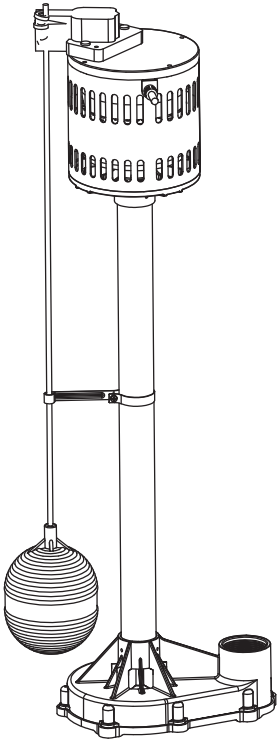
Submersible Pump

SKU: 76081



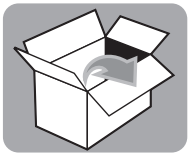
Owner's Manual

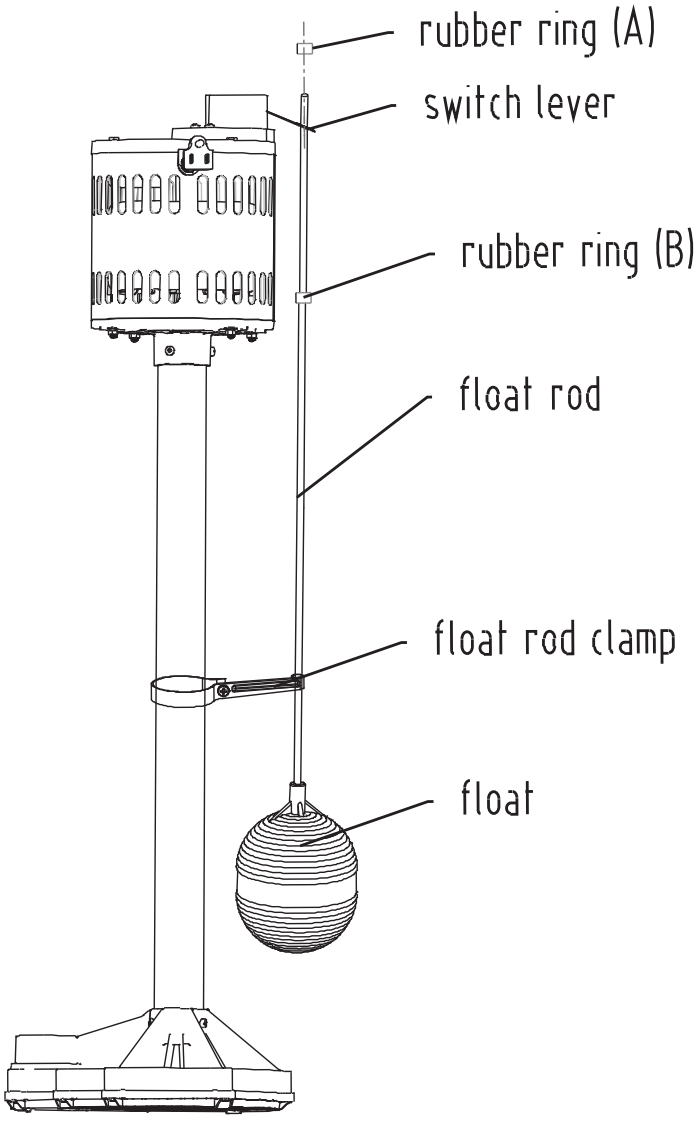
76081

E248578
QSB-2JH-SS025
c UL us
LISTED
26XZ

TABLE OF CONTENTS

ITEM DIAGRAM





DESCRIPTION

This submersible sump pump is designed for home sumps. Unit is equipped with a 3-prong grounding-type power cord. Shaded – pole motor is oil filled and sealed for cooler running. Sleeve bearings on motor shaft never need lubrication. Automatic reset thermal protection. Not designed for use a swimming pool drainer.

