

OPERATIONS MANUAL

AZP-BT-003182-110V

Water Cooling System
OPERATIONS MANUAL

From



Model:
AZP-BT-003182-110V
Water Cooling System

Sold By:



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AZP-BT-003182-110V Water Cooling System INSTRUCTIONS

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Limited Warranty

Arc-Zone.com, Inc tests and inspects all new water coolers and warrants them against defects in material and workmanship.

Arc-Zone will warranty the water cooler for 90 days from the date of purchase.

This warranty is expressly limited to replacement or repair of the defect based on the evaluation of an Arc-Zone Technician and excludes consumable parts that wear as a part of normal operation. All repairs will be based on FOB Vista, CA.

Arc-Zone.com, Inc shall not be liable for any loss or consequential damage or incurred third party expenses resulting directly or indirectly from the use of the equipment covered by this warranty.

Introduction



WARNING

A potentially hazardous condition, if not avoided, may result in death or serious injury:

Water cooling tanks are designed to dispel the heat that is caused by the welding equipment. They supply cooling water to the welding equipment to help prevent overheated. Water cooling tanks come in different capacities to accommodate different size applications.

Safety



Danger

Please follow the below guidelines to help avoid serious injury:

- Safety has been carefully taken into consideration during the design and manufacturing process. Please pay close attention to the below guidelines to avoid injury.
- The machine shall not be used for anything other than its intended use.
- Please comply with local requirements regarding input voltage, installation location, water usage, etc.
- Please limit those close to the welding application to the operator and/or key personnel.
- Those with pacemakers should avoid working with the cooler unless otherwise advised by a doctor. The pump's magnetic field can cause interference to regular pacemaker operation.
- Only have experienced, trained personnel install, maintain, or repair the unit.
- To guarantee safety, only staff who have read and understand these precautions should operate the unit.
- Do not make direct contact with the electrical components of the unit.
- Have an electrician ground the unit based on local regulations.
- During installation or repair, close the distribution box power first and allow 5 minutes prior to starting.
- Do not use wire cable with worn/damaged insulation.
- Make sure the cable joints are insulated.
- Do not operate the machine with the shell removed.
- Please use a dry insulated glove.
- Maintain and check the unit regularly.
- Shut off the input power while not in use.
- Use the electric shock prevention device when operating in tight spaces.
- Please turn off the water cooler power switch to avoid electric shock.

**Caution**

Operate per below to avoid injury:

- Do not operate the machine if the housing or other protective devices are damaged.
- Do not allow fingers, clothes, hair to contact rotating cooling fan, etc.

**Caution**

Operate per below to avoid injury:

- Check handle prior to lifting.
- Be careful to check when replacing water tank not to spill or dump water into the unit.

**Caution**

Operate per below to avoid injury:

- To avoid a possible burn, allow time for the water to cool prior to replacing it.
- When maintaining the unit in a cold environment, wear protective safety equipment to prevent possible burns.

Configuration

The water cooler circulates water via the water pump. Once pressurized, the circulation system will discharge high temperature water. Return water flows the condenser, which is cooled by the fan, and now cooled water is returned to the tank. This water cooling series has large capacity, rapid cooling, wide range of application, and a favorite by users!!

Key Features

- Easy to operate, no exhaust required.
- Built-in intelligent control panel, transformer, and independent fan provide stabilize heat dissipation.
- Overload protection ensures long life.

Tech Specs

Model	AZP-BT-003182-110V
Supply Voltage	AC 110V 50HZ
Rated Input Power	111W
Rated Lift	98ft (30m)
Rated Water Capacity	2.0 gal (7.6L)
Enclosure Protection Degree	IP21
Dimension (L x W x H)	23 in x 13 in x 15 in
Weight	45 lbs (20kg)
Storage Temperature	14 °F - 131 °F
Working Environment Temperature	23 °F - 104 °F

Front-Panel Components

- Fuse: should a short circuit occur, the fuse will burn out protecting the pump and cooling fan.
- Power Switch: Provides power to the unit.
- Water Outlet Joint: Connected by a water line to the water inlet joint.
- Return Water Joint: Connects to the return water line.
- Buzzer: Any blockage of return water supply will sound this alarm.

Machine Operation

Check the water level by looking through the water window. The water level needs to be greater than half the rated capacity of the water tank. Confirm the connection of the inlet and return water joints. Turn on the power supply.

Caution

- When environment temperature is greater than 105 °F, tap water or other neutral water with a PH of 7 can be used.
- When environment temperature is less than 105 °F, ionized water, cooling fluid, antifreeze, or a 1/3 alcohol 2/3 distilled water should be used. Freezing water will burst and damage the pump.
- Do not exceed the rated capacity of the water tank.
- While in use, make sure the water tank is greater than half-full. Water should be added as needed.
- When environment temperature is below than 105 °F, drain the water from the system to avoid freezing.
- If the unit will not be used for a long period of time, water should be drained from the system.

(Note: there is a small amount of water stored in the condenser. Use compressed air on the return water joint to blow water into the tank.)

Cycle Checklist

Part Name	Check Point	Measure	Cycle
Circulating Water	Dirt	Clean out water tank, water way system and change circulating water	1 month
Water Filters	Too much dirt	Clean out the dirt	1 month
Water Tube	Whether there is a leak	Exchange water tube	1 month
Condenser	Having dust	Sweep out dust	1 month
Cooling Fan	Whether fan and electrical wire is loose	Screw up and add lube	Half a year
Pump Joint	Leak	Screw up and replacing	Half a year

Troubleshooting Unit

Issue	Cause	Solution
Power switch doesn't work	<ol style="list-style-type: none"> 1. The switch is broken 2. AC230V is disconnected 3. Fuse is in short circuit 	<ol style="list-style-type: none"> 1. Change switch 2. Check the incoming line and switch spot 3. Change fuse
The fuse is fused	<ol style="list-style-type: none"> 1. The amperage of the fuse is too low 2. The motor of water pump or fan is in short circuit 	<ol style="list-style-type: none"> 1. Exchange the fuse between 3A and 5A 2. Exchange the motor
The fan doesn't rotate	<ol style="list-style-type: none"> 1. There is a problem with AC230V power 2. There is a problem with fan 	<ol style="list-style-type: none"> 1. Check power supply 2. Check and repair the fan
Water not flowing out	<ol style="list-style-type: none"> 1. Gas filled into the water way system 2. There is a fault in the water pump 3. There is a serious blockage in water way system 	<ol style="list-style-type: none"> 1. Can connect the pipe at the outlet and suck out air 2. Check and repair water pump 3. Check and repair water way
Not enough water flowing out	<ol style="list-style-type: none"> 1. There is slight blockage in water way system 2. There is a problem with water pump 	<ol style="list-style-type: none"> 1. Check and repair water way system (inlet of the pump) 2. Check and repair water pump

Wiring Diagram

