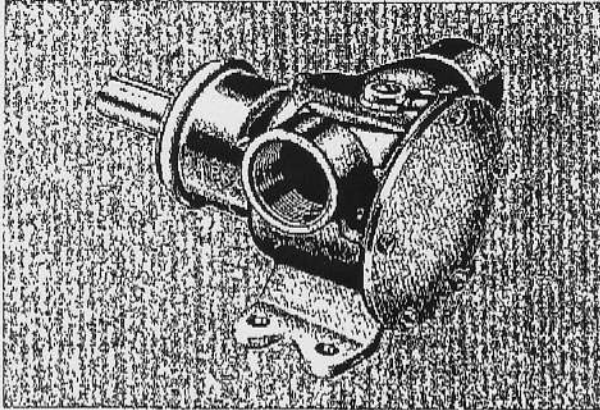


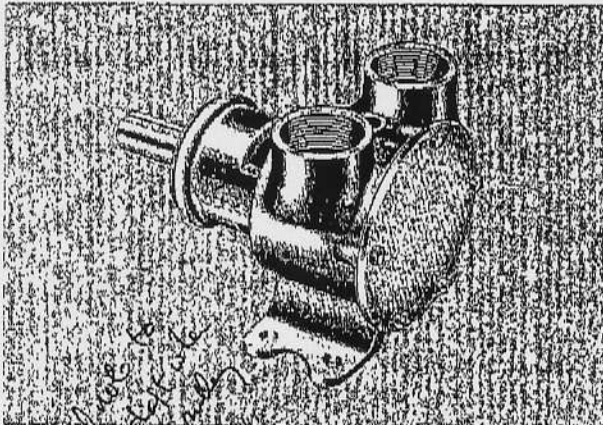
**JABSCO® PUMPS**

**MODEL: 6400-SERIES  
& 7420-SERIES**

*Product Data*



6400-SERIES



7420-SERIES

*Added note to support shaft on pulley part on*

**DESIGN FEATURES**

Body	Bronze Construction
Impeller	Jabco Neoprene Compound
Shaft	Bronze
Wear Plate	Replaceable
Shaft Seal	Carbon-Face Rotary Type with Replaceable Seal Seat
Bearing	Prelubricated Double Row Ball Bearing
Ports	1 1/4" NPT
Weight	10 1/2 lbs. (approximately) (4.8 KGS)

MODEL NO.	DESCRIPTION
6400-0001	1 1/4" Bronze, Ball Bearing Pump Plastic Cam, Neoprene Impeller with Plastic Insert.
6400-0004	1 1/4" Bronze, Ball Bearing Pump Brass Cam, Neoprene Impeller with Brass Insert.
7420-0001	1 1/4" Bronze, Ball Bearing Pump Plastic Cam, Neoprene Impeller with Plastic Insert.
7420-0004	1 1/4" Bronze, Ball Bearing Pump Brass Cam, Neoprene Impeller with Brass Insert.

**APPLICATIONS**

**MARINE:** Pumping bilges, Wash down, Engine Cooling.  
**INDUSTRIAL:** Circulating and Transferring liquids; Velocity-mixing; Transferring soap, liquors, pastes, glues, glycerine, lotions and brine. **FARM:** Pumping water for stock and poultry houses and Booster Pumping.  
**PLUMBING & HOME:** Pumping out flooded basements, cesspools, sumps and many other uses.

**OPERATING INSTRUCTIONS**

- 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.
- DRIVE** — Belt or Direct with flexible coupling.  
**BELT DRIVE** — Overtight belt load will reduce 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.
- SPEEDS** — 100 RPM to the maximum shown in the performance table. For longer pump life, operate at lowest possible speeds.
- SELF-PRIMING** — Primes at low or high speeds. For vertical dry suction lift of 10 feet, a minimum of 800 RPM is required. Pump will produce suction lifts up to 22 feet when wetted. **BE SURE SUCTION LINES ARE AIR TIGHT.**
- 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.

**JABSCO PRODUCTS ITT**

Marine and Recreation Components Division  
 International Telephone and Telegraph Corporation  
 1485 Dale Way, Costa Mesa, California 92626

Telephone: (714) 545-8251

Form 43000-0011 Rev. 11/79

MODELS: 6400-SERIES & 7420-SERIES

## OPERATING INSTRUCTIONS

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 or after each work day.
7. **PRESSURES** — For continuous operation, pressure should not exceed 35 PSI. For intermittent service only, pressures from 35 to 50 PSI can be attained using 807-0001 impeller, plus an extra gasket.
8. **TEMPERATURES** — Neoprene: 45°-180°F  
Nitrile: 50°-180°F  
Natural Rubber: 33°-120°F
9. **FREEZING TEMPERATURES** — Drain unit by loosening end cover. The following anti-freeze compounds can be used without any adverse effect to the neoprene impeller: Atlas "Permaguard", DuPont "Zerex" and "Telar", Dow Chemical "Dowguard" and Olin Mathison "Pyro". Most methyl alcohol (methanol) based anti-freezes can be used. **DO NOT USE PETROLEUM BASED ANTI-FREEZE COMPOUNDS OR RUST INHIBITORS.**
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 Jabsco Service Kit on hand.

