

 **ARISTON**



Booster

Scaldacqua Elettrico **Rapido**
Rapid electric water heater
Chauffe-eau Electrique **Rapide**
Elektrischer Wasserdurchlauferhitzer
快速电热水器

Realizzazione grafica: Andreani - Foglio - Stampa: Litograf s.r.l. - Jesi

025.060.055.1.05

Merloni TermoSanitari SpA
Viale Aristide Merloni, 45
60044 Fabriano (AN)
Tel. 0732.6011
Telefax. 0732.602331
Telex 560160
<http://www.mts.it>

MTS
GROUP

*D*ear customer,

*W*e would like to congratulate you on having purchased the BOOSTER water heater, the most innovative of all electric storage water heaters.

*W*e are convinced that BOOSTER will fully satisfy your needs, because it is the fruit of our experience in top quality and technology which ensures that all ARISTON products measure up to the confidence placed in them by families all over the world. BOOSTER has been designed for the person who, just like you, demands maximum performance.

*T*hanks to the exclusive BOOSTER dual heating element, you will have the option of a rapid small water heater as well as the comfort of a large hot water supply, without any increase in energy consumption.

*W*e recommend reading this handbook carefully in order to gain all the advantages from BOOSTER that we have designed for you. We strongly suggest you to keep the handbook for your easy access to any further information and for installation and maintenance personnel.

Merloni TermoSanitari

Hot Line for
the customer (for China only): 800-8201050

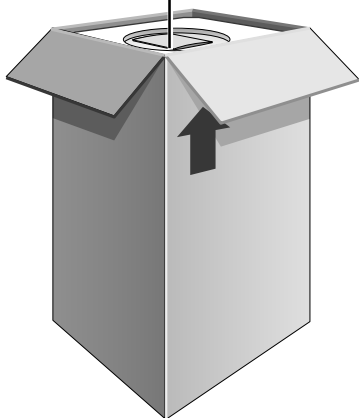
1	HOW TO REMOVE THE PACKAGING	19
2	DESCRIPTION OF THE SYSTEM	20
	2.1 Accessories supplied with the heater	
3	TECHNICAL CHARACTERISTICS	21
	3.1 Rating plate data	
	3.2 Technical data	22
	3.3 Dimensions	
4	GENERAL WARNINGS	24
5	INSTALLATION	24
	5.1 How to fasten the wall	
	5.2 Plumbing	
	5.3 Wiring	25
	5.4 Useful information	
6	USE	25
7	DESCRIPTION OF THE CONTROLS	26
8	MAINTENANCE	26
	8.1 How to remove the cover	27
	8.2 How to remove the flange	
	8.3 Regular maintenance	28
	8.3.1 How to remove deposits from the heating elements	
	8.3.2 Water safety device	29
	8.4 Special maintenance	
	8.4.1 Replacement of anode	
	8.4.2 How to reset the bipolar safety device	
	8.4.3 Replacement of heating element	

1 HOW TO REMOVE THE PACKAGING



Operations that must be carried out by at least 2 people.

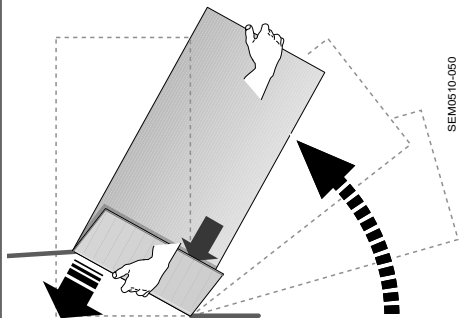
1 INSTRUCTION HANDBOOK



SEM0510-040

First place the box in the position shown in the diagram and open it. Then consult your instruction handbook.

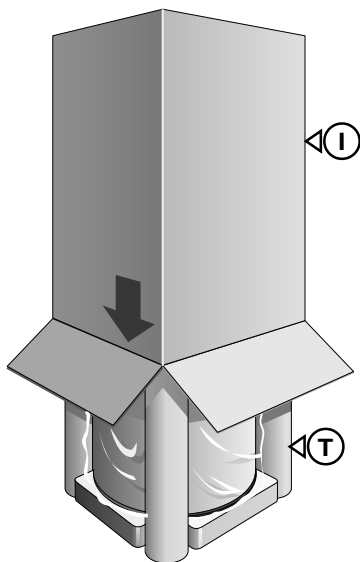
2



SEM0510-050

Hold the box on both sides and carefully turn it upside down.

