



SPECK SWIMMING POOL PUMP MODEL 93

READ THIS MANUAL CAREFULLY BEFORE USING THE SPECK SWIMMING POOL PUMP

NOTE: All wiring should be done by a qualified electrician in accordance with the national electrical code and all local codes.

NOTE: Before installation, inspect all equipment, plumbing and wiring for damage that may have occurred during shipment. The shipping container has been specifically designed to prevent damage, however, any indications of damage should be carefully noted on the delivery ticket and a claim filed with the carrier.

SECTION 1 IMPORTANT SAFETY INSTRUCTIONS

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

READ AND FOLLOW ALL INSTRUCTIONS.

WARNING - To reduce the risk of injury, do not permit children to use this equipment unless they are closely supervised at all times.

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 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.

TO REDUCE RISK OF ELECTRICAL SHOCK, connect ground wires to grounding screw located in the motor. Use no smaller than a #12 AWG (3.3mm²) wire.

TO REDUCE RISK OF ELECTRICAL SHOCK, a bonding connector is provided for bonding to metal water pipes, metal rails, or other metal within 5 feet of the swimming pool. All local points should be bonded with a #8 AWG (8.4mm²) wire.

NOTE: To installer and/or operator of the Speck Swimming Pool Pump, the manufacturers warranty will be void if the pump is improperly installed and/or operated.

READ INSTRUCTIONS CAREFULLY.

SAVE THESE INSTRUCTIONS!

SECTION 2 EQUIPMENT OPERATION AND MAINTENANCE

2/1 LOCATION

Locate pump as close to the pool as practical. Consult local codes for minimum distance between pool and pump.

The piping should be as direct and free from turns or bends as possible, as elbows and other fittings greatly increase friction losses.

Place pump on a solid foundation which provides a rigid and vibration-free support so that it is readily accessible for service and maintenance.

Protect the pump against flooding and excess moisture, and prevent foreign objects from clogging air circulation around motor.

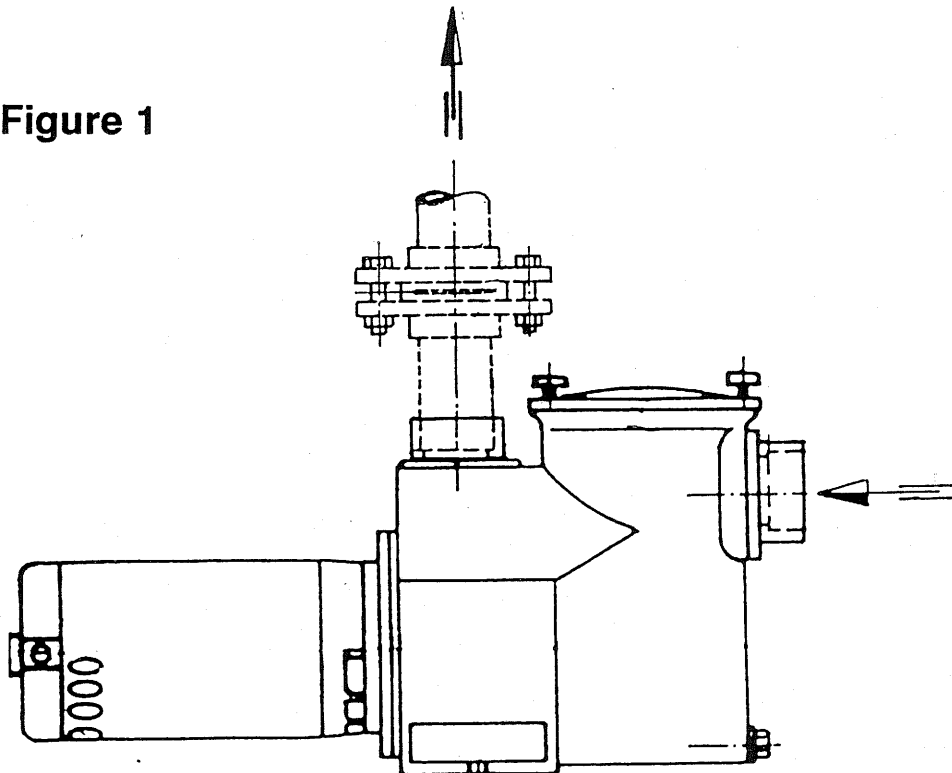
DO NOT store or use gasoline or flammable vapors of liquids in the vicinity of this pump. **DO NOT** store pool chemicals near the pump.

