

ELECTRIC WATER HEATER



ARISTON

ASSEMBLY AND OPERATION INSTRUCTIONS




GENERAL SAFETY INSTRUCTIONS

1. **Read the instructions and warning in this manual carefully, they contain important information regarding safe installation, use and maintenance.**
















This manual is an integral part of the product. Hand it on to the next user/owner in case of change of property.

2. The manufacturer shall not liable for any injury to people, animals or damage to property caused by improper, incorrect or unreasonable use or failure to follow the instructions reported in this publication.
3. Installation and maintenance must be performed by professionally qualified personnel as specified in the relative paragraphs. Only use original spare parts. Failure to observe the above instructions can compromise the safety of the appliance and **relieves** the manufacturer of any liability for the consequences.
4. DO NOT leave the packaging materials (staples, plastic bags, expanded polystyrene, etc.) within the reach of children they can cause serious injury.
5. **The appliance may not be used by persons under 8 years of age, with reduced physical, sensory or mental capacity, or lacking the requisite experience and familiarity, unless under supervision or following instruction in the safe use of the appliance and the hazards attendant on such use. DO NOT permit children to play with the appliance. User cleaning and maintenance may not be done by unsupervised children.**
6. **DO NOT** touch the appliance when barefoot or if any part of your body is wet.
7. Before using the device and after routine or extraordinary maintenance, we recommend filling the appliance's tank with water and draining it completely to remove any residual impurities.
8. If the appliance is equipped with a power cord, the latter may only be replaced by an authorised service centre or professional technician.
9. It is mandatory to screw on the water inlet pipe of the unit a safety valve in accordance with national regulations. In countries which have enacted EN 1487, the safety group must be calibrated to a maximum pressure of 1487 MPa (0,7 bar) and include at least a cock,

- check valve and control, safety valve and hydraulic load cutout.
10. Do not tamper with the overpressure safety device (valve or safety group), if supplied together with the appliance; trip it from time to time to ensure that it is not jammed and to remove any scale deposits.
 11. It is **normal** water drips from the overpressure safety device when the appliance is heating. For this reason, the drain must be connected, always left open to the atmosphere, with a drainage pipe installed in a continuous downward slope and in a place free of ice.
 12. Make sure you drain the appliance and disconnect it from the power grid when it is out of service in an area subject to subzero temperatures.
 13. Water heated to over 50 °C can cause immediate serious burns if delivered directly to the taps. Children, disabled persons and the aged are particularly at risk. We recommend installing a thermostatic mixer valve on the water delivery line, marked with a red collar.
 14. Do not leave flammable materials in contact with or in the vicinity of the appliance.
 15. Do not place anything under the water heater which may be damaged by a leak.

| Symbol | Meaning |
|---|--|
|  | Failure to observe this warning can result in injury, which may even be fatal in certain circumstances |
|  | Failure to observe this warning can result in damage or injury, even serious in certain circumstances, to property, plants and animals |
|  | Observe the product's general and specific safety instructions. |