NOTICE: Do not reduce size of discharge pipe or hose below1-1/4" diameter. If discharge is too small, pump will overheat and fail prematurely.

NOTICE: This unit is not designed for applications involving salt water or brine! Use with salt water or brine will void warranty.
Pump water only with this pump.
Do not use where water recirculates.
Not designed for use as a swimming pool.

Technical data	
Model	76081
Nominal voltage	115 V / 60 Hz
Horsepower	1/3HP
Protection type	IPX4
Current rating	4 A
Max. Flow Rate	3000gph
Max. Head	18ft

GENERAL SAFETY INFORMATION

Electricity powered sump pumps normally give many years of trouble- free service when correctly installed, maintained, and used. However, unusual circumstances (interruption of power to the pump, dirt/ debris in the sump, flooding that exceeds the pump's capacity, electrical or mechanical failure in

This Pump Has Been Evaluated for Use With Water Only
WARNING -"Risk of electric shock - This pump is supplied with a grounding conductor and grounding type attachment plug. To reduce the risk of electric shock, be certain that it is connected only to properly grounded, grounding-type receptacle".

the pump, etc.) may prevent your pump from functioning normally. To prevent possible water damage due to flooding, consult your retailer about a secondary AC sump pump, a CD backup sump pump, and/ or a high water alarm. See the " Trouble shooting Chart" in this manual for information about common sump pump problems and remedies.

1. Know the pump application, limitations, and potential hazards.
2. Do not use in water with fish present.
3. Disconnect power before servicing.
4. Release all pressure within system before servicing any component.
5. Drain all water from system before servicing.
6. Secure discharge line before starting pump. An unsecured discharge line will whip, possibly causing personal injury and/ or property damage.
7. Check hoses for weak or worn condition before each use, making certain that all connections are secure.
8. Periodically inspect sump, pump and system components. Keep free of debris and foreign objects .Perform routine maintenances as required.
9. Provide means of pressure relief for pumps whose discharge line can be shut-off or obstructed.
10. Personal safety:
    a. Wear safety glasses at all times when working with pumps.
    b. Keep work area clean, uncluttered ad properly lighted – replace all unused tools and equipment.
    c. Keep visitors at a safe distance from work area.
    d. Make workshop child – proof – with padlocks, master switches, and by removing starter keys.
11. When wiring an electrically driven pump, follow all electrical and safety codes that apply.
12. This equipment us only for use on 115 volt (single phase) and is equipped with an approved 3 – conductor cord and 3 – prong, grounding – type plug.

⚠ WARNING To reduce risk of electric shock, pull plug before servicing. This pump has not been investigated for use in swimming pool area. Pump is supplied with a grounding conductor and grounding – type attachment plug. Be sure it is connected only to a properly grounded grounding – type receptacle.

Where a 2 – prong wall receptacle is encountered, it must be replaced with properly grounded 3 – prong receptacle installed in accordance with codes and ordinances that apply.

13. All wiring should be performed by a qualified electrician.
14. Make certain power source conforms to requirements of your equipment.
15. Protect electrical cord from sharp objects, hot surfaces, oil, and chemicals. Avoid kinking cord. Replace or repair damaged or worn cords immediately.
16. Do not touch an operating motor. Modern motors can operate at high temperatures.
17. Do not handle pump or pump motor with wet hands or when standing on wet damp surface or in water.

⚠ WARNING Hazardous voltage can shock, burn or kill. If you basement has water or moisture on floor, do not walk on wet area until all power has been turned off. If shut – off box is basement, call electric company or hydro authority to shut – off service to house, or call your local fire department for instructions. Remove pump and repair or replace. Failure to follow this warning can result in fatal electrical shock.

Do not lift pump by power cord.

FLOAT SWITCH INSTALLATION

Models equipped with vertical switches require some assembly. See the Switch Assembly instructions on Page4. Models with tethered float switches are ready for use.

