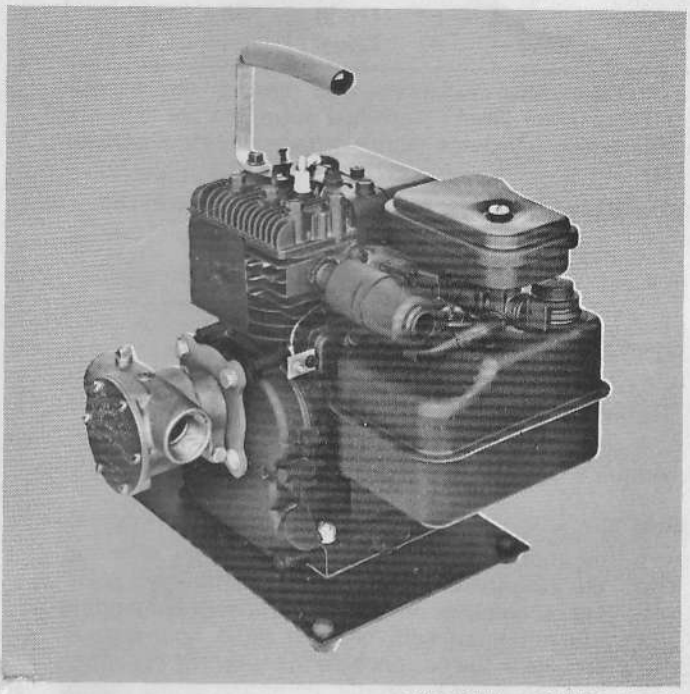
JABSCO® PUMPS

Self-Priming Pumps
GASOLINE MOTOR PUMP UNIT

MODEL 6850-0001

Product Data



MODEL: 6850-0001

DESIGN FEATURES

Body:	**Bronze Construction**
Impeller:	**Jabsco Neoprene Compound**
Wearplate:	**Replaceable**
Shaft Seal:	**Lip Type**
Shaft:	**Motor shaft is used—Steel with special 316 Stainless Steel Sleeve**
Ports:	**1" NPT—internal**
Weight:	**32½ lbs. (14.7 kg) approximately**
Engine:	**Briggs & Stratton Gasoline. H.P., 4 Cycle, 3000 RPM (factory setting)**

VARIATIONS AVAILABLE

Model	Variation Incorporated
6850-0003	Nitrile Impeller

APPLICATIONS & OPERATING INSTRUCTIONS

MARINE – Bait Tank Circulation, Bilge Pump, Wash Down, Utility Dock Pump, Fire Fighting.

INDUSTRIAL – Municipal Trucks, Priming Centrifugals, Dredging Equipment, Utility Transfer Pumps.

CONTRACTORS – Remove Water from Excavations, Supply Water to Mortar Boxes, Cement Mixing, Wash Down Equipment, 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, Fire Fighting.

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' (4.6M) when dry and lift up to 22' (6.7M) 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 BURN THE IMPELLER. DO NOT RUN PUMP FOR "TEST" UNLESS INTAKE HOSE IS IN WATER.
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 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 1½" (38mm) diameter hose or pipe in installations requiring a total of 50' to 150' (15.2 to 45.7M) piping. For installations requiring 25' to 50' (7.6 to 15.2M) total piping, use a minimum of 1¼" (32mm) diameter hose or pipe. For installations requiring less than 25' (7.6M) total piping, use a minimum of 1" (25mm) diameter hose or pipe. It is recommended that 1½" (38mm) diameter hose or piping be used in all cases for pump inlet. For unusually long or complicated piping systems, contact factory for engineering assistance.

JABSCO PRODUCTS ITT

Form 43000-0132Rev. 6-79

(Continued from page 1)

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 (10° 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. Std. gasket is .010 thick.

12. **SPARE PARTS** – A JABSCO Service Kit should be kept on hand to service all but the most badly worn 6850-Series pumps.

HEAD CAPACITY TABLE

TOTAL HEAD				3000 RPM	
Lbs. per Sq. In.	(kg/sq cm)	Feet of Water	(meter)	GPM	(L/min)
4.3	(.3)	10	(3.0)	35.5	(134.4)
8.7	(.6)	20	(6.1)	35.0	(132.5)
17.3	(1.2)	40	(12.2)	33.4	(126.4)
26.0	(1.8)	60	(18.3)	30.0	(113.6)
35.0	(2.5)	80	(24.4)	24.5	(92.7)

NOTE: Table shows approximate head flow for new pump in U.S. Gallons (and liters). Capacities shown are for maximum throttle setting. Reduced throttle setting will reduce capacity.

FOR EASIER START MAKE SURE IMPELLER IS WETTED.

SERVICE INSTRUCTIONS DISASSEMBLY

1. Remove end cover screws, gasket and end cover.
2. Withdraw impeller.
3. Loosen cam screw and remove cam. Clean off permatex.
4. Remove wearplate.
5. Loosen nut at body clamp and remove body from engine.
6. Pressing from motor end of pump body, remove seal.

