AUSTEK FULL INVERTER
SWIMMING POOL HEAT PUMP

Installation and Instruction Manual

Model:
Austek Atlas 60kw / Austek Atlas 120kw / Austek Atlas 250kw







Please read this manual carefully before installation, operation or maintenance.

CONTENTS

1. PRECAUTIONS ····· 1
1.1. Risks of Casualties ····· 2
1.2. Risks of Equipment Damage ····· 2
1.3. Attention ····· 3
2. GENERAL INFORMATION ····· 4
2.1. Technical Specification ····· 4
2.2. Unit Dimension ····· 5
3. INSTALLATION INSTRUCTION ····· 6
3.1. Transportation ····· 6
3.2. Installation Distance ····· 6
3.3. Layout of Water System ····· 7
3.4. Electric Installation ····· 7
4. TESTING ····· 9
4.1. Initial Inspection ····· 9
4.2. Leakage Detection ····· 9
4.3. Trial Operation ····· 9
5. OPERATION ····· 10
5.1. Main Interface of Wire Controller ····· 10
5.2. Operation of Wire Controller ····· 10
6. MAINTENANCE ····· 19
6.1. Cleaning ····· 19
6.2. Inspection ····· 19
6.3. Winterizing ····· 19
6.4. Warranty ····· 20

1. PRECAUTIONS

The following are special precautions that need to be followed strictly.

 **R32 Gas**	The refrigerant used in this equipment is flammable. Exposure of refrigerant to external ignition sources may cause a fire hazard. This equipment needs to be kept away from any source of fire.
	Read this manual carefully before performing any operation of the equipment.
	The installation and maintenance of this equipment must be performed by professional service personnel.
	Service personnel should strictly refer to this manual when installing, operating or maintaining the equipment.
	Before installing the equipment, the power supply, voltage, and frequency must be confirmed to be correct. Connect the power cord correctly according to the wiring diagram on the device.
	The equipment must be properly grounded to prevent the risk of electric shock due to leakage of electricity.
	The equipment must be vacuumed thoroughly before welding. Welding should only be done by professional service personnel.
	The equipment must be placed in a well-ventilated area. Indoors or in enclosed areas is not allowed.

1.1. Risks of Casualties

a. It is strictly prohibited to store flammable, explosive and toxic items in the place where the unit is used to prevent accidents such as fires.
b. Improper installation may cause fire or electric shock.
c. Improper operation may result in personal injury.
d. Please place the main power switch out of the reach of children and avoid contact by children.
e. This equipment is not suitable for direct use by children. Children must be supervised by adults when using it to ensure their safety.
f. If this product needs to be operated at high temperatures, appropriate fire extinguishing devices should be prepared, such as dry powder or carbon dioxide fire extinguishers.
g. Do not touch the edges of fins to avoid cuts.
h. Do not operate or touch this equipment with wet hands to prevent electric shock.
i. Do not put your fingers into the vents, as high-speed fan operation may cause serious injury.
j. Do not touch the refrigerant pipe with your hands to avoid burns.
k. When it is necessary to cut off the power for maintenance, please wait for 1 minute after the power is cut off before touching the circuit board to avoid electric shock caused by capacitor discharge.
l. If refrigerant leakage occurs during installation or use, any operation should be stopped immediately and service personnel should be asked to check.
m. Do not clean the machine while the power is on. Please turn off the power before cleaning. Otherwise, personal injury or electric shock may occur due to the fan operating at high speed.

1.2. Risks of Equipment Damage

a. The equipment must be stored and transported vertically in its original packaging. If this is not possible, do not operate immediately after correct placement and must wait at least 24 hours before applying power.
b. Ensure that the water flow has been established before starting the equipment. Do not start the device until water flow is established. Otherwise, there is a risk of damage to the device.
c. In winter or when the air temperature is below 0°C, the water must be drained when the equipment is not in use. Otherwise, the equipment will be damaged by freezing. In this case your warranty will be void.
d. Improper installation may cause the equipment to fall or leak.
e. Misoperation may cause damage to the equipment.
f. Do not place objects that obstruct airflow near the air inlet and outlet. Otherwise, it will affect the efficiency of the equipment and even cause the equipment to malfunction and stop running.
g. Please turn off the main power supply during thunderstorms to avoid equipment damage or short circuit.

h. Make sure that no water penetrates into the electrical components, otherwise the electrical components will be damaged.
i. Do not use any method to accelerate the defrosting process or clean frosted parts, otherwise the equipment may be damaged.

1.3. Attention

a. Install this equipment in accordance with local laws, regulations and standards.
b. After receiving the product, carefully inspect it and confirm whether it is in good condition, whether there are fixing screws.
c. Before formal installation, unpack the heat pump, cut off the packaging tape, remove the packaging, and take out the bottom wooden pallet. Plastic bags and tape should be disposed of properly and kept out of the reach of children.
d. Ensure that the equipment is installed securely.
e. A circuit breaker must be installed between the equipment and the user's power supply.
f. Check the surrounding environment of the cable to ensure that it is not affected by wear, corrosion, extrusion, sharp edges or any other adverse environment. The cables need to be connected firmly to avoid loosening due to continuous vibration of the compressor, fan, etc.
g. If leakage is found in the pipe connected to the water inlet and outlet, the equipment needs to be shut down immediately.
h. In order to optimize the heating effect, install insulation materials on the water pipes.
i. Set the appropriate temperature for a comfortable experience, too heat or too cold should be avoided.
j. The pool insulation cover can be used during the heat pump heating process, which will help improve the heating efficiency of the heat pump.
k. When the equipment fails to operate normally or reports a fault code, stop operation and contact maintenance personnel.
l. Use only parts specified by the manufacturer to replace components.

