

JABSCO® PUMPS

Self-Priming Pumps

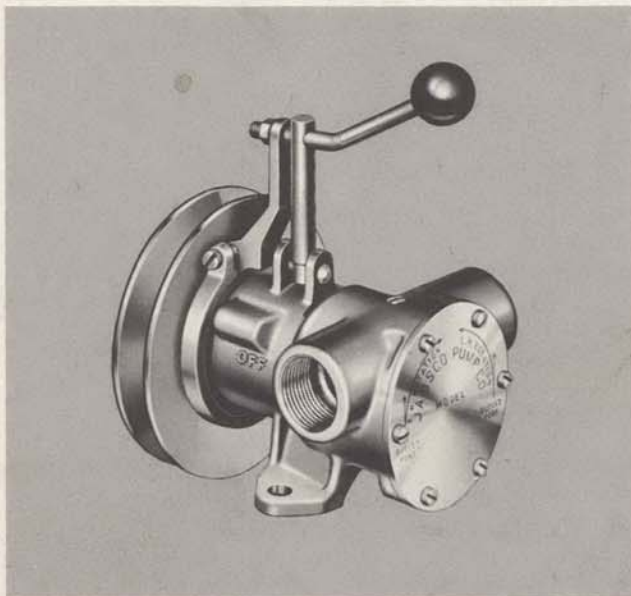
MODELS: 2300 - 9001

Formerly - 2300F

6590-0001 & 10660-0001

Manual Clutch Units

Product Data



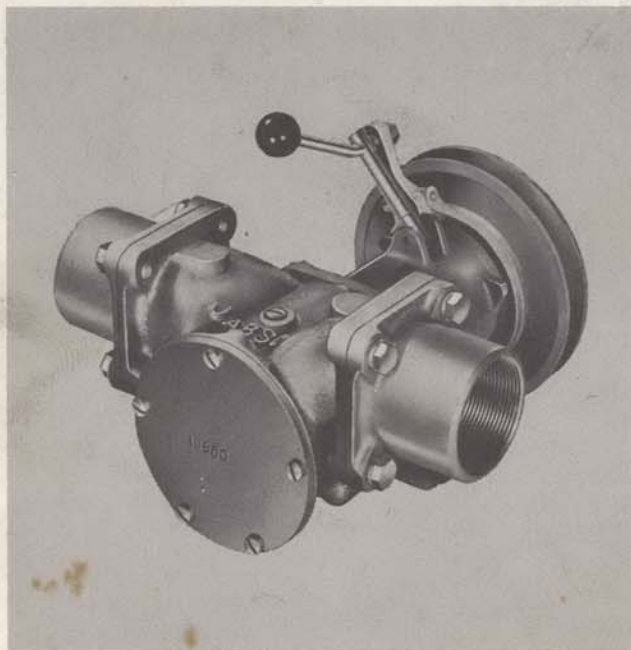
Model: 2300F

DESIGN FEATURES

Body:	Bronze
Impeller:	Jabsco Neoprene Compound
Shaft:	2300-9001 Stainless Steel 6590-0001 & 10660-0001 Brass
Ports:	2300-9001 - 1" NPT 6590-0001 - 1½" NPT 10660-0001 - 2" NPT
Seal:	Carbon-Ceramic, Face-Type
Bearings:	Sealed Ball Bearings
Shipping Weight:	2300-9001 - 9½ lbs. Approx. 6590-0001 - 17 lbs. Approx. 10660-0001 - 23 lbs. Approx.

VARIATIONS AVAILABLE

2300-9003	w/Nitrile Impeller
6590-0003	w/Nitrile Impeller



Model: 10660

APPLICATIONS

MARINE: Engine cooling, Pumping bilges, Wash-downs, Circulating water in bait tanks, Utility dock side pump.

INDUSTRIAL: Circulating and transferring, Velocity-mixing, Pumping machine tool coolants, Return spill, Sump drainage, Chemicals, Pharmaceuticals, Soap, Liquors, Ink, Dyes, Alcohol, Various acids, Tanning Liquors, Glycerine, Brine, etc.

FARMING: Pumping water for stock, Pumping water from shallow wells and cisterns.

PLUMBING & HOME EMERGENCY USE: Pumping out flooded basements, Cesspools, Sumps, Water heaters and water closets, Drains and sinks, Draining fish-ponds and pools.

PUBLIC UTILITIES AND MUNICIPALITIES: De-watering and draining meter boxes and excavations, dust control and sampling.