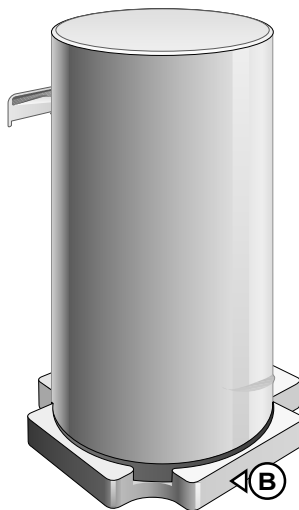
3



SEM0510-030

Remove box **I**.
Take out the cardboard tubes **T**.
Remove the protective bag and throw it away.

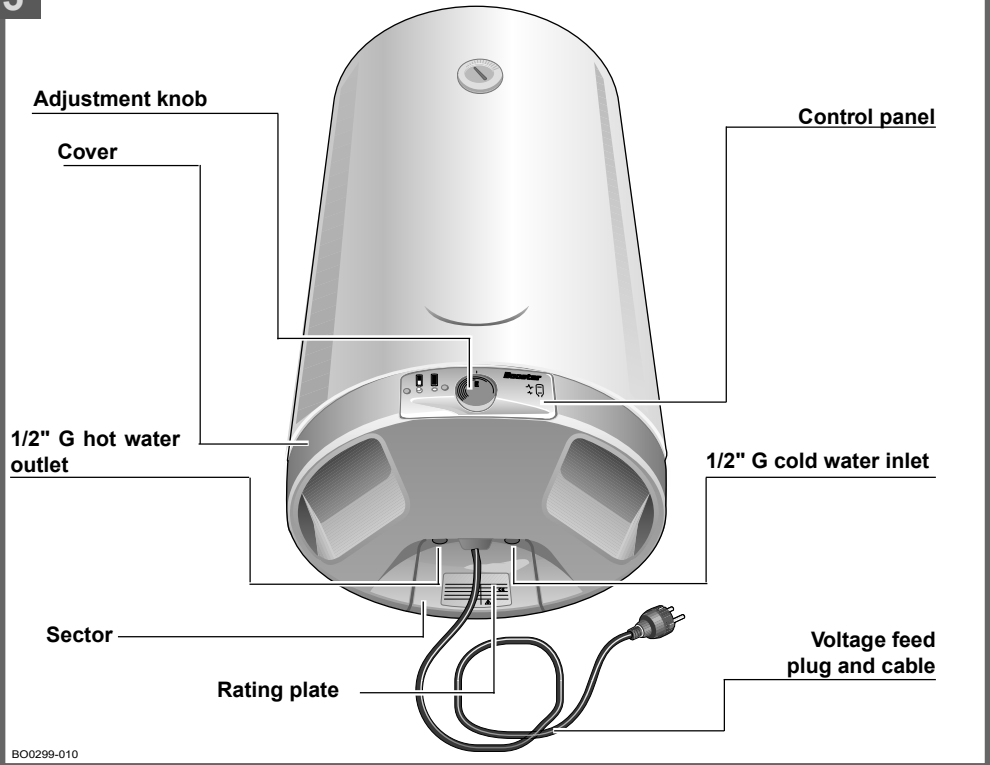
4



SEM0510-025

The water heater must be left on its polystyrene base **B** until it is ready to be installed.

5

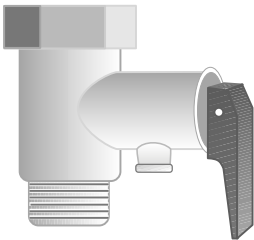


The water heaters are equipped with water intake and outlet connections at the bottom.

