

PSP-3240

Polypropylene Self-Priming 2" 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 CDS-JOHN BLUE COMPANY. CDS-JOHN BLUE COMPANY RESERVES THE RIGHT TO DENY WARRANTY OR LIABILITY CLAIMS IN ANY/ALL SITUATIONS INVOLVING MISUSE, ABUSE OR MODIFICATION.

THE ORIGINAL INTENT OF THIS PRODUCT DOES <u>NOT</u> 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 CDS-JOHN BLUE TECHNICAL STAFF AT 1-800-253-2583.

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.

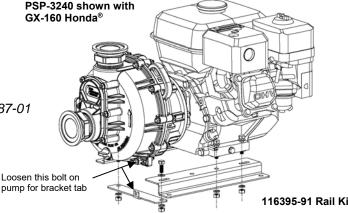
Specifications:

Max flow: 200 gpm Max pressure: 45 psi Required HP: 5 Hp 2" FPT Port size:

Optional screw-in 220 flange adapter = 116287-01

Materials: Polypropylene, Viton® o-rings,

316 stainless bolts and shaft



Remove tool before running

amua

Installation:

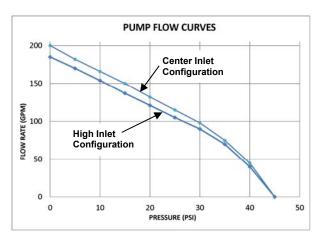
- The standard pump is configured for gas engine use. For electric motor fitment, you must order a "-E" pump for use on a CDS-JBC 5hp motor (see page 4).
- For mounting on a gas engine that is not mounted to a trailer or base, you may order a mounting rail kit as shown to the right, p/n 116395-91. 5/16"-24 hardware is provided with the pump to mount it to the engine.
- A shaft locating tool is used to hold the shaft during installation on the engine/motor. This must be removed before running the pump.
- Note that any plumbing must be supported so that its weight does not hang off of the pump – this will void the warranty.
- If you have the -FLG version of the pump with 220 flange fittings included, the fitting threads must have sealant applied before assembly to the pump.
- 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.

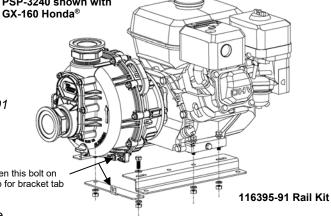
Storage:

- 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.

Maintenance:

- The seal reservoir may be inspected by opening the fill plug. The fluid level should be around 1/2" 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.





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.

DATE OF INSTALLATION:	
-----------------------	--

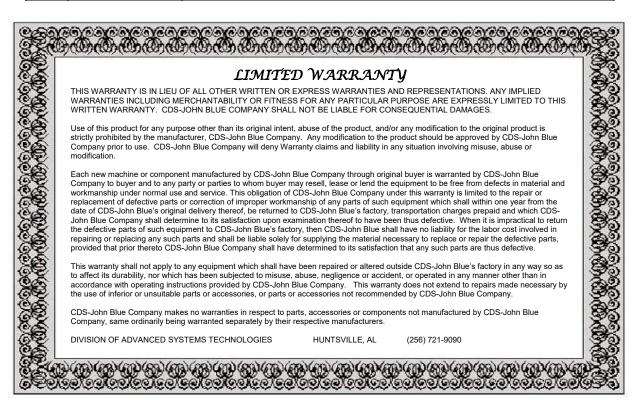
Troubleshooting:

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: 25 14 20 21 15 24 32 32 32 33 28 18 10 27 10 20 21 21 22 24 32 32 32 33 34 39 (INSTALL NUT WITH IMPACT UNITH UNITH IMPACT UNITH UNITH IMPACT UNITH UNITH IMPACT UNITH UNITH UNITH UNITH UNITH UNITH

	Description	Part #
1	HOUSING	116282-01
2	BACKPLATE	116283-01
3/3A	SCROLL PLATE / SCROLL PLATE INSERT	116284-01A / 02A
4	IMPELLER	116285-91
5	INLET FLANGE – NPT	116286-01
6	½" PLUG	116288-01
7	1" PLUG	116289-01
8	PIVOT PIN – 316SS	116290-01
9	FLAP – EPDM	116241-01
10	M220 FLANGE ADAPTER TO 2" MPT - OPTIONAL	116287-01
11	#123 VITON O-RING – 1" PLUG	116293-01
12	#115 VITON O-RING – ½" PLUG	116294-01
13	#139 VITON O-RING – VOLUTE	116295-01
14	#049 VITON O-RING – ENGINE ADAPTER	116296-01
15	M4X228 VITON O-RING – HOUSING	116297-01
16	#158 VITON O-RING – INLET FLANGE	116298-01
17	#012 VITON O-RING – 3/8" BOLTS	116300-01
18	#010 VITON O-RING – 1/4" BOLTS	SMPT-0067
19	1/2" IMPELLER RETAINING NUT - 316SS (approx. 30 ft-lb – use impact gun)	92033
20	IMPELLER SHAFT – 316SS	116299-01
21	DOUBLE SEAL – 1" VITON, CERAMIC	S-3565-V
22	SHAFT CLAMP	S-3607S
23	ENGINE ADAPTER	S-3556
24	TEFLON RING	116246-01
25	3/8"-16 FLANGED NUT (10 ft-lb max. for re-assembly)	91077
26	3/8"-16 X 3" LG. FLANGED BOLT, 316SS	116291-01
27	1/4"-20 FLANGED NUT (5 ft-lb max. for re-assembly)	92017
28	1/4"-20 X 2" LG. FLANGED BOLT, 316SS	116292-01
29	IMPELLER WASHER - 316SS	93044
30	PTFE REAR IMPELLER SHIM	116441-01
31	SHAFT INSTALLATION TOOL	116301-01
32	5/8" IMPELLER INSERT NUT – 316SS	116470-01

Availal	Available Electric Motors and Gas Engine:			
	Part Number	Description		
	C-5962 / C-5960	5HP ELECTRIC MOTOR, DRIP-PROOF (3PH / 1PH)		
	C-5963 / C-5961	5HP ELECTRIC MOTOR, TEFC (3PH / 1PH)		
	113798-01	5.5 HP HONDA GX-160 GAS ENGINE, ROPE START		
	116419-01	6.0 HP HONDA GX-200 GAS ENGINE, ROPE START		





CDS-John Blue Company

Division of Advanced Systems Technology 165 Electronics Blvd., Huntsville AL 35824 Telephone: (256) 721-9090 • Fax (256)-721-9091 Toll Free 1-800-253-2583

www.cds-johnblue.com

YOUR LOCAL DEALER