GENERAL SAFETY STANDARDS

| Ref. | Warning | Risk | Symbol |
|------|---|---|--|
| 1 | Do not open the appliance or remove from its installation | Electrocution hazard due to the presence of live electrical equipment Personal injury - burns caused by overheated components and wounds caused by sharp edges |  |
| 2 | Do not start or stop the appliance by inserting/pulling the power plug | Electrocution hazard due to damage to the power cord, its plug or the socket |  |
| 3 | Do not damage the power cord | Electrocution hazard due to bare live wires |  |
| 4 | Do not leave objects on the appliance | Personal injury due to objects falling off the appliance as a result of vibration |  |
| | | Damage to the appliance or other property due to objects falling off the appliance as a result of vibration |  |
| 5 | Do not climb onto the appliance | Personal injury due to falling off the appliance |  |
| | | Damage to the appliance or other property due to the appliance itself detaching from its mounting |  |
| 6 | Do not clean the appliance without having first switched it off, pulled its power plug or shut off its power switch | Electrocution hazard due to the presence of live electrical equipment |  |
| 7 | Install the appliance to a solid wall which is not subject to vibration | Danger of the appliance falling off the wall due to structural collapse, or noisy operation |  |
| 8 | Make the electrical hookup with cables of adequate cross-section | Danger of fire due to overheating of under-sized electrical wires |  |
| 9 | Restore all safety and control functions after working on the appliance and check that they are operational before returning it to service | Damage or blocking of the appliance due to improper control |  |
| 10 | Drain all components containing hot water, using the bleed cocks, before handling them | Danger of burns |  |
| 11 | Descalcify the system as given in the product's "safety sheet"; when doing so, ventilate the room, wear safety clothing, make sure not to mix products, and protect the appliance itself and any adjacent objects | Personal injury due to contact of the skin and eyes with acid, inhalation or ingestion of noxious chemicals |  |
| | | Damage to the appliance and adjacent objects due to corrosion by acid |  |
| 12 | Do not use insecticides, solvents or aggressive detergents to clean the appliance | Damage to plastic and painted parts and assemblies |  |

LEGIONELLA BACTERIA

Legionella are small rod shaped bacteria which are a natural constituent of all fresh waters. Legionaries' disease is a pneumonia infection caused by inhaling of Legionella species. Long periods of water stagnation should be avoided; it means the water heater should be used or flushed at least weekly.

The European standard CEN/TR 16355 gives recommendations for good practice concerning the prevention of Legionella growth in drinking water installations but existing national regulations remain in force.

DESCRIPTION OF WATER HEATER

(see figure 7)

- F) LED
- A) Cap
- M) Adjustment knob
- B) Water intake pipe
- C) Water outlet pipe

TECHNICAL CHARACTERISTICS

For the technical specifications, refer to the nameplate (the nameplate is located next to the water intake/outlet pipes).

| TABLE 1 - PRODUCT INFORMATION | | | | | | |
|---|-------------|-----------------|------------------|-----------------|------------------|-----------------|
| Model | | 10L Oversink | 10L Undersink | 15L Oversink | 15L Undersink | 30L Oversink |
| Weight when empty | kg | 6.6 | 6.6 | 7.4 | 7.4 | 12.8 |
| Wattage | W | 1500 | | | | |
| Heating Time [$\Delta T = 50^{\circ}C$] | minutes | 23 | 23 | 35 | 35 | 90 |
| Heat Dispersion | kWh/24hours | 0.51 | 0.62* | 0.56 | 0.69* | 0.68 |

This appliance is conforming with the standard SANS 151 and with the electrical safety standards SANS 60335-1 and SANS 60335-2-21

*** Declared Energy Performance have been achieved by using the hydraulic adaptors supplied with the Water Heater**

INSTALLING NORMS (for the installer)



CAUTION: Observe all general warnings and safety standards listed at the beginning of this text in full; all such instructions are obligatory.

The appliance must be installed and commissioned by a qualified technician in accordance with established regulations and local health and safety regulations.

We recommend installing the appliance as close as possible to the delivery points to minimise heat loss along the pipes. Local regulations may provide for restrictions on installation in bathrooms; observe any regulatory minimum distances. The range of water heaters includes models set up to be assembled above or below the point of use (sink, basin or shower). The models intended to be assembled under the point of use are called “undersink”. To facilitate maintenance, make sure there is a clearance of at least 50 cm inside the enclosure for access to the electrical equipment. Fix the supplied bracket to the wall with screws and dowels of adequate size for the type of wall. Hook the water heater to the bracket and pull down to make sure it is secured.

HYDRAULIC CONNECTION

The INSTALLATION of the appliance must strictly comply with SANS 10254 code of practice, a copy of which is obtainable from the South African Bureau of Standards. Installation, maintenance and repairs to the appliance not complying with the SANS 10254 code of practice will invalidate the Warranty.