2. GENERAL INFORMATION

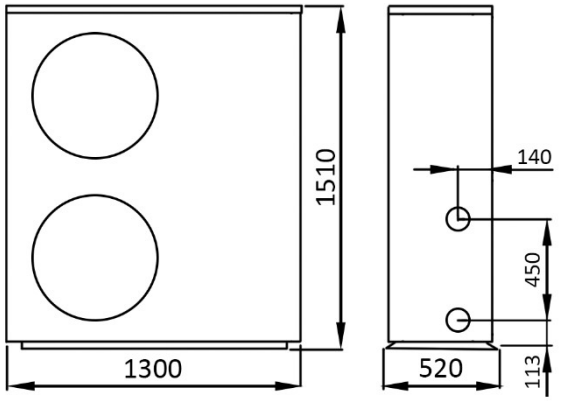
2.1. Technical Specification

Model No.: Austek Atlas		60kw	120kw	250kw
Refrigerant	/	R32		
Power Supply	/	380-415V/3N~/50Hz		
Performance Condition: Air Temperature 27°C, Inlet Water Temperature 26°C, Humidity 80%				
Heating Capacity	kW	60.8	120.5	250.2
COP	W/W	6.44~18.15	6.54~18.07	6.39~18.09
Performance Condition: Air Temperature 15°C, Inlet Water Temperature 26°C, Humidity 70%				
Heating Capacity	kW	41.3	80.7	182.9
COP	W/W	5.10~8.68	5.07~8.87	5.35~8.41
Operating Air Temperature	°C	-20~43		
Rated Power Input	kW	0.81~9.44	1.61~18.43	3.14~39.15
Sound Level (1m)	dB(A)	52~62	54~65	60~71
Sound Level (10m)	dB(A)	32~42	34~45	40~51
Max. Current	A	30	62	125
Advised Water Flow	m^3/h	20~25	40~50	80~100
Water Pressure Drop	kPa	40	60	110
Water Connection	mm	60.3	88.9	88.9

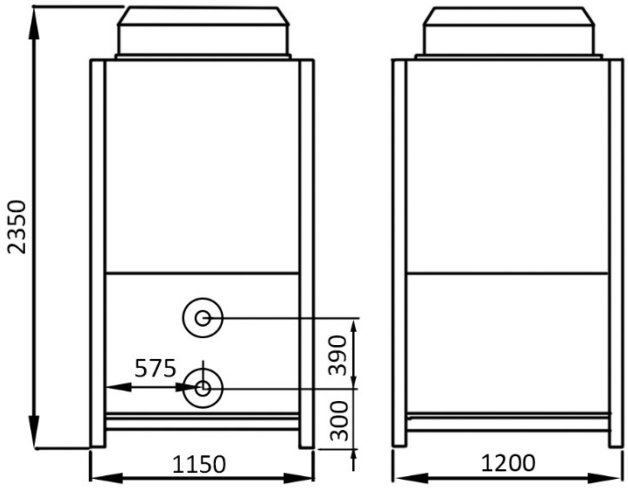
2.2. Unit Dimension

unit: mm

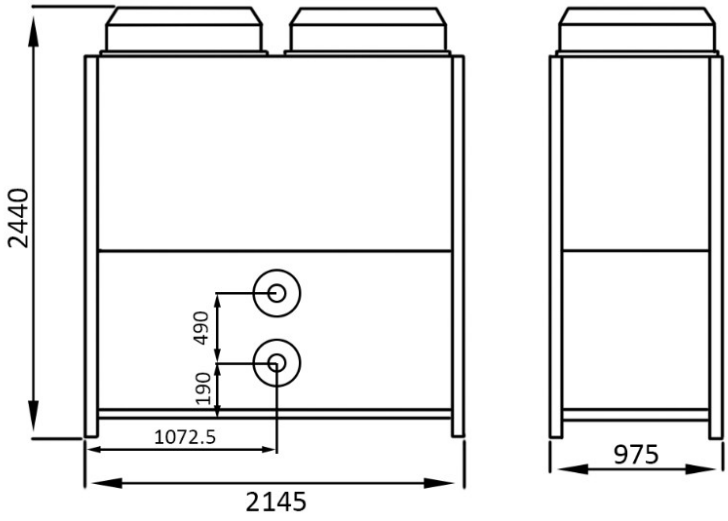
Austek Atlas 60kw:



Austek Atlas 120kw:



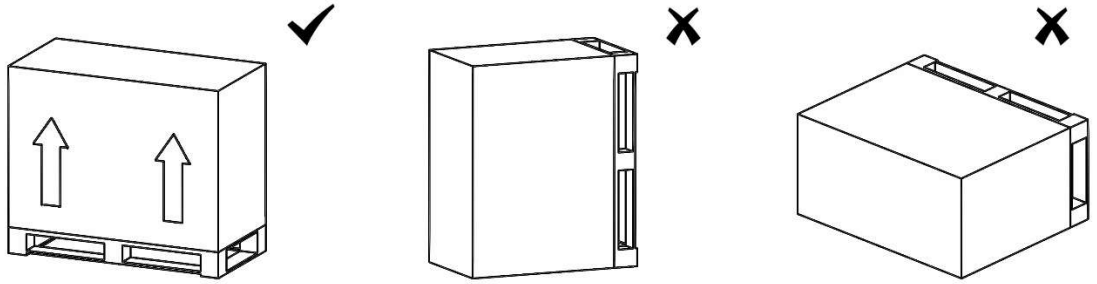
Austek Atlas 250kw:



3. INSTALLATION INSTRUCTION

3.1. Transportation

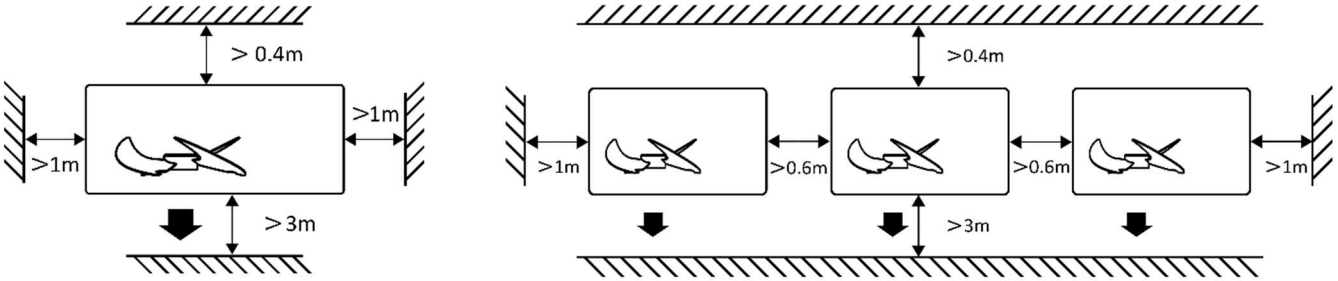
When storing or moving the heat pump, always keep it upright and never place it on its side.