JABSCO PRODUCTS ITT

Form 4001-A Rev. 1-74

MODELS: 2300-9001 / 6590-0001 / 10660-0001

JABSCO PUMP AND CLUTCH UNITS			Port 1" NPT  MODEL 2300-9001 Seal—Cer. Face Shaft—SS Wt.—9½ lbs.	Port 1½" NPT  MODEL 6590-0001 Seal—Cer. Face Shaft—Brass Wt.—17 lbs.	Port 2" NPT  MODEL 10660-0001 Seal—Cer. Face Shaft—Brass Wt.—23 lbs.
KEY	DESCRIPTION	QTY. REQ.	PART NO. (See Fig. 1)	PART NO. (See Fig. 1)	PART NO. (See Fig. 1)
1	Screw (End Cover)	6	91003-0010		
	Screw (End Cover)	5		91005-0040	91005-0040
2	End Cover	1	2449-0020	6560-0000	10665-0000
3	*Gasket (End Cover)	1	890-0000	816-0000	816-0000
4	*Impeller	1	920-0001	836-0001	6760-0001
5	Cam	1	934-0000	834-0000	6988-0000
6	Screw (Cam)	1	91004-0090	91005-0040	91005-0040
7	Body	1	798-0030	6594-0000	10494-0000
8	Wearplate	1	4156-0000	2574-0000	2574-0000
9	*Seal (Shaft)	1	96080-0080	6407-0010	6408-0000
10	Seal (Brg.)	1	913-0000	817-0000	92701-0180
11	Ret. Ring (Plug to Body)	1	91701-1850	91700-2460	91701-2440
12	Adaptor Ring	1	2290-0000	2471-0000	2471-0000
13	Lever Ring	1	2285-0000	2470-0000	2470-0000
14	Body Plug & Engaging Sleeve	1	3855-0000	3856-0000	3856-0000
15	Roll Pin (Cone)	1	93100-0010	93100-0010	93100-0010
16	Shaft	1	6718-0000	824-0000	10657-0010
17	Ret. Ring (Brg. to Sleeve)	1	91700-0980	91700-1370	91700-1370
18	Ret. Ring (Brg. to Clutch)	1	91700-2060	91700-2830	91700-2830
20	Ret. Ring (Brg. to Shaft)	1	91700-2470	91700-2450	
21	Slinger	1		3181-0000	3181-0000
22	Clutch Cone	1	2584-0000	2473-0000	2473-2000
	Clutch Cone Shield	1	4313-0000		
23	Clutch Pulley	1	2286-0000	2472-0000	2472-0010
24	Lock Washer (Lever Ring)	1	91602-0060	91602-0060	91602-0060
25	Screw (Lever Ring)	1	91005-0060	91005-0060	91005-0060
26	Ball Bearing (Pump)	1	92600-0060	92600-0040	92600-0090 (2)
27	Ball Bearing (Pulley)	1	92600-0110	92600-0090	92600-0090
28	Hex Nut (Handle)	1	91085-0090	91085-0090	91085-0090
29	Lock Washer (Handle)	1	91602-0080	91602-0080	91602-0080
30	Plug (Rubber)	1	3530-0000	3530-0000	3530-0000
31	Knob (Handle)	1	92330-0010	92330-0010	92330-0010
32	Handle (Clutch)	1	2415-0000	2415-0000	2415-0000
33	Guide Tube	1	3525-0000	3525-0000	3525-0000
34	Spring (Handle)	1	3528-0000	3528-0000	3528-0000
35	Spring (Guide Tube)	1	3526-0000	3526-0000	3526-0000
36	Roll Pin (Tube)	1	93100-0020	93100-0020	93100-0020
38	Seal (Lever Ring)	1		6559-0000	9364-0000
	Washer (Body Brg.)	4			71602-0130
	Bearing Housing	1			10654-0000
	Bolt (Body Brg. Hsg.)	4			91095-0280
	Clutch Kit (Not Shown)		4377-0000	4387-0000	
	Service Kit (Not Shown)		90118-0001	90062-0001	90254-0001

* Parts Supplied with Service Kit.
2300F available with Nitrile Impeller - No. 2300-9003
6590 available with Nitrile Impeller - No. 6590-0003

	TOTAL HEAD		500 RPM		1160 RPM		1750 RPM		2100 RPM	
	PSI	Ft. of Water	GPM	H/P	GPM	H/P	GPM	H/P	GPM	H/P
2300-9001	4.3	10	6.8	1/4	16.5	1/3	26.0	3/4	30.5	3/4
	8.7	20	6.3	1/4	15.9	1/2	24.5	3/4	29.8	1
	17.3	40	4.7	1/4	13.5	1/2	20.0	3/4	26.7	1
	26.0	60			9.5	3/4	16.5	1	21.4	1 1/2
	34.6	80					11.5	1	15.0	1 1/2

	TOTAL HEAD		500 RPM		1160 RPM		1750 RPM	
	Lbs. per Sq. In.	Ft. of Water	GPM	H/P	GPM	H/P	GPM	H/P
6590-0001	4.3	10	18	1/2	41	1	62	1 1/2
	8.7	20	17	1/2	40	1	60	1 1/2
	17.3	40	14	1/2	37	1 1/2	55	2
	26.0	60			32	1 1/2	50	2
	34.6	80					44	3

	TOTAL HEAD		500 RPM		1160 RPM		1750 RPM	
	Lbs. per Sq. In.	Ft. of Water	GPM	H/P	GPM	H/P	GPM	H/P
10660-0001	4.3	10	23	1/2	54	1	83	2
	8.7	20	22	1/2	50	1	79	2
	17.3	40	17	1/2	43	1 1/2	71	3
	26.0	60			34	1 1/2	61	3
	30.3	70					55	3