2.1 ACCESSORIES SUPPLIED WITH THE HEATER

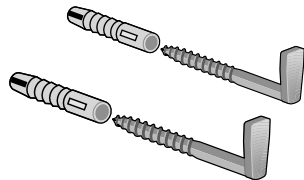
6

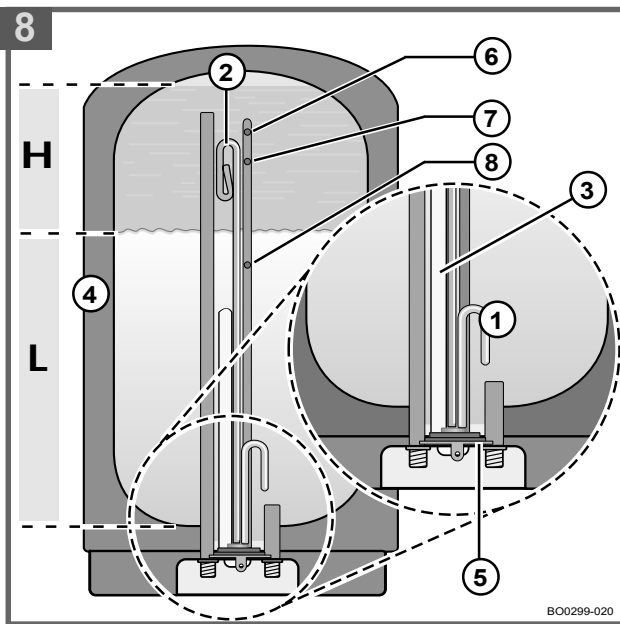
Safety valve



7

Parts to fasten the water heater support





- 1 Lower heating element
- 2 Upper heating element
- 3 Magnesium anode
- 4 Boiler
- 5 Flange
- 6 Safety thermostat probe
- 7 Changeover switch thermostat probe
- 8 Operational thermostat probe

The upper heating element 2 enables only a limited amount of water (H) to be heated.

This system gives you a smaller amount of hot water (about 20 ÷ 30% of the total capacity) in a shorter time thus reducing consumption.

Use the "BOOSTER" key for this function.

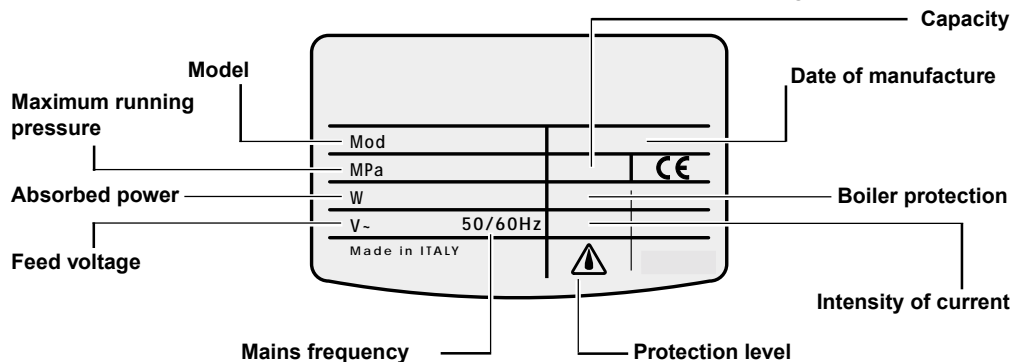
The temperature in area H is preset to the maximum thermostat temperature setting and is controlled by means of the changeover switch thermostat probe 7. When normal running operations are set ("NORMAL" total heating), the lower water heating element 1 switches on so that all the water inside the appliance is heated (H+L).

Water temperature is controlled by the operational thermostat 8 according to the position of the adjustment knob (fig. 5).

3 TECHNICAL CHARACTERISTICS

3.1 RATING PLATE DATA

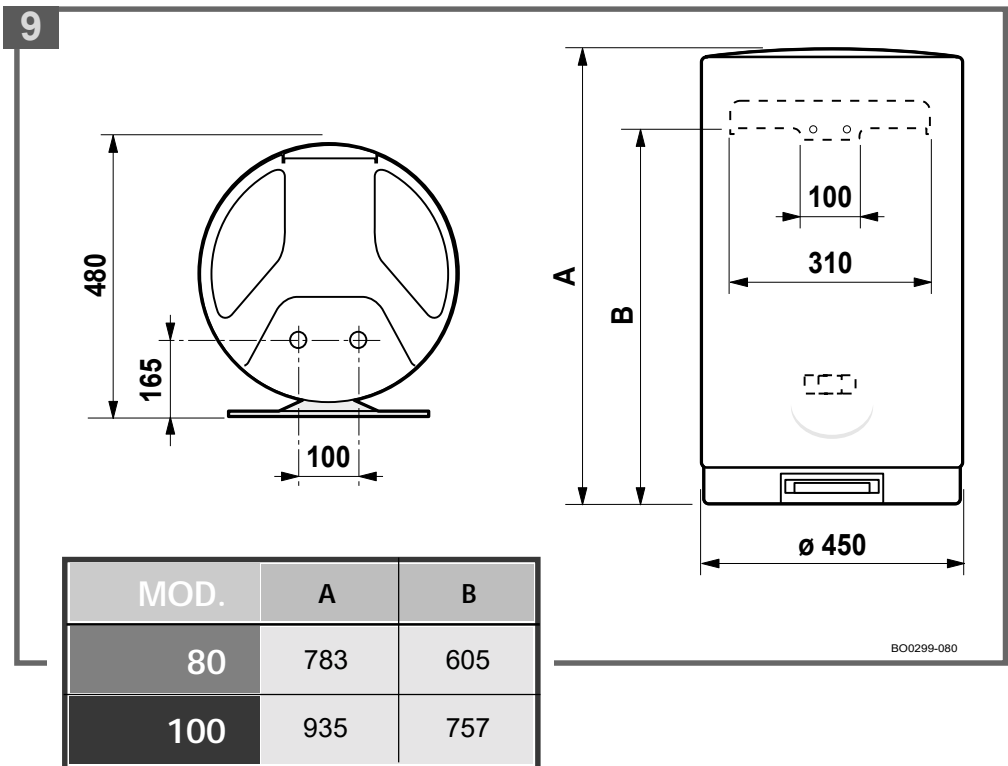
For the technical characteristics please refer to the data on the rating plate.