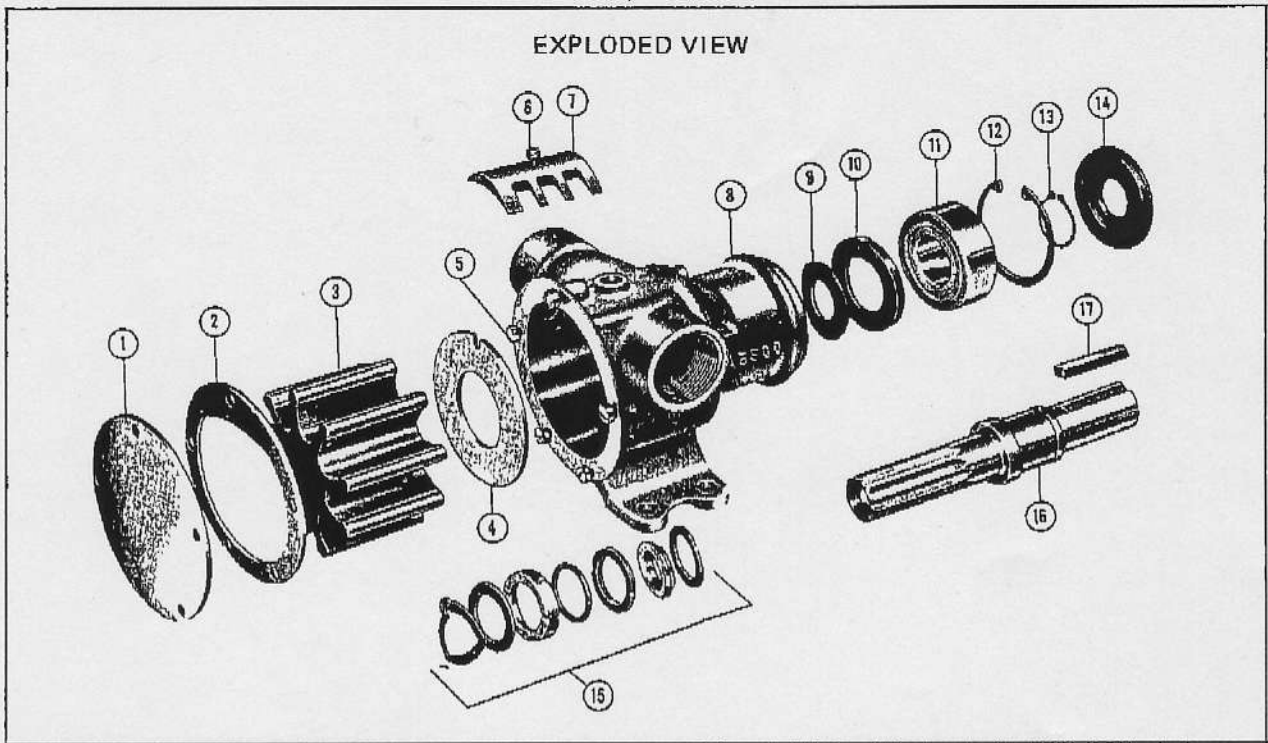
## SERVICE INSTRUCTIONS

## DISASSEMBLY

1. Remove end cover screws, end cover and gasket.
  2. Remove impeller.
  3. Remove seal with hooked wire. Remove seal seat and gasket.
  4. Loosen cam screw and remove cam. (Clean off permatex).
  5. Remove wearplate.
  6. Insert screwdriver between O.D. of outer bearing seal and pump bore and pry out seal.
  7. Remove bearing to body retaining ring.
  8. Press on impeller drive end of shaft to remove shaft and bearing assembly. Heating outside of body at bearing will ease disassembly.
  9. Remove bearing-to-shaft retaining ring.
  10. Supporting bearing inner race, press shaft through bearing.
  11. Using extreme care not to mar body bore, insert screwdriver between O.D. of inner bearing seal and pump bore and pry out the seal.
- NOTE:** Inspect all parts for wear or damage and replace if necessary.