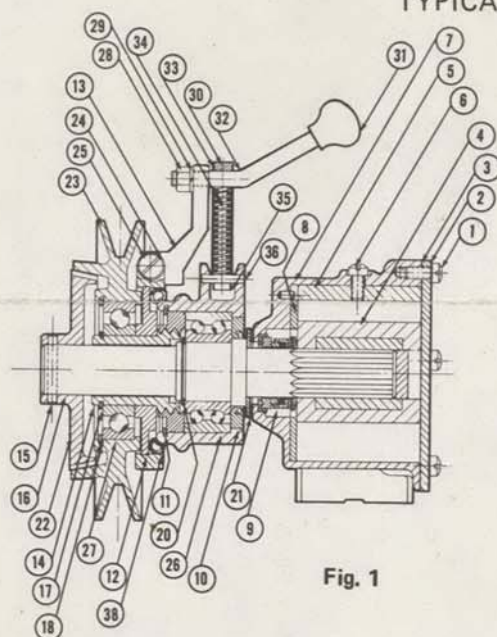


Fig. 1

TYPICAL CROSS-SECTION VIEW

CLUTCH ADJUSTMENT—(To prevent slippage) - The Jabsco clutch engages and disengages by means of internal threads on the body plug and external threads on the engaging sleeve. When adjustment is made, the engaging sleeve is "backed out" of the body plug. Therefore, the adjustment is limited to the position beyond which the threads are not sufficiently engaged to provide a sturdy support for the belt load. When over-adjustment is made, the pulley wobbles and causes more wear and slippage. The following procedure is recommended:

- Place lever ring in engage position. (On the extreme left as viewed from the pulley end of unit.)
- Loosen fillister head screw.
- Hold adaptor ring in place with a screwdriver to prevent it turning and simultaneously rotate lever ring to the right towards the disengaged position approximately 1/4".
- Tighten fillister head screw and check to see if lever ring permits clutch engagement.
- Repeat if necessary. However, if it becomes necessary to move the lever ring more than 1/2" or 45° from its original position, the cone is badly worn and should be replaced to prevent undue strain on the engaging sleeve and body plug.

OPERATING INSTRUCTIONS

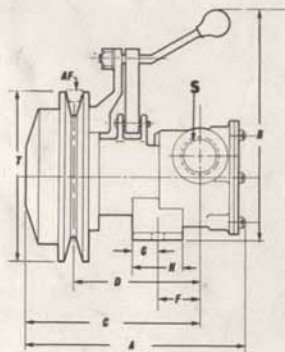
- INSTALLATION**—Pump may be mounted in any position. Intake and discharge ports are determined by the direction of shaft rotation (refer to Dimensional Drawing). Before installing, turn the pump shaft in the direction of the operating rotation.
- DRIVE**—Belt.
Belt Drive—Overtight belt load will reduce pump bearing Clutch Face life.
- SPEEDS**—100 RPM to the maximum shown in the performance table. Consult the factory for operation at speeds above those shown. For longer pump life, operate at lowest possible speeds.
- SELF-PRIMING**—Primes at low or high speeds. For vertical dry suc-

tion lift of 10 feet, a minimum of 800 RPM is required. Pump will produce suction lift up to 22 feet when wetted. **BE SURE SUCTION LINES ARE AIR TIGHT OR PUMP WILL NOT SELF-PRIME.**

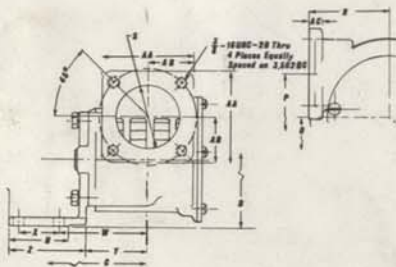
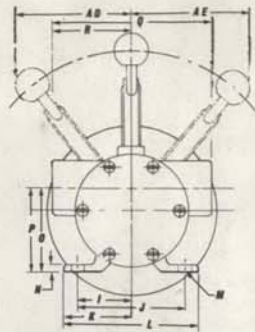
- RUNNING DRY**—Unit depends on liquid pumped for lubrication. **DO NOT RUN DRY** for more than 30 seconds. Lack of liquid will burn the impeller.
- CAUTION**—If pumping light fraction petroleum derivatives, solvents, thinners, highly concentrated or organic acids, consult Jabsco "Chemical Resistant Table" F3031 for proper body materials and impeller compounds. If corrosive fluids are handled, pump life will

be prolonged if flushed with water after each use or after each work day.

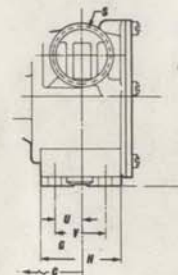
- PRESSURES**—Consult Head Capacity Chart for recommended maximum for continuous operation. If pressures exceed those shown, consult the factory.
- TEMPERATURES** 45° - 180° F.
- FREEZING WEATHER**—Drain unit by loosening end cover.
- GASKET**—Use a standard pump part. Thicker gasket will reduce priming ability. A thinner gasket will cause the impeller to bind. Standard gasket is .010" thick on the 2300-9001, .015" on the 6590-0001 and 10660-0001.
- SPARE PARTS**—To avoid costly shut downs, keep a Jabsco Service Kit on hand.