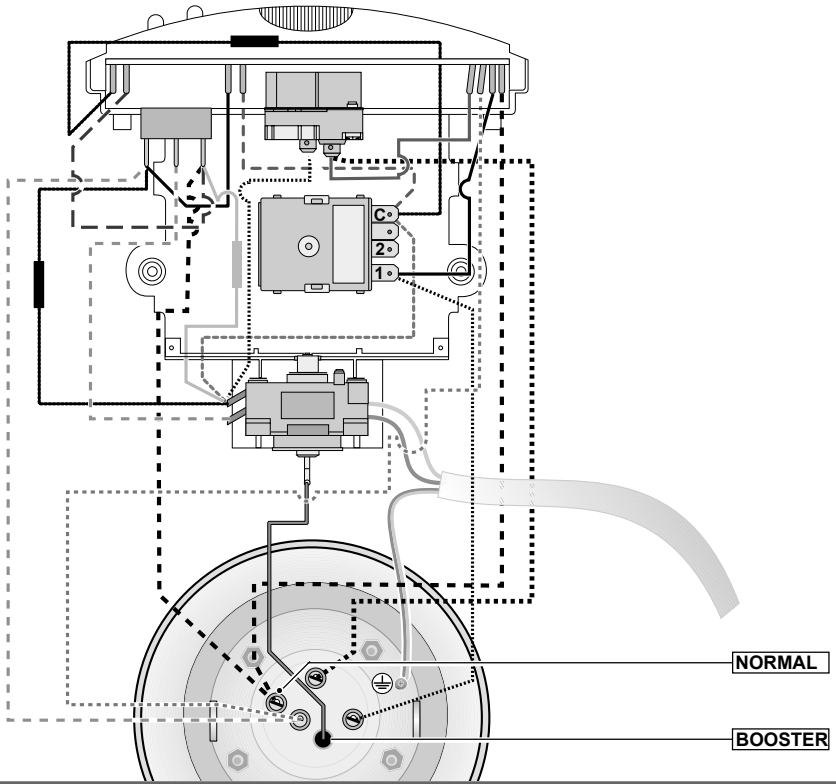
3.2 TECHNICAL DATA

MODEL		80	100
CAPACITY	l	80	100
APPLIANCE WEIGHT	kg (N)	25,5 (255)	31 (310)
"BOOSTER" HEATING TIME ($\Delta T = 45\text{ }^{\circ}\text{C}$)	h, min	1,00	1,10
"BOOSTER" power	W	1640	1640
"NORMAL" TOTAL HEATING TIME ($\Delta T = 45\text{ }^{\circ}\text{C}$)	h, min	3,00	3,40
"NORMAL" power	W	1640 \rightarrow 1310	1640 \rightarrow 1310

