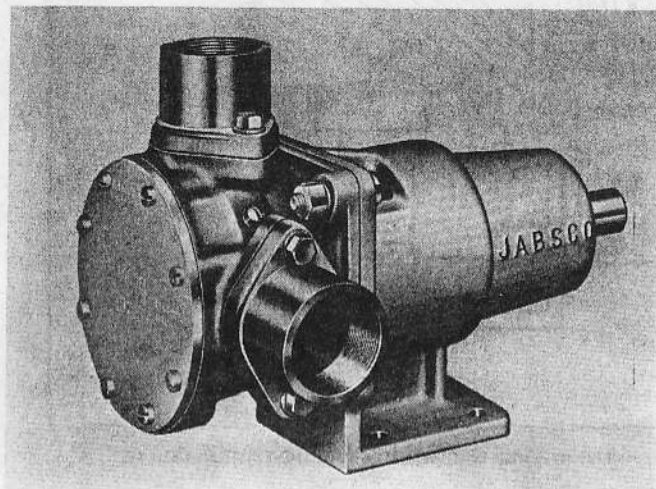


JABSCO® PUMPS

Self Priming Pumps

MODEL: 3200-0011

Product Data



MODEL 3200-0011

DESIGN FEATURES

Body:	Bronze
Impeller:	Jabasco Neoprene Compound
Shaft:	Bronze
Wearplate:	Replaceable
Shaft Seal:	Carbon-Face Rotary Type with Replaceable Seal Seat
Pedestal:	Cast Iron
Bearings:	Sealed Ball Bearings
Ports:	2" NPT
Weight:	57 1/2 lbs. (approximately) (26.1 kgs)

APPLICATION

MARINE

- Circulating engine raw water
- Pumping bilges, washdowns

INDUSTRIAL

- Circulating and transferring liquids
- Velocity-mixing
- Returning spilled liquids to process
- Transferring size and wood pulp slurries in paper mills

- Sump pumping
- Circulating water for cooling towers, heat exchangers
- Circulating and transferring viscous fluids, such as molasses, honey, beverage syrups, etc.
- Circulating mildly abrasive slurries
- Chemical manufacturers and pharmaceutical houses — to pump soap, liquors, ink, dyes, medicines, alco-

hol, various acids, tanning liquors, sugar solutions, glycerine, lotions, brine, etc.

FARMING

- Pumping water for stock, poultry houses, farmhouse
- Pumping water from wells and cisterns
- Booster pumping