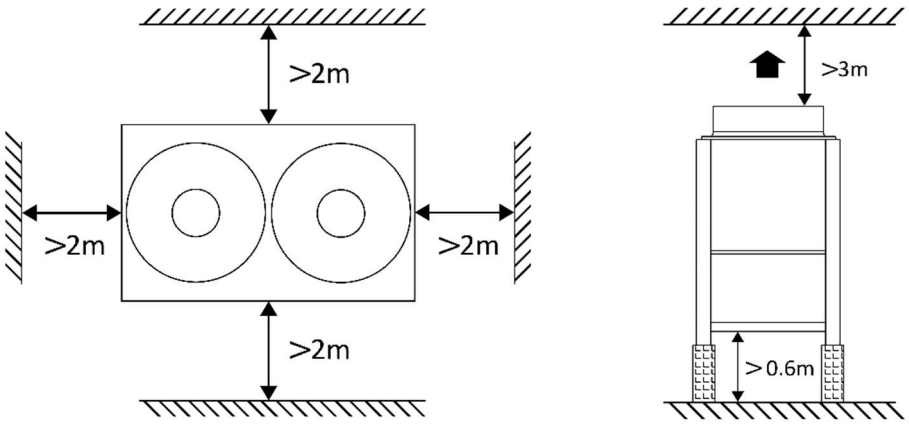
3.2. Installation Distance

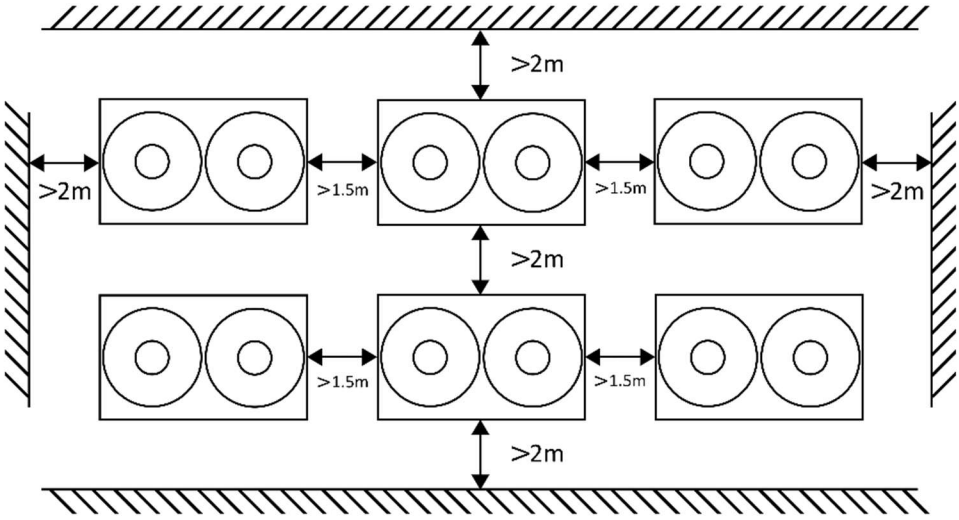
The heat pump should be installed in a well-ventilated area. And the location of the unit must be easily accessible for convenient operation and maintenance. It should be installed in the place greater than the following distances:

(1) For front discharge unit:



(2) For top discharge unit:

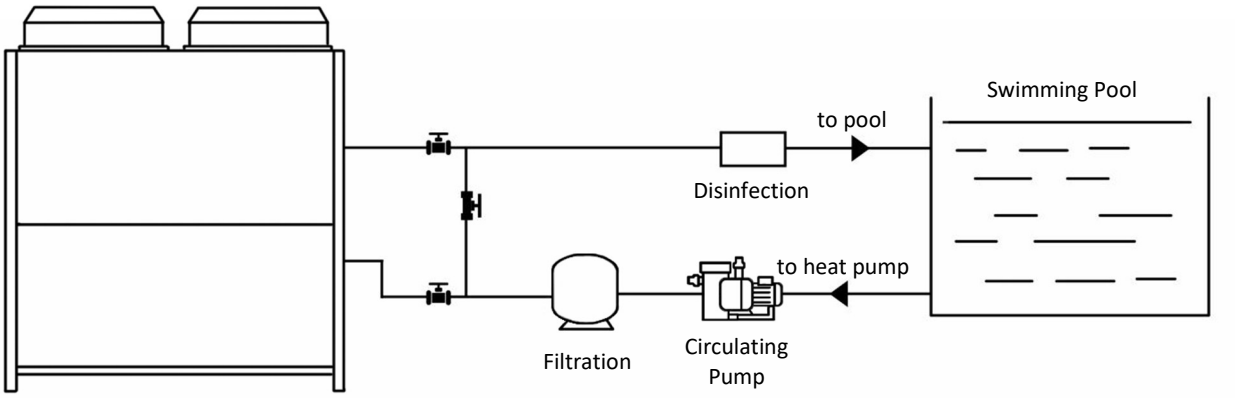




3.3. Layout of Water System

Keep the water pump running if operating temperature drops below 0°C. To keep the water in your system clean and avoid filter clogging, the filter must be cleaned regularly.