3.3 DIMENSIONS

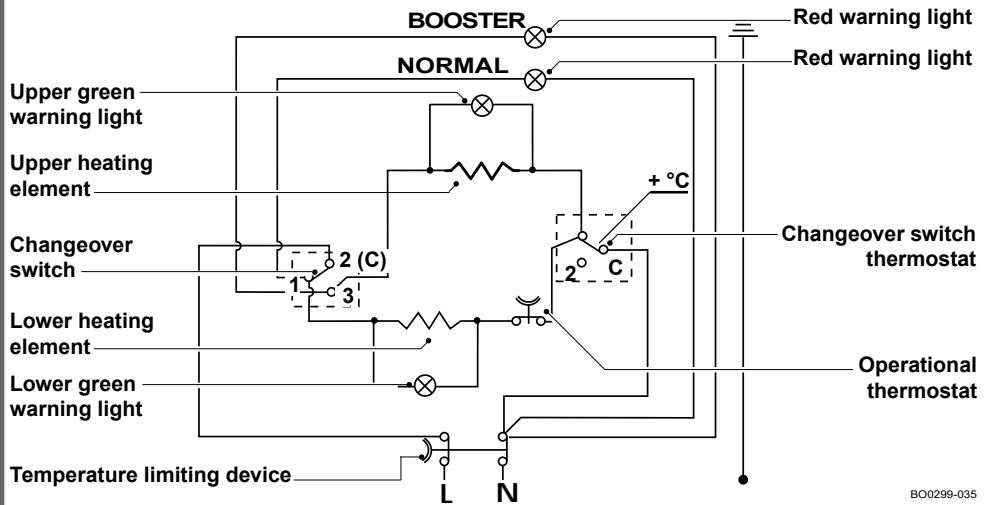


CONNECTION DIAGRAM



BO0299-075

ELECTRICAL WIRING DIAGRAM



BO0299-035

4 GENERAL WARNINGS

National norms may include restrictions on installation in bathrooms. Installation is at the purchaser's expense. Merloni TermoSanitari S.p.A. shall not be held responsible for any damage caused by incorrect installation or because the rules in this handbook have not been followed correctly. In particular:

- electrical wiring must comply with what is specified in paragraph 5.3;
- the safety valve supplied with the appliance must not be tampered with and must not be replaced at the time of installation;
- installation must be carried out by qualified personnel;
- the mains supply must be the same as that given in

the data on the rating plate showing the characteristics of the appliance;

- the earth must be installed correctly;
- do not use extensions or pressure reducing devices.



GB0304-050

5 INSTALLATION

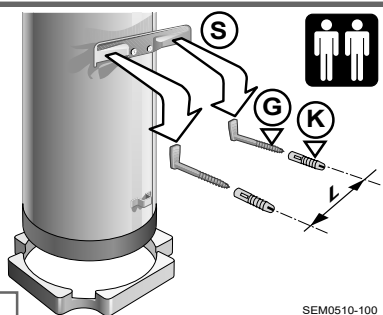
5.1 HOW TO FASTEN TO THE WALL

- Install the appliance at a minimum height of over 1 m. Above floor level, so that the resistances can be removed.

Use the rawl plugs **K** supplied with the appliance to fasten the support hooks **G** to the wall. Hook on the water heater and pull it downwards to check that it is fastened correctly.

NB: Make sure that bracket S has been well hooked on.

12



$$L = 130 \div 290$$

SEM0510-100

5.2 PLUMBING

- Use pipes that will resist operative pressure as well as hot water temperatures that can normally rise to and even exceed 80°C to connect the water heater intake and output. It is inadvisable, therefore, to use materials that will not withstand this kind of temperature.
- Screw a pipe connection **K** on to the appliance water inlet **I** marked with a blue ring.
- A tap **B** to empty the water heater must be screwed on one side of the pipe connection. A special tool must be used to turn this tap. A safety valve **A** supplied with the appliance must be screwed on to the other side of the connection.
- Connect the latter to the mains cold water pipe by means of a hose pipe **F**.

Also install a drain pipe **C** to be used if the tap **B** is opened.

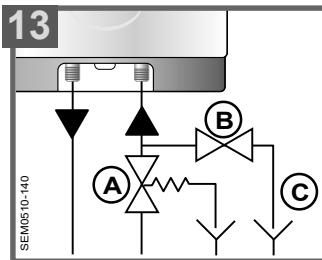
- When the safety valve is screwed on, take care not to force it as far as it will go and do not tamper with it.

A slight drip is normal during heating; we therefore advise you to connect the valve to a drain by means of a small pipe **E**. A discharge pipe **E** connected to the pressure relief device is to be installed in a continuously downward direction and in a frost-free ambient.

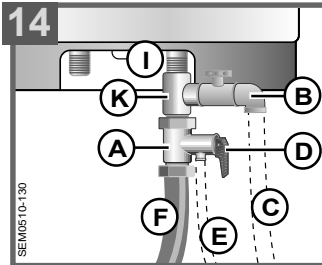
If the mains pressure should be similar to the valve pressure setting, a pressure reducer should be installed as far away as possible from the appliance.

- Fill the water heater and make sure there are no leaks.
- In order to **empty the water heater** close the main intake tap, open the hot water tap and the drain tap **B**.