INSTRUCTION

1. Install pump in sump pit with minimum diameter of 10” (254mm) for models equipped with vertical switches and 14” (356mm) for tethered float switch models. Sump depth should be 16” (406mm) for tethered models and 10” (254mm) for vertically switched models. Construct sump pit of tile, concrete, steel or plastic. Check local codes for approved materials and for proper installation.
2. Install pump in pit so that switch operating mechanism has maximum possible clearance.
3. Pump should not be installed on clay, earth or sand surface. Clean sump pit of small stones and gravel which could clog pump. Keep pump inlet screen clear.

   NOTICE: Do not use ordinary pipe joint compound on plastic pipe. Pipe joint compound can attack plastics.

4. Install discharge plumbing. Use rigid plastic pipe and wrap threads with Teflon™ tape. Screw pipe into pump hand tight plus 1-1/2 turns.

⚠ CAUTION Risk of flooding. If a flexible discharge hose is used, make sure pump is secured in sump to prevent movement. Failure to secure pump may allow pump movement, switch interference and prevent pump from starting or stopping.

5. To reduce motor noise and vibrations, a short length of rubber hose (1-7/8" (47.6mm) I.D., e.g. radiator hose) can be connected into discharge line near pump using suitable clamps.
6. Install an in-line check valve (Flotec No. FP0026- 10D) or an in-pump check valve to prevent flow backwards through pump when pump shuts off.

NOTICE: If your check valve is not equipped with an air bleed hole to prevent air locking pump, drill a 1/8" (3.2 mm) hole in discharge pipe just above where the discharge pipe screws into the pump discharge. Be sure the hole is below the waterline and the check valve to prevent air locks.

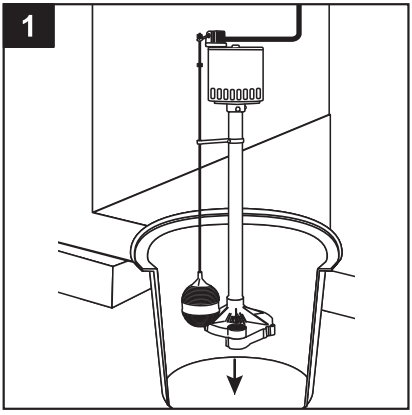
7. Power Supply: Pump is designed for 115 V. , 60 Hz operation and requires a minimum 15 amp individual branch circuit. Both pump and switch are supplied with 3-wire cord sets with grounding-type plugs. Switch plug is inserted directly into outlet and pump plug inserts into opposite end of switch plug.

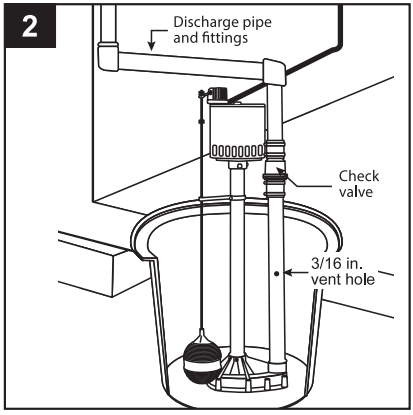
⚠ WARNING Pump should always be electrically grounded to a suitable electrical ground such as a grounded water pipe or a properly grounded metallic raceway, or ground wire system. Do not cut off round ground pin.

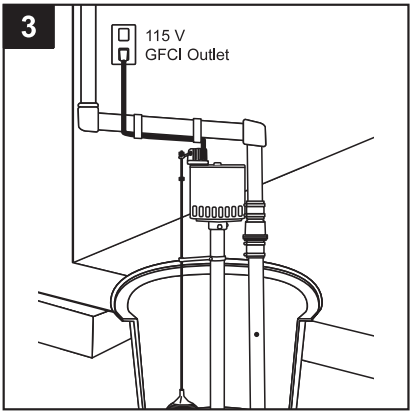
8. If pump discharge line is exposed to outside subfreezing atmosphere, portion of line exposed must be installed so any water remaining in pipe will drain to the outfall by gravity. Failure to do this can cause water trapped in discharge to freeze which could result in damage to pump.
9. After piping, check valve and float switch have been installed, the unit is ready for operation.
10. Check the pump operation by filling sump with water and observing pump operation through one, complete cycle. For switch settings see the Electrical and Switch Specifications chart on Page 2.

