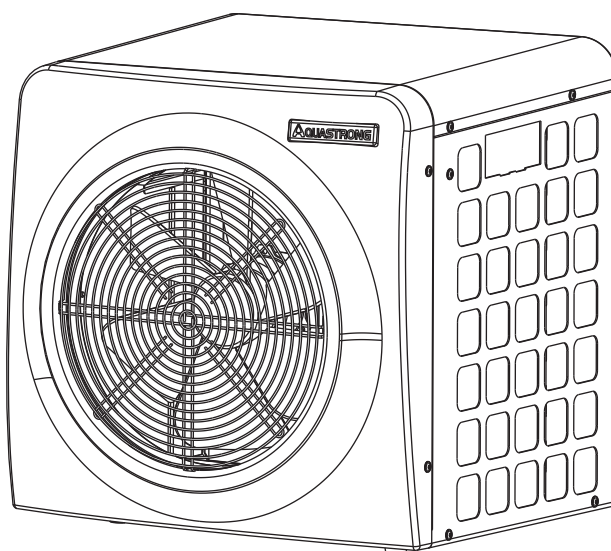




SWIMMING POOL HEAT PUMP

OWNER'S MANUAL



MODEL: HEX012 HEX016 HEX018

Email: service@aquastrong.co

Web: www.aquastrong.co



WARNING: SAVE THIS MANUAL FOR FUTURE REFERENCE

The manual includes essential safety, operation, maintenance, and storage instructions. Read and understand all warnings and instructions before use to avoid serious injury or property damage.

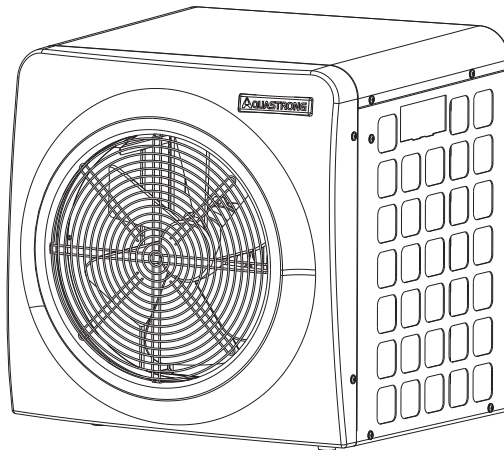


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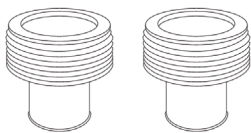
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OPERATION

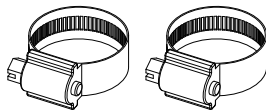
Package includes:



Pool heat pump



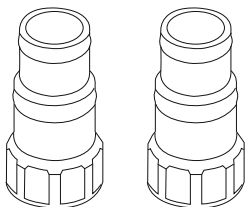
1-1/4" To 1-1/2" Type B
Hose Adapters



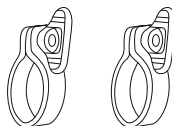
Metal Hose Clamps



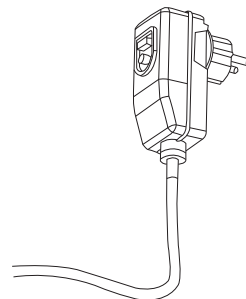
OWNER' S MANUAL



1-1/4" — 1-1/2"
Hose Connectors



Plastic Hose Clamps



RCD adapter

SAFETY GUIDELINES

For the safety of users and property, adhere to the following directions:

- Incorrect use could lead to injury or damage;
- Ensure installation conforms to local laws, regulations, and norms;
- Verify the unit's power voltage and frequency;
- The unit should be operated with grounding sockets only;
- An independent switch is required for this unit.

Considerations for Safety

Take into account these safety considerations before installation:

- Review all warning notices prior to installation;
- Inspect all details, especially safety aspects, that require attention;
- Preserve the installation manual for future use after review.

