

6 MANTAINANCE

6.1 ROUTINE MAINTENANCE

Cleaning of the filter is carried out with the frequency of at least once a month and anyhow according to the degree of dustiness of the installation environment.

Remove the metal grille, positioned in the front part (Ref. A) by rotating the screw by one fourth of a revolution in the anticlockwise direction and pull out the filter. Clean the filter by washing it with lukewarm water.



CAUTION: Do not use hard brushes or blunt instruments to avoid damaging the filter.

Reposition the filter and close the metal grille by turning the screw anticlockwise by one fourth of a revolution.

7 DIAGNOSTICS, PROBLEMS, CAUSES AND REMEDIES

7.1 Disadvantages, causes and remedies table

Disadvantages	Causes	Remedies
The display does not light up	Lack of electric supply	Check that the plug is fully inserted in the electrical current socket. Check that the switch is in position "1"
Insufficient water cooling	Insufficient water flow.	Check the proper operation of the pump (not supplied)
	Aquarium isolation is not enough.	Insulate the walls of the aquarium and the pipes to reduce heat loss
	Dirty air filter	Clean the air filter following the instruction (Chapter 6 Maintenance)
	Ambient temperature too high	Re-establish the optimal ambient conditions The maximum ambient temperature allowed is 38°C (100°F)
	Outgoing air from the ventilation grid at room temperature	Lack of gas in the compressor, contact the TECO S.r.l area retailer
	Obstructed ventilation grate	Free the grate or place the unit in a suitable ambient
Insufficient water heating	Broken ventilation system	Contact the TECO S.r.l area retailer
	Insufficient water flow	Check the correct operation of the pump (not supplied)
	Faulty heater	Contact the TECO S.r.l area retailer
On the display appears the message "E1"	Damage of the water's temperature probe	Contact the TECO S.r.l area retailer
On the display appears the message "E2"	Damage of the overheating temperature probe	Contact the TECO S.r.l area retailer
On the display appears the message "AL1"	Dirty air filter	Clean the filter as indicated in Chapter 6, Maintenance
	Room temperature is too high	Restore the optimal environmental conditions. The maximum allowed room temperature is 38 °C (100 °F)
	Obstructed ventilation grille	Release the ventilation grille or place the air-conditioner in a suitable environment
	Failed ventilation system	Contact the TECO S.r.l area retailer FAN
On the display appears the message "AL2"	The UV lamp has run out (this signalling is present only if the sterilisation system is installed)	Replace the UV lamp available at the TECO S.r.l. dealers
The temperature displayed is not the real one	The water does not circulate correctly inside the hydraulic circuit	Check eventually pipes obstructions Check the efficiency of the aquarium's pump (not supplied)
	Long and not insulated pipes	Reduce as much as possible the pipes and insulate them
	Temperature sensor not calibrated correctly	Calibrate the temperature sensor as described in paragraph 5.2.2 Thermostat Settings

Tab. 7-1



WARNING: The operator must be able to check, from all the positions to which he has access, that the plug remains disconnected.

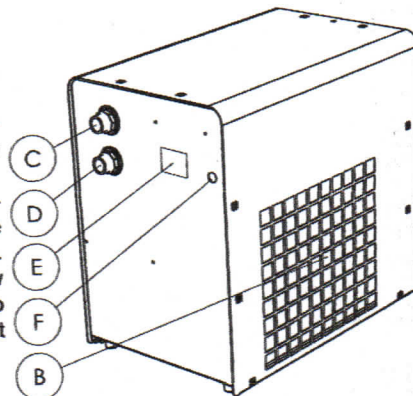
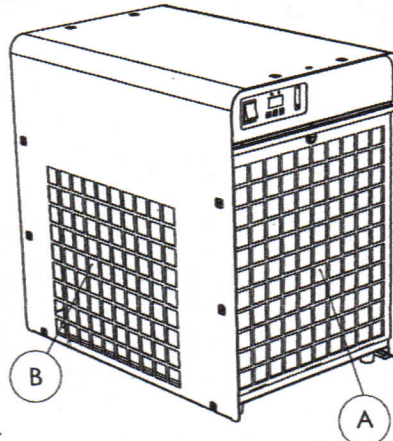
5.2 INSTALLATION AND FUNCTIONING OF THE DEVICE

- 1) Do not install and do not try to repair the product if it was damaged during transport.
- 2) Do not connect the power cord to the power supply, unless specifically required.
- 3) In order to ensure the correct working of the device in safe conditions, it is absolutely forbidden to expose the product to atmospheric agents and to direct heat sources. The temperature of the installation environment has to be between 5 °C and 38 °C (41 °F – 100 °F).
- 4) Choose the place foreseen for the installation of the device. It must have the following features:
 - It must have openings that allow change of air with the outside.
 - The air change must be such to dissipate the heat of the device.
 - Make sure that the room temperature does not exceed 38 °C (100 °F) during operation.
- 5) Place the device by taking into consideration the minimum recommended distances to allow visibility:





Air outlet side (Ref. B)	>500 mm – 19.7 in
Filter side (Ref. A)	>300 mm – 11.8 in
Electrical power supply cable side (Ref. F)	>60 mm – 2.3 in

Tab. 5-1

- 6) Lay the tubes as follows:
Insert the fitting (supplied in the package, including gasket and ring) inside the pipe, screw clockwise the fitting orienting it as needed and tighten firmly.
- 7) In connecting the pipes, check that the pipe coming from the pump and/or from the filter group (not supplied as standard) is connected in the position indicated with INLET (Ref. C) and that the return pipe to the aquarium is connected in the position indicated with OUTLET (Ref. D)
- 8) Start the pump and make sure that the water circulates regularly within the circuit without any leaks. In case of abnormalities of the hydraulic circuit or leaks thereof, inspect the connections.
- 9) **WARNING: Make sure that the water that reaches the device is filtered.**
- 10) Make sure that the electrical power supply requirements correspond to those shown on the technical data plate, applied on the rear of the device.
- 11) With the pump in operation, insert the electrical power supply cable in the electrical current socket and by displacing the electrical switch in position "1", your device will start operating. The temperature of water is indicated on the display. To view the temperature to be reached, press the SET key; to return to the water temperature, press once again the SET key or wait for 5 seconds.
- 12) **WARNING: A 2-minutes delay was added to prevent compressor failure at the first start.**
- 13) To stop the device, displace the electrical switch in position "0".












5.2.1 Information on the display

- "Green light"  On: unit in cooling mode
- "Red light"  On: unit in heating mode
- "Green light"  Flashing light: unit ready for cooling
- "Red light"  Flashing light: unit ready for heating


5.2.2 Thermostat settings


Refer to figure 15 for buttons detection.

- 1) To change the temperature of the water:
 - a. Press the SET key, the value currently set is displayed. The value starts blinking
 - b. Change the value by using the  and  keys
 - c. Press the SET key to confirm the set value or wait 5 seconds, the value is stored
- 2) Changing the hysteresis value of operation
 - a. Press for 10 seconds the SET key
 - b. On the display will appear the hysteresis value currently set. The value will start blinking. It is advisable not to change this value
 - c. Change the value by using the  and  keys
 - d. Press the SET key to confirm the set value or wait 5 seconds, the value is stored
- 3) Adjustment of the temperature viewed on the display
In the event that the temperature viewed on the display is different than that taken inside the aquarium, proceed as follows:
 - a. Press for 10 seconds the SET key
 - b. On the display will appear the hysteresis value currently set. The value will start blinking
 - c. Press once again the SET key
 - d. On the display will appear the value of the temperature currently read by the probe. The value will start blinking
 - e. Change the value by using the  and  keys
 - f. Press the SET key to confirm the set value or by waiting 5 seconds, the value is stored
- 4) Change of the unit of measurement of the temperature viewed on the display
 - a. Press simultaneously the  and  keys
 - b. On the display will appear the writing C - F (from Celsius degrees to Fahrenheit degrees) or F - C (from Fahrenheit degrees to Celsius degrees). The temperature will be displayed with the new unit of measurement
- 5) Activation/deactivation of the water sterilisation kit

 **NOTE: The water sterilisation kit is optional in the TK3000, TK6000 and TK9000 models, while it is supplied as a standard in the TK3000H, TK6000 and TK9000H models.**

- a. Press the "UV" key
- b. The corresponding bright detector light switches on and the UV lamp inside of the device lights up
- c. By pressing once again on the UV key the function is deactivated and the bright detector light switches off


 **NOTE: if the optional water sterilisation kit is not present, in the event that the UV key is pressed, the corresponding bright detector light starts blinking.**

 **WARNING: after 6-8 months of use of the optional water sterilisation system, the UV-C lamp runs out and must be replaced.**

5.3 TRANSPORTATION AND STORAGE

The conditioner must be handled carefully in a vertical position using the handles. It is recommended to place it on a flat surface.

5.4 DEMOLITION AND DISPOSAL

 The crossed-out wheellie bin label that can be found on your products, indicates that the product may not be treated as household waste. By ensuring that this product is disposed of correctly, you will help preventing potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of these products. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal or the dealer where you purchased this product.

This information only applies to customers in the European Union, according to Directive 2002/96/EC of EUROPEAN PARLIAMENT and THE COUNCIL OF 27 January 2003 on waste electrical and electronic equipment (WEEE) and legislation transposing and implementing it into the various national legal systems. For other countries, please contact your local government to investigate the possibility of recycling your product.