Model 2300-9001



Foot and Port Mounting Details
For Model 10660-0001



Foot and Port Mounting Details
For Model 6590-0001

TABULATIONS FOR ABOVE MODELS

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
2330-9001	6 9/16	7 1/4	5 1/4	3 3/4	—	1 1/4	3/4	1 1/2	1 9/16	3 1/8	2	4	.406 DIA.	1/4	1 7/8	2 1/2
6590-0001	8 1/16	8 1/8	5 31/32	4 3/8	—	—	1 7/32	2 5/16	2 1/4	4 1/2	2 3/4	5 1/2	.406 DIA.	1/4	2 9/16	3 13/16
10660-0001	11	8	8 11/16	7 3/16	—	—	—	2 1/4	1 7/8	3 3/4	2 1/4	4 1/2	.406 DIA.	5/16	2 1/2	4 1/8

MODEL	Q	R	S (Port Size)	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	(Drive AF Belt Size)
2330-9001	4 3/4	2 3/8	1-11 1/2 NPT.	5 DIA.	—	—	—	—	—	—	—	—	—	3 1/2	3 1/2	A or B
6590-0001	5 7/8	2 15/16	1 1/4-11 1/2 NPT.	6 DIA.	13/16	1 1/2	—	—	—	—	—	—	—	4	4 5/8	A or B
10660-0001	6	3	2 NPT.	6 DIA.	—	—	3 3/16	1 1/2	2 1/4	2 13/16	3 3/8	1 11/16	1/2	4 1/16	4 1/2	A or B

JABSCO PRODUCTS ITT

A Unit of International Telephone and Telegraph Corporation, 1485 Dale Way, Costa Mesa, California 92626

Telephone: (714) 545-8251

JABSCO**51080/51200 SERIES**

odd clutch pump.

~~51080~~ 51080-9013

Bilge Pump.

Inspect all parts for wear or damage and replace if necessary.

DIS-ASSEMBLY-CLUTCH

1. Remove snap-on cover.
2. Unscrew spring retaining bolt at end of shaft. Remove retainer, spring and clutch cone.
Note: Bolt is assembled with Loctite.
3. Remove one retaining bolt from guide tube assembly.
4. Unscrew bolts holding engaging mechanism housing to body. Remove complete clutch assembly including pulley and engaging mechanism from pump.
5. Remove key and shim from shaft.
6. To break down handle, pulley and engaging mechanism remove small retaining ring at bearing, support pulley press engaging mechanism sleeve through bearing in handle and remove handle from engaging mechanism.
7. If pulley bearing requires renewing, remove retaining from pulley and push out bearing.

DIS-ASSEMBLY -PUMP

1. Remove end cover screws, end cover and gasket.
2. Remove impeller.
3. Loosen cam screw and remove cam.
4. Remove wearplate.
5. Remove seal assembly, (Lip seal - 51080).
6. Press shaft on impeller drive end to remove shaft and from pump.
7. Remove bearing retaining ring from shaft.
8. Press shaft out of bearing supporting bearing inner.
9. Remove inner bearing seal if it needs replacing.

ASSEMBLYPUMP

1. Press new seal into bearing end of body with lip facing away from bearing bore.
2. Press shaft into bearing supporting inner race of bearing. Fit bearing retaining ring onto shaft.
3. Position slinger in body drain area. Grease seal area of shaft. Push bearing and shaft into body by pressing on outer race of bearing.
4. MODEL 51080.
Fit lip seal into body with lip facing into impeller bore.
MODEL 51200
Take new seal seat (cup rubber and seal seat), lightly grease the outside edge of cup rubber and press into cavity in pump body with ceramic facing towards impeller bore. Slide mechanical seal sub assembly over shaft until it engages against ceramic face of stationary seal.
5. Fit wearplate.
6. Coat cam screw thread, top side and back of cam, with non setting jointing compound and fit into body, securing with the cam screw.
7. Lightly grease impeller bore and fit impeller.
8. Fit end cover and gasket and secure with screws.

ASSEMBLY-CLUTCH

1. Screw engaging mech/sleeve into housing approximately 1 turn. Fit handle over sleeve and set 0.25mm clearance between housing and handle, when in the dis-engaged position, by screwing sleeve in or out as required. Lock handle on sleeve with grub screws.
Note: Lubricate thread with ANTI-SCUFFING PASTE
2. Re-fit bearing and retaining ring into pulley. While supporting clutch mech/sleeve press pulley bearing assembly onto sleeve hard up against handle.
3. Fit pulley/handle/engaging mech. assembly to pump with 3 bolts.
4. Fit guide tube mechanism to handle and to engaging mech housing.
5. Fit shim and key onto shaft.
6. Fit clutch cone, spring and spring retainer and secure with bolt. Tighten bolt until retainer is clamped against shaft.
Notes: Lubricate between shaft and clutch cone with ANTI-SCUFFING PASTE. Assemble screw with Loctite (nut lock).
7. Re-fit snap-on cover.

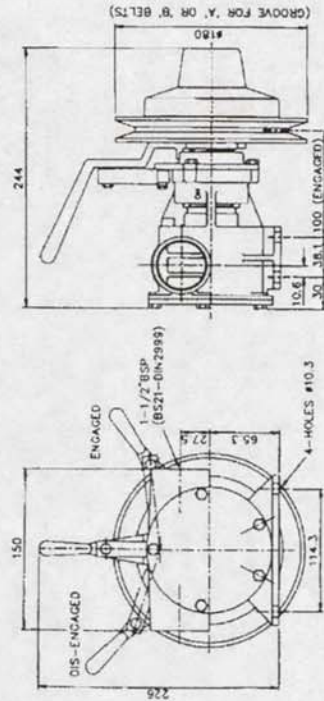
ADJUSTMENT-CLUTCH

When new, the clutch will begin to engage approx. half way between the 'OFF' and 'ON' position i.e. when handle is near to the vertical position. As wear takes place the engaging position will move towards the 'ON' position. When there is little movement left between the engaging point and the 'ON' stop the clutch can be adjusted as follows:

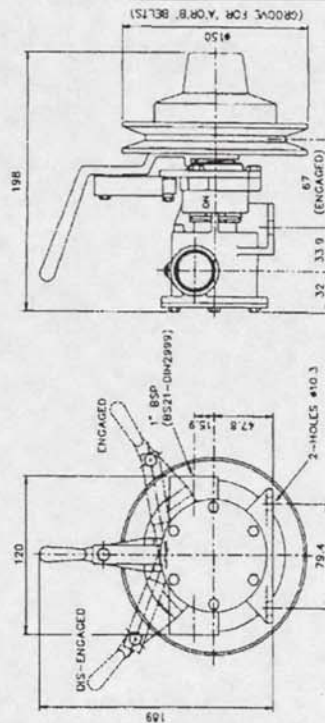
1. When handle in the 'OFF' position remove snap on cover.
2. Unscrew spring retaining bolt at end of shaft. Remove retainer spring, clutch cone and key.
Note: Bolt is assembled with Loctite Nut Lock.
3. Remove shim and re-assemble key, clutch cone, spring, retainer, screw and cover.
Note: Removal of shim will restore engaging point to its original position. Once shim has been removed no further adjustment is possible and clutch cone, and possibly pulley will need to be replaced.

Refer to Operating Instructions on page 17.

51200 SERIES



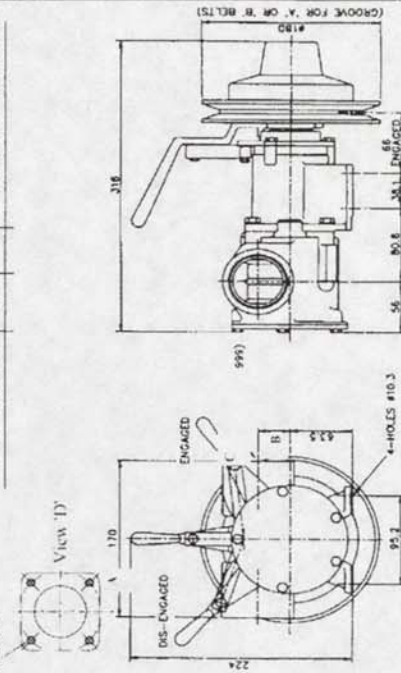
51080 SERIES



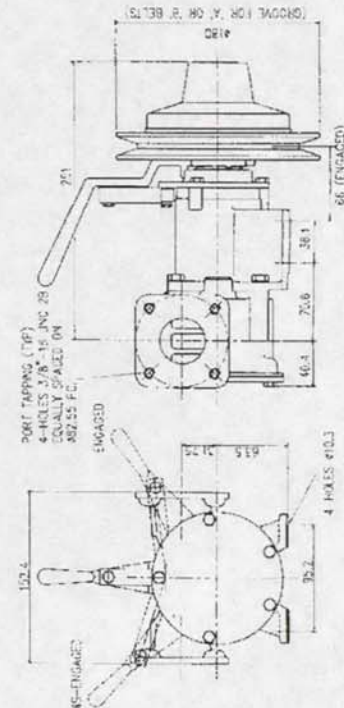
51270 SERIES

PORT TAPPING (TYP)
4 HOLES 3/8"-16 UNC 2B
EQUALLY SPACED ON
Ø90.47 ±0.2 PC

	A	B	C
51270 - 'O' Series	152.4	41.3	See View TY
51270 - '2' Series	170	32	2" BSP (BS21 - DIN2999)



51220 SERIES (Flanged Ports)



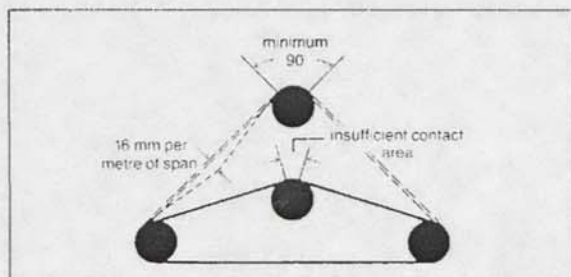
PUMP MAY BE MOUNTED in any position. When installed vertically motor must be above the pump.

THE ROTATION OF THE PUMP SHAFT determines the location of the pump inlet/outlet ports: refer to installation drawing.

BEFORE INSTALLING rotate pump shaft and impeller in the direction of the required operation.

ALL PUMP PIPEWORK must be adequately supported to avoid stress on pump and pump components and consequential leakage.

BELT DRIVEN PUMPS excessive drive belt tension will cause rapid belt wear and may result in premature bearing failure. It should be possible to deflect a correctly tensioned belt between pulleys about 16mm per metre of span by applying finger pressure. Ideally, the contact area should be about 120° but not less than 90°.



OPERATION

Pump should not be operated above its published performance without referring to distributor.

D.C. CLUTCHES

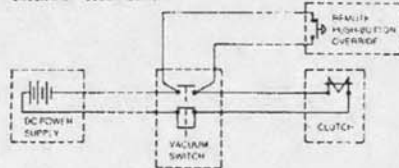
Inadequate supply voltage at DC terminals (not less than 20% below rated voltage at full load) due to partly discharged battery or voltage loss through long or small size electric wire may cause fuses to blow or pump starting problems. If fuse fails repeatedly, identify and solve the fault. (DO NOT under any circumstances fit a heavier fuse or bridge fuse terminals). Connect black wire or negative (-) battery terminal. Red wire should run via a suitably rated switch and fuse to a positive (+) battery terminal. The pump should be installed where it will always remain dry. Ensure battery capacity is adequate for ALL electrical equipment (pumps, radio, TV, refrigerator, navigational instruments). Observe installation instructions of instruments likely to be affected by close proximity of a magnetic field such as navigational instruments.