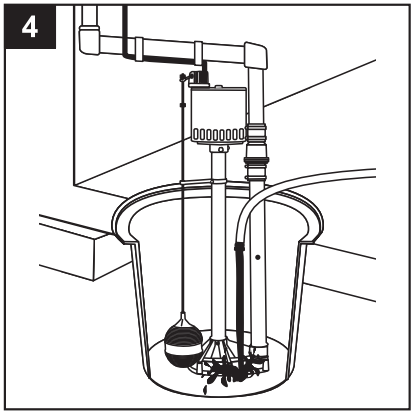
    ⚠ WARNING Failure to make this operational check may lead to improper operation, premature failure, and flooding.

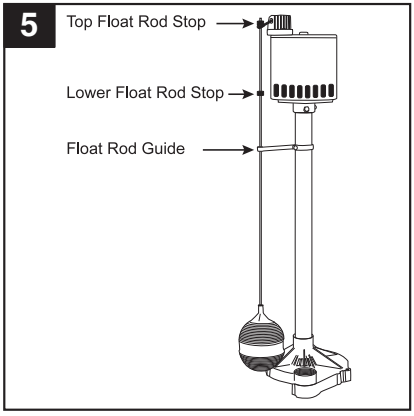
FLOAT SWITCH INSTALLATION

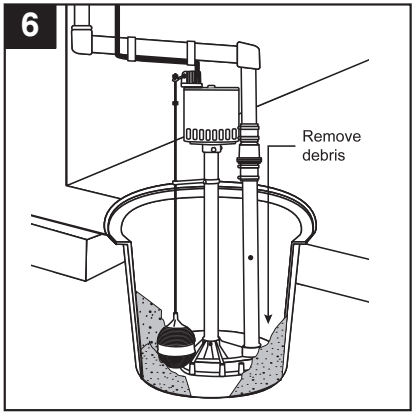












OPERATION

⚠ WARNING Risk of electric shock. Do not handle a pump or pump motor with wet hands or when standing on wet or damp surface, or in water.

1. Shaft seal depends on water for lubrication. Do not operate pump unless it is submerged in water as seal may be damaged if allowed to run dry.
2. Motor is equipped with automatic reset thermal protector. If temperature in motor should rise unduly, switch will cut off all power before damage can be done to motor. When motor has cooled sufficiently, switch will reset automatically and restart motor. If protector trips repeatedly, pump should be removed and checked as to cause of difficulty. Low voltage, long extension cords, clogged impeller, very low head or lift, or a plugged or frozen discharge pipe, etc., could cause cycling.
3. Pump will not remove all water. If operating a pump manually, and suddenly no water comes out of the discharge hose, shut off the unit immediately. The water level is probably very low and the unit has broken prime.

⚠ WARNING Risk of electric shock . Before attempting to check why unit has stopped operating, disconnect power from unit.

Vertical Switch Assembly

1> Mount on the float with the float rod.

2> Mount the float rod clamp

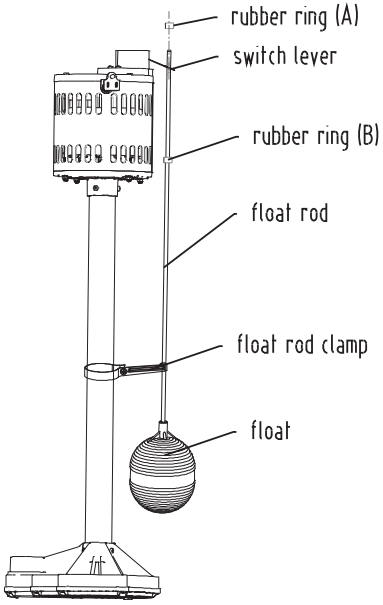
3> Mount a rubber ring B at a distance from the upper of the float rod.

