

PSP-3340

Polypropylene Self-Priming 3" Centrifugal Pump

Installation and Operation Manual

WARNING: USE OF THIS PRODUCT FOR ANY PURPOSES OTHER THAN ITS ORIGINAL INTENT, ABUSE OF THE PRODUCT, AND/OR MODIFICATION TO THE ORIGINAL PRODUCT IS STRICTLY PROHIBITED BY JOHN BLUE COMPANY. JOHN BLUE COMPANY RESERVES THE RIGHT TO DENY WARRANTY OR LIABILITY CLAIMS IN ANY/ALL SITUATIONS INVOLVING MISLIFS ARLISE OR MODIFICATION

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THE ORIGINAL INTENT OF THIS PRODUCT DOES NOT INCLUDE USE WHERE THE MAXIMUM ALLOWED PRESSURE OR TEMPERATURE IS EXCEEDED, AND IT DOES NOT INCLUDE APPLICATIONS UTILIZING FLUIDS THAT ARE NOT COMPATIBLE WITH THE PRODUCT'S COMPONENT MATERIALS. DO NOT USE THIS PRODUCT WITH FLAMMABLE OR COMBUSTIBLE FLUIDS SUCH AS GASOLINE, KEROSENE, DIESEL, ETC... FAILURE TO FOLLOW THIS NOTICE MAY RESULT IN SERIOUS INJURY AND/OR PROPERTY DAMAGE AND WILL VOID THE PRODUCT WARRANTY. IF IN DOUBT ABOUT YOUR APPLICATION, CONTACT YOUR STOCKING DEALER OR THE JOHN BLUE TECHNICAL STAFF AT 1-800-253-2583.

WARNING: This product can expose you to certain chemicals, which are known to the State of California to cause cancer or birth defects or other reproductive harm. For more information go to: www.P65Warnings.ca.gov.

SAFETY PRECAUTIONS: EQUIPMENT SHOULD BE OPERATED BY RESPONSIBLE PEOPLE. A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST AN ACCIDENT. FILL SYSTEM WITH WATER FIRST AND CHECK FOR LEAKS – REPLACE HOSES WHEN WORN OR CRACKED.

Specifications:

Max flow: 375 gpm
Max pressure: 45 psi
Required HP: 10 HP
Port size: 3" FPT

- Materials: Polypropylene, Viton® O-rings,

316 stainless bolts and shaft

Optional screw-in M300 flange adapter is P/N: 116431-01

PSP-3340 shown with GX-390 Honda® Engine

Installation:

- The standard pump is configured for pedestal mounting, you must order a "-E" pump for use on an electric motor, and you must order a "-BS" pump for use with a gas engine. (see page 4 for more details)
- Note that any plumbing must be supported so that its weight does not hang off of the pump this will void the warranty.
- For best results when installing any fittings into the inlet and outlet of the pump, apply soft-set thread sealant to both the male threads on the fitting and the female threads of the pump. (Examples of soft-set thread sealants include Gasoila Soft-Set Thread Sealant with PTFE and Permatex Thread Sealant with PTFE or equivalent)
- The inlet configuration of the pump may be changed by removing the 6 locknuts holding the inlet on. The inlet check valve flap may also be removed in the high configuration. Using the pump in the high inlet condition allows the outlet hose to drain when the pump is shut off, which is beneficial to some users. Tighten all housing fasteners to 5 ft-lbs.

Start-up Procedure:

- Inspect all fittings to insure they are tight and free of leaks.
- Inspect antifreeze level in the seal reservoir. Antifreeze level should be around 1/2" from the opening.
- Add 50/50 pre-diluted automotive antifreeze as required to maintain proper level in the seal reservoir."
- Insure Impeller is rotating in the correct direction, as indicated by arrow on Main Housing
- Make sure Inlet Flap moves freely and is in the down or closed position.
- Pre-fill pump Housing to the top of the outlet with fluid being pumped.
- Attach inlet and outlet hoses and secure.
- Open inlet and outlet valves.
- Initiate power to the pump.