WIRING DIAGRAM

Circuit without Vacuum Switch



Circuit with Vacuum Switch



Electrical installation must take into account the minimum wire size recommended.

12v Clutches need 5 amp fuse with 1.5mm² wiring.

24v Clutches need 2.5 amp fuse with 1.0mm² wiring.

TEMPERATURE: Operating range

Neoprene Impellers 4-80°C

Oil Resistant Impellers 10-90°C

PUMPS: are dry self-priming i.e. do not require to be filled with liquid start up.

RUNNING DRY: Unit depends on liquid pumped for lubrication. A dry running period of up to 30 seconds is generally a safe length of time. If pump has not been primed after 30 seconds, stop and check for air leaks in pipework, and impeller, seal or gasket damage.

SAFETY ADVICE

Ensure that all moving parts are adequately guarded to prevent accidental contact. Leakage from mechanical seal or gland could cause hazard. If liquids being pumped are toxic or corrosive, use of a drip tray is recommended.

DO NOT USE for Petrol, Toluene, Benzene or light fraction petroleum products such as solvent, thinners or other liquids with flashpoint below 37°C.

FREEZING Temperatures - do not permit liquid to freeze in pump body. Drain pump by loosening end cover.

IT IS A REQUIREMENT OF COSHH(1988) REGULATIONS THAT THE MANUFACTURER'S INSTRUCTIONS IN THE HANDLING OF HAZARDOUS SUBSTANCES MUST BE OBSERVED AT ALL TIMES.

To conform with the Health and Safety and COSHH Regulations, ITT Jabsco will require that any pump or part of a pump that is returned to this company for repair or examination, or for any reason whatsoever, will be accompanied by a letter stating what the pump/part has been pumping.

If the liquid or product is hazardous or in any way dangerous, this must be stated and the chemical make-up of it must be stated in detail.

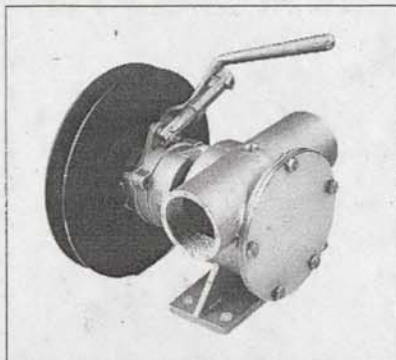
Unless this procedure is observed then the unit will not be accepted on our company premises. The only exception to this rule is if the pump returned is new and unused.



For Pumps and Parts
go to PumpVendor.com

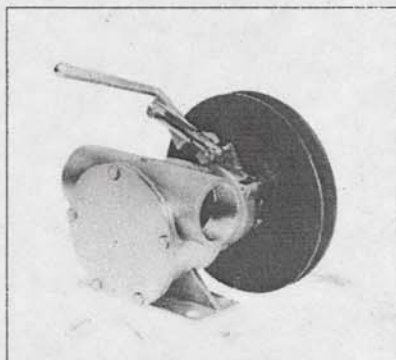
STANDARD PRODUCT RANGE

MANUAL CLUTCH PUMPS - DESIGN FEATURES



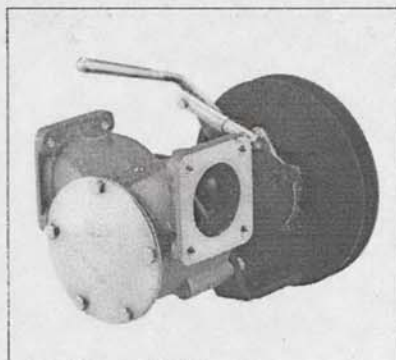
51080 SERIES

Body	Bronze
Impeller	Jabsco neoprene or nitrile compound
Shaft Seal	Lip type
Bearing	Ball
Shaft	Stainless steel 316 S31 to BS970
Wearplate	Replaceable
Pulley	Anodised Aluminium
Ports	1" BSP to BS21 (DIN2999)
Weight	5 kg



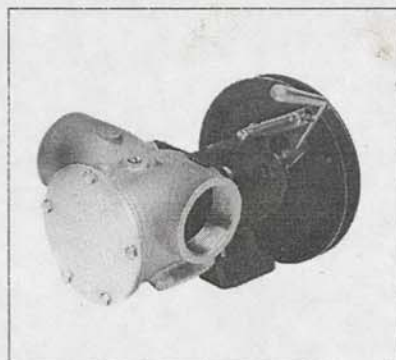
51200 SERIES

Body	Bronze
Impeller	Jabsco neoprene or nitrile compound
Shaft Seal	Mechanical carbon ceramic
Bearing	Ball
Shaft	Stainless steel 316 S31 to BS970
Wearplate	Replaceable
Pulley	Painted cast iron
Ports	1 1/2" BSP to BS21 (DIN2999)
Weight	8 kg



51220 SERIES

Body	Bronze
Impeller	Jabsco neoprene or nitrile compound
Shaft Seal	Mechanical carbon ceramic
Bearing	Ball
Shaft	Stainless steel 316 to BS970
Wearplate	Replaceable
Pulley	Painted cast iron
Bearing Housing	Cast iron painted protective primer
Ports	1 1/2" Flanged
Weight	10 kg