4> Install the components throw into the top of the float rod.

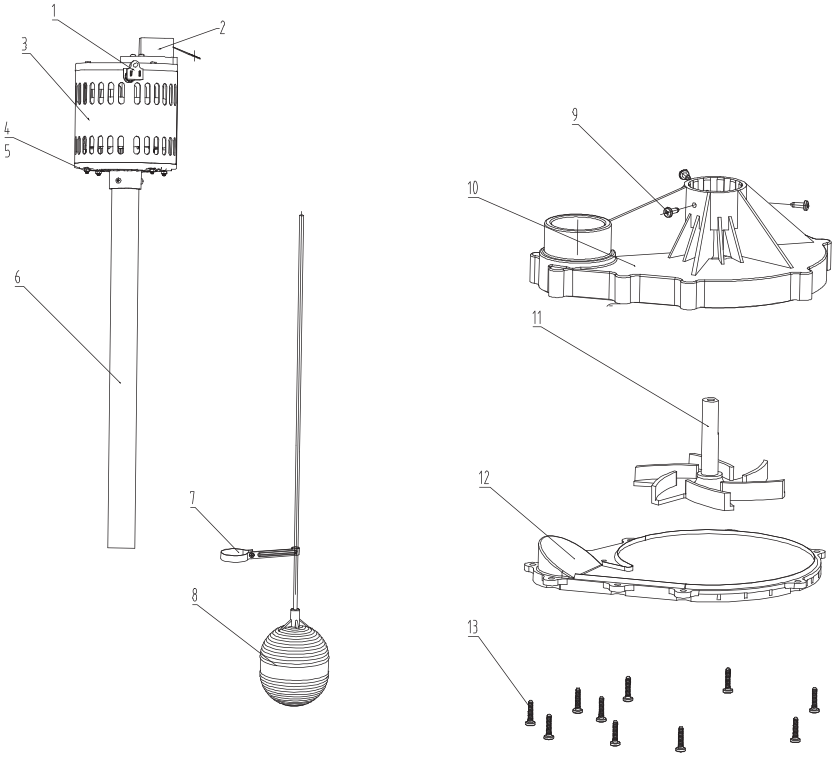
NOTICE: Be sure the switch lever between the rubber ring A and the rubber ring B.

NOTICE: Attach the switch to the pump as shown.

NOTICE: Be sure that the float rod clamp at about 450mm from the ground.



