

# PowerLine XP I

Dual Speed Swimming Pool Pump (Light Oak color model)

3 FT CORD UL/NEC Models 0-1596-206, 0-1597-206, 0-1598-206

25 FT CORD w/GFCI UL Models 0-1596-200, 0-1597-200, 0-1598-200

6 FT CORD Models 0-1596-203, 0-1597-203, 0-1598-203

**Owner's Guide** 

#### IMPORTANT SAFETY INSTRUCTIONS

#### FOR ALL MODELS:

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

- 1. READ AND FOLLOW ALL INSTRUCTIONS.
- WARNING To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
- 3. WARNING Risk of electric shock. Connect only to a grounding type receptacle protected by a Ground Fault Circuit Interrupter (GFCI). Contact a qualified electrician if you cannot verify that the receptacle is protected by a GFCI.

(For storable pool pumps) This product is provided with a ground-fault circuit interrupter. If replacement of the plug or cord is needed, use only identical replacement parts.

(For all permanently installed units) Connect only to a branch circuit protected by a ground-fault circuit-interrupter (GFCI)

- Do not bury cord. Locate cord to minimize abuse from lawn mowers, hedge trimmers, and other equipment.
- WARNING To reduce the risk of electric shock, replace damaged cord immediately.
- WARNING To reduce the risk of electric shock, do not use extension cord to connect unit to electric supply; provide a properly located outlet.

#### FOR UL MODELS ONLY: 0-1596-200, 0-1597-200, 0-1598-200

 CAUTION — This pump is for use with storable pools only. Do not use with permanently installed pools. A storable pool is constructed so that it may be readily disassembled for storage and reassembled to its original integrity. A permanently installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage.

(For storable pools) The unit is provided with a ground-fault circuit-interrupter (GFCI). To test the GFCI, push the test button. The GFCI should interrupt power. Push the reset button. Power should be restored. If the GFCI fails to operate in this manner. the GFCI is defective. If the GFCI interrupts power to the pump without the test button being pushed, a ground current is flowing, indicating the possibility of an electric shock. Do not use this pump. Disconnect the pump and have the problem corrected by a qualified service representative before using.

# FOR UL/NEC MODELS ONLY: 0-1596-206, 0-1597-206, 0-1598-206

 CAUTION — This pump is for use with permanently installed pools and may also be used with hot tubs and spas if so marked. Do not use with storable pools. A permanently installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage. A storable pool is constructed so that it may be readily disassembled for storage and reassembled to its original integrity.

#### FOR ALL MODELS:

9. SAVE THESE INSTRUCTIONS.

#### **ELECTRICAL FEATURES**

FOR UL MODELS ONLY: 0-1596-200, 0-1597-200, 0-1598-200

Your pump is supplied with a 25-foot, 3-wire electrical cord and 3-pronged plug. The pump is double insulated and grounded. The pump electrical cord must be connected to a grounded, 3-wire, 115 VAC electrical receptacle. The receptacle must be protected by a Ground Fault Circuit Interrupter (GFCI) in accordance with Article 680-31 of the National Electrical Code (NEC), (Section 68-204 of the Canadian Electrical Code [CSA]) and local codes or ordinances. For runs greater than 25 feet, consult your local licensed electrical contractor.

# FOR UL/NEC MODELS ONLY: 0-1596-206, 0-1597-206, 0-1598-206

Your pump is supplied with a 3-foot, 3-wire electrical cord and 3-prong flanged, twist-lock plug.

The pump electrical cord must be connected to a single twist lock, grounding type receptacle that is located a minimum of 6 feet from the inside pool wall.

A qualified electrical contractor must install this receptacle in accordance with Article 680-6 of the National Electrical Code (NEC). A Ground Fault Circuit Interrupter (GFCI) must be used. An ON/OFF switch must be installed at the receptacle.

#### Use a Hubbell No. 2310 Receptacle, 20 AMP 125 Volt A.C. or an equivalent receptacle that meets NEMA Configuration L5-20R.

This pump is double insulated and grounded. Dead metal parts are not in contact with pool water.

#### FOR 6FT cord MODELS ONLY:

Your pump is supplied with a 6-foot, 3-wire electrical cord and 3-pronged plug. The pump is double insulated and grounded. The pump electrical cord must be connected to a grounded, 3-wire, 115 VAC electrical receptacle. The receptacle must be protected by a Ground Fault Circuit Interrupter (GFCI) in accordance with Article 680-31 of the National Electrical Code (NEC), (Section 68-204 of the Canadian Electrical Code [CSA]) and local codes or ordinances. For runs greater than 6 feet, consult your local licensed electrical contractor.

#### IMPORTANT: INSTRUCTIONS AND SAFETY INFORMATION

If you have purchased a filtration system, follow the instructions provided with your filter instructing you to prepare the filter and pump foundation using patio blocks and a level.

Failure to use a pump base will cause the motor to overheat and will void any warranty.