Storage:

- After use flush the pump with a solution that will neutralize the fluid you have been pumping, and then drain. Do not use water to flush acids – resulting damage not warrantied.

12-M-74 1 Rev. 6/2022

Note to the Owner

The pump should be inspected annually for any wear or damage to any of the components in order to ensure proper operation. Enter the date of installation in the space provided for future reference. This information will be required for ordering replacement parts or servicing your pump.

Our engineering department constantly improves its products. We reserve the right to make design and specification changes without notice.

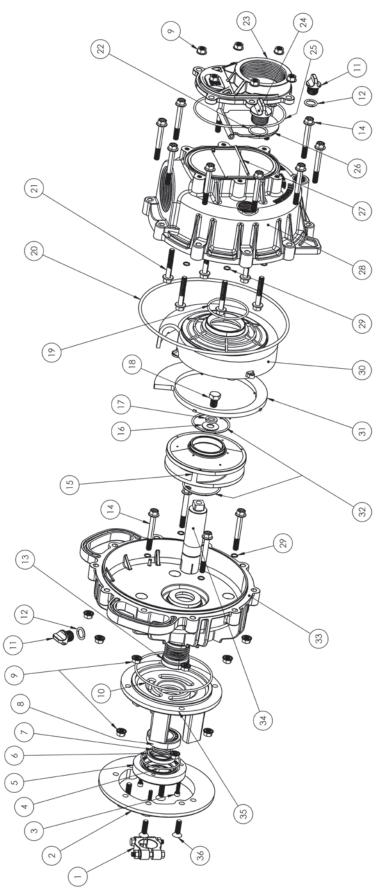
Maintenance:

- The seal reservoir may be inspected by opening the fill plug. The fluid level should be approximately ½" below the opening. If the fluid is dirty, drain by tilting the pump upside down or pull it out with a vacuum, then replace with PREMIXED antifreeze. If the fluid is cloudy, the impeller side seal may be leaking.
- The tapered roller bearing, P/N: 116511-01, is packed with Polyrex EM type grease during the assembly process of the pump. Anytime the pump is disassembled for maintenance or pump repair, all grease and any contaminants must be removed from the bearing and grease reservoir, then the bearing must be repacked with Polyrex EM type grease. Failure to perform this process could significantly reduce the life of the bearing. It is recommended to ensure proper bearing life; all grease and any contaminants be removed from the bearing and grease reservoir and the bearing be repacked with Polyrex EM type grease at minimum every 1,000 hours of pump operation.

Troubleshooting:

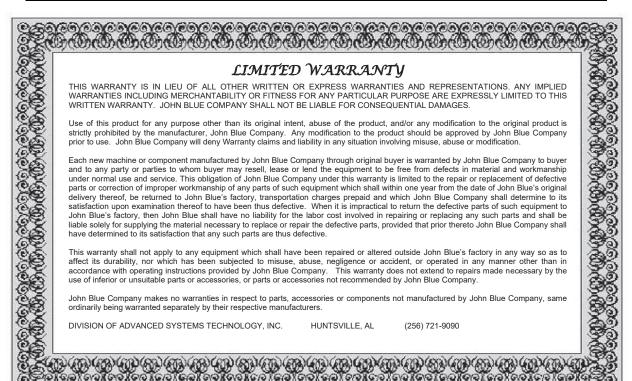
ISSUE	PROBABLE CAUSE
Pump makes rattling noise while running	Cavitation or pump starvation (suction lift is too high or the inlet line is too restrictive)
Interference observed between impeller and scroll plate	Pump was not installed properly using installation tool and the shaft is inserted too far into the pump.
Reduced pump output or pressure	Clogged impeller or inlet piping (including strainer)
	Leaks in suction line or at inlet gasket
	Collapsed suction line
	Trapped air in sections of suction line
	Suction lift is too great
	Discharge lift is too great
	Worn or damaged parts (impeller or volute)
Pump fails to prime or slow prime	Leaks in suction line or at inlet gasket
	Failure to pre-fill pump with fluid to generate suction
	Suction lift is too great
	Collapsed suction line
	User may need to swap the inlet flange orientation (change from center inlet to high inlet without flap)
Seal reservoir fluid changes level	Leak at the input shaft seal if level is low
	Leak at the impeller side seal if level is high