COMPONENT DIAGRAM

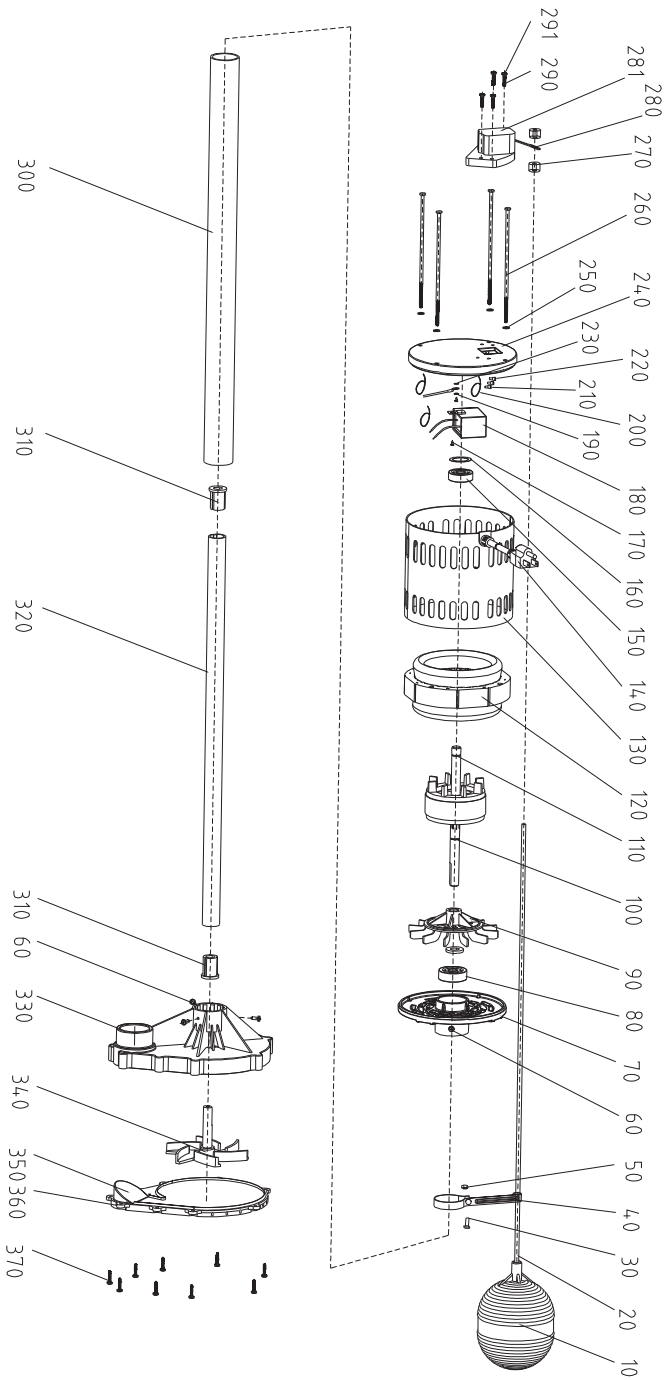


Key NO	Part Description	Qty
1	Power code Assembly	1
2	Switch	1
3	Motor	1
4	Screw, #4x 155Phillips Pan Head	4
5	Screw nut	1
6	Outer tube	1
7	Floater rod clamp	1
8	Float	1
9	Screw, #4x 9 Phillips Pan Head	3
10	Volute (upper)	1
11	Impeller	1
12	Volute (lower)	1
13	Screw, #4.2x 16 Phillips Pan Head	10

TROUBLESHOOTING CHART

SYMPTOM	PROBABLE CAUSE(S)	CORRECTIVE ACTION
Pump won't start or run.	Pump is not plugged in. Blown fuse. Low line voltage. Defective motor. Defective float switch. Impeller. Float obstructed.	Check and see if pump is plugged in to a proper outlet. If blown, replace with fuse of proper size. If voltage under recommended minimum, check size of wiring from main switch on property. If OK, contact power company or hydro authority. Replace pump. Replace float switch. If impeller won't turn, remove lower pump body and locate source of binding. Remove obstruction.
Pump starts and stops too often.	Backflow of water from piping. Faulty float switch.	Install or replace check-valve. Replace float switch.
Pump won't shut off.	Defective float switch. Restricted discharge (obstacle or ice in piping). Float obstructed. Restricted intake screen.	Replace float switch. Remove pump and clean pump and piping. Remove obstruction. Remove the pump and clean the intake screen and the impeller,
Pump operates but delivers little or no water.	Low line voltage. Something caught in impeller. Worn or defective parts or plugged impeller. Check valve installed without vent hole. Restricted intake screen. Check valve is installed either backward or upside down.	If voltage under recommended minimum, check size *of* wiring from main switch on property. If OK, contact power company or hydro authority. Remove the pump and clean out the impeller. Clean impeller if plugged; otherwise replace pump. Check valve (1-2" above where the discharge pipe screws into the pump discharge and below the waterline). Remove the pump and clean out the intake screen. Be sure check valve is installed correctly.