Cautionary Notes

- Confirm the unit is installed securely and functions reliably.
 - A poorly secured or uninstalled unit might result in damage.
 - Consider room size and airflow in tightly enclosed or small spaces to avoid suffocation due to refrigerant leakage.
- Employ proper tools for all electrical installations.
- Accurately connect the power cable as shown in the wiring diagram provided in the manual to prevent unit burnout or fire.
 - Utilize the designated wire and secure it properly to the terminal block to mitigate pressure on parts.
 - Incorrect wiring could lead to a fire.

Additional Safety Warnings

- A grounding mechanism is essential for the unit.

SAFETY GUIDELINES

- Do not connect the unit if the power supply lacks a grounding mechanism.
- Utilize appropriate installation materials.
 - Using incorrect components or materials can result in fire, electric shock, or the unit dropping.
- Ensure the unit is installed stably on the ground, and consult the installation manual.
 - Poor installation might cause fire, electric shock, the unit to fall, or leakage.
- The external unit should be positioned levelly to avoid noise and vibration.
- Only a qualified technician should remove or service the unit.
 - Incorrect handling or servicing might lead to leakage, electric shock, or fire. Engage a professional for these tasks.
- Avoid connecting or disconnecting the power during operation as it might lead to fire or electric shock.
- Refrain from handling the unit with wet hands to prevent fire or shock.
- Keep heaters and other electrical devices away from the unit's power cord to avoid fire or shock.
- Water should not directly contact the unit; ensure it does not seep into the electrical components.
- Do not place the unit in areas with explosive gases.
 - Exposure to flammable gases can cause explosions.
- Follow guidelines for managing the drainage systems and pipes. Faulty systems must be fixed immediately to avoid water damage to nearby items.
- Turn off the unit before cleaning to avoid injury from the high-speed fan or shock.
- Avoid accelerating the defrosting or cleaning process with methods not approved by the manufacturer.
 - Store the unit away from continuous ignition sources, like open flames or operational gas and electric heaters.
 - Ensure the refrigerants are not exposed to open flames or high temperatures.

HEATING RATE REFERENCE

HEATING RATE TABLE

POOL WATER CAPACITY	ENVIRONMENT TEMPERATURE	MAXIMUM WATER TEMPERATURE
7,900 GAL - 5,300 GAL	53°F - 59°F	77°F
	59°F - 68°F	86°F
	68°F - 77°F	91°F
5,300 GAL - 2,600 GAL	53°F-59°F	82°F
	59°F- 68°F	91°F
	68°F - 77°F	95°F
Below 2,600 GAL	53°F- 59°F	86°F
	59°F - 68°F	95°F
	68°F - 77°F	104°F

The water heating rate may change under the conditions below:

1. If the maintenance of the filtration system is not performed according to the instructions in the owner's manual and the flow rate is reduced.
2. If the cover is not in position. Always keep the pool cover on when the Pool Heater is in use.
3. In windy conditions, the heating rate will be reduced.
4. Do not use the Pool Heater in rainy conditions, as it will not be able to heat the water effectively.

The water temperature, as tested by an external thermometer, may vary from the temperature displayed on the panel by as much as approximately 35.6°F. The Pool Heater has been tested under limited conditions with an ambient temperature of 109°F(Dry bulb) and 79°F (Wet bulb).