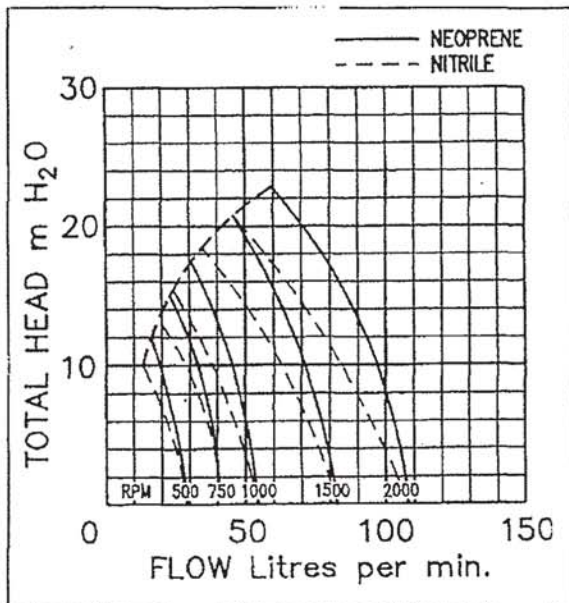
51270 SERIES

Body	Bronze
Impeller	Jabsco neoprene or nitrile compound
Shaft Seal	Mechanical carbon ceramic
Bearing	Ball
Shaft	Stainless steel 316 to BS970
Wearplate	Replaceable
Pulley	Painted cast iron
Bearing Housing	Cast iron painted protective primer
Ports	2" BSP to BS21 (DIN2999) Available with 2" Flange
Weight	11 kg



PERFORMANCE

SIZE 080

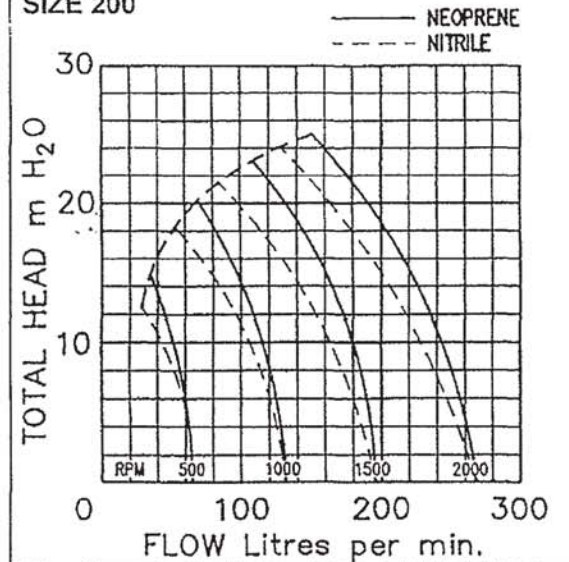


Performance Note Power (watt) figures shown are minimum recommended at pumpshaft.

Total manometric head	500 rpm	750 rpm	1000 rpm	1500 rpm	2000 rpm
	180 watt	180 watt	250 watt	550 watt	750 watt
m/H ₂ O	L/m	L/m	L/m	L/m	L/m
3	26.5	40	53	80	120.5
5	24.5	37.5	57	78	118
9	21	34.5	47.5	74	113.5
12	16.5	29	42.5	68	107
15		23	36	61	99
18			29	52.5	89.5
21				42	78
24					64.5
Suction Bore	25mm	25mm	25mm	25mm	32mm
Temp °C	Metres	Metres	Metres	Metres	Metres
20	7.2	6.9	6.2	4.1	0.5
30	7	6.7	6	3.9	0.3
40	6.6	5.3	5.6	3.5	
50	6	5.7	5	2.9	

Maximum recommended suction head in mH₂O at water temperature 20°C

SIZE 200



Performance Note Power (watt) figures shown are minimum recommended at pumpshaft.

Total manometric head	500 rpm	1000 rpm	1500 rpm	2000 rpm
	750 watt	1100 watt	1800 watt	
m/H ₂ O	L/m	L/m	L/m	L/m
3	64.5	130	195	261
5	60.5	126	191	256
9	54	118.5	183.5	248
12	45	109	173	236.5
15	33.5	96.5	159	222
18	-	81	142.5	204
21	-	63	123	183
24	-	-	100	159
Suction Bore	40mm	40mm	40mm	40mm
Temp °C	Metres	Metres	Metres	Metres
20	7	5.8	3.6	1
30	6.8	5.6	3.4	0.9
40	6.4	5.2	3	0.5
50	5.8	4.6	2.4	

Maximum recommended suction head in mH₂O at water temperature 20°C

Pump Selection Tables and Graphs show approximate performance for new pumps with neoprene impeller pumping water (specific gravity 1.00) at 20°C, but note that performance can be affected if water temperature and suction head are higher than shown in above table. If in doubt consult your local Jabsco distributor or factory for application assistance.

