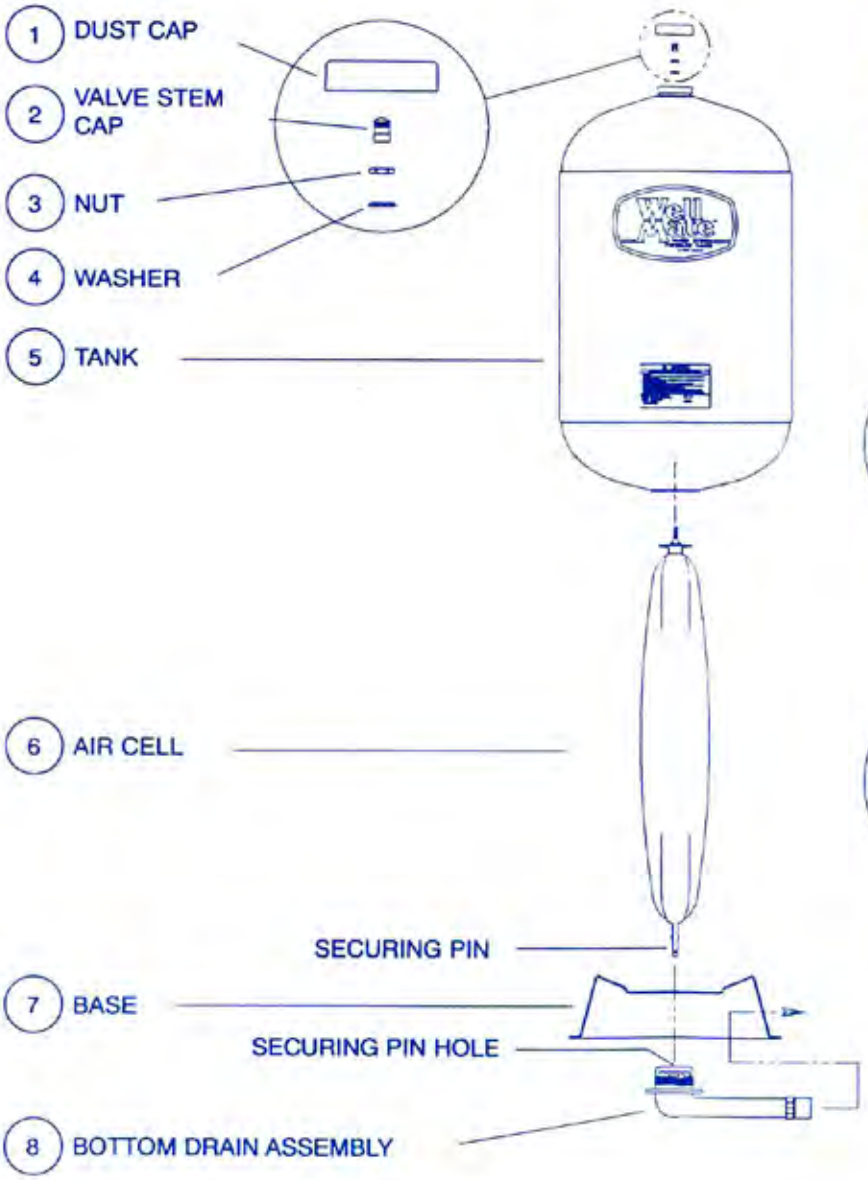
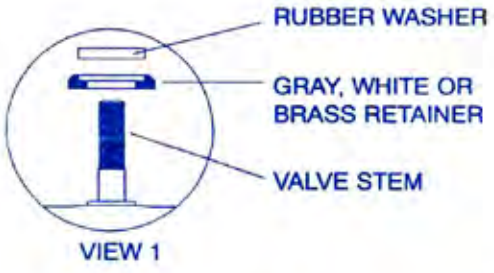
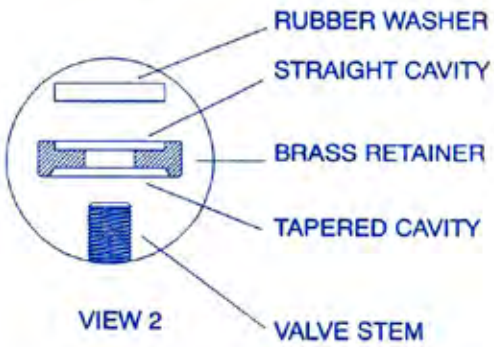
# AIR CELL REPLACEMENT INSTRUCTION SHEET