TECHNICAL SPECIFICATIONS

Unit Model	HEX012	HEX016	HEX018
Heating Capacity A80°F/ W80°F/Humid. 80%	12,000 BTU/hr	16,000 BTU/hr	18,000 BTU/hr
COP A80°F/W80°F/ Humid. 80%	5.5	5.5	5.5
Heating Capacity A59°F/ W80°F/Humid. 70%	8153BTU/hr	10440BTU/hr	11672BTU/hr
COP A59°F/W80°F/ Humid. 70%	4.06	4.06	4.06
Cooling Capacity A95°F/ W85°F/Humid. 70%	4094BTU/hr	4806BTU/hr	5460BTU/hr
Current	7.3A	11.9A	12.6A
Power Supply	115V/60Hz	115V/60Hz	115V/60Hz
Advised Pool Volume (with pool cover)	3000GAL	5000GAL	6500GAL
Operating Air Temperature	19~109°F	19~109°F	19~109°F
Water Flow Volume	343GPH	450GPH	530GPH
Water Connection	1.25"&1.5"	1.25"&1.5"	1.25"&1.5"
Noise (33ft)	36 dB(A)	38 dB(A)	38 dB(A)
Noise (3ft)	48 dB(A)	48 dB(A)	48 dB(A)
Compressor Style	Rotary	Rotary	Rotary
Heating Exchanger	Titanium	Titanium	Titanium
Casing	ABS+Metal	ABS+Metal	ABS+Metal
Refrigerant	R32	R32	R32
CO2 Equivalent	0.1755t	0.189t	0.2025t
Net Unit Size (L/W/H)	16.7*15.4*17.2in		
Carton Size (L/W/H)	20*19*19.3in		
Net/Gross Weight	59.5/63.9lbs	66/69lbs	66/69lbs

Possible Variations in Performance Due to Climatic Conditions.

INSTALLATION

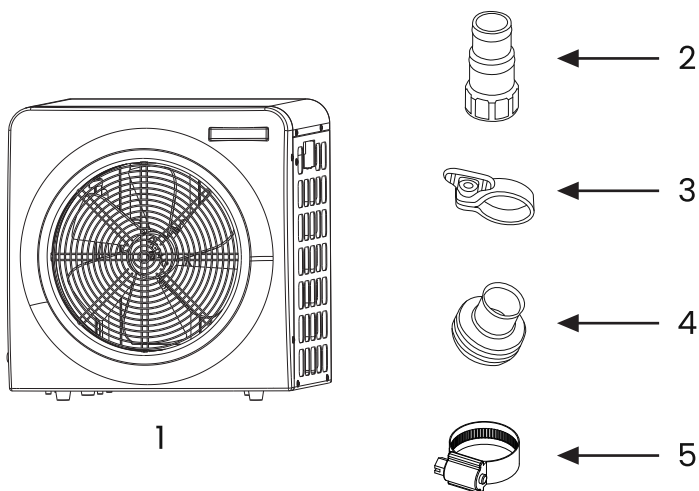
1. Preparation

Distance from the pool

The heat pump should be located at least 6.5ft away from the swimming pool.



- A free area of at least 1ft around the heat pump must be kept clear of any objects.
- Place the heat pump on a flat, solid base.
- Do not obstruct the fan; leave at least 5ft of free, unobstructed space in front of the fan.