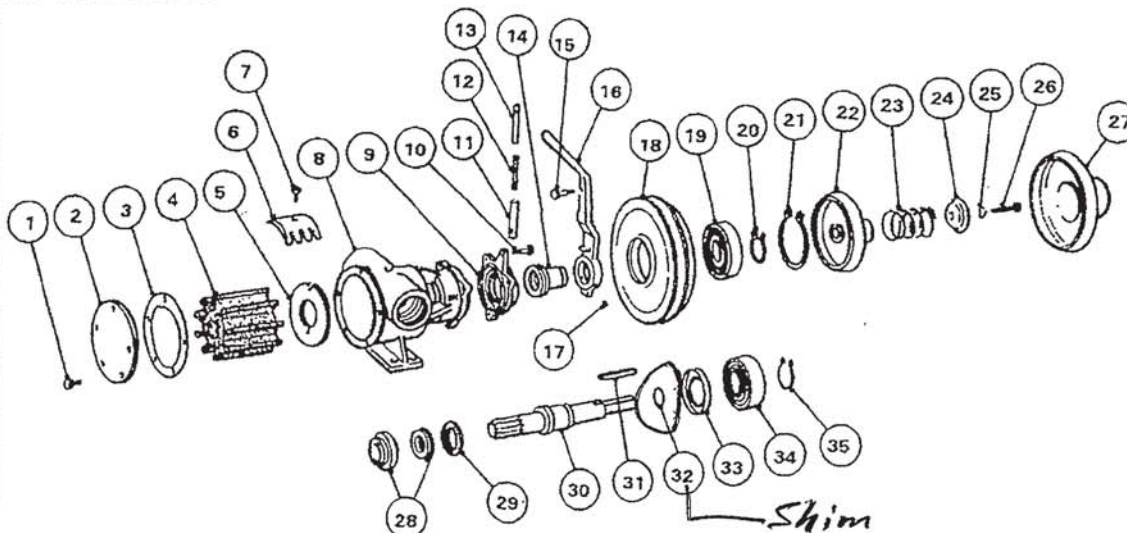
*Minimum nominal recommended bore. Note: Suction Head = Vertical Suction Height + Pipe Losses.



51080/51200 SERIES

51080 - 9013

EXPLODED VIEW



51080 SERIES

KEY	DESCRIPTION	QTY	PARTNUMBER
1	Endcover Screws*	6	X3001-147F
2	Endcover	1	3993
3	Gasket*	1	890
4	Neoprene Impeller*	1	17937-0001
	or Nitrile Impeller**	1	17937-0003
5	Wearplate	1	4156
6	Cam	1	934
7	Cam Screw	1	SP1004-09
8	Body	1	50084-2100
9	Engaging Mech/Housing	1	51081-0000
10	Bolt	3	X3001-178F
11	Guide Tube Outer	1	51089-0000
12	Spring	1	51093-0000
13	Guide Tube Inner	1	51088-0000
14	Engaging Mech/Sleeve	1	51082-0000
15	Retaining Bolt	1	51094-0000
16	Handle	1	51083-0000
17	Grub Screw	2	X3009-145F
18	Pulley	1	51084-0000
19	Bearing <i>SP2600-06</i>	1	SP2600-11
20	Retaining Ring	1	SP1700-137
21	Retaining Ring	1	SP1700-245
22	Clutch Cone	1	51085-0000
23	Spring	1	X5250-001
24	Spring Retainer	1	51086-0000
25	Spring Washer	1	X3081-101C
26	Screw	1	X3001-211F
27	Cover	1	51092-0000
28	Lip Seal (not illustrated)	1	SP2700-1027
29	Slinger	1	3180
30	Shaft	1	51087-0000
31	Key	1	X4000-209A
32	Shim	1	51091-0000
33	Inner Bearing Seal	1	SP2700-48
34	Bearing	1	SP2600-06
35	Retaining Ring	1	SP1700-247

Service Kit SK406-0001 contains parts marked *

Service Kit SK406-0003 contains parts marked * plus ** in place of Neoprene Impeller

Refer to Operating Instructions on page 17.

51200 SERIES

KEY	DESCRIPTION	QTY	PARTNUMBER
1	Endcover Screws*	5	X3001-176F
2	Endcover	1	9336
3	Gasket*	1	816
4	Neoprene Impeller*	1	17935-0001
	Nitrile Impeller**	1	836-0003
5	Wearplate	1	2574
6	Cam	1	834
7	Cam Screw	1	SP1005-04
8	Body	1	50204-2100
9	Engaging Mech/Housing	1	51201-0000
10	Bolt	3	X3001-180F
11	Guide Tube Outer	1	51089-0000
12	Spring	1	51213-0000
13	Guide Tube Inner	1	51088-0000
14	Engaging Mech/Sleeve	1	51202-0000
15	Retaining Bolt	1	51094-0000
16	Handle	1	51203-0000
17	Grub Screw	2	X3009-172F
18	Pulley	1	51204-0000
19	Bearing	1	SP2600-09
20	Retaining Ring	1	SP1700-137
21	Retaining Ring	1	SP1700-245
22	Clutch Cone	1	51205-0000
23	Spring	1	X5250-002
24	Spring Retainer	1	51206-0000
25	Spring Washer	1	X3081-101C
26	Screw	1	X3001-213F
27	Cover	1	51212-0000
28	Seal Assembly*	1	21649
29	Slinger	1	3181
30	Shaft	1	51207-0000
31	Key	1	X4000-270A
32	Shim	1	51211-0000
33	Inner Bearing Seal	1	SP2700-50
34	Bearing	1	SP2600-04
35	Retaining Ring	1	SP1700-245

Service Kit SK407-0011 contains parts marked *

Service Kit SK407-0003 contains parts marked * plus ** in place of Neoprene Impeller