NOTE: Units manufactured prior to January 1961. Remove "O" Ring from "O" Ring groove.

7. Remove slinger from shaft.
8. Adaptor may be removed from engine if necessary.

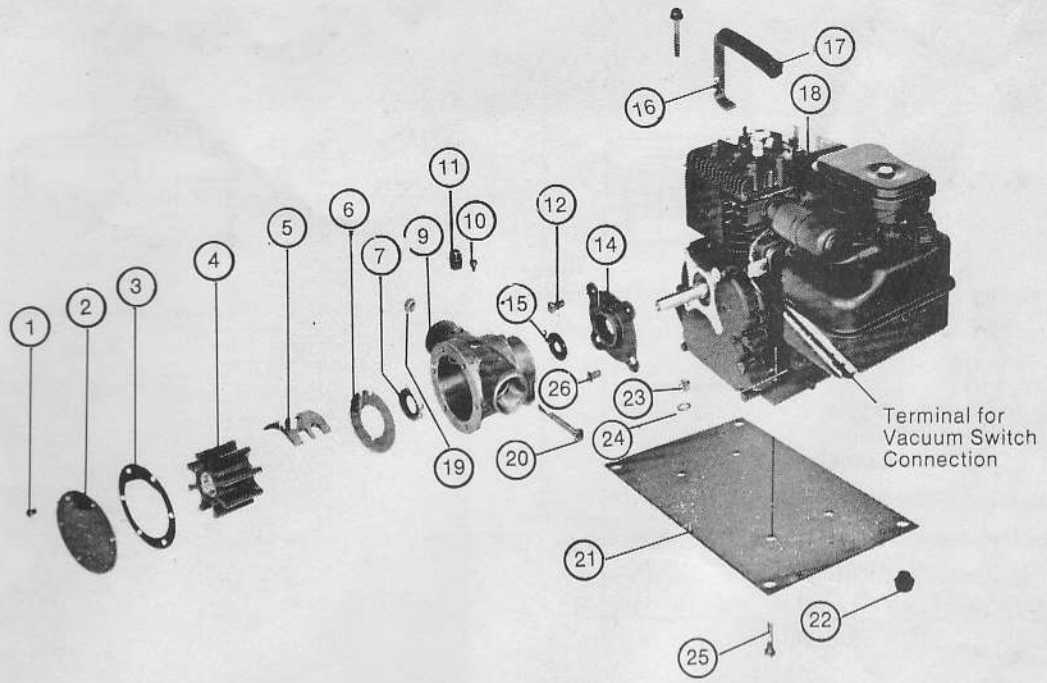
NOTE: Units manufactured prior to March 1962 are equipped with four hex head bolts for securing the adaptor to the engine necessitating mounting of the pump on an angle. Subsequent models are equipped with two flat head countersunk screws in the bottom hole locations of the adaptors, allowing horizontal mounting of the pump.

9. Inspect all parts for wear and replace if necessary.

SERVICE INSTRUCTIONS ASSEMBLY

1. Press seal into seal bore (lip facing the impeller bore). For models manufactured prior to January 1961, install "O" Ring in "O" Ring groove and press seal into seal bore.
2. Install wearplate, align slot in wearplate with dowel pin in body.
3. Permatex 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 Marfak 2HD 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 ¼" 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.

EXPLODED VIEW



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

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 Assembly (Neoprene) (Nitrile)	6056-0001 6056-0003	1 1
5	Cam	3255-0000	1
6	Wearplate	4156-0010	1
7	Seal (Shaft)	92700-0080	1
9	Body	6854-0000	1
10	Screw (Cam)	91004-0110	1
11	Plug	92650-0070	1
12	Bolt (Adaptor to Engine)	91094-0080	2
13	Washer (Adaptor to engine)	91602-0130	2
14	Adaptor	5243-0010	1
15	Slinger	6398-0000	1
16	Handle	5244-0000	1
17	Handle Grip	6708-0000	1
18	Engine	97030-0050	1
19	Nut (Pump to Adaptor)	91105-0030	1
20	Bolt (Pump to Adaptor)	91095-0000	1
21	Base	6704-0000	1
22	Rubber Bumper	92900-0020	4
23	Nut (Base)	91085-0130	4
24	Washer (Base)	91602-0130	4
25	Bolt (Base)	91094-0130	4
26	Flat Head Screw (Adaptor to Engine)	91013-0020	2

Pumps manufactured prior to January 1961 were equipped with 92000-0540 "O" Ring to seal around O.D. of Seal. "O" Ring must be used in these pumps.