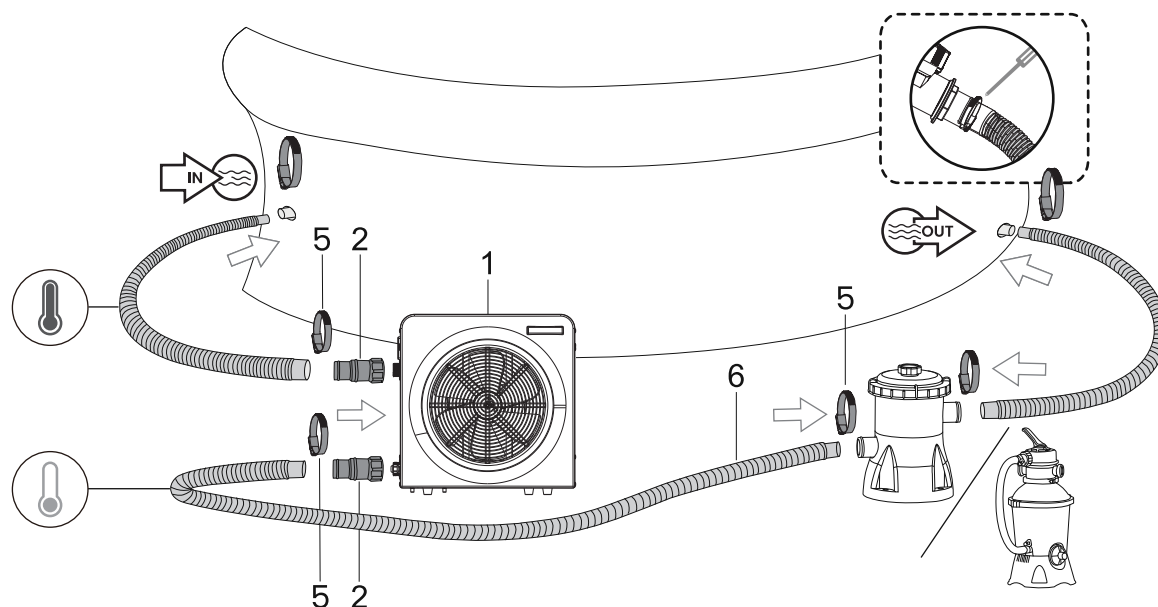


No.	ITEM	QTY
1	Pool Heat Pump	1
2	1-1/4" – 1-1/2" Hose Connectors	2
3	Plastic Hose Clamps	2
4	1-1/4" To 1-1/2" Type B Hose Adapters	2
5	Metal Hose Clamps	2