If you decide to install mixer units (taps or shower), purge the pipes of any potentially damaging impurities first. The appliance must not be supplied with water of hardness less than 12°F, nor with especially hard water (greater than 25°F); we recommend installing a water softener, properly calibrated and controlled - do not allow the residual hardness to fall below 15°F. Before using the appliance, we recommend filling its tank with water and draining it completely so as to remove any residual impurities.

Specific taps must be used for this type of installation and the connection must be implemented as shown in the diagram in Fig. 1. With this solution, the water heater can work at any mains pressure and no type of tap must be connected on the outlet pipe, which acts as a vent.

We recommend that all exposed metal pipes must be lagged.

The hydraulic adaptors, which are delivered with the product, must be installed on the thread connection with a sealing.

ELECTRICAL CONNECTION

Before performing any operations, disconnect the appliance from the electricity mains using the external switch.

1. Electrical installation must comply with SANS 10142 – Electrical code for wiring of premises and should be tested by the local electricity authority. The fixed wiring must incorporate a means of disconnecting from the main supply having a separation of at least 3 mm in all poles.
2. Check the circuit breaker on the distribution board is the correct amperage for the unit.
3. Check that all electrical connections are secure, with a sealing.




!WARNING! THIS APPLIANCE MUST BE EARTHED.

4. Replace electrical cover and ensure geyser is full of water before switching on electricity, even for testing purposes.
5. Fixed wiring must incorporate a means of disconnecting from the main supply, having a separation of at least 3 mm in a pole.

NOTE: Elements burn through commissioning without water and burnouts due to loose connections are not covered by the Warranty.

For greater safety, have qualified personnel carry out a careful inspection of the electrical system, ensuring it complies with the applicable norms in force, because the appliance manufacturer will not be held responsible for any damage caused by the lack of earthing of the system or for faults in the electricity supply.

Check that the system is suitable for the maximum power absorbed by the water heater (please refer to the data plate) and that the cross-section of the electrical connection cables is suitable and complies with current laws. The use of multiplugs, extensions or adaptors is strictly prohibited. It is strictly forbidden to use the piping from the plumbing, heating and gas systems for the appliance earthing connection. If the appliance is supplied with a power supply cable and the latter should need replacing, use a cable featuring the same characteristics (type H05VV-F 3x1.5 mm², 8.5 mm in diameter) and compliant with SANS 60227-5. The supply cable (type H05 VV-F 3x1.5 mm²) is to be inserted in the proper hole situated in the back of the appliance and slide it until it reaches terminal of the thermostat, then lock single cables by mean of the insulation base. To disconnect the unit from the electrical supply use a bipolar, switch conforming to local (contact opening at least 3 mm, better if equipped with fuses).

The appliance must be earthed and the earth cable (which must be yellow-green and longer than that of the phases it is fixed to the terminal marked by the symbol ). Block the power supply cord on the small cap using the special wire clamp provided.

Before usage, make sure that the supply voltage is in compliance with the rated values of the appliance. If the appliance is not supplied with a power supply cable, use a flexible cable (type H05VV-F 3X1.5mm², 8.5 mm) in diameter compliant with the applicable norms in force, if the appliance is supplied with a cable clamp.

Startup and commissioning

Before powering up the appliance, fill the heater with mains water.

To do so, open the mains cock and the hot water tap until all the air has been vented from the boiler. Check for leaks from the flanges, tighten down the fittings (not too much!) if necessary (A fig. 4). Power up using the switch and in models with no switch, power up by turning the adjustment knob clockwise

MAINTENANCE REGULATIONS (for competent person)



CAUTION: Observe all general warnings and safety standards listed at the beginning of this text in full; all such instructions are obligatory.