REPLACEMENT PUMP HEADS COMPLETE

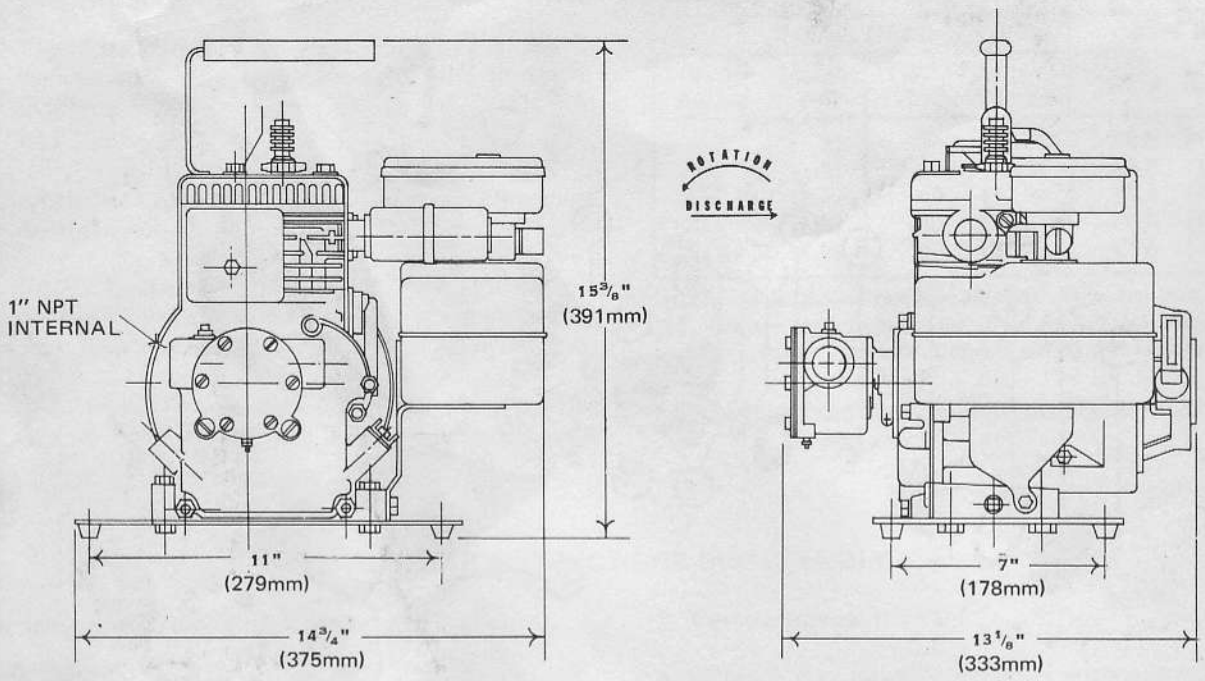
PUMP MODEL NO.	PUMP HEAD NO.	DESCRIPTION
6850-0001	7004-0001	Complete Pump and Mounting Kit (Less Engine)
6850-0001	6853-0001	Pump only (Less Mounting Kit and Engine)
6850-0003	6853-0003	Pump only (Less Mounting Kit and Engine)

SERVICE KITS

PUMP MODEL NUMBER	SERVICE KIT NUMBER
6850-0001	90058-0001
6850-0003	90058-0003

Kits consist of Impeller, seal and gasket.

DIMENSIONAL DRAWING

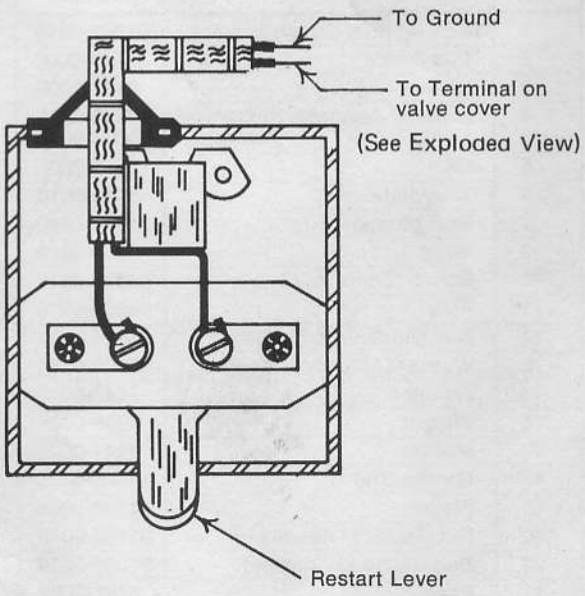


TO EQUIP WITH VACUUM SWITCH 4732-0010

1. Install switch in tapped hole on top of inlet port with nipple provided. (Permatex 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 to prime.

SPECIAL ATTENTION

1. Constant vibration of the restart lever indicates:
   (A) **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.



Wiring Diagram for Vacuum Switch

JABSCO PRODUCTS ITT
A Unit of International Telephone and Telegraph Corporation, 1485 Dale Way, Costa Mesa, California 92626
Telephone: (714) 545-8251

 Form 43000-0132 Rev. 6-79