The suggested installation schematic of water system is shown below:



3.4. Electric Installation

(1) Wiring Precautions

For safe operation and to maintain the integrity of the electrical system, wiring must be conducted in accordance with the following regulations:

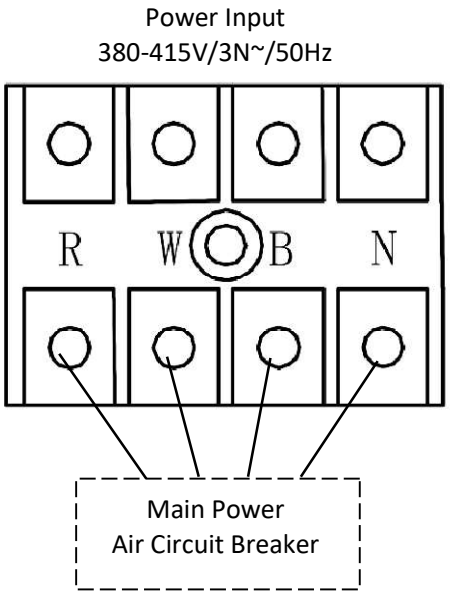
a. Wiring must be connected by professional technicians according to the wiring diagram.

b. The heat pump must be connected to an appropriate circuit breaker in accordance with the current standards and regulations of the country where the system is installed.
c. Connect to a suitable power supply, and the voltage should comply with the rated voltage of the equipment.
d. For three-phase systems, they must be connected in the correct phase sequence. If the phases are reversed, the heat pump compressor will not work.
e. Make sure the heat pump is well grounded.
f. The power supply cable must be suitable for the rated power of the equipment and the wiring length required for the installation. The cable must be suitable for outdoor use.
g. In places open to the public, an emergency stop switch must be installed near the heat pump.
h. Power cords and signal lines should be arranged neatly and not affect each other.

(2) Wiring Instruction

WARNING: Power to the heat pump must be disconnected before performing any wiring work.

- Connect the cable to the corresponding port of the heat pump as shown below.



4. TESTING

4.1. Initial Inspection

Make sure that the following items are complied with.

a. The heat pump is installed correctly.
b. Pipes and wires are connected correctly.
c. The power supply voltage is the same as the rated voltage of the unit.
d. The leakage protector works normally.
e. The ground wire is connected correctly.
f. Drainage is smooth and there is no water leakage.
g. Pipe insulation is completed.
h. The air in the duct has been exhausted.
i. Refrigeration pipes or components are not installed in corrosive environments.

4.2. Leakage Detection

All the following operations must be performed by professionals.

a. Leak detection fluid is suitable for most refrigerants, but chlorine-containing cleaners cannot be used because chlorine may react with the refrigerant and corrode the copper pipes.
b. Leak inspection must be done in a ventilated area. It is prohibited to detect the leakage in closed areas.
c. When refrigerant leakage occurs, stop using the equipment immediately and contact the service center professionals.
d. If welding is required, complete vacuuming is required before welding.

4.3. Trial Operation

Step 1: The user must turn on the water pump first and then the heat pump. Turn off the heat pump first, then the water pump. Otherwise the equipment will be damaged.

Step 2: Before starting the heat pump, check for water leaks, set the appropriate temperature, and then turn on the power.

Step 3: Check the following items during trial operation.

a. Is there any abnormal noise or vibration during operation?
b. Is there any leakage in the entire gas system?
c. Are all the keys of wire controller normal?
d. Is the display of wire controller normal?
e. Is the current normal?
f. Is the condensed water discharge normal?

5. OPERATION

5.1. Main Interface of Wire Controller



5.2. Operation of Wire Controller

5.2.1. Running Status

There are three running statuses: Operating, OFF and Standby.

Operating status:



OFF status:



Standby status (when the target water temperature is reached or there is fault or protection, the unit will enter the standby status):



5.2.2. ON/OFF

Click the following key to turn ON or OFF the unit.



5.2.3. Mode Switching

Click the following key to switch between different modes.



Mode	Description
Boost Heating	Heating mode. Maximize the performance of the heat pump and realize rapid heating.
Eco Heating	Heating mode. Can be used if rapid heating is not required, achieving more energy-saving effect.
Silent Heating	Heating mode. Achieve a silent state of the heat pump, with the best energy saving effect, while also maintaining water temperature.
Smart Heating	Heating mode. Automatically switch between Boost, Eco or Silent Heating based on the actual heat demand.
Cooling	Cooling mode, decreasing the water temperature.
Auto	Automatically switch between heating or cooling mode based on the current and target water temperature.