OPERATING INSTRUCTIONS

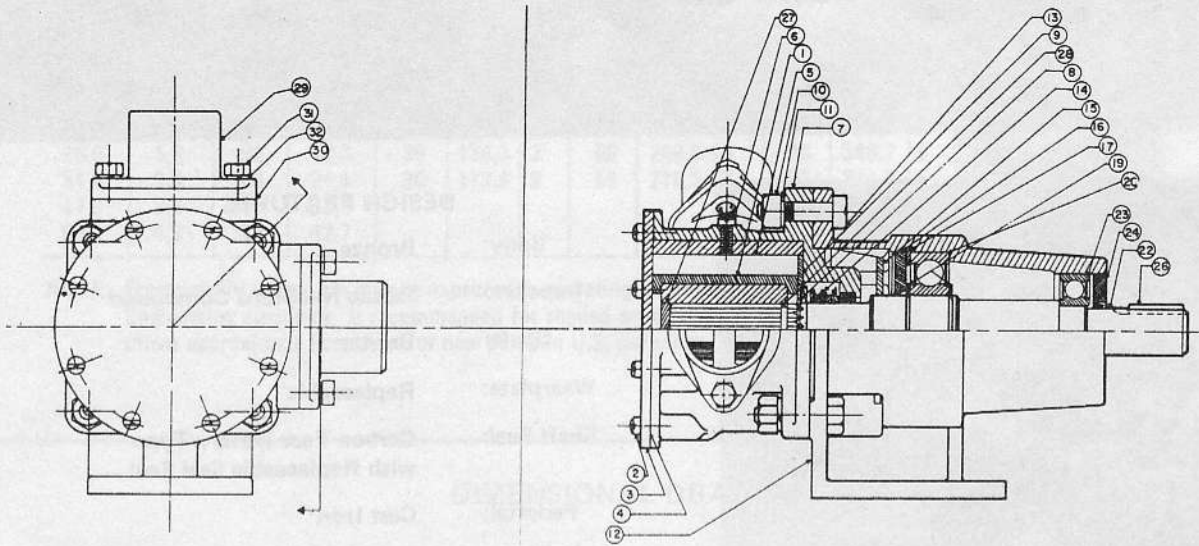
- 1. INSTALLATION**—Pump may be mounted in any position. The rotation of the pump shaft determines the location of the pump's intake and discharge ports. (Refer to dimensional drawing.) Before installing, turn the pump shaft in the direction of the operating rotation.
- 2. DRIVE**—Belt or Direct with flexible coupling.
BELT DRIVE—Overtight belt load will reduce pump bearing life.
DIRECT DRIVE—Clearance should be left between drive shaft and pump shaft when installing coupling. Always mount and align pump and drive shaft before tightening the coupling set screw.
- 3. SPEEDS**—100 RPM to the maximum shown in the performance table. For longer pump life, operate at lowest possible speeds.
- 4. SELF-PRIMING**—Primes at low or high speeds. For vertical dry suction lift of 10 feet (3.3m), a minimum of 800 RPM is required. Pump will produce suction lift up to 22 feet (6.7m) when wetted. **BE SURE SUCTION LINES ARE AIR TIGHT OR PUMP WILL NOT SELF-PRIME.**
- 5. RUNNING DRY**—Unit depends on liquid pumped for lubrication. **DO NOT RUN DRY** for more than 30 seconds. Lack of liquid will burn the impeller.
- 6. CAUTION**—Do not pump petroleum derivatives, solvents, thinners, highly concentrated or organic acids. If corrosive fluids are handled, pump life will be prolonged if flushed with water after each use of after each work day.
- 7. PRESSURES**—For continuous operation, pressure should not exceed 55 pounds (3.9 kg/sq cm) for the standard Model 3200-0011.
- 8. TEMPERATURES** 45° - 180° F., operating range.
- 9. FREEZING WEATHER**—Drain unit by loosening end cover.
- 10. GASKET**—Use standard pump part. A thicker gasket will reduce priming ability. A thinner gasket will cause impeller to bind. Standard gasket is .015" thick.
- 11. SPARE PARTS**—To avoid costly shut downs, keep a Jabasco Service Kit No. 90029-0001 on hand.

JABSCO PRODUCTS ITT

Form 43000-0225 Rev. 4-78

MODEL: 3200-0011

CROSS SECTION



Insist on genuine Jabsco parts — made only by the ITT Jabsco Products — the original and world's leading manufacturer of self-priming flexible neoprene impeller pumps.

PARTS LIST

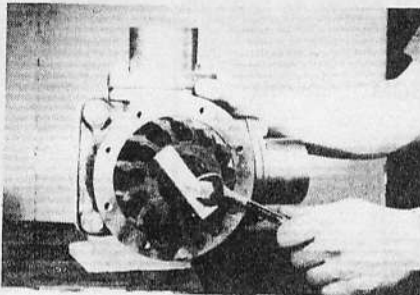
KEY	PART NUMBER	DESCRIPTION	QTY. REQ.	KEY	PART NUMBER	DESCRIPTION	QTY. REQ.
1	2999-0001*	Impeller	1	17	91701-4330	Retaining Ring (Inner Brg. to Pedestal)	1
2	91006-0050	Screws (End Cover)	8	19	91700-1960	Retaining Ring (Brg. to Shaft)	2
3	12069-0000	End Cover	1	20	92600-0160	Ball Bearing (Inner)	1
4	3209-0000*	Gasket	1	22	3207-0000	Shaft	1
5	3210-0000	Cam	1	23	92600-0150	Ball Bearing (Outer)	1
6	91006-0030	Screw (Cam)	1	24	3213-0000	Bearing Seal	1
7	3204-0000	Body	1	26	9214-0000	Key	1
8	91700-1430*	Retaining Ring (Seal)	1	27	4239-0000	Spline Seal	1
9	3211-0000	Wearplate	1	28	92000-0540*	"O" Ring	1
10	91085-0150	Hex Nut	4			Port Flange Assembly	
11	91608-0020	Lock Washer	4			Consists of:	
12	3206-0000	Bearing Housing (Pedestal)	1	29	3218-0010	Port Flange (2" NPT)	2
13	91095-0290	Hex Head Bolt (Pedestal to Body)	4	30	3219-0000	Gasket	2
14	3222-0000*	Seal Assembly (Complete)	1	31	91095-0300	Hex Head Bolt	4
		Replaceable Seal Components:		32	91608-0040	Lock Washer	4
	3941-0000	Carbon Seal			1019-0000	Impeller Puller (Not Shown)	
	3942-0000	Seal Seat Assembly			90029-0001	Service Kit (Not Shown)	
15	3212-0000	Slinger	1				
16	3214-0000	Bearing Seal (Inner)	1				

