

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Submersible Utility Pump

Description

This portable, submersible utility pump is designed for non-automatic use in water. The units are equipped with a grounding type power cord. The motor is oil filled and sealed for cooler operation. The discharge fitting is designed for convenient attachment to a garden hose.

IMPORTANT: THIS PUMP IS NOT SUITABLE FOR AQUATIC LIFE!

Unpacking

After unpacking the unit, carefully inspect for any damage that may have occurred during transit. Check for loose, missing or damaged parts.

Very Important Safety Information

⚠ DANGER

Danger indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

⚠ WARNING

Warning indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

⚠ CAUTION

Caution indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury.

NOTICE

Notice indicates important information, that if not followed, MAY cause damage to equipment.

This manual contains information that is very important to know and understand. This information is provided for SAFETY and to PREVENT EQUIPMENT PROBLEMS. To help recognize this information, observe the following:

1. Read these rules and instructions carefully. Failure to follow these instructions could cause serious bodily injury and/or property damage.



⚠ DANGER

Do not pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. Do not use in a flammable and/or explosive environment. Pump only clear water. Personal injury and/or property damage will result.



⚠ DANGER

Risk of electric shock! This pump has not been tested for use in swimming pool areas. Never place pump in pools while people are in the water.



⚠ DANGER

Do not handle pump with wet hands or when standing in water or on a damp surface.



⚠ DANGER

Risk of electric shock! This pump is supplied with a grounding conductor and grounding type attachment plug. Use a grounded receptacle to reduce the risk of fatal electrical shock.



⚠ WARNING

This pump contains dielectric motor oil for motor heat transfer. Care should be taken when disposing of this oil. Do not use this pump in ponds or fountains because the motor oil can be harmful to aquatic life.



2. Wear safety glasses at all times when working with pumps.
3. It is strongly recommended that this unit be plugged into a Ground Fault Circuit Interrupter (GFCI). Consult a local electrician for installation and availability.
4. Do not use the power cord or discharge hose to carry or handle the pump. Damage to the power cord or discharge hose may occur. Use the lifting ring supplied on the pump.



Installation and Operation

⚠ DANGER

Always disconnect electric supply before attempting to install, service, relocate or perform any maintenance. If the power source is out of sight, lock and TAG IN OPEN (OFF) POSITION to prevent unexpected power application. Failure to do so could result in fatal electrical shock!



NOTICE

This unit is not designed for use in septic tanks or underground vaults to pump raw sewage or effluents. Never use in hazardous or explosive locations.



1. This pump has been designed to attach to a standard garden hose. Thread the female end of the garden hose to the male discharge on the pump.
2. To reduce leakage between the pump and the hose, place a hose washer (not included) on the garden hose before installing to the pump.
3. For best pump performance, unwind the hose before starting the pump. This will help remove any kinks or binds in the hose and allow the unit to pump with less restriction.
4. Set the pump on a hard surface in the water. Do not set the pump directly on mud or sand surfaces. This will cause the inlet screen to clog.
5. The water level must be at least 1/2 inch for the pump to operate. Water levels less than 1/2 inch will not allow the impeller to contact water and no water will be pumped.

REMINDER: Keep your dated proof of purchase for warranty purposes! Attach it to this manual or file it for safekeeping.

Installation and Operation (Continued)

⚠ DANGER

Do not handle pump with wet hands or when standing in water or on a damp surface when the unit is operating or fails to operate. Always disconnect pump power cord from power source before handling.



6. Plug the power cord into a grounded 120-volt AC power outlet. The pump will start operating as soon as the power cord is plugged into the power outlet.
7. The pump will remove water down to 1/8 inches of the hard surface the pump was placed on.
8. The pump should be turned off once the water level reaches the 1/8-inch mark.

NOTICE

Do not allow

pump to run dry. The shaft seal depends on water for lubrication. Operating pump without water will damage the shaft seal and cause pump failure.

Maintenance

⚠ DANGER

Always disconnect electric supply before attempting to install, service, relocate or perform any maintenance. Failure to do so could result in fatal electrical shock.



Minimal service is required for this pump. If pump should fail to operate, perform the following troubleshooting guidelines:

1. The motor housing of the pump is completely sealed and requires no service. Disassembly of the motor housing or alteration of the power cord could result in fatal electrical shock.
2. Verify pump is operating correctly.
 - a. Disconnect pump from power source.
 - b. Disconnect discharge hose from pump.