5.2.4. Temperature Setting

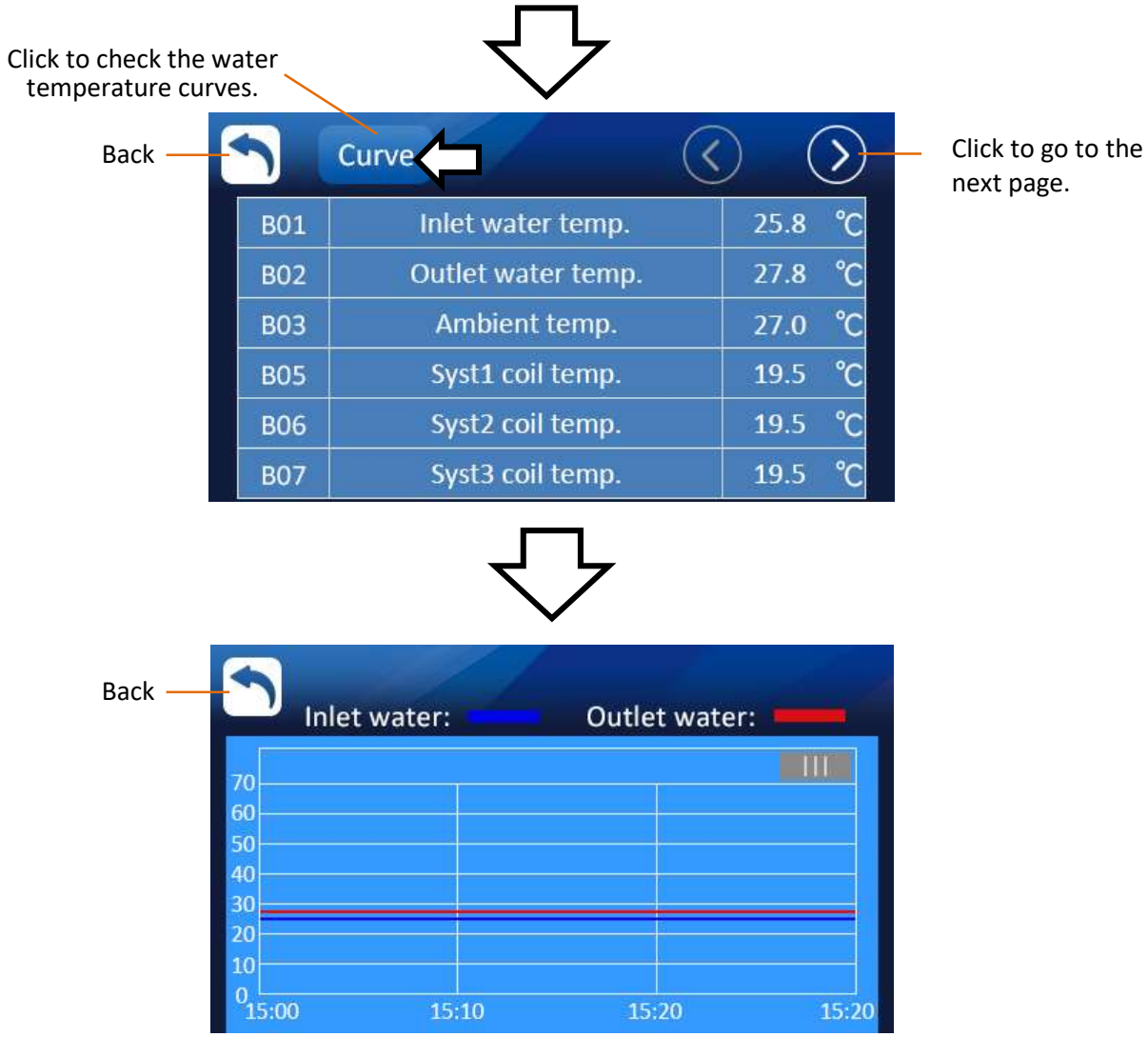
Click the following key to set the target water temperature.



5.2.5. Status Parameter Query

Click the following key to check the unit status parameters.

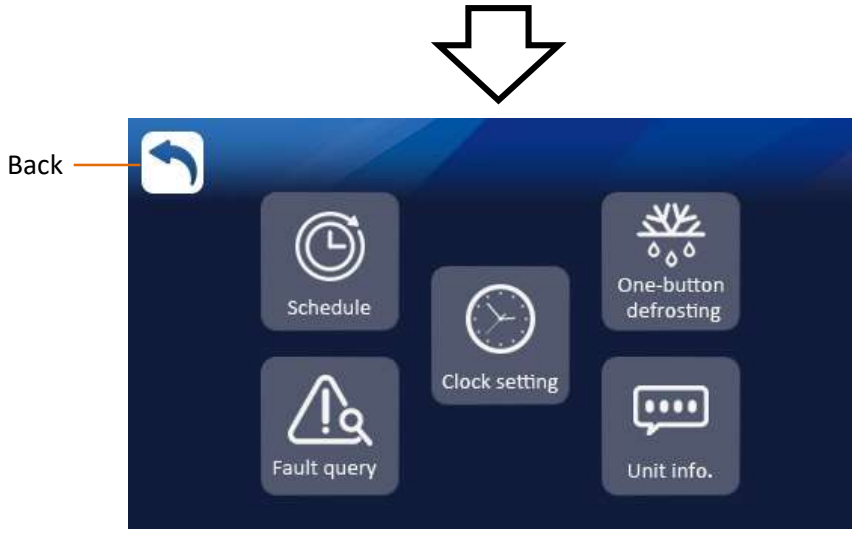




5.2.6. Function Setting

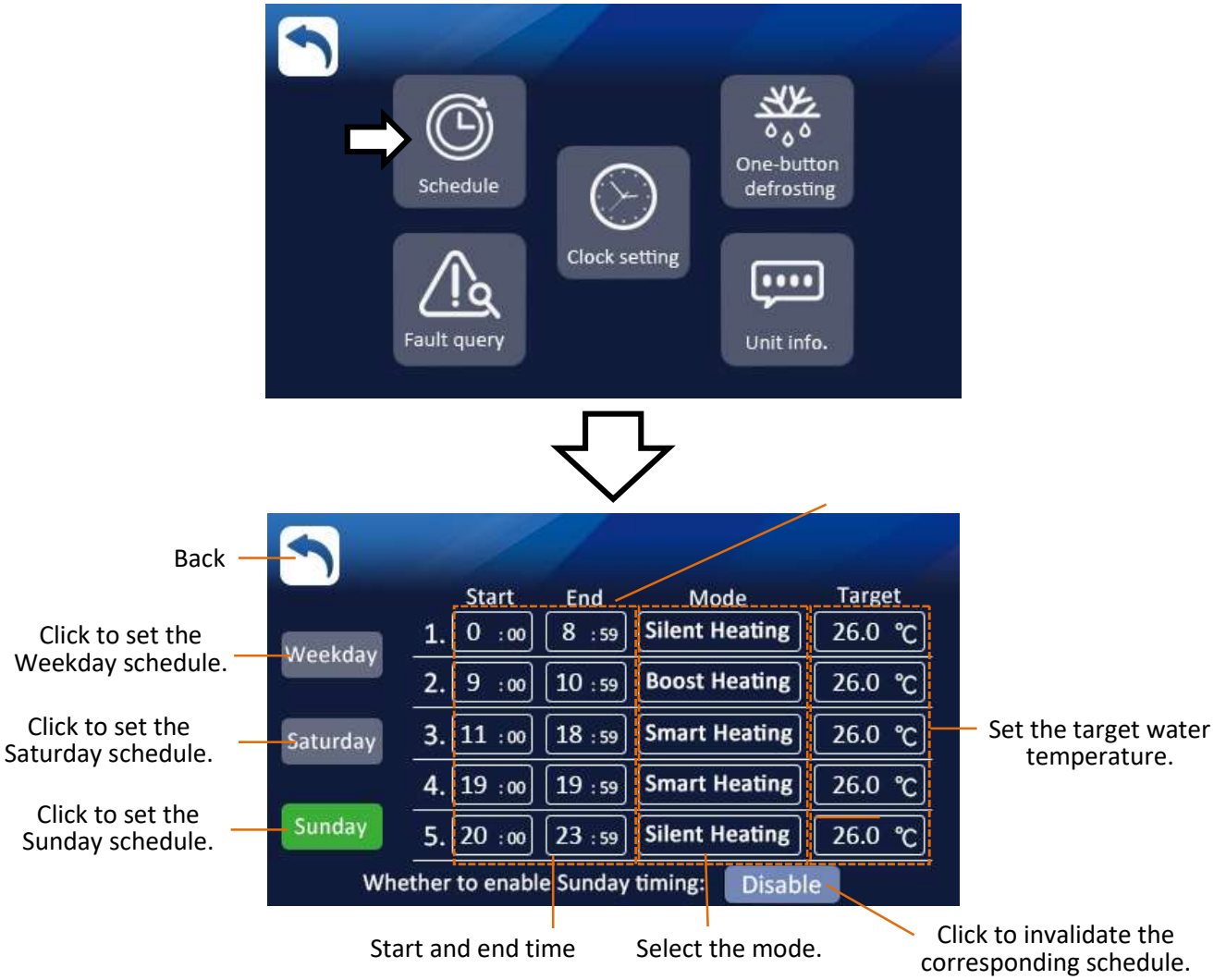
Click the following key to enter the function setting interface.