13



14



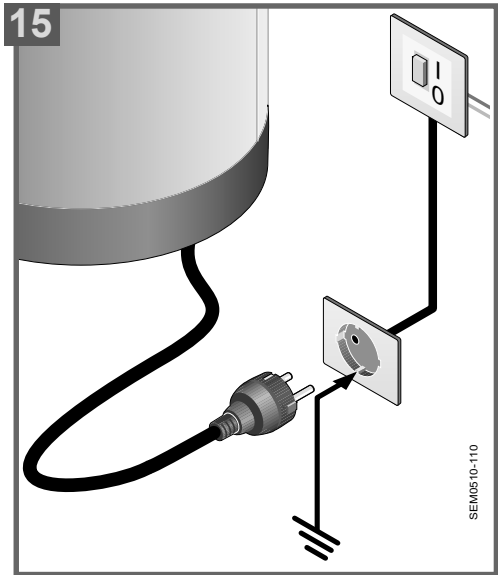
5.3 WIRING

The appliance must be connected to the mains supply by means of a differential two-pole magnetothermal switch (30 mA) in compliance with the current IEC standards (contact opening of at least 3 mm, preferably equipped with fuses), or by means of the plug.

This switch must be used each time the appliance has to be disconnected from the mains supply.

The appliance is equipped with an H05VV-F type cable with a cross-section of 3x1,5 mm², and a diameter of 8,5 mm. The yellow-green earth wire must be slightly longer than the phase wires.

Before start-up make sure that the mains voltage is the same as the value marked on the appliance rating plate.



5.4 USEFUL INFORMATION

If, after a certain period of time, no hot water comes out of the taps, before contacting your Technical Assistance Service make sure that the plumbing and electrical wiring is as described in the relevant paragraphs.

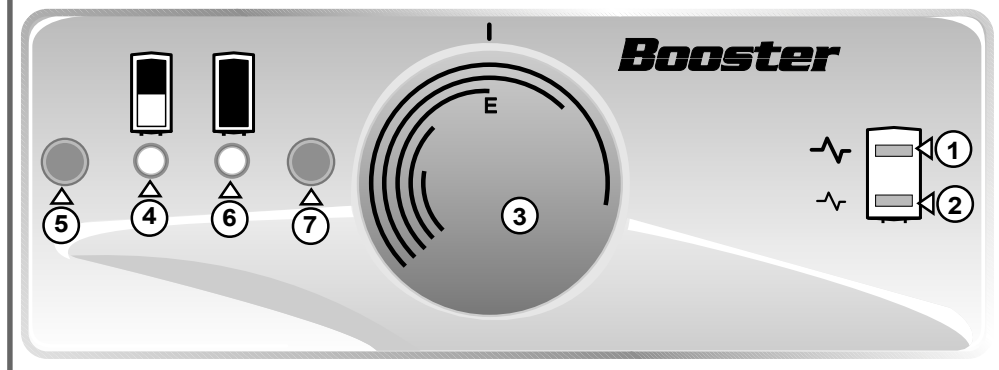
If the electricity is cut off to the lower heating element, the amount of hot water available is 20 ÷ 30% of the total capacity ("BOOSTER" running). You should still contact your Technical Assistance Service.

The level of water hardness must never fall below 12° FR for the galvanic protection system to work well.

6 USE

- Open the main tap of your home water supply as well as the hot water tap until all the air has come out of the appliance; when only water starts to come out, close the hot water tap.
- Make sure there are no leaks.
- Insert the plug into the mains and switch on the machine; if the appliance has a wall control panel, turn the switch to **I** (ON).

16



BO0299-040

BOOSTER FUNCTION

When the BOOSTER button 4 is pressed, the warning light 5 switches on and the upper heating element switches on. This function will provide you with a small amount of water (about 20 ÷ 30% of the total contents) in a very short time.

The temperature is pre-set to the maximum set-up value of the thermostat. Knob 3 has no effect.

Warning light 1 switches on when the upper heating element is working.

- 1 Upper heating element warning light on
- 2 Lower heating element warning light on
- 3 Adjustment knob
- 4 "BOOSTER" button
- 5 "BOOSTER" function warning light
- 6 "NORMAL" button
- 7 "NORMAL" function warning light

NORMAL FUNCTION

When the NORMAL button 6 is pressed, the warning light 7 switches on and the upper heating element is switched on first, followed by the lower element, in order to guarantee total heating. Knob 3 can be used to adjust the temperature up to a maximum temperature of 75°C. When the knob is turned to E (Economy), water temperature is preset at about 60°C.

8 MAINTENANCE



All maintenance operations must be carried out by qualified personnel.

Before contacting your technical assistance service for a suspected breakdown, make sure that there is no other reason such as a temporary blackout or water cut.

