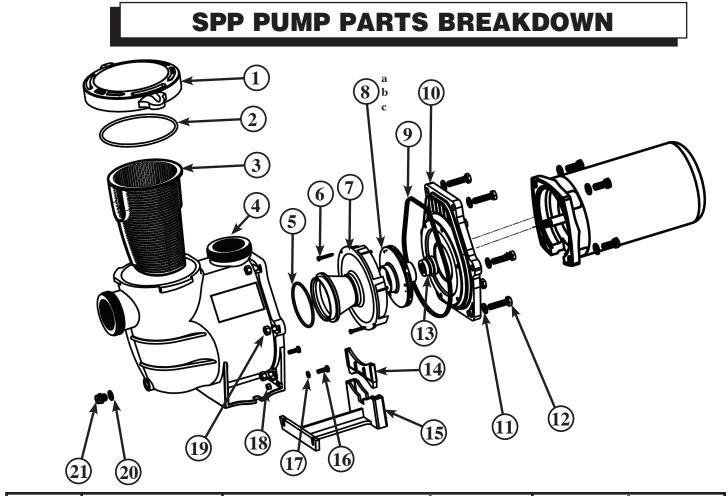
# SPP POOL PUMP

# **INSTRUCTION MANUAL**



#### READ THIS MANUAL CAREFULLY BEFORE USING YOUR SPP PUMP



PART #	MODEL #	DESCRIPTION	1000 SPP	1500 SPP	2000 SPP
1	AC 81361	Pump Lid	1	1	1
2	AC 81396	Pump Lid O-Ring	1	1	1
3	AC 81434	Pump Basket	1	1	1
4	AC 81937	Strainer Casing	1	1	1
5	AC 81477	Diffuser O-Ring	1	1	1
6	AC 82015	Diffuser Screws	1	1	1
7	AC 82333	Diffuser	1	1	1
8A	AC 84468	Impeller 1 HP	1	1	1
8B	AC 82538	Impeller 1.5 HP	1	1	1
8C	AC 82546	Impeller 2 HP	1	1	1
9	AC 82565	Casing O-Ring	1	1	1
10	AC 82589	Seal Plate	1	1	1
11	AC 82597	Housing Washer	10	10	10
12	AC 82600	Housing Bolts	6	6	6
13	AC 82619	Seal Plate	1	1	1
14	AC 82627	Base Bracket	8	8	8
15	AC 82643	Base Support	1	1	1
16	AC 82651	Base Bolt	2	2	2
17	AC 82649	Base Bolt Washer	2	2	2
18	AC 85847	Base Bolt Nut	1	1	1
19	AC 82724	Casing Nut	6	6	6
20	AC 81590	Drain Plug O-Ring	1	1	1
21	AC 81620	Drain Plug	1	1	1

#### **IMPORTANT SAFETY INSTRUCTIONS**

**NOTE** All wiring should be done by a qualified electrician in accordance to the National Electric Code and all Local Codes and ordinances.

When installing and using this electrical equipment, basic safety precautions should ALWAYS be followed.

#### **READ AND FOLLOW ALL INSTRUCTIONS**



## WARNING

- 1. To reduce the risk of injury, do not allow children to use this equipment
- 2. Connect only to a grounding type receptacle that is protected by a ground fault circuit interrupter (GFCI).
- 3. Do not connect this equipment to an extension cord. To reduce the risk of electric shock, only connect the electric cord to a properly located outlet.
- 4. To reduce the risk of shock, connect ground wires to the grounding screw located in the motor.
- 5. To reduce the risk of shock, a bonding connector is provided for bonding to any metal within 5 feet of the swimming pool. All local points should be bonded with #8AWG (8.4mm2) wire.

**NOTE** To installer and/or operator of the SPP swimming pool pump: the manufacturer's warranty will be void if the pump is improperly installed and/or operated.

#### **PUMP LOCATION**

- 1. Locate the pump on a level surface as close to the pool as practical. Consult local codes for minimum distances between pool and pump if applicable.
- 2. The connection plumbing (hose or rigid pipe) should be direct and as free from turns and bends as possible. Take care not to kink flexible hose. Elbows and other fittings greatly increase friction losses.
- 3. Place pump on a solid foundation / base which provides a rigid and vibration free support.
- 4. Protect the pump against flooding and excess moisture. Protect the motor from foreign objects clogging the air circulation around the motor.
- 5. **NEVER** use gasoline or other flammable liquids or vapors in the vicinity of this pump.

**NOTE** DO NOT store pool chemicals near this pump.

DO NOT remove any safety labels such as CAUTION / DANGER / WARNING from this pump. Keep labels in good condition and replace any damaged labels.