DO NOT remove any safety alert labels such as **DANGER, WARNING, or CAUTION**. Keep safety labels in good condition and replace missing or damaged labels.

2/2 INSTALLATION

When connecting pipework to pump it is recommended that a flanged connection be used in the discharge line directly above the pump (see fig.1). If the suction pipe is not sealed correctly, the pump will not prime properly and will pump small volumes of water or none at all.

Figure 1



When installing the pump, care should be taken to see the suction line is below water level to a point immediately beneath the pump to ensure quick priming via a flooded suction line. The height between the pump and the water level should not be more than 15 feet. Should it not be possible to lay the pipework giving a flooded suction, then a check valve should be fitted in the vertical section of the suction line. The check valve will ensure that the water in the pump starts priming. (Does not apply to flooded suction application.)

Suction and discharge line should be independently supported at a point near the pump to avoid strains being placed on the pump.

It is advisable to install a gate valve in both the suction and discharge line in the event that the pump must be removed for servicing. (Flooded suction application only)

Before starting the pump for the first time, remove the lid. Fill pump body with water until level with suction inlet. Replace lid, hand tight, making sure that the O-ring is not damaged.

When installing and using the motor, basic safety precautions should always be followed. The wiring of motor should be done by a licensed electrician in accordance with local codes. Be certain that the motor frame is grounded. Motor name plate has voltage, phase, ampere draw and other motor information as well as wiring connection instructions.

BONDING: As required by National Electrical Code Article 680-22, the pump motor must be electrically bonded to the pool structure (reinforced bars, etc.) by a solid copper conductor not smaller than #8 AWG via the external copper bonding lug on the pump motor.

GROUNDING: Permanently ground the pump motor using a conductor of appropriate size. Connect to the #10 green headed ground screw provided inside the motor terminal box.

NOTE: Do not connect to electric power supply until unit is permanently grounded.

SECTION 3 MAINTENANCE

The pump requires little or no service other than reasonable care. The seal on the pump is a mechanical seal. The seal may come loose during the course of time, depending on the running time and water quality. If water continually leaks out, a new mechanical seal should be fitted. To replace a mechanical seal, remove the eight bolts holding the casing to the seal-housing. Slide the motor part including the seal housing out. Remove impeller nut by turning it counter clockwise when facing it, while holding motor shaft with a 1/2" wrench at rear end of motor. Pull impeller from shaft. To re-assemble, reverse the process. (Use a drop of loctite to secure the impeller nut.)

NOTE: Make sure both parts of the mechanical seal (ceramic and spring portion) are clean. Gently wipe polished faces with soft and dry cotton cloth. Surfaces can easily be damaged by dirt and scratching. Only water should be used as lubricant to mount both parts of the mechanical seal.