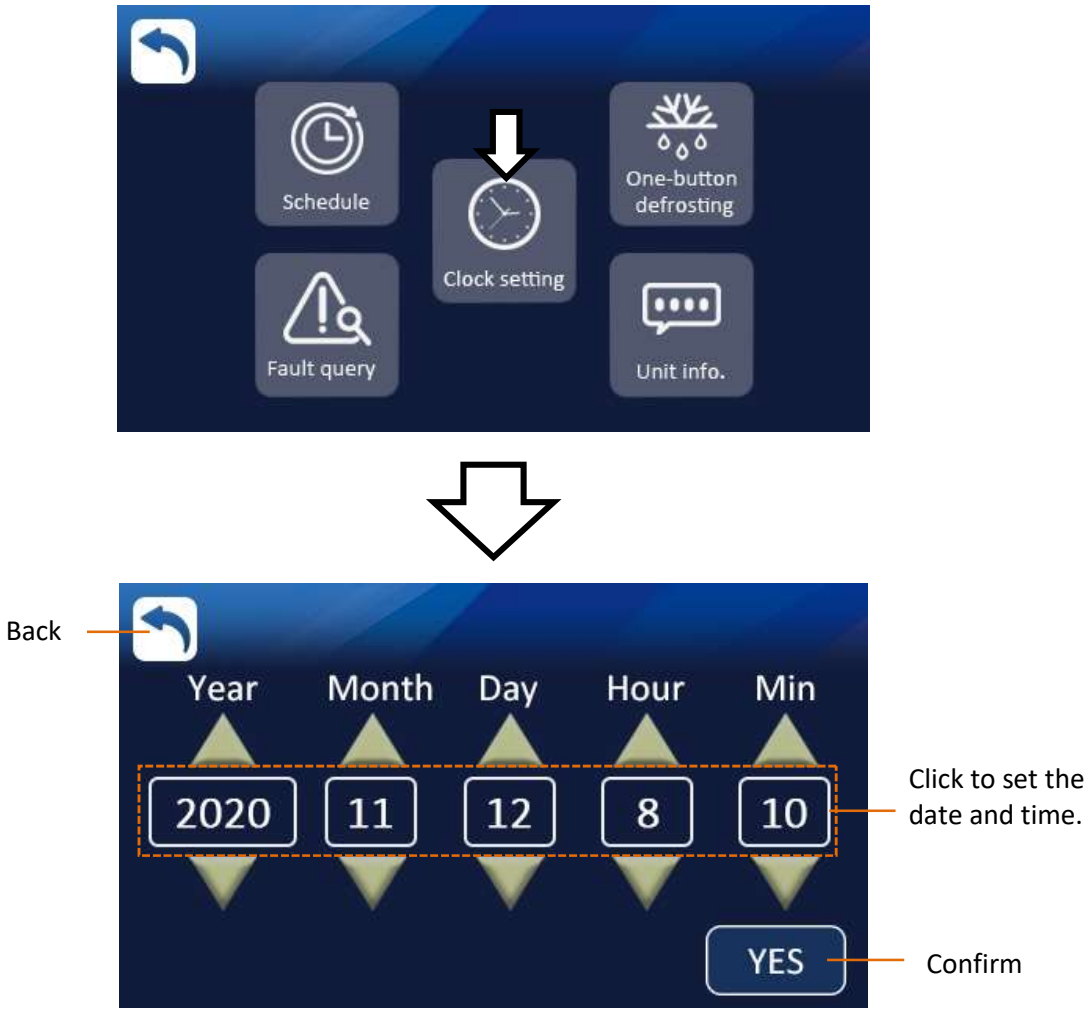
a. Schedule Setting

Click the following key to enter the schedule setting interface.



b. Clock Setting

Click the following key to enter the Clock setting interface.



c. One-button Defrosting

Click the following key to enter the defrosting mode.



d. Fault Query

Click the following key to enter the fault interface.