## ASSEMBLY

1. Lubricate inner bearing seal with grease and press into body bearing seal bore with lip facing away from bearing bore.
2. Press shaft into bearing, using care to support inner race of bearing.
3. Install bearing to shaft retaining ring with flat side toward bearing.
4. Position slinger in body drain area. Insert splined end of shaft through bearing bore and guide slinger over shaft until bearing contacts body.
5. Pressing on bearing outer race, install bearing into bore. Heating outside of body at bearing area will ease assembly.
6. Install bearing to body retaining ring in body groove with flat side toward bearing.
7. Lubricate outer bearing seal with grease and press into bearing bore until it is flush with the body.
8. Install wearplate in body bore, aligning slot in wearplate with dowel pin in body.
9. Permatex screw threads and top side of cam and install in body with cam screw.
10. Lubricate seal gasket of seal seat and gasket assembly and insert in seal bore of body with polished surface facing outward. Care must be taken not to mar or scratch seal seat face. Installing this assembly with a slight rotary motion will insure seating the gasket firmly in the cavity.
11. Install balance of seal assembly with polished carbon seal face against seal seat. The seal assembly consists of the carbon seal ring and "O" ring which are contained within the metal ferrule. The metal ferrule has a neoprene washer cemented to its outside face against which the marcel spring washer is positioned. **NOTE:** It is advisable to position the marcel spring washer so that drive points are aligned with the indentations in the ferrule face.
12. Lubricate impeller bore with a light coat of Marfak 2HD and start impeller into bore with a rotary motion until splines engage, then push into bore.
13. Install gasket and end cover and secure with end cover screws.



Model ~~6400-0001~~ Model 6400-0004  
 Model ~~7420-0001~~ Model 7420-0004

PARTS LIST

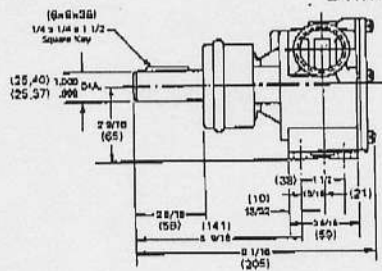
Key	Description	Qty. Req.	Part Number	Part Number
1	End Cover	1	12062-0000	12062-0000
2	*Gasket (Standard) (Optional) for use with 1/2 cam	1	816-0000	816-0000
3	Impeller* (St'd) Neoprene † (Opt'l) Nitrile (Opt'l) High Pressure (Opt'l) Natural Rubber	1	2553-0000 836-0001 836-0003 807-0001 836-0008	2553-0000 836-0001 836-0003 --- ---
4	Wearplate	1	2574-0000	2574-0000
5	Screw, End Cover	1	91005-0040	91005-0040
6	Screw, Cam (Opt'l) for use with 1/2 cam	1	91005-0040 91005-0050	91005-0040 91005-0050
7	Cam (Opt'l) 1/2 thickness cam	1	834-0001 2551-0000	834-0001 2551-0000
8	Body, Sub Ass'y (6400) Body, Sub Ass'y (7420)	1 1	6404-0000 7424-0000	6404-0000 7424-0000
9	Slinger	1	3181-0000	3181-0000
10	Bearing Seal (inner)	1	817-0000	817-0000
11	Ball Bearing	1	92600-0040	92600-0040
12	Retaining Ring (Brg to Body)	1	91700-2460	91700-2460
13	Retaining Ring (Brg to Shaft)	1	91700-2450	91700-2450
14	Bearing Seal (outer)	1	818-0000	818-0000
15	*Seal Assembly	1	6407-0010	6407-0010
16	Shaft	1	824-0000	824-0000
17	Key	1	9214-0000	9214-0000
	Service Kit		90062-0001	90062-0001 90062-0003

