


**Model 6850-0003**

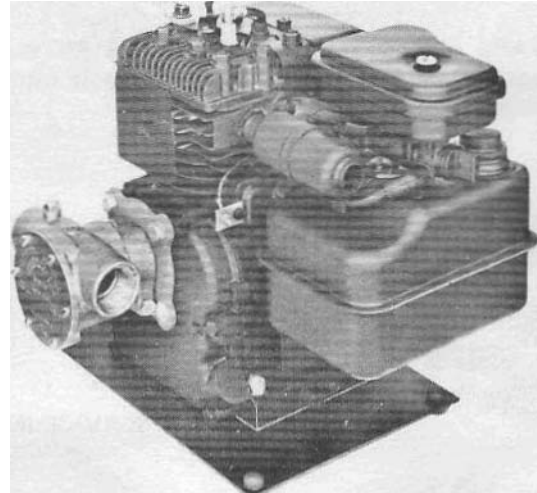
## SELF-PRIMING GASOLINE ENGINE PUMP UNIT

### FEATURES

Body:	Bronze Construction
Impeller:	Nitrile (Oil Resistant)
Wearplate:	Replaceable
Shaft Seal:	Lip Type
Shaft:	Stainless Steel Sleeve over Steel Motor Shaft
Ports:	1" NPT Internal
Weight:	32-1121b 114,7 kg)
Engine:	Briggs & Stratton Gasoline, 3 HP, 4 Cycle, 3000 RPM (factory setting)



ENGINE CAN CAUSE SPARKS OR FLAME. EXPLOSION MAY OCCUR CAUSING INJURY OR DEATH. DO NOT USE WHERE FLAMMABLE VAPORS ARE PRESENT.


**Model 6850-0003**

### APPLICATIONS

MARINE - Bait Tank Circulation, Wash Down, **Utility** Dock Pump, Fire Fighting.

INDUSTRIAL - Municipal Trucks, Priming Centrifuge's, **Utility** Transfer **Pumps**.

CONTRACTORS - Remove Water from Excavations, Supply Water to Mortar Boxes, Cement Mixing, Wash Down **Equip-**ment, Portable Utility **Truck** Pumps.

FARMING - Fill Water Tanks, Pump Out Silo Pits (Liquid Manure), **Flush** and Clean Animal Pens, Pumping Water for Stock and Poultry Houses.

PLUMBING AND HOME EMERGENCY USE - Pumping Out Flooded Basements, Cesspools, Sumps, Etc., Drain Water Heaters and Drain Laundry Tubs, Remove Water from Low Areas.

### OPERATING INSTRUCTIONS

1. **INSTALLATION** - Facing pump end cover, inlet port is on the left, discharge port is on the right.
2. **DRIVE** - Direct.
3. **SPEED** - 3,000 RPM(factory setting).
4. **SELF-PRIMING** - Pump will produce a suction lift approaching 15' (4,6 m) **when** dry and **lift** up to 22' (6,7 m) when primed. BE SURE SUCTION LINES ARE AIRTIGHT or pump will not self-prime.
5. **RUNNING TIME** - Unit depends on liquid pumped for lubrication. DO NOT RUN DRY FOR MORE THAN 30 SECONDS. LACK OF LIQUID WILL DAMAGE THE IMPELLER. DO NOT RUN PUMP FOR "TEST" UNLESS INTAKE HOSE IS IN WATER.
6. **NOTICE** - If pumping light fraction petroleum derivatives, solvents, thinners, **highly** concentrated or organic acids, consult Jabsco **Chemical Resistance** Table (which is available **upon** request from IIT Jabsco) for proper body materials and impeller compounds. If corrosive fluids are handled, pump life **will** be prolonged if pump is flushed with water after **each** use or after each working day.
7. **PRESSURES** - For continuous operation, pressures should not exceed 35 PSI (2,5 kg/sq cm),
8. **PIPING** - For maximum efficiency and performance, use a minimum of '1/2" (38 mm) diameter hose or pipe in installations requiring a total of 50' to 150' (15,2 to 45,7 m) piping. For installations requiring 25' to 50' (7,6 to **15,2** m) total piping, use a minimum of 1-1/4" (32 mm) diameter hose or pipe. For installations requiring less than 25' (7,6 m) total piping, use a minimum of 1" (25 mm) diameter hose or pipe. It is recommended that 1-1/2" (38 mm) diameter hose or piping be used in all cases for pump inlet. For unusually long or complicated piping systems, contact factory for engineering assistance.