* Parts Contained in Service Kit

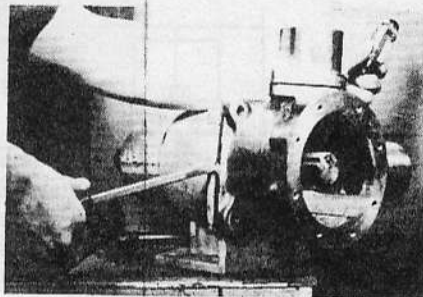
SERVICE INSTRUCTIONS

DISASSEMBLY

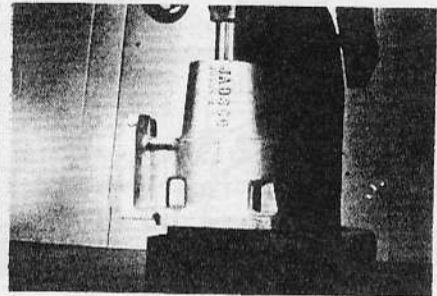
1. Remove end cover screws, gasket and end cover.
2. Using 1019-0000 as a gear puller, supplied with pump, remove impeller. (Picture No. 1)
3. Remove "O" ring spline seal from shaft with pick or hooked wire.
4. Remove retaining ring and seal, using caution as seal is spring loaded.
5. Loosen cam screw, remove cam and wearplate.
6. Loosen nuts securing body to pedestal and remove body. (Picture No. 2)
7. Remove seal seat from body.
8. Remove slinger.
9. Insert screwdriver between inner bearing seal and body bore, and pry out the seal.
10. Insert screwdriver between outer bearing seal and body bore, and pry out the seal.
11. Remove body to bearing retaining ring.
12. Pressing on shaft drive end, remove bearing and shaft assembly. (Heating outside of bearing housing will ease disassembly.) (Picture No. 3)
13. Remove bearing to shaft retaining rings from both sides of large bearing.
14. While using 2 metal bars to support inner race of small bearing, press drive end of the shaft through bearing.
15. While supporting inner race of large bearing, press drive end of shaft through bearing. To prevent scoring of bearing seal area of shaft, do not press on splined end.
16. Inspect all parts for wear or damage and replace where necessary.