- c. Immerse pump in a bucket or tub of water.
 - d. Plug power cord into a grounded 120 volt AC power outlet. If pump operates correctly proceed to step #3. If pump does NOT operate, unplug power cord and proceed to maintenance guideline item 4 in this section.
3. Verify discharge hose is correctly installed.
 - a. Connect hose to another water source such as a faucet. If water flows through hose, proceed to step 3b. If water is restricted, verify discharge hose is unwound. Remove all kinks, bends or obstructions in hose.
 - b. Verify pumping height does NOT exceed 25 feet (See Figure 1). If pumping height is greater than 25 feet, this pump will NOT work.
4. Periodic cleaning of pump is required to maintain performance of the pump. Follow the cleaning steps listed below:
 - a. Unplug the power cord.
 - b. Remove the 3 screws at the bottom of the pump.
 - c. Remove the volute cover. Note the alignment marks.
 - d. Remove the gasket. Note how the openings in the gasket align with the openings in the pump base.
 - e. Remove the debris and make sure the impeller turns freely.
 - f. Replace the gasket making sure the openings are aligned.
 - g. Replace the volute cover.
 - h. Replace the 3 screws.

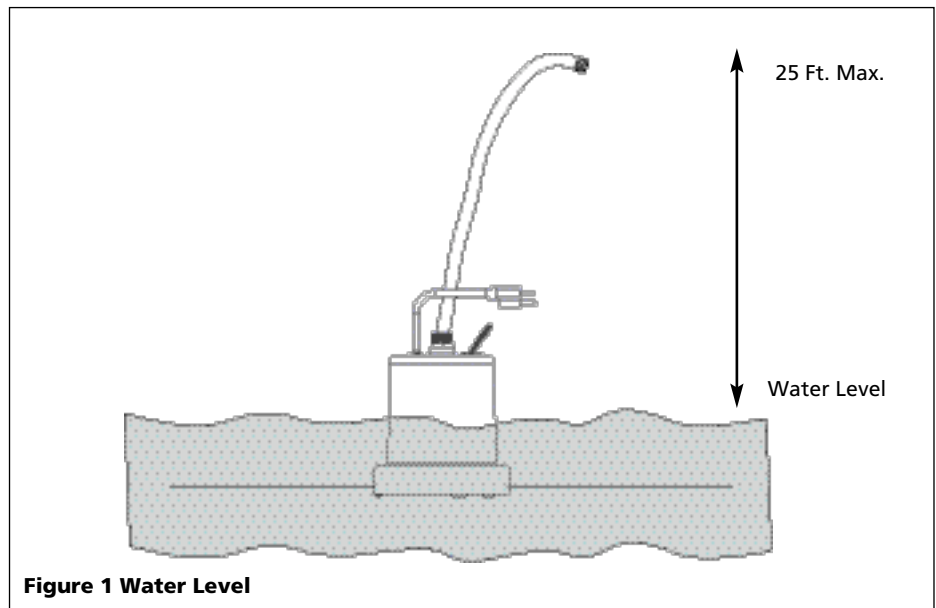


Figure 1 Water Level

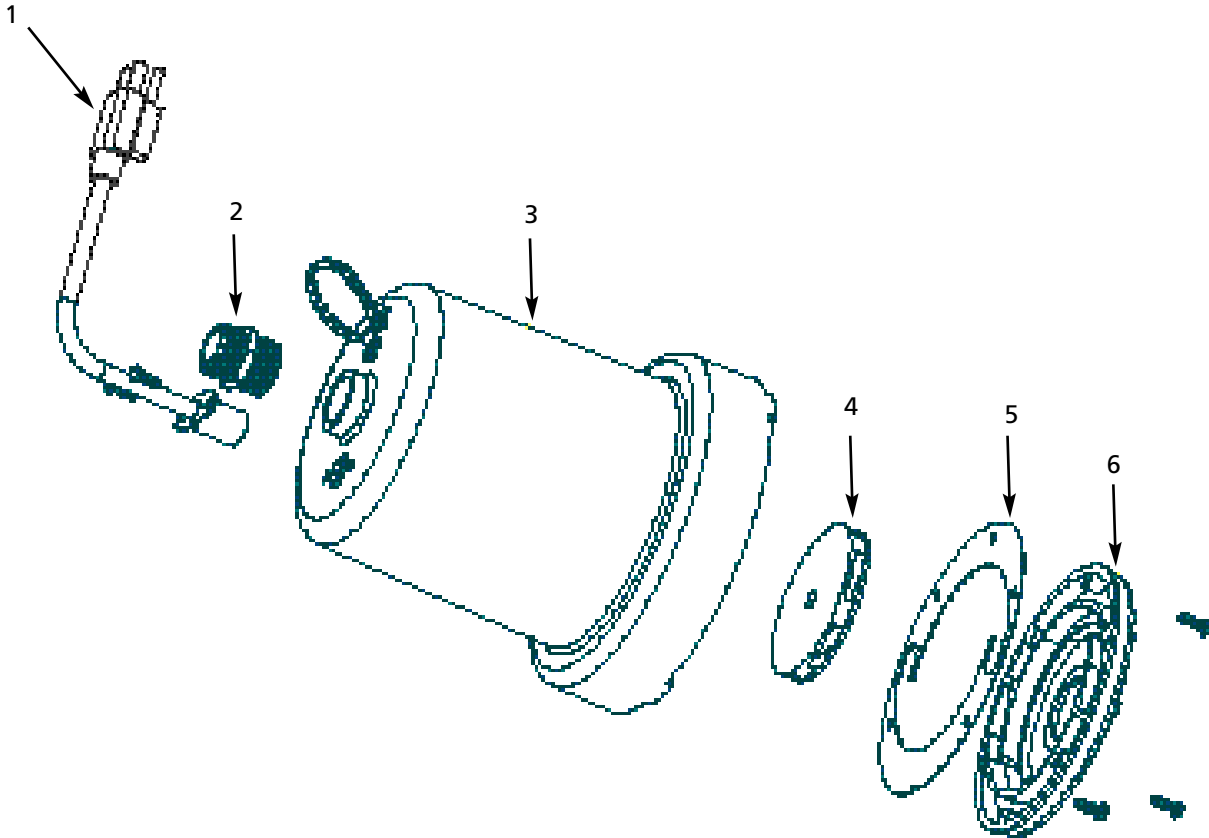
For Replacement Parts, call 1-888-636-6628

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Address parts correspondence to:

Blue Angel Pumps
 101 Production Drive
 Harrison, OH 45030 U.S.A.



| Ref. No. | Description | ESU80 | ESU82 | Qty. |
|----------|---------------------------|-----------|-----------|------|
| 1 | Power cord | 31006-002 | 31006-002 | 1 |
| 2 | Discharge fitting | 15875-002 | 15875 | 1 |
| 3 | Outer housing with o-ring | 28053-001 | 28053-001 | 1 |
| | | 19023-001 | 19023-001 | 1 |
| 4 | Impeller | 23097 | 23097 | 1 |
| 5 | Volute gasket | 23122 | 23122 | 1 |
| 6 | Volute cover with screen | 28056-001 | 28056-001 | 1 |

Limited Warranty