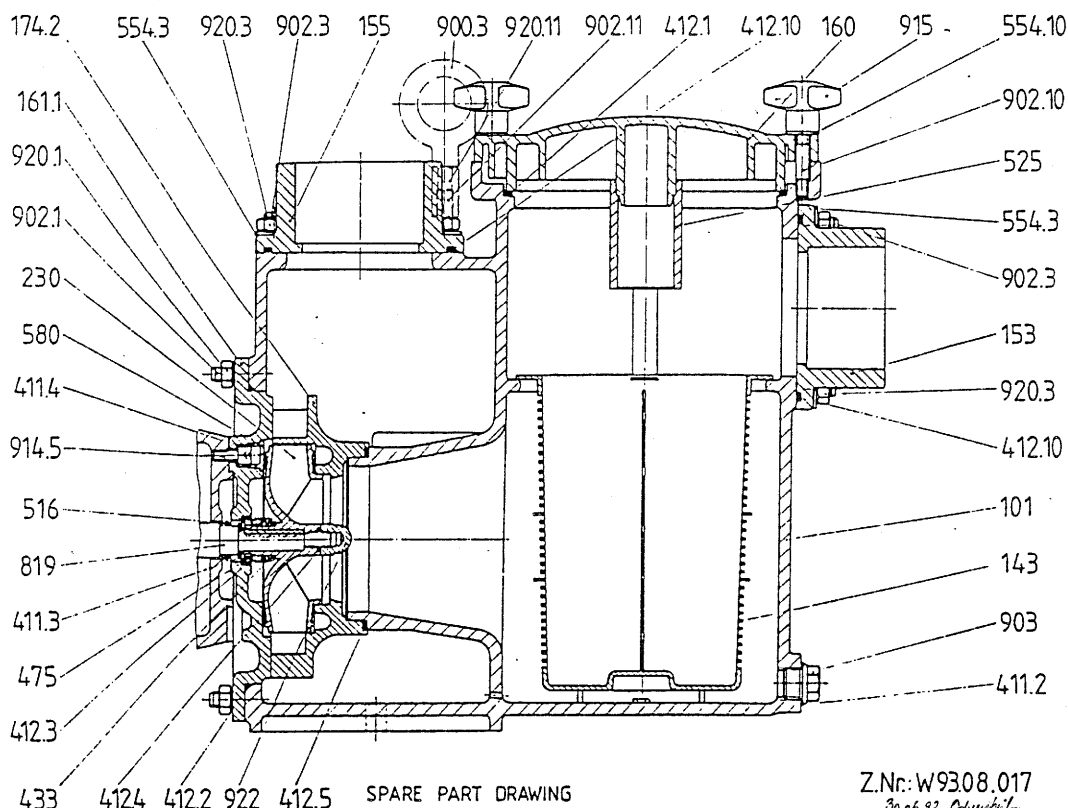
SECTION 4 WINTERIZING

In areas subject to freezing winter temperatures, protect by removing drain plug. Do not replace plug. Store plug in strainer basket for the winter. An alternative is to remove the pump and motor from plumbing and store indoors in a warm and dry location.

SECTION 5 SERVICING INFORMATION

When calling Speck Pumps regarding a question or problem with your pump, please have the serial number available. The serial number is located on the Speck Pump model label on the motor or pump flange. Replacement parts may be available from your installer. Call, fax, or write:

Speck Pumps - Pool Products, Inc.
7867 Bayberry Road
Jacksonville, FL 32256
Phone (904) 739-2626 FAX (904) 737-5261



PART #	QTY	DESCRIPTION
922	1	NUT, CAP M12
920.11	1	NUT, COUPLING M12
920.3	8	NUT, M12
920.1	4	NUT, M12
915	4	LID KNOB
903	1	DRAIN PLUG 3/4"
902.11	1	STUD M12 x 50
902.10	4	STUD M8 x 45
902.3	7	STUD M12 x 40
902.1	4	STUD M12 x 25
900.3	1	EYE BOLT M12
580	4	CAP, PLASTIC
554.10	4	WASHER A8.4
554.3	8	WASHER A13
516	1	V-RING V18S
475	1	CERAMIC RING
433.5	1	MECHANICAL SEAL
412.10	2	O-RING 120 x 7
412.5	1	O-RING 110 x 5
412.4	1	O-RING 12 x 2.5
412.3	1	RUBBER COLLAR
412.2	1	O-RING 185 x 4
412.1	1	O-RING 185 x 6
411.4	4	GASKET, PLASTIC
411.3	1	SPACER 14/22
411.2	1	GASKET-IT
230.1	1	IMPELLER 93-VII
230.1	1	IMPELLER 93-VIII/IX
161.1	1	SEAL HOUSING
160	1	LID WITH SPACER
155	1	ADAPTOR, DISCHARGE ABS
153	1	ADAPTOR, SUCTION ABS
143	1	BASKET COMPLETE
101	1	CASING, BRONZE

Z.Nr.: W9308.017
30.06.92 Odessa, Ukraine

SAVE THESE INSTRUCTIONS!