PARTS LIST


291
290
281
280
270
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
300
310
320
310
60
330
340
350
360
370

PARTS#	NO.	ITEM	QTY	UNIT
P76081-0010	0010	FLOATING BALL	1	PCS
P76081-0020	0020	FLOATER	1	PCS
P76081-0030	0030	CROSS HEAD TAPPING SCREW	1	PCS
P76081-0040	0040	BUSHING	1	PCS
P76081-0050	0050	HEXAGON NUT	1	PCS
P76081-0060	0060	TAPPING SCREW	6	PCS
P76081-0070	0070	MOTOR FRONT COVER	1	PCS
P76081-0080	0080	BEARING	1	PCS
P76081-0090	0090	FAN	1	PCS
P76081-0100	0100	ROTOR	1	PCS
P76081-0110	0110	SHAFT RETAINING RING	2	PCS
P76081-0120	0120	STATOR	1	PCS
P76081-0130	0130	MOTOR OUTER HOUSING	1	PCS
P76081-0140	0140	PLUG CORD	1	PCS
P76081-0150	0150	BEARING	1	PCS
P76081-0160	0160	CORRUGATED GASKET	1	PCS
P76081-0170	0170	CROSS HEAD TAPPING SCREW	2	PCS
P76081-0180	0180	CAPACITOR	1	PCS
P76081-0190	0190	EXTERNAL SERRATED LOCK WASHER	1	PCS
P76081-0200	0200	TIE	4	PCS

PARTS#	NO.	ITEM	QTY	UNIT
P76081-0210	0210	NYLON SECURE LINE PRESSING CAP	1	PCS
P76081-0220	0220	NYLON SECURE LINE PRESSING CAP	2	PCS
P76081-0230	0230	SPRING WASHER	2	PCS
P76081-0240	0240	MOTOR REAR COVER	1	PCS
P76081-0260	0260	CROSS HEAD TAPPING SCREW	4	PCS
P76081-0270	0270	ISOLATION RING	2	PCS
P76081-0280	0280	PUMP SWITCH	1	PCS
P76081-0281	0281	SHIELD	1	PCS
P76081-0290	0290	CROSS HEAD TAPPING SCREW	4	PCS
P76081-0291	0291	PLAIN WASHER	5	PCS
P76081-0300	0300	OUTER TUBE	1	PCS
P76081-0310	0310	INNER TUBE INSERT	2	PCS
P76081-0320	0320	INSIDE TUBE	1	PCS
P76081-0330	0330	PUMP HOUSING	1	PCS
P76081-0340	0340	IMPELLER	1	PCS
P76081-0350	0350	DIFFUSOR PLATE	1	PCS
P76081-0360	0360	SEAL GASKET	1	PCS
P76081-0370	0370	CROSS HEAD TAPPING SCREW	10	PCS
P76081-0380	0380	GLUE	0.34	FL OZ

DISCLAIMER

PLEASE READ THE FOLLOWING CAREFULLY

The manufacturer and/or distributor have provided the parts list and assembly diagram in this manual for reference purposes only. They do not make any representation or warranty to the buyer that they are qualified to make repairs to the product or replace any parts of the product. In fact, the manufacturer and/or distributor expressly state that all repairs and parts replacements should be undertaken by certified and licensed technicians, and not by the buyer.

The buyer assumes all risk and liability arising from their repairs to the original product or replacement parts or arising from their installation of replacement parts. It is strongly advised that qualified professionals handle any repairs or replacements to ensure safety and proper functioning of the product. Improper installation and operation may result in injury, property damage, or voiding of warranty. The manufacturer and/or distributor shall not be held responsible for any accidents, damages, or malfunctions resulting from the buyer's installation and operation of the product. It is essential to follow all safety guidelines and recommendations provided in this manual and to seek professional assistance if unsure about the installation or operation procedures.

CUSTOMER SERVICE

If you have any questions about ordering our outdoor furnitures and replacement parts or other furniture products, please feel free to contact us using the following contact information:

Customer Service and Technical Support

Phone: (909) 628-0880
Email: customer@xtremepowerusa.com
Hours of Operation: Monday – Friday, 9AM – 4PM (CST)