For one year from the date of purchase, Blue Angel (BA) will repair or replace, at its option, for the original purchaser any part or parts of its Sump Pumps or Water Pumps ("Product") found upon examination by BA to be defective in materials or workmanship. Please call BA (888-636-6628) for instructions or see your dealer. Be prepared to provide the model number and the serial number when exercising this warranty. All transportation charges on Products or parts submitted for repair or replacement must be paid by purchaser.

This Limited Warranty does not cover Products which have been damaged as a result of accident, abuse, misuse, neglect, improper installation, improper maintenance, or failure to operate in accordance with BA's written instructions.

THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM THE DATE OF PURCHASE. THIS IS THE EXCLUSIVE REMEDY AND ANY LIABILITY FOR ANY AND ALL INDIRECT OR CONSEQUENTIAL DAMAGES OR EXPENSES WHATSOEVER IS EXCLUDED.

Some states do not allow limitations on how long an implied warranty lasts, or do not allow the exclusions or limitations of incidental or consequential damages, so the above limitations might not apply to you. This limited warranty gives you specific legal rights, and you may also have other legal rights which vary from state to state.

In no event, whether as a result of breach of contract warranty, tort (including negligence) or otherwise, shall BA or its suppliers be liable for any special, consequential, incidental or penal damages including, but not limited to loss of profit or revenues, loss of use of the products or any associated equipment, damage to associated equipment, cost of capital, cost of substitute products, facilities, services or replacement power, downtime costs, or claims of buyer's customers for such damages.

You **MUST** retain your purchase receipt along with this form. In the event you need to exercise a warranty claim, you **MUST** send a **copy** of the purchase receipt along with the material or correspondence. Please call BA (888-636-6628) for return authorization and instructions.

DO NOT MAIL THIS FORM TO BLUE ANGEL. Use this form only to maintain your records.

MODEL NO. _____ SERIAL NO. _____ INSTALLATION DATE _____

ATTACH YOUR RECEIPT HERE