Parts Breakdown:



ITEM		PSP-3340-BS			PSP-3340-E			PSP-3340	
NOMBER	PART NUMBER	DESCRIPTION	QTY.	PART NUMBER	DESCRIPTION	QTY.	PART NUMBER	DESCRIPTION	QTY.
-	S-3608AS	SS SHAFT CLAMP ASSEM - 3" KEYED	-	\$-36085	SS SHAFT CLAMP ASSEM - 3" SMOOTH	-	\$-3608\$	SS SHAFT CLAMP ASSEM - 3" SMOOTH	-
2	116510-01	3" GAS ENGINE ADAPTER RING	-	116509-01	3" ELEC MOTOR ADAPTER RING	-	116508-01	3" PEDESTAL ADAPTER RING	-
က	90512	1/4-20 SOCKET HEAD CAP SCREW	က	90512	1/4-20 SOCKET HEAD CAP SCREW	က	90512	1/4-20 SOCKET HEAD CAP SCREW	3
4	116515-01	-149 O-RING, BUNA	-	116515-01	-149 O-RING, BUNA	-	116515-01	-149 O-RING, BUNA	-
2	116507-01	3" ADAPTER BEARING CAP	-	116507-01	3" ADAPTER BEARING CAP	-	116507-01	3" ADAPTER BEARING CAP	_
9	116513-01	ROTARY SHAFT SEAL	-	116513-01	ROTARY SHAFT SEAL	-	116513-01	ROTARY SHAFT SEAL	_
7	116514-01	EXTERNAL RETAINING RING	-	116514-01	EXTERNAL RETAINING RING	-	116514-01	EXTERNAL RETAINING RING	_
80	116511-01, 116512-01	TAPERED ROLLER BEARING ASSEMBLY	-	116511-01, 116512-01	TAPERED ROLLER BEARING ASSEMBLY	1	116511-01, 116512-01	TAPERED ROLLER BEARING ASSEMBLY	1
6	91077	3/8-16 FLANGED LOCK NUT	20	91077	3/8-16 FLANGED LOCK NUT	20	91077	3/8-16 FLANGED LOCK NUT	20
10	116434-01	-255 O-RING, VITON	-	116434-01	-255 O-RING, VITON	1	116434-01	-255 O-RING, VITON	1
11	116288-01	1/2" NPT PLUG - POLY SP PUMPS	2	116288-01	1/2" NPT PLUG - POLY SP PUMPS	2	116288-01	1/2" NPT PLUG - POLY SP PUMPS	2
12	116294-01	-115 O-RING, VITON	2	116294-01	-115 O-RING, VITON	2	116294-01	-115 O-RING, VITON	2
13	43005	SEAL, VITON	-	43005	SEAL, VITON	-	43005	SEAL, VITON	_
14	116291-01	FLANGED HEAD 316SS BOLT, 3/8-16 X 3	14	116291-01	FLANGED HEAD 316SS BOLT, 3/8-16 X 3	14	116291-01	FLANGED HEAD 316SS BOLT, 3/8-16 X 3	14
15	116427-91	IMPELLER ASSEMBLY - 3" POLY SP	-	116427-91	IMPELLER ASSEMBLY - 3" POLY SP	-	116427-91	IMPELLER ASSEMBLY - 3" POLY SP	-
16	93044	1/2" FLAT WASHER, 316 SS	-	93044	1/2" FLAT WASHER, 316 SS	-	93044	1/2" FLAT WASHER, 316 SS	1
17	116521-01	1/2" LOCK WASHER, 316 SS	-	116521-01	1/2" LOCK WASHER, 316 SS	-	116521-01	1/2" LOCK WASHER, 316 SS	-
18	116520-01	1/2-13 X 3/4 HHCS, 316 SS	-	116520-01	1/2-13 X 3/4 HHCS, 316 SS	-	116520-01	1/2-13 X 3/4 HHCS, 316 SS	1
19	116433-01	-233 O-RING, VITON	-	116433-01	-233 O-RING, VITON	-	116433-01	-233 O-RING, VITON	_
