

OWNER'S MANUAL

#3 Cistern Pump (Type A)



SAFETY WARNINGS

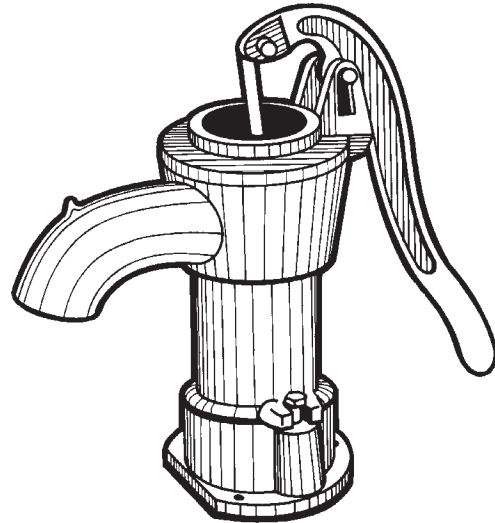


BEFORE OPERATING OR INSTALLING THIS PUMP, READ THIS MANUAL AND FOLLOW ALL SAFETY RULES AND OPERATING INSTRUCTIONS.

SAFETY CAREFULLY READ THESE SAFETY MESSAGES IN THIS MANUAL AND ON PUMP.

CAUTION

- Review instructions before operating.



APPLICATION

This pump is designed for shallow well applications and is capable of lifting water from depths of 20 feet.

INSTALLATION

- (a) **PUMP LOCATION:** This pump is intended for use in a sheltered location which will prevent contaminated fluids from entering into the pump through the open slot in the top of the pump.
- (b) **DROP PIPE:** The pump base is tapped to 1 1/4 NPT to accept standard 1 1/4 threaded pipe.
- (c) **HANDLE POSITION:** The position of the pump handle may be adjusted by loosening the set screw located beneath the handle and rotating the cover and handle assembly to the desired position, retighten set screw.

OPERATION

(a) PRIMING: It may be necessary to prime the pump, this is accomplished by pouring water into the pump through the opening in the top. This enables the leather cup seal to absorb the water and expand, thus providing a tight seal against the inside of the pump. The addition of water also adds lubrication for the leather cup seal thereby reducing the wear. It may be necessary to operate the pump for several strokes to draw up water from the well. It is suggested that a small container always be kept beside the well, full of water. This will enable the next user to prime the pump if necessary.

(b) DRAINING: If the pump is subjected to freezing temperatures, it is necessary to drain the pump to prevent damage. To drain the pump, raise the handle to the highest position. This enables the water to drain back into the well. To check if the pump has drained, examine the inside of the pump by viewing through the slot in the top of the pump. If it has not drained, force up lightly on the handle.

MAINTENANCE

(a) Replacement of leather cup seal:

- i) Remove the cotter pin and clevis pin.
- ii) Remove the handle.
- iii) Loosen the set screw and remove the cover.
- iv) Lift out the plunger rod assembly.
- v) Remove the leather cup by unscrewing the valve seat from the cage.

Note: Refer to the Repair Parts List for a breakdown of the individual components and the descriptions.

(b) Replacement of the leather valve:

- i) Unbolt and remove casing from pump base.
- ii) Remove leather valve assembly.
- iii) Replace leather valve, ensure that the large washer on the underside is correctly positioned so that the valve leather assembly seals against the base.
- iv) Orientate the valve leather assembly.
- v) Reassemble the pump.
- vi) Fill pump with water and monitor whether or not the valve leather is sealing adequately and thus holding the water in the pump.
- vii) Lift handle to highest point and examine if pump drains.
- viii) If all of the above checks prove to be okay, pump is ready for operation.

TROUBLE SHOOTING SECTION

PROBLEM	POSSIBLE CAUSE	SOLUTION
a) Pump handle operates but no water is discharged.	<ol style="list-style-type: none"> 1. Well is dry. 2. Water level has dropped below bottom of suction pipe. 3. Pump has lost its prime. 4. The leather cup is worn out. 5. The valve is not closing; it may be jammed or worn. 6. Hole or leak in suction pipe. 7. Suction pipe is clogged. 	<ol style="list-style-type: none"> 1. Dig well deeper or drill a new well. 2. Attach additional length to pipe. 3. Operate the pump handle for several strokes until water is discharged. 4. Replace the leather cup. 5. Examine valve, replace worn or damaged components. 6. Remove pipe and examine connections and pipe - reconnect or replace as required. 7. Remove pipe and examine. Clean as required.
b) Pump operates but only delivers small amount of water.	<ol style="list-style-type: none"> 1. The well is not accumulating fast enough with water. Water level is being drawn down below suction pipe. 2. Leather cup is badly worn. 3. Leather valve may not be sealing properly. 4. Suction pipe is partially clogged. 5. Suction pipe may be leaking. 	<ol style="list-style-type: none"> 1. Attach additional length of drop pipe. 2. Replace leather cup. 3. Examine and replace worn components. 4. Clean out pipe. 5. Repair pipe or tighten connections.
c) Pump requires too many strokes to deliver water.	<ol style="list-style-type: none"> 1. Pump loses its prime. 2. Leather cup is badly worn. 	<ol style="list-style-type: none"> 1. The pump may be periodically pumping the well dry or the suction line may be leaking. Repair or replace components. 2. Replace leather cup.

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