\*Parts Included in Service Kit 90062-0001  
 † " " " " " 90062-0003

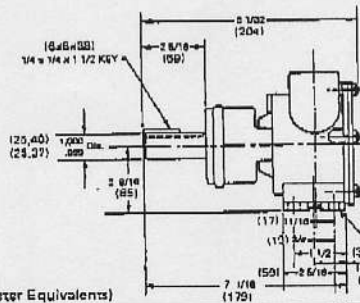
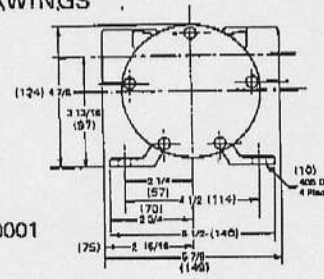
	TOTAL HD.		500 RPM		1160 RPM		1450 RPM		1750 RPM		2100 RPM		2450 RPM		
	P.S.I.	Ft. of Water	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	
	(kg/sq cm)	(meter)	(L/min)		(L/min)		(L/min)		(L/min)		(L/min)		(L/min)		
Standard Pressure	4.3 (0.3)	10 (3.0)	18 (68.1)	1/2	41 (155.2)	1	51 (193.0)	1 1/2	62 (234.7)	1 1/2	72 (272.5)	3	83 (308.7)	4	
	8.7 (0.6)	20 (6.1)	17 (64.4)	3/4	40 (151.4)	1	50 (189.3)	1 1/2	60 (227.1)	1 1/2	70 (265.0)	3	81 (297.8)	4	
	17.3 (1.2)	40 (12.2)	14 (53.0)	1	37 (140.1)	1 1/2	46 (174.1)	1 1/2	55 (208.2)	2	66 (249.8)	3	77 (288.7)	4	
	26.0 (1.8)	60 (18.3)			32 (121.1)	1 1/2	42 (159.0)	2	50 (189.3)	2	60 (227.1)	3	70 (258.3)	4	
	34.8 (2.4)	80 (24.4)					35 (132.5)	2	44 (166.5)	2	53 (198.8)	3	63 (235.8)	4	
Half Thickness Cam	4.3 (0.3)	10 (3.0)	11 (41.6)	3/4	26 (98.4)	1 1/2	31 (117.3)	1 1/2	37 (140.1)	1 1/2	46 (174.1)	1 1/2	56 (212.0)	2	
	8.7 (0.6)	20 (6.1)	9.5 (38.0)	1	24 (90.8)	1 1/2	29 (109.8)	1 1/2	35 (132.5)	1 1/2	44 (166.5)	2	52 (196.8)	3	
	17.3 (1.2)	40 (12.2)	5.5 (20.8)	1 1/2	19 (71.9)	2	23 (87.1)	2	29 (109.8)	2	38 (143.8)	2	45 (170.2)	3	
	26.0 (1.8)	60 (18.3)			12 (45.4)	2	15 (56.8)	2	21 (79.5)	2	31 (117.3)	3	37 (140.1)	3	
High Pressure	8.7 (0.6)	20 (6.1)	14 (53.0)	3/4	38 (143.8)	1 1/2	47 (178.3)	1 1/2	56 (209.4)	2	65 (244.5)	2	74 (276.6)	3	
	21.6 (1.5)	50 (15.2)	12 (45.4)	1	34 (128.7)	1 1/2	43 (162.8)	1 1/2	52 (196.9)	2	61 (228.0)	2	70 (258.1)	3	
	34.8 (2.4)	80 (24.4)	8 (30.3)	1 1/2	30 (113.6)	2	39 (145.7)	2	48 (181.2)	2	57 (213.3)	3	66 (246.4)	3	
	47.8 (3.4)	110 (33.5)			28 (106.0)	2	37 (139.1)	2	46 (174.1)	2	55 (208.2)	3	64 (239.3)	3	

TABLE SHOWS APPROXIMATE HEAD-FLOW FOR NEW PUMP IN U.S. GALLONS PER MINUTE, WITH METRIC EQUIVALENTS  
NOTE: Progressively longer life may be expected as operating pressures and speeds are reduced. Factory Application Engineering assistance suggested for operation in light shaded area. Capacitor type motor recommended.

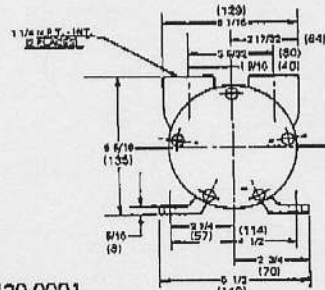
DIMENSIONAL DRAWINGS



MODEL 6400-0001



MODEL 7420-0001



JABSCO PRODUCTS **ITT**

0 50 100 150 200 250  
 FLOW IN IMPERIAL G.P.M. →  
 0 10 20 30 40 50  
 FLOW IN LITERS/MIN. →

**HEAD vs FLOW**    DATE  
 MODEL - 6400    8/9/78  
 IMP. - 836-0003  
 CAM - 834-0000  
**JABSCO PUMP COMPANY**  
**COSTA MESA, CALIFORNIA**  
 For continous duty do not  
 operate above 2/3 maximum  
 pressure capability.

↑ HEAD FEET H<sub>2</sub>O

↑ HEAD IN METERS H<sub>2</sub>O



0 10 20 30 40 50 60 70  
 FLOW IN U.S. GPM →