No. 1



No. 2



No. 3

ASSEMBLY

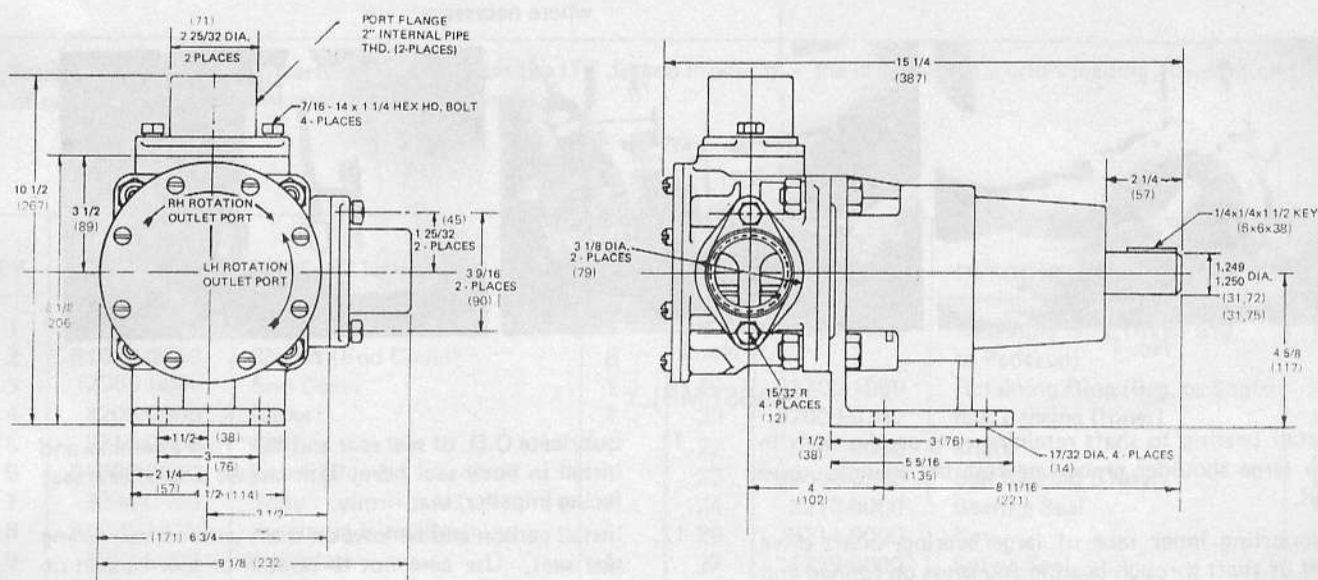
1. Install bearing to shaft retaining ring on the shaft in the large shoulder groove nearest the impeller drive end.
2. Supporting inner race of large bearing, insert drive end of shaft through bearing and press on splined end until bearing contacts retaining ring firmly.
3. Install bearing-to-shaft retaining ring in second groove on large shoulder next to the bearing.
4. Support inner race of small bearing, insert drive end of shaft through bearing and press on splined end until shaft shoulder contacts small bearing inner race firmly.
5. Install shaft and bearing assembly, drive end of shaft first, into large diameter of the bearing pedestal. Press against outer race of large bearing until large bearing bottoms on shoulder in pedestal.
6. Install large body to bearing retaining ring in groove next to large bearing.
7. Lubricate bearing seals with grease and press in each end of pedestal, with lips facing away from bearings.
8. Install slinger on shaft approximately 1/8" from shoulder.
9. Permatex screw threads and top side of cam and install in body.
10. Secure body to bearing housing with bolts, lock washers and nuts.
11. Lubricate O.D. of seal seat and "O" ring assembly and install in body seal bore, with lapped side of seal seat facing impeller, seat firmly.
12. Install carbon and bellows on shaft with carbon facing seal seat. Use care not to scratch or mar carbon or seal seat face.
13. Place spring, spring holder and retaining ring on shaft. **IMPORTANT** - Make certain retaining ring has seated in correct groove. There are two grooves around the splines. The retaining ring fits in the narrower of the two, farthest away from the end of the shaft.
14. Drop wearplate in body.
15. Lubricate "O" ring spline seal with grease and install in wide groove in shaft.
16. Wipe a thin film of Marfak 2HD around impeller bore surfaces.
17. Using a rotary motion in the direction in which impeller will rotate, deflect the impeller blade under the cam while pushing impeller into bore. When impeller splines contact shaft splines, push impeller onto shaft. Use a mallet to drive impeller completely into body bore.
18. Install neoprene impeller plug in impeller insert.
19. Install gasket, end cover and secure with end cover screws.

HEAD CAPACITY TABLE

TOTAL HEAD				500 RPM			870 RPM			1160 RPM			1450 RPM		
Lbs. per Sq. In.	Kg per Sq cm	Ft. of Water	Meters of Water	GPM	Liters per Min	HP	GPM	Liters per Min	HP	GPM	Liters per Min	HP	GPM	Liters per Min	HP
8.7	0,6	20	6,1	42	159,0	1½	76	287,7	2½	100	378,5	4	127	480,7	5
17.3	1,2	40	12,2	41	155,2	1½	71	268,7	3	95	359,6	4	125	473,1	5
26.0	1,8	60	18,3	36	136,3	2	66	249,8	3	90	340,7	5	122	461,8	7½
34.6	2,4	80	24,4	30	113,6	2	58	219,5	3	83	314,2	5	117	442,8	7½
47.8	3,4	110	33,5							68	257,4	7½	105	397,4	7½
60.5	4,3	140	42,7										80	302,8	7½

NOTE: Progressively longer life may be expected as operating pressures and speeds are reduced. Factory Application Engineering assistance is recommended for shaded area. High starting torque motor recommended. Table shows approximate head-flow for new pump in U.S. gallons per minute and liters per minute.

DIMENSIONAL DRAWING



(Millimeter Equivalents)

Model: 3200-0011

JABSCO PRODUCTS **ITT**

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