

Please read and save this Repair Parts Manual. Read this manual and the General Operating Instructions carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. The Safety Instructions are contained in the General Operating Instructions. Failure to comply with the safety instructions accompanying this product could result in personal injury and/or property damage! Retain instructions for future reference.

# 2 Inch High Pressure Pumps

Refer to form 1808-633-00 for General Operating and Safety Instructions.

## Description

These self-priming high pressure engine driven pumps are equipped with two high performance impellers and a Buna N mechanical seal to prevent leakage, coupled to a 4-cycle gasoline engine. (Priming above 10 ft. lift requires a foot valve.)

The pump is designed for higher pressure applications such as lawn sprinkling, spraying irrigation, also draining and general dewatering applications. Handles liquids from 40° to 180° F (4° to 82° C).

## Specifications

Suction inlet	2" NPT
Discharge outlet	2" NPT
Driver	
5830-96	B&S Intek OHV 6.5 HP
5831-96	Honda GX160 OHV 5.5 HP
5830-D6	Yanmar 4.7 HP Diesel
Basic Pump Construction	Aluminum
Shaft Seal	Buna N & Stl Stl w/carbon & ceramic faces

## Maintenance

**WARNING** To prevent accidental starting always remove spark plug, or disconnect and ground spark plug wire before attempting to service or remove any component.

## MECHANICAL SEAL REPLACEMENT

Refer to Figure 1.

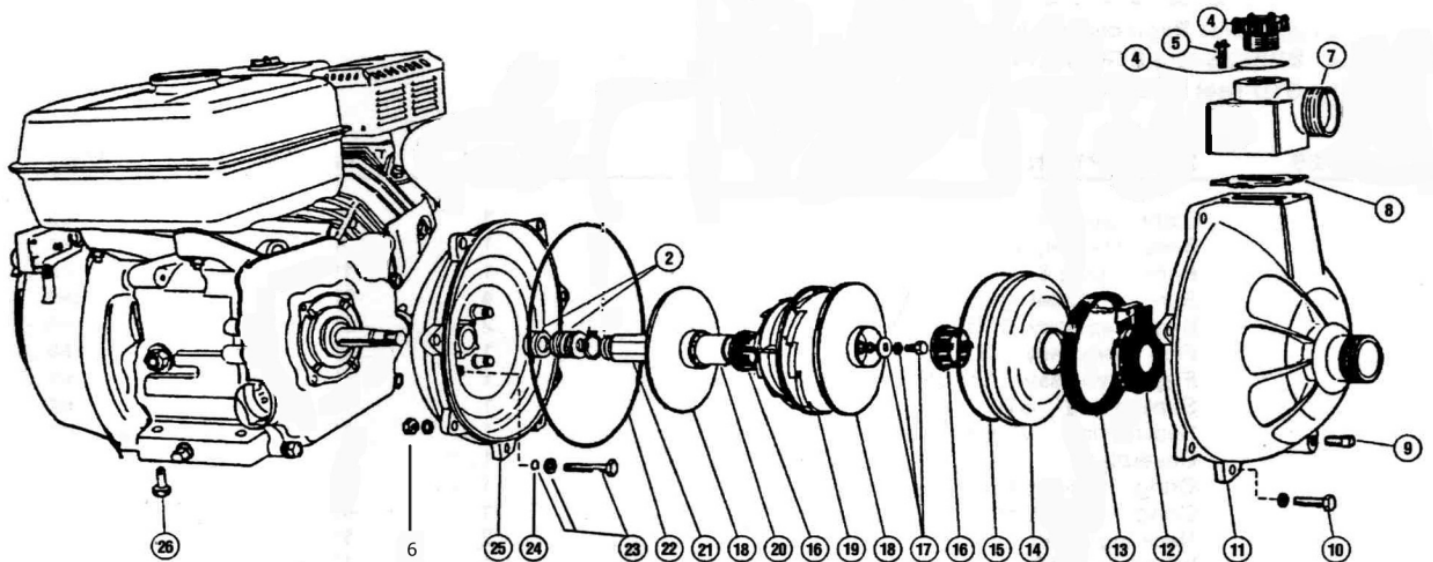
**IMPORTANT:** Always replace both seal seat and seal head to ensure proper mating of components!

1. Unthread fasteners and remove pump casing from adapter
2. Remove diffuser cover plate and neck ring insert.
3. Unthread fastener from stub shaft
4. Unscrew first stage impeller from stub shaft (impeller unscrews CCW looking at stub shaft).

**NOTE:** A strap wrench is recommended to loosen both impellers. Attempts to loosen impellers with other tools may cause permanent damage to impellers. Due to close

running fits between parts, damaged impellers should be replaced before reassembly of pump.

5. Remove diffuser.
6. Remove shaft sleeve from stub shaft and unscrew second stage impeller (Ref. No. 1).
7. Remove seal head (Ref. No. 12) from engine shaft
8. Unscrew fasteners and remove adapter from motor mounting face.
9. Push seal seat from adapter recess with screwdriver.
10. Clean adapter recess before inserting new seal seat.
11. Carefully wipe seal face surface of new seal seat with clean cloth.
12. Wet rubber portion of new seal seat with a light coating of soapy water.
13. Press new seal seat squarely into adapter recess. If seal seat does not press squarely into recess, it can be adjusted in place by pushing on it with a piece of pipe. Always use a piece of cardboard between pipe and seal seat to avoid scratching seal seat. (This is a lapped surface and must be handled very carefully.)
14. After seal seat is in place, ensure that it is clean and has not been marred.
15. Using a clean cloth, wipe stub shaft and make certain that it is perfectly clean.
16. Carefully guide new seal seat over engine shaft and secure adapter.
17. Apply a light coating of soapy water to inside rubber portion of seal head and slide onto engine shaft (with polished sealing face first) facing white face of seal seat.
18. Reverse steps 5 to 1 to reassemble pump.



REF. NO.	DESCRIPTION	PART NO.	QTY.
1	Engine, Honda	1639-036-00	1
1	Engine, Yanmar	1630-006-00	1
1	Engine, Briggs & Stratton	1639-018-00	1
2	Seal Kit; includes Ref. Nos. 2,8,12,13,15,16,20,22, 24	5830-300-90	**
3	Roll Frame Kit: Not Shown	3120-105-K0	1
4	Priming Plug and O-ring Assembly	5830-170-90	**
5	Screws	*	**
6	Nut	*	**
7	Discharge Port and Gasket	5830-050-90	**
8	Gasket	See Ref. 2	**
9	Drain Plug 1/4"	*	**
10	Bolt	*	**
11	Casing	5830-001-00	**
12	Check Valve Assembly, Included in Ref. 2	5830-060-90	**
13	Sealing Ring	See Ref. 2	**
14	Diffuser Cover Plate	5830-220-00	**
15	O-ring Cover Plate	See Ref. 2	**
16	Neck Ring Insert - Included w/Ref. 14 and 19	See Ref. 14 or 19	**
17	Impeller Screw Assembly	See Ref. 21	**
18	Impeller	5830-010-00	**
19	Diffuser	5830-221-00	**
20	Sleeve	5830-121-00	1
21	Stub Shaft, includes Ref. 17	5830-120-90	1
22	O-ring - Casing	See Ref. 2	**
23	Bolt	*	**
24	O-ring - Adapter	See Ref. 2	**
25	Adapter	5830-030-00	**

\*Standard Hardware Item Available Locally

\*\*Discontinued. Contact EFKAY SALES at 800-515-2021 or [www.efkaysales.com](http://www.efkaysales.com) for Davey Pump Parts pricing and availability.