SECTION 6 WARRANTY

LIMITED WARRANTY

The manufacturer supplies a limited warranty to the original consumer purchaser of the pump and the motor on the following terms and conditions.

1. The pump is warranted to be free from defects in material and workmanship for a period of eighteen (18) months from the date that the pump is originally installed.
2. The motor is warranted to be free from defects in material and workmanship for a period of twelve (12) months from the date the pump and motor are originally installed.
3. Notwithstanding any provision herein to the contrary, the warranties and obligations hereunder shall not in any event extend for more than 2 years beyond the date of shipment of the motor and the pump from the factory in Jacksonville, Florida.
4. Warranty is void in the following cases: damages which result in whole or in part from: (a) careless or improper installation of the pump or the motor; (b) improper or negligent use and maintenance of the pump or the motor; (c) tampering with the pump or the motor by unauthorized repair personnel.
5. The manufacturer's sole obligation hereunder shall be to replace or repair any defective pump or motor. The manufacturer reserves the absolute right to determine whether any defective pump or motor should be replaced or repaired.
6. Any customer who wishes to make a claim under this Limited Warranty shall notify the manufacturer of such claim by telephone or by mail. After the customer has been authorized to return a defective pump or motor, the customer must return the pump or motor to the manufacturer at 7867 Bayberry Road, Jacksonville, Florida 32256. Any goods returned to the manufacturer without prior authorization will be returned to the shipper unopened. The manufacturer shall not bear any costs or risks incurred in shipping a defective pump or motor to the manufacturer or in shipping a repaired or replaced pump or motor to a customer.
7. The manufacturer will charge customers for all non-warranty work which it may perform. Warranty work will not be performed until the customer has accepted the price quoted.
8. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS, AND OF ALL OBLIGATIONS OR LIABILITIES ON THE PART OF THE MANUFACTURER FOR DAMAGES, INCLUDING BUT NOT LIMITED TO INCIDENTAL DAMAGES, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE PUMP OR THE MOTOR.
9. Some states do not permit limitations on the terms of implied warranties or on the recovery of incidental or consequential damages. Accordingly, the limitations contained in paragraph 8 may not apply to certain customers.
10. This warranty gives customers specific legal rights. Customers may have other rights which vary from state to state.

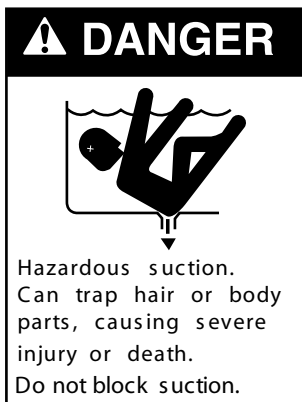
READ THIS MANUAL CAREFULLY

BEFORE USING THE SPECK PUMP



DANGER

DO NOT BLOCK SUCTION

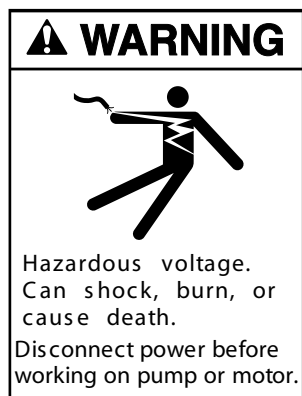


1. Pump suction is hazardous and can trap and drown or disembowel bathers.
2. Blocking suction with body may cause severe or fatal injury.
3. Do not use or operate swimming pools, spas or hot tubs if a suction outlet cover is missing, broken or loose.
4. All suction outlets covers must be maintained. They must be replaced if cracked, broken or missing.
5. All suction outlets must have correctly installed screw-fastened covers in place.
6. The pump suction system must provide protection against the hazard of suction entrapment or hair entrapment /entanglement.
7. Provide at least two hydraulically balanced (3' apart) main drains, with covers as suction outlets for each circulating pump suction line.



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, unplug motor before working on pump or motor.