20	116436-01	-379 O-RING, VITON	-	116436-01	-379 O-RING, VITON	-	116436-01	-379 O-RING, VITON	_
21	116482-01	FLANGED HEAD 316SS BOLT, 3/8-16 X 2-3/8	9	116482-01	FLANGED HEAD 316SS BOLT, 3/8-16 X 2-3/8	9	116482-01	FLANGED HEAD 316SS BOLT, 3/8-16 X 2-3/8	9
22	116293-01	-123 O-RING, VITON	-	116293-01	-123 O-RING, VITON	-	116293-01	-123 O-RING, VITON	1
23	116428-01	INLET FLANGE NPT - 3" POLY SP	-	116428-01	INLET FLANGE NPT - 3" POLY SP	-	116428-01	INLET FLANGE NPT - 3" POLY SP	_
24	116289-01	1" NPT PLUG - POLY SP PUMPS	-	116289-01	1" NPT PLUG - POLY SP PUMPS	-	116289-01	1" NPT PLUG - POLY SP PUMPS	-
25	116435-01	-257 O-RING, VITON	-	116435-01	-257 O-RING, VITON	-	116435-01	-257 O-RING, VITON	-
26	116216-01	3" INLET FLAP	-	116216-01	3" INLET FLAP	-	116216-01	3" INLET FLAP	_
27	116217-01	3" FLAP HINGE PIN	-	116217-01	3" FLAP HINGE PIN	-	116217-01	3" FLAP HINGE PIN	-
28	116425-01	HOUSING - 3" POLY SP	-	116425-01	HOUSING - 3" POLY SP	-	116425-01	HOUSING - 3" POLY SP	-
29	116300-01	-012 O-RING, VITON	0	116300-01	-012 O-RING, VITON	10	116300-01	-012 O-RING, VITON	10
30	116438-01	SCROLL PLATE - 3" POLY SP	-	116438-01	SCROLL PLATE - 3" POLY SP	-	116438-01	SCROLL PLATE - 3" POLY SP	_
31	116439-01	SCROLL PLATE INSERT - 3" POLY SP	-	116439-01	SCROLL PLATE INSERT - 3" POLY SP	-	116439-01	SCROLL PLATE INSERT - 3" POLY SP	_
32	116223-01	-231 O-RING, TEFLON	2	116223-01	-231 O-RING, TEFLON	2	116223-01	-231 O-RING, TEFLON	2
33	116426-01	BACKPLATE - 3" POLY SP	-	116426-01	BACKPLATE - 3" POLY SP	-	116426-01	BACKPLATE - 3" POLY SP	-
34	116432-01A	SHAFT - 3" POLY SP, 316 SS, BS PUMP	-	116430-01A	SHAFT - 3" POLY SP, 316 SS, ELEC	-	116430-01A	SHAFT - 3" POLY SP, 316 SS, ELEC	-
35	116506-01	3" PUMP ADAPTER	-	116506-01	3" PUMP ADAPTER	-	116506-01	3" PUMP ADAPTER	-
36	116516-01	3/8"-16 FLAT HEAD SCREW	4	116516-01	3/8"-16 FLAT HEAD SCREW	4	116516-01	3/8"-16 FLAT HEAD SCREW	4
	1								

AVAILABLE GAS ENGINE AND ELECTRIC MOTORS	
Part Number	Description
115457-01	Honda GX390 Gas Engine, Electric Start
116590-01	Vanguard 14HP Gas Engine, Electric Start
C-517	10HP Electric Motor, TEFC, 3 PH
115277-01	10HP Electric Motor, TEFC, 1 PH





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