#### **PUMP INSTALLATION**

1. When connecting plumbing fittings to the pumps threaded ports, it is recommended that thread seal tape (Teflon tape) be used. If the suction (intake) connection is not sealed correctly the pump will not prime

properly and will pump only small volumes of water or no water at all.

- 3. Suction and discharge lines should be independently supported at a point near the pump to avoid strains being placed on the pump.
- 4. It is advisable to install a union in both the suction and discharge lines in the event the pump needs servicing or removal.
- 5. Before starting the pump for the first time remove the clear lid at the front of the pump. Fill the pump strainer with water until it is level with the suction port opening. Replace the lid making sure the lid is tight Hand tighten only.
- 6. **BONDING:** as required by the National Electrical Code Article 680-26 the pump must be electrically bonded to the pool structure by a solid copper conductor no smaller than #8 AWG via the external copper bonding lug on the motor.
- 7. **GROUNDING:** Permanently ground the pump motor using a conductor of appropriate size. Connect to the green headed screw provided inside the motor terminal box.

**NOTE** DO NOT CONNECT MOTOR TO THE ELECTRIC POWER SUPPLY UNTIL IT IS PERMANENTLY GROUNDED.

# **ATTENTION LICENSED ELECTRICIANS STANDARD WIRING FOR 220V**

#### - See Motor Label for Details -

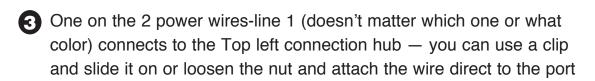
If you are connecting your Blue Torrent Pump to a 220V power source follow these simple directions. Remove the rear housing to expose the electric connection plate



Your New Blue Torrent Pump is pre-wired for 220V operation



You will attach the 2 power supply wires and the ground wires as indicated below



A Connect second power wire (line 2) to the connection hub below the first connection. Again you can slide on a clip connection or loosen the nut and attach the wire direct. Once again the color of the line in does not matter

Attaching the ground wire (green) Take the 3rd wire from your power source (green) and attach it to the grounding screw located on the motor





## ATTENTION LICENSED ELECTRICIANS STANDARD WIRING FOR 110V — See Motor Label for Details —

If you are connecting your Blue Torrent pump to a 110V power source follow these simple directions. Remove the rear housing cover to expose the electric connection plate

Move the white wire (not your power cord white) —the short white wire inside the motor housing- from the current location to the clip pin located in the center of the connection plate. You can use pliers to pull the clip from its original location and slide it onto its correct position

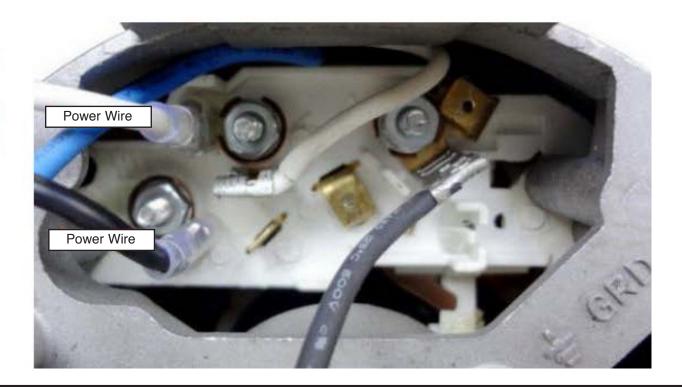
Move the black wire (not your power cord) —the short black wire located inside your motor housing- from its current location and slide it onto the hub located on the right side of the connection plate

Take one of your wire leads from the power source —the color does not matter (do no use ground green wire)— and connect it to the wire hub next to the existing white wire. If your power source wire has a clip on the end you can slide it onto the hub pin

Take the second power source wire and connect it to the hub below the first power wire connection

Take your power source ground wire (green) and connect it to the grounding screw located on the motor

6 Replace housing cover



#### **STANDARD WIRING FOR 115V/230V**



#### WHITE SWITCH PLATE STYLE 48 FRAME

- 1. Unscrew the cover over the back end of the motor
- 2. You will see a White Switch Plate with a black knob. You will turn that to the electric setting that the pump runs on.
- 3. If you are wiring 230V and AFTER the black knob shows 230, one wire will go to L1 terminal and the other to L2 terminal. The green wire is placed under the ground screw. The color wires going to terminal 1 and 2 do not matter what terminal they are posted on.
- 4. If you are wring 115V and AFTER the black knob shows 115, attach the white wire to terminal 1 of line 1 (L1). Attach the black wire to terminal 3 of line 2 (L2). The green ground wire in place under the ground screw.
- 5. Replace the back cover.