Maintenance work may only be done by qualified technicians (in possession of the regulatory requirements). Before requesting for the Technical Assistance to intervene for a suspected fault, check that this is not caused by a temporary lack of water supply or power failure.

Draining the appliance

Make sure to drain the appliance when it is out of service or in an area subject to subzero temperatures.

To drain the appliance, proceed as follows:

- permanently disconnect it from its power supply;
- open the hot water tap (sink or bath tub).

Replacing parts

Disconnect the appliance from its power supply.

Remove the enclosure to access the electrical equipment.

To work on the thermostat, extract it from its mount and disconnect it from its power supply.

To work on the heating element and anode, first drain the appliance.

Use only original spare parts

Scheduled maintenance

The heating element (R fig. 5) should be descaled every two years to ensure it works properly.

If you do not wish to use a liquid descaler, you can simply break off the deposit, taking care not to damage the heating element's cladding. The magnesium anode (**N fig. 5**) must be replaced every two years; however, the anode should be checked every year if the water is corrosive or chloride rich. To replace it, remove the heating element and unscrew it from its bracket.

After routine or extraordinary maintenance, we recommend filling its tank with water and draining it completely so as to remove any residual impurities.

Use only original spare parts supplied by the manufacturer's authorised service centres.

Reactivating the two-pole cutout

If the water overheats excessively, a thermal cutout (CEI-EN compliant) trips to cut the electrical power supply to the heating element (both phases); contact the Service Centre if this occurs.

USER INSTRUCTIONS



CAUTION: Observe all general warnings and safety standards listed at the beginning of this text in full; all such instructions are obligatory.

Recommendations

- Do not place anything under the water heater which may be damaged by a leak.
- If the water is not used for a long time:
 - shut off power to the appliance by setting the external switch to "OFF";
 - close the water circuit cocks.
- Water heated to over 50°C can cause immediate serious burns or even death. Children, disabled persons and the aged are particularly at risk of burns.

Do not attempt to service or repair the appliance.

Operation, setting the operating temperature

Start up

Power up by turning the adjustment knob clockwise. The indicator lamp only remains on when heating up. The thermostat will automatically disconnect the resistance when the preset operating temperature is reached.

Setting the operating temperature

On models with external regulation, the water temperature can be set with the knob (**M fig. 6**) connected to the thermostat, as indicated on the device itself.

USEFUL HINTS

If the water delivery is cold, have the following checked:

- is there power to the thermostat and terminal block?
- are the heating elements working?

If the water is boiling hot (steam is coming out of the taps)

Shut off electrical power to the appliance and have the following checked:

- thermostat;
- the amount of scale on the boiler and heating element.

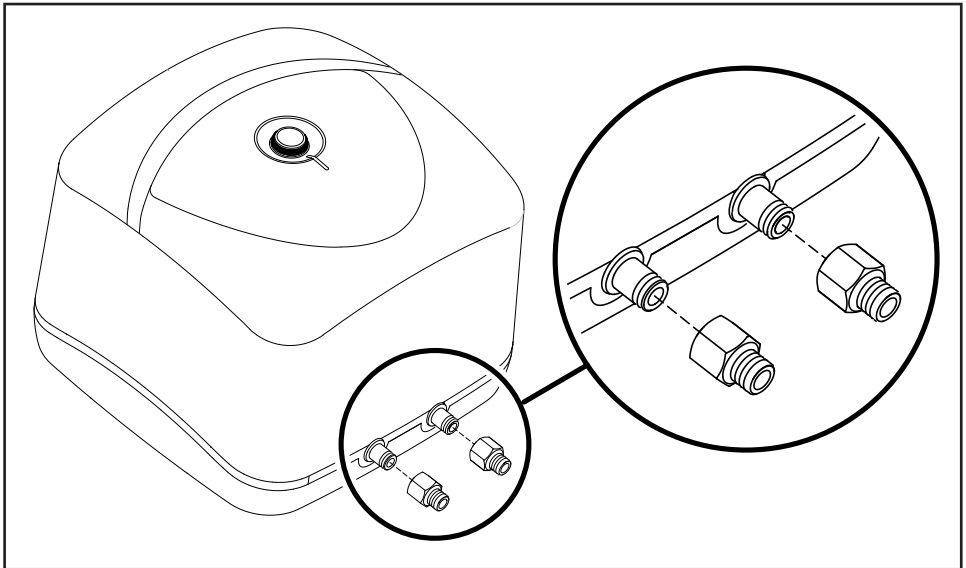
If the hot water delivery is insufficient, have the following checked:

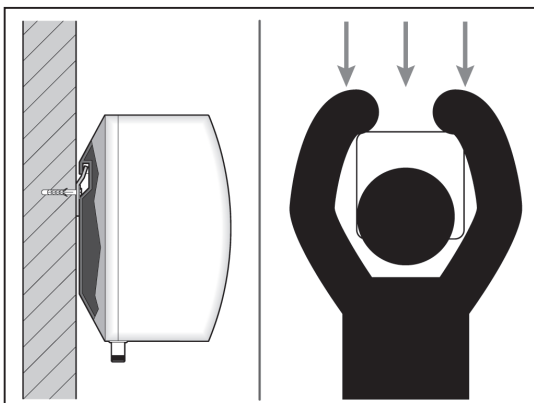
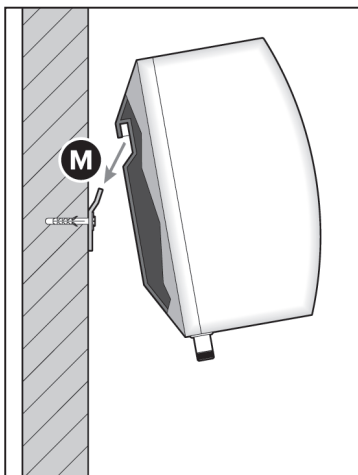
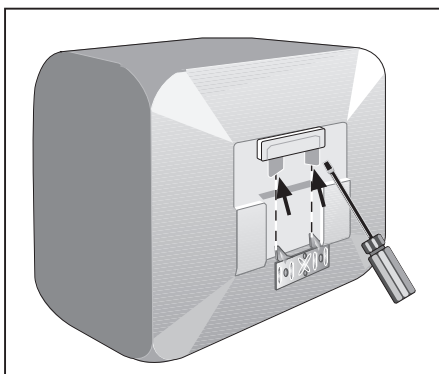
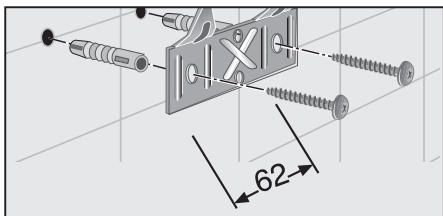
- the mains water pressure;
- the condition of the deflector on the cold water intake pipe;
- the condition of the hot water pipe;
- the electrical equipment.

NEVER ATTEMPT TO REPAIR THE APPLIANCE YOURSELF - ALWAYS HAVE THIS DONE BY A QUALIFIED TECHNICIAN.

The indicated data and specifications are not binding; the manufacturer reserves the right to modify them at his own discretion notification or replacement.

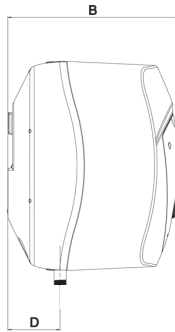
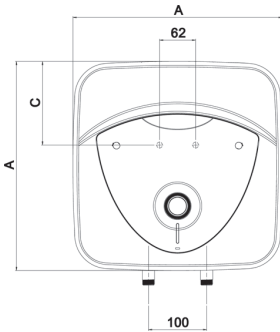
HYDRAULIC FITTINGS