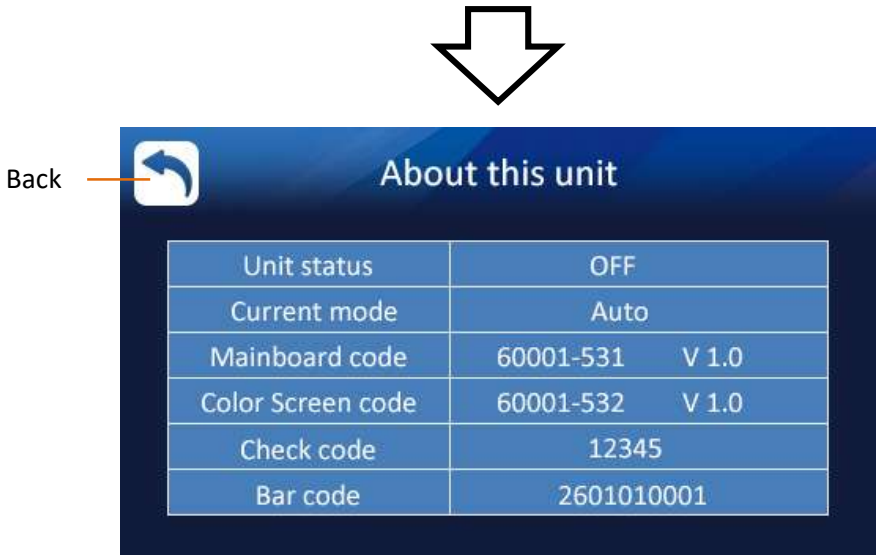




e. Unit Information

Click the following key to check the unit information.




Back
About this unit
Unit status
OFF
Current mode
Auto
Mainboard code
60001-531
V 1.0
Color Screen code
60001-532
V 1.0
Check code
12345
Bar code
2601010001

6. MAINTENANCE

Warning: Before maintaining the equipment, make sure the power supply is turned off.

6.1. Cleaning

a. Do not use a hard brush to scrub the surface of the machine.

b. Use household cleaners or water to clean the machine. Do not use gasoline, thinner or any similar fuel.

c. If there is garbage attached to the air inlet or outlet, it needs to be cleaned up in time.

d. Clean the finned-tube heat exchanger of the heat pump by using a vacuum cleaner or soft brush.

6.2. Inspection

The following checks should be performed regularly:

a. Clean the pool and filter system to avoid dirty or clogged filters that could damage the unit.

b. The water supply system should be checked to avoid air entering the water system and low water flow, which would reduce the performance and reliability of the unit.

c. Check and confirm that there is enough water flow before starting the unit again.

The following operations must be performed by qualified personnel at least once a year:

a. Check for refrigerant leaks.

b. Check the connections and integrity of the wires.

c. Check that the machine is still grounded.

d. Check if there is any abnormal sound when the device is running

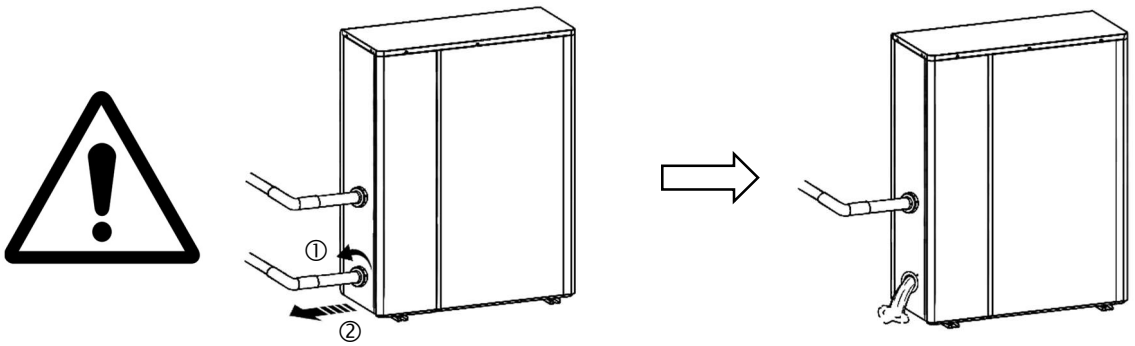
e. Check for loose bolts and screws.

6.3. Winterizing

When not swimming in winter:

a. Cut off the power supply to prevent damage to the equipment.

b. Drain the water in the machine: Unscrew the water joint of the water inlet pipe and let the water flow out. (The water in the machine freezing in winter may damage the titanium heat exchanger.)



Keep your heat pump covered with a winter cover when not in use.

6.4. Warranty

Our product range comes with a limited 3-year warranty covering any component failure or defective workmanship from the installation date a further 5 years on the compressor and 15 years on the titanium components in the heat exchanger.

GENERAL

1.1 This warranty is provided by Austek pool heaters Pty Ltd.
1.2 For the purposes of this document, the Austek heat pump swimming pool heater is referred to as the "unit."
1.3 Austek offers a trained and qualified national service network to repair or replace components at the location of the heat pump, subject to the terms of this warranty. Austek Service can also provide preventative maintenance and operational advice; however, it cannot give site-specific advice and would be recommended to speak to the original installer or dealer.
1.4 For more details about this warranty, please visit www.Austekpoolheaters.com.au
1.5 If a subsequent version of this warranty is published, the terms of that warranty will apply to units manufactured after the date specified in the subsequent version.
1.6 The application of this warranty is contingent upon payment for the unit being made in accordance with the Company's Standard Terms and Conditions.

1. **TERMS OF THE AUSTEK WARRANTY AND EXCLUSIONS**

   2.1 The warranty period commences from the end user's date of purchase.

   2.2 The decision to repair or replace a faulty component is at Austek's sole discretion.

   2.3 If you require a call-out and the fault is not covered by the Austek warranty, you are responsible for our standard call-out charge. If you wish to have the relevant component repaired or replaced by Austek, that service will be at your cost.

   2.4 Where a failed component is replaced under this warranty, the balance of the original warranty period remains effective. The replacement does not carry a new Austek warranty.

