



**INSTALLATION &  
OPERATION MANUAL**

**for**

**SHALLOW WELL JET PUMPS**



**SWJ**  
**SHALLOW WELL JET PUMPS**

## **INTRODUCTION**

SHALLOW WELL JET PUMPS, SWJ ½ to 1 ½ HP, are designed for pumping water at levels not to exceed 25ft. Before installation, check for damages in shipment. Any damage should be reported to dealer.

### **CAUTION: IMPORTANT SAFETY NOTICE**

The installation, use and operation of this type of equipment is affected by various federal, state and local laws and regulations.

Check all local codes covering electrical installation, plumbing, pumps, and wells. Please note that all motors are either signal voltage 115 or 230 volts AC or dual voltage. Make sure motor name plate voltage corresponds to power supply voltage.  
**MAKE SURE THAT ELECTRICAL CIRCUIT IS PROPERLY GROUNDED.**

**CAUTION: BEFORE INSTALLATION OR SERVICING PUMP, BE SURE POWER SOURCE IS DISCONNECTED.**

## **INSTALLATION**

Mount pump on flat stable foundation. Connect pump to well, so that suction pipe weight is not carried by the pump. Pump should be protected from freezing. Pipe connections must be tight to avoid suction leaks that prevent priming. Use foot valve or check valve in pump suction piping.

To prime pump install "T" fitting in discharge part.

## **OPERATION**

Priming Pump:

Completely fill suction piping and pump casing through priming opening and check for leaks. Wait a few minutes for air to escape system and replace prime plug tightly.

**WARNING: DO NOT RUN PUMP DRY**

## **STARTING:**

After priming, start pump. If pressure does not build after reasonable time, stop pump, reprime and start again. Allow pump to operate briefly to purge air from the system.

This procedure may have to be repeated until pump builds pressure.

## **TANK INSTALLATION:**

Dispose of initially pumped water and check water for sand and debris before pumping to tank.

Select proper tank size and be sure to use proper size piping.

A pre-charged diaphragm type tank when properly charged with air and used with pressure switch makes your system automatic.

Tanks without air seal for pre-charging will require an AIR VOLUME CONTROL mounted on tank and connected to 1/4" pipe tap marked A.V.C. on the pump casing.

## **MAINTENANCE**

Caution: Be sure power source is disconnected at source.

### **MOTOR:**

Remove motor back cover and fan, disassemble impeller and separate motor.

### **MECHANICAL SEAL:**

To replace mechanical seal, remove four (4) pump capscrews holding motor bracket to casing. It is not necessary to disturb plumbing. Pull assembly out of casing, remove diffuser and impeller and remove old seal. To replace, moisten seal and shaft with water for ease of assembly.

### **DRAINING:**

Drain pump and piping when there is a danger of freezing. Piping should be drained below freeze line. Disconnect air volume control when draining.

### **DO NOT USE OIL LUBRICANTS!**

Be sure seal is seated properly, then install impeller. Install diffuser. Reassemble motor and motor bracket to pump case with four (4) capscrews.

## **WARNING: DO NOT RUN PUMP DRY**

# SWJ Series Shallow Well Jet Pump Repair Parts

## MATERIAL LIST

SYMBOL Number	DESCRIPTION	PART NUMBERS			
		1/2 HP	3/4 HP	1 HP	1 1/2 HP
1	Motor 115/230 Volt	000101016401	000101026401	000101036401	000101046401
2	Motor Bracket	4100026	4100026	4100026	4100026
3	O-Ring Housing	1711010	1711010	1711010	1711010
4	Seal & Seal Seat	6001000	6001000	6001000	6001000
5	Impeller	3154035	3154036	3154037	3154038
6	Diffuser	3711001	3711001	3711001	3711001
7	Venturi	3511001	3511001	3511002	3511002
8	Nozzle	3611001	3611001	3611001	3611001
9	O-Ring Venturi	1710909	1710909	1710909	1710909
10	O-Ring Nozzle	1710606	1710606	1710606	1710606
11	Jet Pump Housing	1500105	1500105	1500105	1500105
12	Pet Cock 1/4" NPT	2810003	2810003	2810003	2810003
13	Dual Drain Plug 1/4" NPT	2800103	2800103	2800103	2800103
14	Bolt Hex Head 5/16"-18	1811012	1811012	1811012	1811012
15	Pressure Switch	9900052	9900052	9900052	9900052
16	Nipple 1/2" NPT	2842209	2842209	2842209	2842209
17	Lock Nuts (2)	3217142	3217142	3217142	3217142
18	Plastic Tubing	9900032	9900032	9900032	9900032
19	Elbow NPT to Barb	2804003	2804003	2804003	2804003