Install filter and pump a minimum of 6 feet from the pool wall so they may not be used as steps by children.

# PUMP ASSEMBLY

 Align the rectangle peg on the base with the mating hole in the pump housing (see pic below) and refer to exploded view. Turn the pump upside down and place the pump base into the notches in the pump. Attach the pump to the pump base using the four (4) 5/8" hex head screws supplied.



 Place the O-rings over the threads of the hose adaptors and screw them into the intake and discharge ports on the pump.
 Caution: Do not over-tighten.

# **INITIAL START-UP**

- If you have a Doughboy filtration system, follow the "Initial Start-Up" instructions in the filter owner's guide.
- 2. For best results, be sure to select the HI speed switch setting for initial startup, pump priming, vacuuming and backwashing the filter. Use the

LO speed switch setting for surface skimming and filtering over a longer period of time or when energy savings is desired.

3. If this pump has been purchased as a replacement (and you are not referring to the filter instructions), the pump will have to be primed after all hose connections have been made and pool has been filled to the proper level. To prime the pump, loosen the pump strainer pot lid to allow air to escape. Tighten lid when water begins to flow between strainer pot body and lid. Do not overtighten.

#### CLEANING STRAINER BASKET

- 1. Stop pump. Insert a winterizing disk, or stuff a rag into the return fitting to close off water flow from the pool.
- 2. Remove skimmer basket. Stuff a rag into the bottom of the skimmer outlet port.
- Remove strainer pot lid, lift out basket, and clean thoroughly. When replacing the basket, align notch in basket with rib in strainer pot. Clean and lubricate O-ring with a non-petroleum lubricant. Consult your pool store for proper lubricant. Replace lid. Remove winterizing disk and/or rags, and replace basket and skimmer lid. Only hand-tighten the lid.

## MAINTENANCE

Make sure the pump is disconnected from the electrical source before attempting any maintenance work.

#### LUBRICATION:

Periodically lubricate the O-ring under the strainer cover with a nonpetroleum lubricant recommended for A.B.S., Noryl and Acrylic plastics. Consult your pool dealer for lubricant selections.

If you have questions or require assistance, contact your local pool dealer.

# TROUBLE SHOOTING CHECKLIST

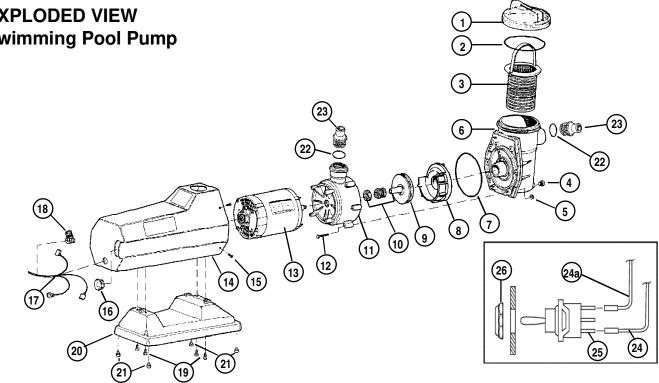
#### NOTE: ALWAYS BE SURE PUMP IS DISCONNECTED FROM ELECTRICAL SOURCE BEFORE ATTEMPTING ANY MAINTENANCE OR REPAIR WORK.

PROBLEMS:	POSSIBLE CAUSE:	REMEDIES:
1. Motor will not start.	1. Pump not plugged in.	<ol> <li>Make sure pump is plugged into a grounded, 3-wire, 115 V. electrical receptacle that is not overloaded with other appliances.</li> </ol>
	2. Faulty electrical outlet.	<ol> <li>Check for improper or loose connections, open switches or relays, blown circuit breaker or fuses.</li> </ol>
	3. Low voltage.	3. The use of an electrical extension cord may cause a low power source. Have a qualified electrician install a Ground Fault Circuit Interrupter (GFCI) for direct electrical access.
2. Pump will not prime.	1. Air in pump.	<ol> <li>Make sure pool is filled to proper level. Make sure pump, strainer pot and hoses leading to and from pump are filled with water. Make sure strainer cover is secure and cover O-ring is clean and properly sealed. Keep hose connections tight to prevent water and/ or air leaks.</li> </ol>
	<ol> <li>Clogged inlet and/or outlet connections.</li> </ol>	<ol><li>Clean out strainer basket, skimmer basket and hoses if necessary.</li></ol>
2 Motor will stop without being turned off	1 A too loop on too light outproion could	d - I land a successful al a la strictere install a
3. Motor will stop without being turned off, then restart later.	1. A too long of too light extension cord.	<ol> <li>Have a qualified electrician install a Ground Fault Circuit Interrupter (GFCI) for direct electrical access, or use a heavier gauge extension cord.</li> </ol>
	2. Blocked air vents on bottom of pump housing causing motor to overheat.	<ol> <li>Properly elevate pump 2 to 3 inches above foundation according to instructions.</li> </ol>
	3. There may be a bind in motor causing overload.	3. Locate bind and remove cause.
	4. Thermal protector in motor is faulty.	4. Replace motor.
	d. Filancia distri	
<ol> <li>High pressure gauge reading with low return flow.</li> </ol>	1. Filter is dirty.	1. Backwash Filter.
	2. Plugged or restricted return line.	2. Plug skimmer and return fitting, then clear debris from return line.
<ol> <li>Low pressure gauge reading with low return flow.</li> </ol>	1. Plugged or restricted impeller.	1. Plug skimmer and return fitting, then disassemble pump and clean impeller.
	<ol> <li>Clogged skimmer basket and/or plugged suction line leading to pump.</li> </ol>	2. Plug skimmer and return fitting, then clear debris from suction line.
6. Leak from front of pump.	1. Defective pump O-ring.	1. Replace pump O-ring.
	2. Worn pump seal set.	2. Replace pump seal set.
	3. Cracked pump volute.	3. Replace pump volute.