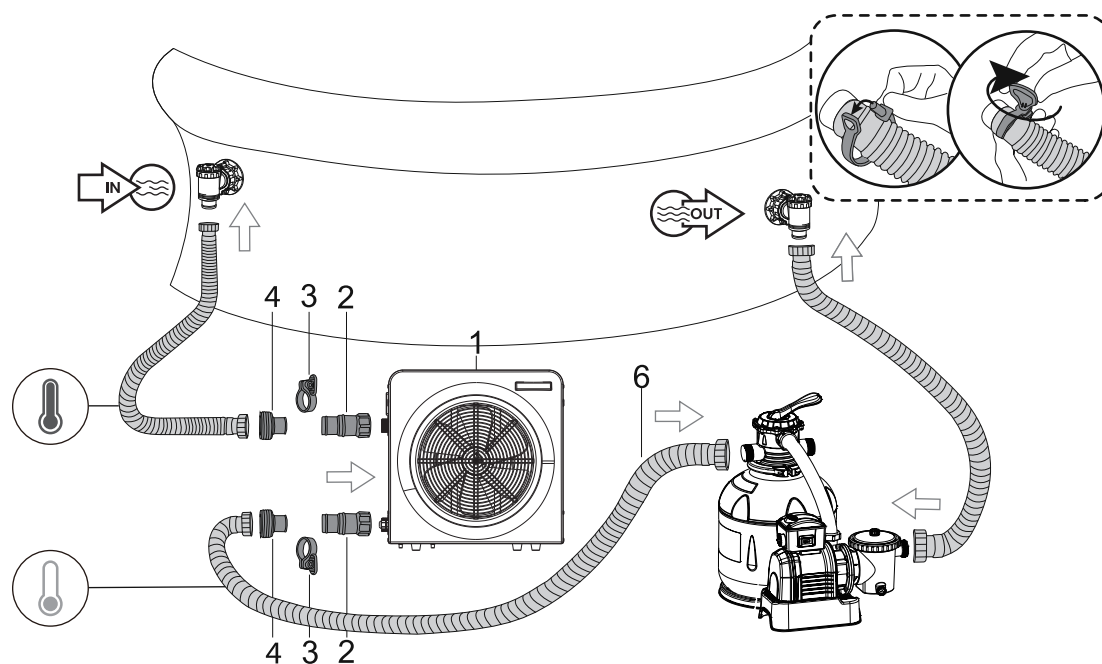
INSTALLATION

2. Hose Connection

A



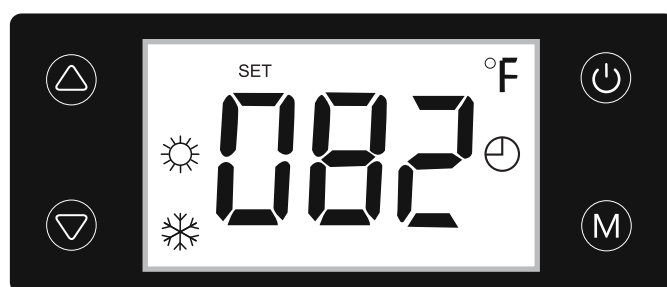
B



INSTALLATION

3. Using Pool Heater

- Switch on the filter pump. Check for leaks and verify that water is flowing to and from the swimming pool.
- Connect power to the heat pump and press the On/Off button on the control panel. The unit will start up.
- When first powered on, the pool heater will check the water flow within 30 seconds, then start running if the water flow is sufficient.
- The heat pump has a built-in 3-minute start-up delay to protect the circuitry and avoid excessive contact wear. The unit will restart automatically after this delay expires.
- After a few minutes, check whether the air blowing out of the unit is cooler.
- When turning off the filter pump, the unit should also turn off automatically.
- Depending on the initial temperature of the water in the swimming pool and the air temperature, it may take some time to heat the water to the desired temperature. A good swimming pool cover can significantly reduce the required heating time.



TIP:

- When the Pool Heater is running or on standby, the display shows the water inlet temperature.

INSTALLATION



ON/OFF BUTTON: Press this button to turn on the heat pump. The LED display will show the water setting temperature for 3 seconds, then it will display the real water temperature. Press the button again to turn off the Pool Heater; it will show "OFF" on the display.



HEATING LED: The icon is on when the Pool Heater is working.



DEFROSTING LED: The icon flashes when the Pool Heater is defrosting.



MODE SWITCHING: Switch between cooling "❄️" or heating "☀️" mode.



TEMPERATURE ADJUSTMENT BUTTON: Press the arrows to adjust the desired water temperature. The temperature on the display will flash when the desired temperature is set, and the data will be saved after 3 seconds. The temperature adjustment range is 59°F–104°F.



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ANTI-FROST' FUNCTIONF: Hold for 5s to "ON" or "OFF".

OPERATION GUIDELINES

Cold Weather Conditions

- Your heat pump is designed to operate in rainy weather conditions and withstand frost using specially created anti-frost technology. However, it is not recommended to leave it outside for long periods of time (e.g., over winter). After draining the pool for the winter, store the heat pump in a dry place.

Restarting The Heat Pump After Long-term Storage

- If your heat pump has been stored for a long time, perform the following steps when re-starting the system:
 1. Inspect the system for any debris or damage to the case.
 2. Clean the evaporator fins if necessary. Ensure the evaporator fins are clean. Blocking the air intake will cause insufficient operation and result in lower heat production.
 3. Check the fan for blockages.
 4. Connect the water inlet and outlet.
 5. Turn on the pool water circulation pump to start the water flow to the heat pump.
 6. Restore electrical power to the heat pump and press the RESET button on the RCD.

OPERATION GUIDELINES

Maintenance and Error Messages

1. Check the water supply to and from the unit often. Low water flow or air entering the pipes should be avoided, as this will diminish the heat pump's performance and reliability. Regularly clean the swimming pool water to prevent damage to the heat pump caused by dirty pool water.
2. Ensure the area around the heat pump is clear and well-ventilated. Clean the evaporator and evaporator guard regularly to maintain good airflow and efficiency.
3. Check the power supply and cable connections often. In case of abnormal operation or a smell of burning near the electrical compartment, switch off the heat pump and contact your dealer.