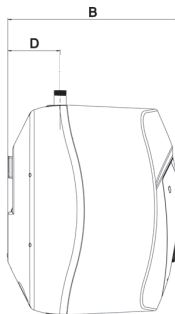
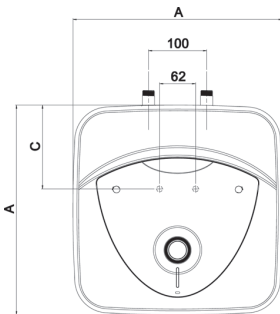
Installation scheme

Above-sink



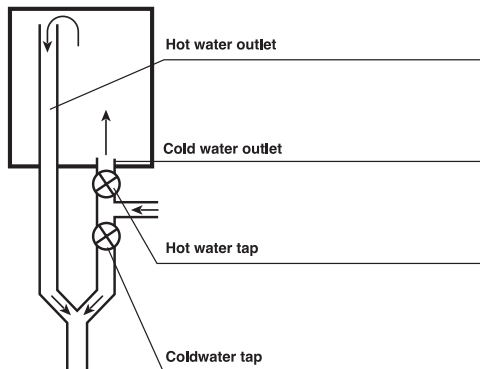
| MOD. | 10 | 15 | 30 |
|------|-----|-----|-----|
| A | 357 | 357 | 447 |
| B | 282 | 330 | 392 |
| C | 144 | 144 | 165 |
| D | 92 | 78 | 114 |

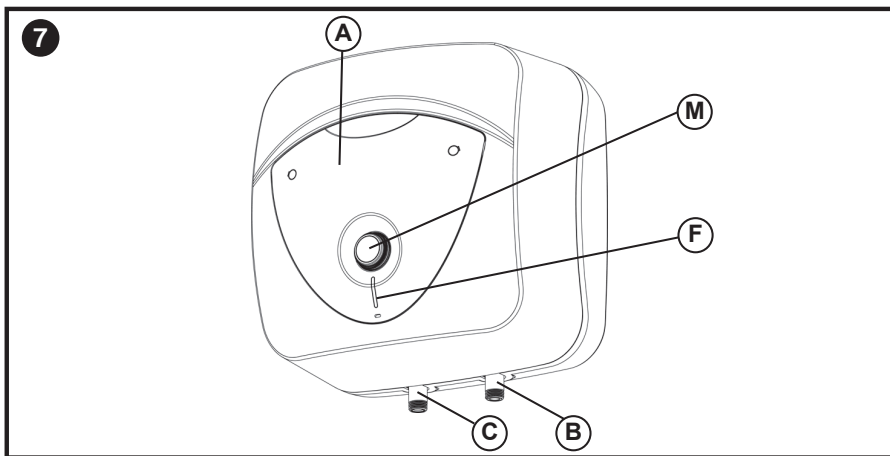
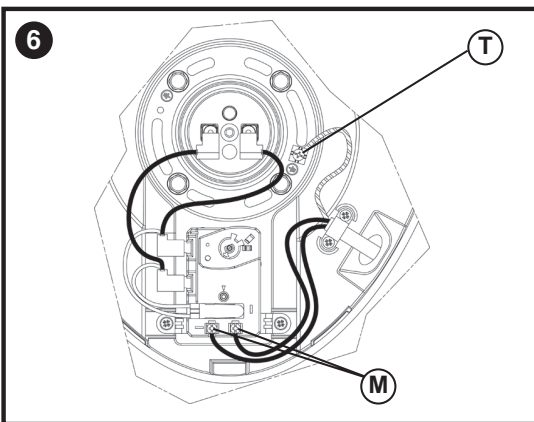
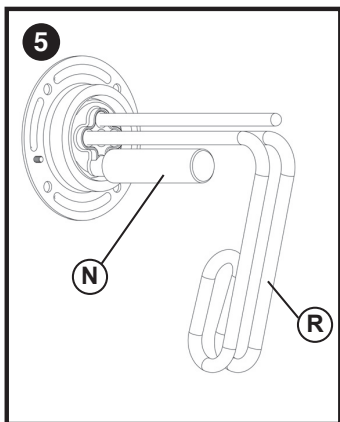
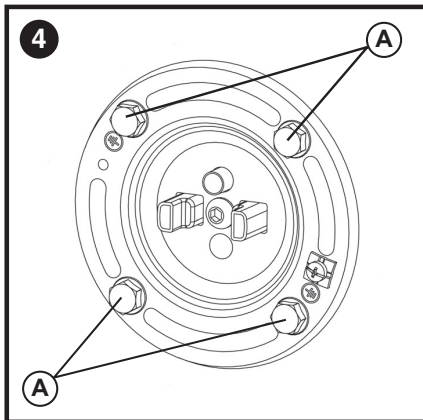
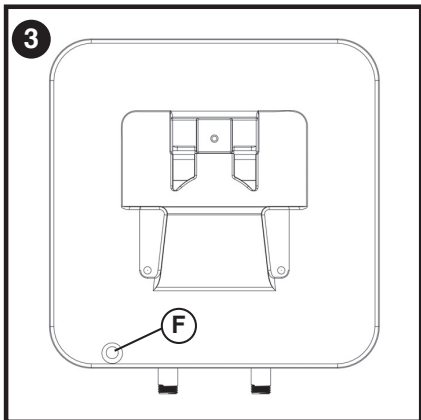
Under-sink