#### **PUMP & MOTOR PARTS LIST**

ITEM	P/N	QTY	DESCRIPTION	MODEL
1 2 3 4 5 6 7 8 9	1121-1429 308-1065 1107-1018 1121-2007 321-1021 340-2681 308-1064 340-2682 1107-1388 1107-1547	1 1 1 6 1 1 1 1	Strainer Cover Strainer O-Ring Strainer Basket 1/4" Pipe Plug w/O-ring(not shown) 1/4" -20 Flange Nut Strainer Pot Pump O-Ring Pump Volute Impeller Impeller	All All All All All All All All 1 HP Models 1-1/2 - 2 HP Models
10 11 12	1121-1057 1107-2502 330-1106	1 1 6	Seal Set Pump Housing 1/4"-20 x 2" Flange Bolt	All All All
13	300-1150 300-1149 300-1149	1 1 1	1 HP Motor 60 HZ 1.5 HP Motor 60 HZ 2 HP Motor	0-1596-xxx 0-1597-xxx 0-1598-xxx
13a	310-1054	1	Baffle foam (not shown)	All
14	1121-2034	1	Motor Enclosure	All
14a	340-2608	1	Strainer cover wrench (not shown)	All
15 16	330-1023 343-1074	4 1	8 x 5/8" Hex Washer Screw Switch Hole Plug	All Not required
17 18	1100-1707 1100-1708 1100-1115 1100-1695 1100-1696 303-1715	1 1 1 1 1	Power Cord - 6' 1 hp Power Cord - 6' 1.5-2 hp Power Cord - NEC/UL - 3' Power Cord 25' GFCI 1 HP Power Cord 25' GFCI 1.5-2 HP Strain Relief Bushing - 25' & 6'	-203 models -203 models -206 models 0-1596-200 0-1597-200, 0-1598-200 -200 & -203 models
	303-1120	1	Strain Relief Bushing - 3' models	-206 models
19 20 21 22 23	330-1057 340-2680 348-1041 308-1042 340-1224	4 1 4 2 2	10-16 x 5/8" Hex Washer Screw Pump Base Stem Bumpers O-Ring, Hose Adaptor Hose Adaptor	All All All All All
24a 24 25 26	1100-1712 1100-1400 303-1350 303-1110	1 1 1	Jumper Wire - blue Jumper Wire Switch Switch Nut	
			ALL MODELS	
27 28	365-2075 —	1 1	Owner's Guide Warranty	

#### EXPLODED VIEW Swimming Pool Pump



# **CAUTIONS**

- Do not install pump and filter 1. system where flooding may occur. This could damage the pump motor.
- 2. Do not install filter and pump on a deck, or similar surface, above pool water level. They could fall into the pool water, causing severe electrical shock.
- 3. Do not allow children or adults to climb, sit or stand on the filter or pump. They could easily fall and injure themselves. Install the filter and pump a minimum of 6 feet from the pool wall so they may not be used as steps by children.

## WARNINGS

- Always be sure the ground under 1. your feet and body is dry before you touch the filter and pump electrical equipment. Failure to follow this warning may cause injury due to severe electrical shock.
- 2. Make sure pump is disconnected from electrical source before servicing pump and filter equipment.

## LOCAL CODES

Contact your local building department for applicable codes or regulations governing the installation of swimming pool equipment.

#### CONTRACTED **ELECTRICIANS**

Always have a licensed electrician install electrical components to make sure electrical integrity is maintained in accordance with the pump data label. Improper installation to power supply may damage the pump motor.



Change of Design: Doughboy Recreational expressly reserves the right to change or modify the design and construction of any product in due course of our manufacturing procedures, without incurring any obligation or liability to furnish or install such changes or modifications on products previously or subsequently sold.

> Doughboy Recreational 315 North Sebastian St. • West Helena, AR 72390 Visit our website at www.doughboy-pools.com