   2.5 If the unit is installed in a position that does not allow safe or ready access, the cost of that access, including the cost of additional materials handling and/or safety equipment, will be the owner's responsibility. This includes the cost of dismantling or removing cupboards, doors, or walls, and any special equipment to bring the pool heater to floor or ground level or to a serviceable position.

   2.6 This warranty only applies to the original and genuine Austek unit in its original installed location and any genuine Austek replacement parts.

   2.7 The Austek warranty does not cover faults resulting from:

   a) Accidental damage to the unit or any component (e.g., acts of God such as floods, storms, fires, lightning strikes, and third-party acts or omissions).

   b) Misuse or abnormal use of the unit.

   c) Installation not in accordance with the Owner's Guide and Installation Instructions or with relevant statutory and local requirements in the State or Territory where the unit is installed.

   d) Connection of the unit in any way that does not comply with the guidelines outlined in the Owner's Guide and Installation Instructions.

   e) Repairs, attempts to repair, or modifications to the unit by anyone other than Austek Service or an Austek Accredited Service Agent.

   f) Faulty plumbing or faulty power supply.

g) Failure to maintain the unit in accordance with the Owner's Guide and Installation Instructions.

h) Transport damage where freight is arranged by others.

i) Fair wear and tear from adverse conditions (e.g., corrosion).

j) Cosmetic defects.

2.8 Subject to any statutory provisions to the contrary, this warranty excludes all claims for damage to furniture, carpet, walls, foundations, or any other consequential loss either directly or indirectly due to leakage from the unit, or from fittings and/or pipe work of metal, plastic, or other materials caused by water temperature, workmanship, or other modes of failure.
2.9 This warranty is void if the unit is installed by an installer not approved by Austek or by persons who are not qualified to do so in the opinion of Austek.
2.10 The warranty on the unit's internal heat exchanger covers failure due to water imbalance. It does not cover failure caused by hydraulic damage, such as excess pressure. The extended parts warranty covers the cost of a replacement heat exchanger but excludes labour or associated costs or the cost of any subsequent damage.
2.11 This warranty does not cover the replacement or replenishment of refrigerant within the unit.
2.12 It is a condition of this warranty that the customer has correctly and precisely stipulated the capacity and performance required of the System and the conditions under which the System shall operate. Any performance figures given in the Quotation or mentioned or referred to before the contract are expectations based on tests but are not guaranteed. All such performance figures, whether analytical or financial, are estimates only, and the customer must independently satisfy themselves of their accuracy and completeness. Failure to perform as specified should be notified to us in writing, and we shall be given every reasonable opportunity to investigate the cause of the failure and recommend remedial action. If it is clearly established that the fault is due to an error in calculation by us or failure by our employees to carry out instructions, we will rectify the fault at no cost to the customer within a reasonable time period.
2.13 This warranty does not cover damage to the unit or its components caused by the entry, presence or activity of animals, insects, reptiles, rodents or other foreign objects, including damage to electrical components or circuit boards caused by short circuits, contamination, nesting, chewing or obstruction.

3. **WHAT IS COVERED BY THE AUSTEK WARRANTY**

   3.1 Austek will repair or replace a faulty component of your unit if it fails to operate in accordance with its specifications in the opinion of Austek.

4. **ENTITLEMENT TO MAKE A CLAIM UNDER THIS WARRANTY**

   4.1 To make a claim under this warranty, you need to:

   a) Be the owner of the unit or have the consent of the owner to act on their behalf.

   b) Contact Austek Service without undue delay after detection of the defect and within the applicable warranty period.

   4.2 You are not entitled to make a claim under this warranty if your unit:

   a) Does not have its original serial numbers or rating labels.

   b) Is not installed in Australia.

5. **HOW TO MAKE A CLAIM UNDER THIS WARRANTY**

   5.1 To make a claim under this warranty:

   a) Contact Austek at info@austekpoolheaters.com.au and provide the owner's details, the address of the unit, a contact number, and the date of installation of the heater, or if that's unavailable, the date of manufacture, model, and serial number (from the rating label on the heater).

   b) Austek will arrange for the heater to be tested and assessed on-site.

c) If Austek determines that you have a valid warranty claim, Austek will repair or replace the heater in accordance with this warranty.
5.2 Any expenses incurred in making a claim under this warranty will be borne by you.

6. **THE AUSTRALIAN CONSUMER LAW**
6.1 Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
6.2 The Austek warranty is in addition to any rights and remedies that you may have under the Australian Consumer Law.

Making a Claim

The following steps should be taken when making a warranty claim with Austek Pty Ltd.

1. Owners experiencing issues with their system are to contact Austek Pty Ltd service department's online portal and provide the requested information.
2. A service agent will review the provided information and will contact you on the provided phone number to try and solve the issue.
3. If the issue cannot be dealt with over the phone, owners will be supplied with details of a service agent in their area.
4. Owners will need to contact and deal with service agents directly in relation to the booking and payments for works related to the service or repair of their Austek Pool Heat Pump.
5. Owners can claim reimbursement for costs of works covered under the product warranty when completed by an approved Austek Service Agent. When making a claim, owners will need to provide the following documents:
    - Proof that you are the original system owner – original invoice showing owner name and property address
    - Copy of the invoice from an approved Austek-approved service agent
    - For a major defect, a copy of the report for major defects from an approved Austek Service Agent

---

Please complete all the details below from the installer and store this card along with the purchase docket in a safe place.
Please take 2 or 3 photos of the installation and with this information and send them to info@austekpoolheaters.com.au

---

Installation Details

- Make .....
- Model .....

- Serial .....
- Commissioning .....
- By-pass valve fitted? .....
- Temperature difference .....
- Notes .....
- Supplied by .....
- Date of Purchase .....
- Installed by .....
- Installer No (if applicable) .....
- Date of Install .....
- Owner's full name .....
- Address of Premises .....
- Telephone number .....

AUSTEK POOL HEATERS

Austek Pool Heaters Pty Limited

info@austekpoolheaters.com.au

6/14 Burns rd Heathcote nsw 2233

* If the instruction manual is damaged or lost, please check it via www.austekpoolheaters.com.au