TROUBLESHOOTING

MALFUNCTION	CODE	REASON	SOLUTION
Water temperature sensor failure	E15	Water temperature sensor open circuit or short circuit.	1. Check the sensor wiring.
			2. Replace the water temperature sensor.
Piping temperature sensor failure	E16	Piping temperature sensor open circuit or short circuit.	1. Check the sensor wiring.
			2. Replace the piping temperature sensor.
Ambient temperature sensor failure	E21	Ambient temperature sensor open circuit or short circuit.	1. Check the sensor wiring.
			2. Replace the water temperature sensor.
Too low or too high ambient temperature protection	E44	1. Ambient temperature is out of operating range: 23°F ~ 109.4°F.	1. Wait for the ambient temperature to recover to the operating range.
		2. Controller failure.	2. Replace the controller.
Water flow failure	E03	1. Insufficient or no water flow.	1. Check the water pump or water piping system.
		2. The wiring for the water flow switch is loose.	2. Check the wiring of the water flow switch.
		3. Malfunction of the water flow switch.	3. Replace the water flow switch.

TROUBLESHOOTING

SERVICE

MALFUNCTIONS	OBSERVING	REASON	SOLUTION
Pool Heater is not running	LED display off.	No power supply.	Check if there is power in the wall socket where the Pool Heater is connected.
	LED display is on, and it shows the water temperature.	1. Water temperature is reaching the set value.	1. Verify the water temperature setting.
		2. The Pool Heater just started.	2. The Pool Heater has a built-in 3-minute start-up delay to protect the circuitry and avoid excessive contact wear.
Pool heating effect	1. LED displays on and it shows water temperature, no error code displays.	1. Poor ventilation at the installation site.	1. Check the location of the heat pump unit and eliminate all obstacles to ensure proper ventilation.
	2. The air from the blower is not cold.	2. The heating system fails and the fan blades do not operate.	2. Have a professional maintenance person check.
Water leakage	Water on the floor when the Pool Heater doesn't work.	Water leakage.	Check the connection with the hoses, loosen and place the gasket in position.

WARRANTY INFORMATION

Warranty Coverage AQUASTRONG offers a comprehensive two-year limited warranty to the original purchaser of our products. This warranty assures that the products are free from material and workmanship defects under normal use and service for two years from the date of purchase.

Conditions

- This warranty is non-transferable and is only valid for the original purchaser.
- The warranty covers replacements or repairs of parts that are proven defective in material or workmanship.
- The warranty excludes any problems due to improper use, accidental damage, unauthorized modifications, or misuse.
- The warranty does not cover incidents of natural wear and tear or use beyond intended commercial, rental, or other non-consumer applications.

Exclusions

- Damage from unauthorized repairs or alterations.
- Losses caused by accidents, neglect, or improper maintenance.
- Damage resulting from failure to follow the instructions contained in our user manual.

How to Claim Warranty

- To benefit from your warranty, please contact email at service@aquastrong.co or visit our website at www.aquastrong.co to submit a warranty service request.
- We appreciate your choice of aquastrong and offer an extended warranty option, increasing the initial two-year coverage to three years, subject to registration on our website within 90 days of product delivery.
- Warranty registrations after the 90-day period will be considered invalid.

WARRANTY INFORMATION

Post-Warranty Support

- Should you encounter issues with your aquastrong product outside the warranty period, we are still here to help. Contact our customer service team for assistance and practical solutions.

Aquastrong's Commitment

- Replacement of defective parts or the entire item, depending on the nature of the defect.
- Refund under certain conditions if a replacement or repair is not feasible.

In no event shall liability exceed the original purchase price paid for the product.

For the latest updates on our warranty terms or any other information, please visit our website or contact our customer support directly. Aquastrong is dedicated to providing outstanding after-sales support to ensure your satisfaction with our products.



Email: service@aquastrong.co

Web: www.aquastrong.co

If you come across a problem that cannot be resolved, don't hesitate to reach out to our customer service team for assistance. We're here to help!