(Continued from page 1)

## HEAD CAPACITY TABLE

9. TEMPERATURES — Neoprene impeller is recommended for liquid temperatures of 45° to 180°F (7.2° to 82,2°C), Nitrile 50° to 180°F (100 to 82,2°C).
10. FREEZING WEATHER - Drain unit by loosening the end cover.
11. GASKET - Use standard pump part. A thicker gasket will reduce priming ability. A thinner gasket will cause impeller to bind. Standard gasket is 0.010" thick.
12. SPARE PARTS — A JABSCQ Service Kit should be kept on hand to service all but the most badly worn pumps.

PSI	kg/sq cm	TOTAL HEAD		3000 RPM		
		Feet of Water	metre	GPM	l/min	
4.3	10,31	10	13,01	35.5	(134,4)	
8.7	10,61	20	16,11	35.0	(132,5)	
17.3	11,21	40	(12,2)	33.4	<b>(126,4)</b>	
26.0	(1,8)	60	(18,3)	30.0	(113,6)	
35.0	12,51	80	124,41	24.5	(29,7)	

NOTE: Table shows approximate head flow for new pump with neoprene impeller in US Gallons (and litres). Capacities shown are for maximum throttle setting. Reduced throttle setting **will** reduce capacity.

FOR EASIER START MAKE SURE IMPELLER IS WETTED.

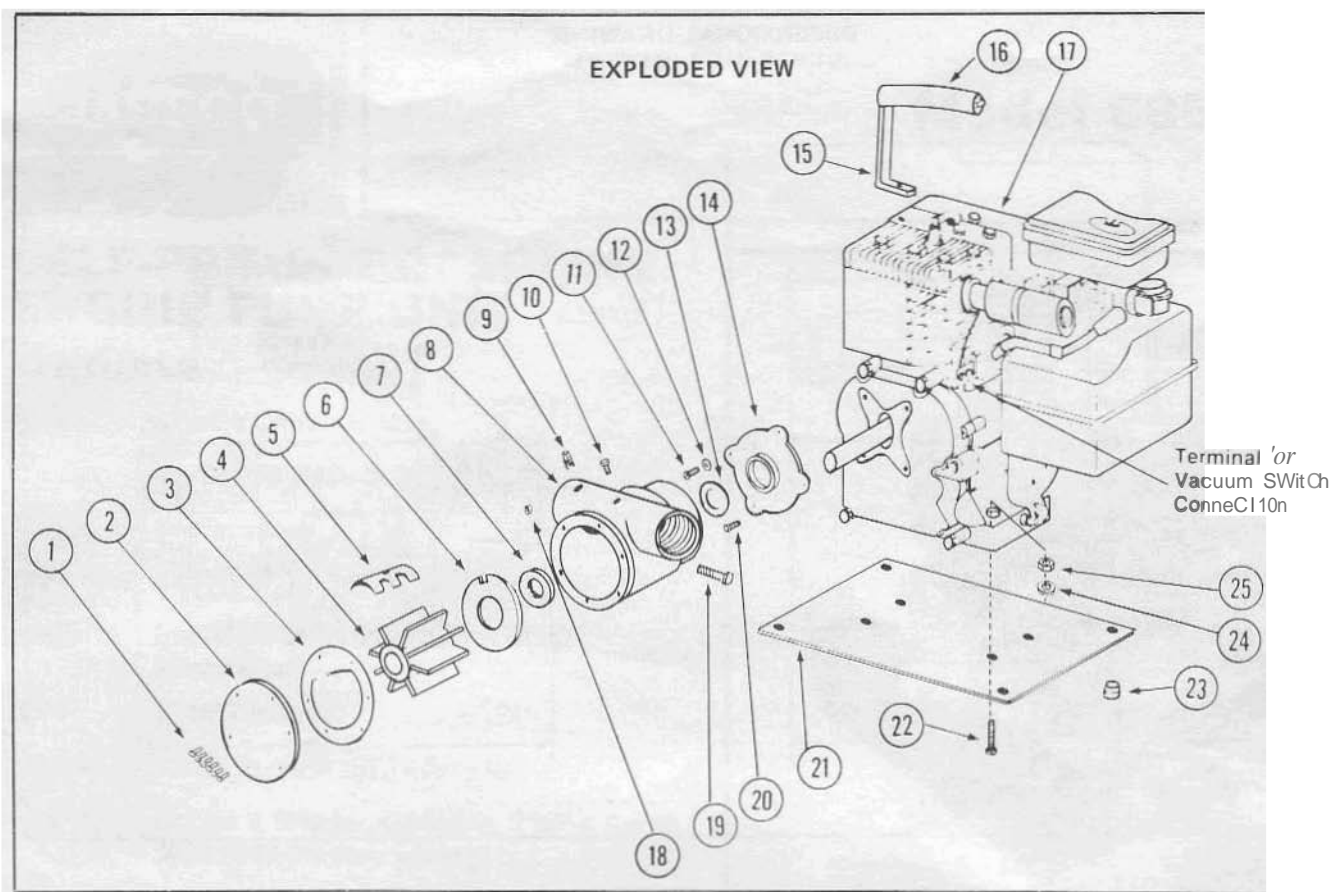
If the pump is not used for long periods of time, starting may be made easier by removing impeller, then **starting** engine and allowing it to warm up for a minute. After shutting off engine, lubricate impeller with water or water pump grease and re-install in pump with a counter-clockwise rotary motion.