| MOD. | 10 | 15 |
|------|-----|-----|
| A | 357 | 357 |
| B | 282 | 330 |
| C | 144 | 144 |
| D | 92 | 78 |

1





WARRANTY

To be retained

Ariston Thermo South Africa (Pty) Ltd

294 Barolong St., Icon Park, Sunderland Ridge, South Africa

T: (+27) 87 9437471 - Web: <http://www.ariston.com/en-za>

Mr.

Address

ZIP [] Town []

Model []

Serial N. []

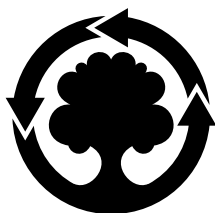
Years Tank Warranty

5 years

Date of purchase

[]

1. Ariston Warranty against corrosion (leaking) the inner tank of this water heater for the period specified on the forehead of this certificate.
2. Heating element and thermostat will be Warranty for two years
3. Other parts, such as: gaskets, probe lamp, flange, security valve, will be warrantee for one year.
4. Magnesium anode (where applicable) is not covered by any Warranty in virtue of its nature of consumable material.
5. Furthermore this Warranty will not cover: transportation and handling damages; damages occurred because of wrong installation, transportation and installation expenses arising from eventual faulty units. This Warranty is invalid unless the unit is properly used and regularly maintained as set out in the installation manual.
6. The Warranty period will begin on the date of purchase reported on the receipt/invoice released by the dealer upon selling the unit.
7. It is therefore required, in order to exercise one's right to the eventual claim, to keep the following: receipt/invoice proving the date of purchase; this certificate duly filled-up.
8. This Warranty provides the free replacement of the defective component or of the whole unit in case the above defects
9. Ariston will not be held responsible for any damage, direct or indirect, to people, animals, properties in the house due to the non observance of the instructions contained in the installation manual of the relevant unit.
10. In case of claim, the unit MUST remain installed. Contact the Ariston Service Call Centre at 087 943 7470. Proof of purchase/installation needs to be supplied.



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Ariston Thermo SpA

Viale Aristide Merloni 45
60044 Fabriano (AN) Italy
Telefono 0732 6011 - Fax 0732 602331
info.it@aristonthermo.com
www.aristonthermo.com

Ariston Thermo South Africa (Pty) Ltd

294 Barolong St. Icon Business Park
Sunderland Ridge
South Africa
(+27) 87 943 7471
info.za@aristonthermo.com
www.aristonthermo.com