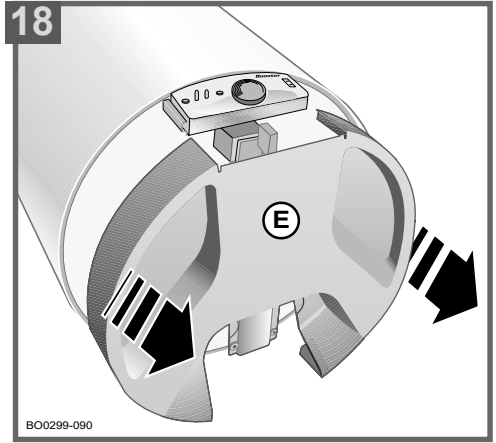
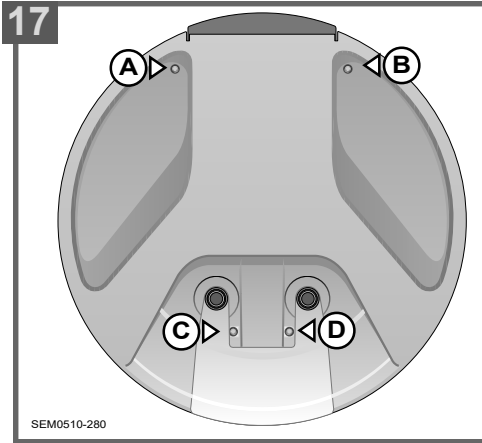
Before carrying out any maintenance operation whatever:

- **Disconnect the appliance from the electrical mains supply.**
- Shut the main tap.
- Empty the appliance by opening the safety valve and the hot water tap.

8.1 HOW TO REMOVE THE COVER

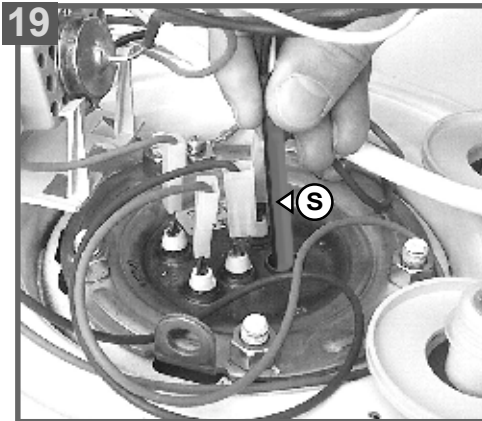
In order to gain access to the electrical part, remove cover **E** as follows:

- unscrew screws **A-B-C-D** that fasten it;
- remove the cover by pulling it downwards as shown in the diagram 18.

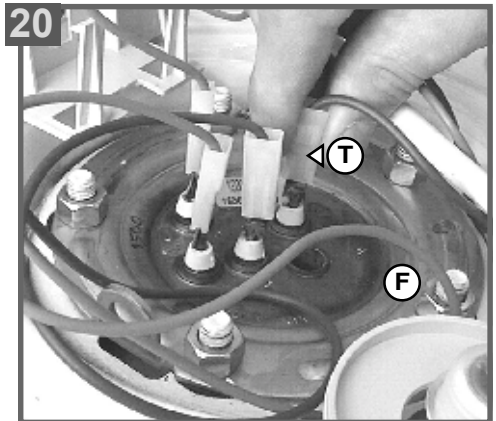


8.2 HOW TO REMOVE THE FLANGE

- **Disconnect the appliance from the electrical mains supply.**
- Shut the main tap.
- Empty the appliance by opening the safety valve and the hot water tap.
- Remove the cover as shown previously (figs. 17-18).

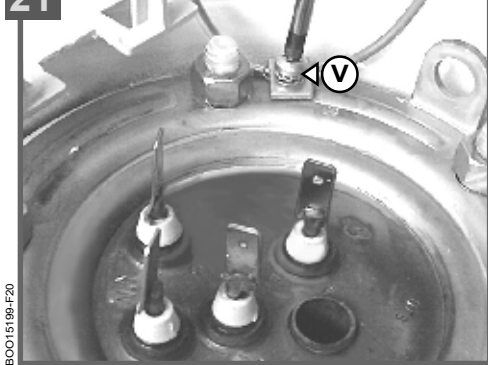


- Remove probes **S**.



- Disconnect terminals **T**.

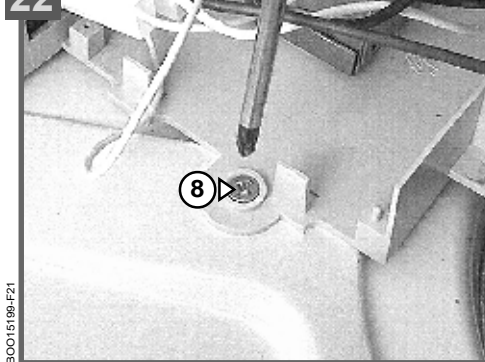
21



BOC15199-F20

- Remove the earth screw **V**.