\* For models 2018 and up.

#### **PUMP MAINTENANCE**

- The pump requires little to no maintenance other than reasonable care and cleaning of the strainer basket on a regular basis. The pump is equipped with a mechanical seal. This seal may eventually come loose of a period of time, depending on running time and water quality. If water continually leaks out, a new mechanical seal should be installed.
- The pump is equipped with a rubber gasket that seals the strainer basket lid. This gasket should be lubricated with water proof lubricant (O-RING LUBE) to ensure proper seal and extend gasket life.

The gasket becomes cracked or worn (flattened) is will become necessary to replace.

#### WINTERIZATION

 In areas subject to freezing temperatures, it is recommended that the pump be disconnected and stored indoors in a warm and dry location. Remove the drain plugs from the pump housing and place them in the strainer basket for storage.

#### **DO NOT BLOCK SUCTION**

- 1. Pump suction is dangerous and can trap and drown or disembowel bathers.
- 2. Blocking suction with body may cause severe and/or fatal injury
- 3. Do not operate swimming pools, spas or hot tubs if a suction outlet cover is missing, broken or loose
- 4. Suction outlet must be replaced if cracked, broken or missing.
- 5. All suction outlets must have correctly installed screw fastened covers in place.



## WARNING

#### **RISK OF ELECTRICAL SHOCK**

- 1. To avoid dangerous or fatal electrical shock, **TURN OFF** power to motor **BEFORE** working on electrical connections.
- 2. To reduce the risk of electrical shock, turn off circuit braker before working on pump or motor.

#### **TROUBLE SHOOTING GUIDE**

PROBLEM	POSSIBLE CAUSE	SOLUTION		
Pump will not Prime	Suction Air Leak	Make sure see thru lid and gasket are clean, lubed and tightened. Tighten all hoses and pipes on the suction side of the pump. Be sure water level in the swimming pool is high enough to flow through skimmer. Be sure skimmer port is not plugged or blocked.		
	No Water in Pump	Make sure strainer tank is full of water		
	Closed Valves or Blocked Lines	Open all valves in system. Clean skimmer and strainer basket. Check for blockage in impeller		
	Low Voltage to Motor	Check voltage at motor. If low, pump will not come up to speed		
Motor Does Not Rur	No Power to Motor	Check that all power switches are on. Be sure fuse or circuit breaker is properly set. Timer set correctly? Check motor wiring at terminals		
	Pump Jammed	With power off, turn motor shaft. It should spin freely. If not disassemble and repair		
Low Flow	Dirty Filter	Backwash filter. When pressure is high you must backwash or clean filter Clean skimmer basket. Clean pump basket		
Motor Runs Hot	Motor is designed to run hot to the touch, this is normal. They are equipped with a thermal overload protector which will turn the motor off if there is an overload or high temperature problem. Excessive heat can be caused by:			
	Poor Ventilation	Do not enclose motor, be sure to have a proper air space around motor		
	Installed in direct sun	Shield motor from direct sun		



**Blue Torrent** manufactures all of its products using cutting-edge technology with the best materials and workmanship available.

Blue Torrent's PUMPS AND FILTERS are warranteed as follows:

## **1 YEAR LIMITED WARRANTY**

**Blue Torrent** warrants its Pumps and Filters to be free of defects in material and/or workmanship for a period of one year from the original date of purchase and/or installation.

### WARRANTY CLAIM EXCLUSIONS:

- · Damage caused by improper installation as specified in owner's manual
- Damage caused by improper handling
- Damage due to misuse, abuse and/or failure to operate item per owner's manual
- · Damage caused by improper water chemistry
- · Damage caused by improper winterization of equipment
- · Damage caused by not using original Blue Torrent replacement parts
- · Damage caused by improper wiring or use of extension cords
- Accidental damage, fire, acts of God or other circumstances outside of
  Blue Torrent's control

#### NOTE:

- Customer must retain the original sales invoice as proof of purchase along with the installers invoice (to establish date of installation)
- · Commercial facilities are not covered by warranty

Please return any and all defective items to your local authorized **Blue Torrent** dealer for inspection.

The customer is responsible for all shipping charges to and from the nearest Factory Warranty Center. For more information. Please visit *www.btwarranty.com* 

Should a defect in material or workmanship appear the product will be repaired or replaced at our discretion. **Neither Blue Torrent nor any authorized dealer is responsible for any charges related to the installation of the new item or part.** Nor are they responsible for any incidental charges incurred including, but not limited to, water, chemicals, landscaping or any other associated expenses.