## SERVICE INSTRUCTIONS DISASSEMBLY

1. Remove end cover screws, gasket and end cover.
2. Withdraw impeller.
3. Loosen cam screw and remove cam. Clean off sealant.
4. Remove wearplate.
5. Loosen nut at body clamp and remove body from engine.
6. Pressing from motor end of pump body, remove seal.
7. Remove slinger from shaft.
8. Adaptor may be removed from engine if necessary.
9. Inspect all parts for wear and replace if necessary.

## SERVICE INSTRUCTIONS ASSEMBLY

1. Press seal into seal bore (**lip** facing the impeller bore).
2. Install wearplate, align slot in wearplate with dowel pin in body.
3. Apply thin coating of sealant to cam screw threads, entire top side and back end of cam and install in body with cam screw.
4. Lubricate impeller bore with a light coat of water pump grease or equivalent and install impeller. Use care not to damage seal lip with impeller sleeve.
5. Install gasket and end cover and secure with end cover screws.
6. Position slinger on shaft, aligning key in slinger with keyway of shaft. Install approximately 1/4" from motor.
7. Aligning impeller drive with shaft keyway, install pump on motor adaptor. Be sure it is seated against the shoulder.
8. Tighten body **clamp** nut.



## PARTS LIST

Key	Description	Part Number	Qty. Req.
1	Screws (End Cover)	91003-0010	6
2	End Cover	11831-0000	1
3	Gasket	3101-0000	1
4	Impeller (Neoprene) (Nitrile)	17956-0001 6056-0003	1 1
5	Cam	3255-0000	1
6	Wearplate	4156-0010	1
7	Seal (Shah)	92700-0080	1
8	Body	6854-0000	1
9	Plug	92650-0070	1
10	Screw (Cam)	91004-0110	1
11	Bolt (Adaptor to Engine)	91094-0080	2
12	Washer (Adaptor to Engine)	91602-0130	2
13	Slinger	6398-0000	1
14	Adaptor	5243-0010	1
15	Handle	5244-0000	1
16	Handle Gnp	6708-0000	1
17	Engine	97030-0050	1
18	Nut (Pump to Adaptor)	91105-0030	1
19	Bolt (pump to Adaptor)	91095-0000	1
20	Flal Head Screw (Adaptor to Engine)	91013-0020	2
21	Base	6704-0000	1
22	Bolt (Base)	910940130	4
23	Rubber Bumper	92900-0020	4
24	Washer (Base)	91602-0130	4
25	Nut (Base)	91085-0130	4