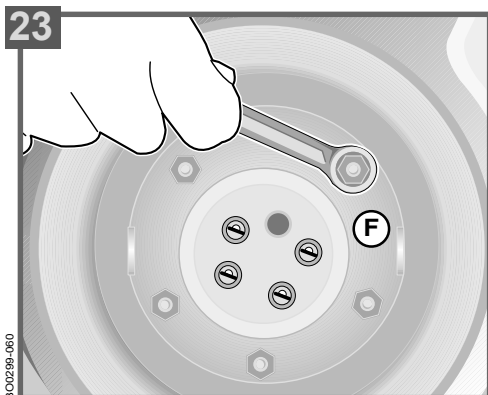
22



BOC15199-F21

- Remove screws **8** so that the electrical system is disconnected from the water heater.

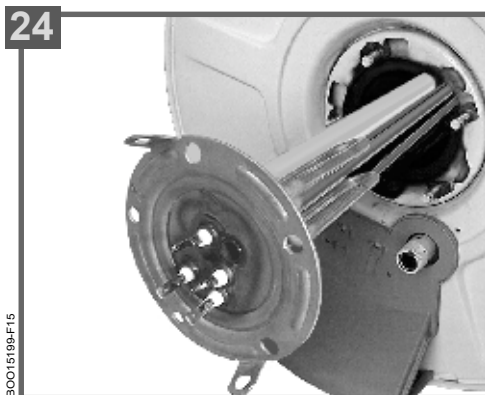
23



BOC299-060

- Use a 13 mm spanner to remove flange **F** check nuts.

24



BOC15199-F15

- Remove the flange.

8.3 REGULAR MAINTENANCE

8.3.1 HOW TO REMOVE DEPOSITS FROM THE HEATING ELEMENTS



For the appliance to perform well, remove any hard water deposits that have formed on the heating elements about once every two years.

- Remove the cover and the flange as shown in paragraphs 8.1 and 8.2.

If you do not wish to use the special acids available for this type of operation, you can gently crumble the deposit but take care not to damage the outer protection of the heating elements.

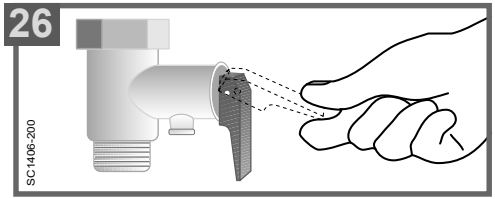
25



BOC150199-F11

8.3.2 WATER SAFETY DEVICE

The safety valve must be made to work regularly at least once a month. Move the lever up and down several times in order to make sure it is not blocked by scale.



8.4 SPECIAL MAINTENANCE

8.4.1 REPLACEMENT OF ANODE

The magnesium anode **2** must be replaced at least once every two years, before it is completely worn out.

- Empty the appliance.
- **Disconnect the appliance from the electrical mains supply.**
- Remove the cover and the flange as shown in paragraphs 8.1 and 8.2.
- Unscrew anode **2** and replace it.

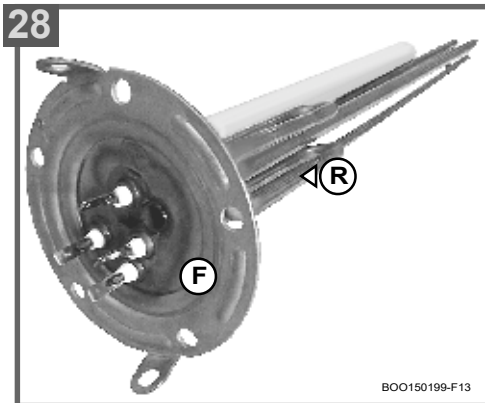


8.4.2 HOW TO RESET THE BIPOLAR SAFETY DEVICE

If the water should overheat, a safety thermal switch, in compliance with IEC norms, interrupts the electrical circuit on both feed phases to the heating element.

Contact your Technical Assistance Service.

8.4.3 REPLACEMENT OF HEATING ELEMENT



- **Disconnect the appliance from the electrical mains supply.**
- Remove the cover and the flange as shown in paragraphs 8.1 and 8.2.
- Replace the entire piece.

Merloni TermoSanitari S.p.A. is not bound by the data and characteristics described in this handbook and reserves the right to make any modifications it deems necessary, without prior notice or replacement.

This appliance complies with the requirements set forth in EMC directive 89/336/EEC concerning the electromagnetic compatibility.