## REPLACEMENT PUMP HEAD COMPLETE

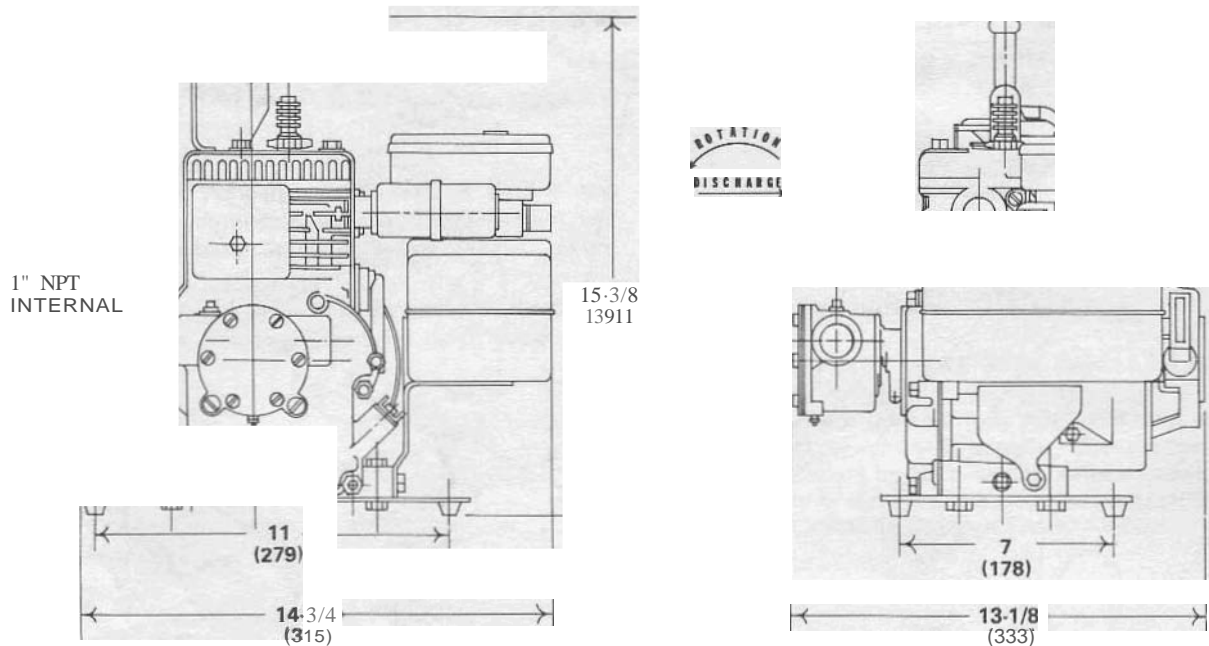
PUMP MODEL NO.	PUMP HEAD NO.	DESCRIPTION
6850-0003	6853-0003	Pump only (Less Mounting Kit and Engine) with Nitrile Impeller

## SERVICE KIT

PUMP MODEL NUMBER	SERVICE KIT NUMBER
6850-0003	90058-0003

Kit conSist 0' Impeller. seal and gasket.

DIMENSIONAL DRAWING  
INCHES MILLIMETERS

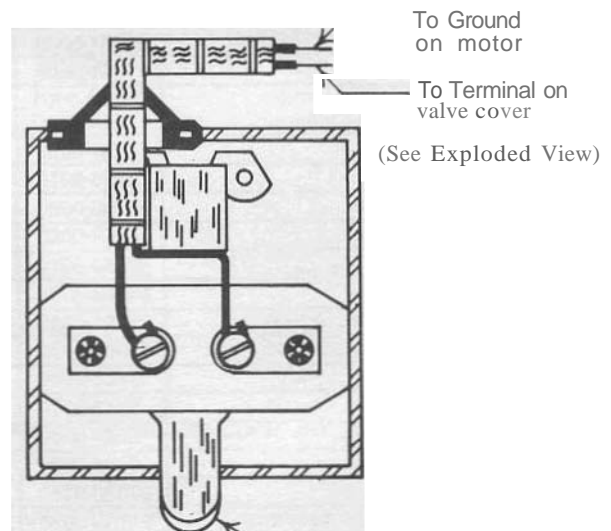


TO EQUIP WITH VACUUM SWITCH 4732-0010

1. Install switch in lapped hole on top of inlet port with nipple **provided**. Apply thin coating of sealant to threads prior to assembly.
2. Connect switch to motor. See exploded view.
3. To operate, start engine with restart lever in the hold-down position until the pump proceeds 10 prime.

SPECIAL ATTENTION

1. Constant vibration of the restart lever indicates:
  - CA) An air leak. This will usually show up when the pump is first started. All **suction** lines should be checked for loose connections.
  - (B) A worn impeller. Impeller should be replaced.
2. Intermittent stopping and starting indicates that the unit is operating against excessive discharge pressure.



Restart lever

Wiring Diagram for Vacuum Switch

THE PRODUCT DESCRIBED HEREIN IS SUBJECT TO THE JABSCO ONE YEAR LIMITED WARRANTY, WHICH IS AVAILABLE FOR YOUR INSPECTION UPON REQUEST.

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For technical advice or service please take your pump into your local pump service center.  
To order pump or parts or for pricing please go to the following links :

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[Jabsco Pumps stock list >>](#)