THE FOLLOWING ADDITIONAL ITEMS MAY BE NEEDED:

- VALVE CORE TOOL
- 3/4" DIAMETER X 18" LONG WOODEN DOWEL
- HACKSAW
- CHANNEL LOCKS
- AIR SOURCE
- 1/2" DEEP WELL SOCKET




## ASSEMBLY DIAGRAM

## The Kit Includes The Following:

(1) Air cell/Rubber Washer
(1) O-ring, 2-1/2"
(1) O-ring, 4"
(1) Nylon Line
(1) Valve Stem Connector
(1) Valve Stem Nut
(1) Valve Stem Washer
(1) Valve Stem Cap
(1) Plastic Spacer, White
(1) Brass Retainer
(1) O-ring Lubricant Packet

## TO REMOVE OLD AIR CELL

1. Turn off the electric power to the pump at the control box or main switch.

2. Drain water from the tank by opening faucet closest to the tank. Allow all water to escape and leave faucet open after water stops running.

**WARNING: MAKE SURE ALL THE PRESSURE HAS BEEN RELEASED FROM THE TANK AND SYSTEM**

3. Remove valve core from valve stem. Loosen metal nut (3) approximately five full turns. Loosen metal washer (4). Note: The valve stem at this time should recede into tank. If it does not, all of the pressure may not have been released.

4. Disconnect tank from water supply line. (Older models that service air cell from top of tank do not need to be removed form water supply line).

5. CAREFULLY lay tank on its side (protect sides of tank). DO NOT DROP.

6. Place wooden dowel (3/4" in diameter by 18" long) in pipe section of the bottom drain assembly (8). Be certain that the wooden dowel is inserted as far as it will go. Loosen and disassemble drain from tank by applying force to dowel in counter-clockwise direction.

7. Detach bottom drain assembly (8) and base (7) by cutting securing pin with hacksaw. (Older models that can service air cell from top of tank should remove top fitting).

8. Remove cut section of the securing pin from the bottom drain assembly.

9. Remove old O-ring from drain. Select the correct size O-ring from kit and completely cover with O-ring lubricant. Place new O-ring on drain.

10. Remove air cell (6) from tank. Two people are recommended when removing the air cell. One person should secure the tank while the other firmly pulls and works the air cell from side to side.

11. Once the old air cell is removed from the tank, determine if a gray, white or brass retainer is used to secure the rubber washer at the valve stem (refer to assembly diagram, view 1). If a retainer is <u>not</u> used on the old air cell skip step 12.

12. Remove the new brass retainer included in the kit. Remove rubber washer from the valve stem on new air cell. Place brass retainer over valve stem with tapered cavity facing air cell (refer to assembly diagram, view 2). Place rubber washer back on to valve stem and seat into the straight cavity of retainer.

# INSTALLATION OF NEW AIR CELL

1. With drain still disconnected from tank, stand tank upright on base with drain connection on bottom. Tank is unstable on base without drain connected. Therefore, it is recommended that one person hold the tank while another continues with the next two steps.

2. Remove nylon line from kit. Separate steel nut and washer from nylon line while keeping plastic spacer attached. Feed valve stem connector, attached to the other end of nylon line, through steel nut and washer. Feed through nut first. Flat sides of nut and washer should be facing valve stem during assembly.

3. Drop valve stem connector through valve stem hole at top of tank. Feed nylon line through hole until plastic washer, steel nut and steel washer are suspending line from top of tank. Carefully lay tank on its side. Valve stem connector should be easily accessible at the bottom of the tank.

4. Attach valve stem connector to valve stem on replacement air cell. This is accomplished by screwing connector into female thread on valve stem. Note: To avoid damage to valve core, do not screw connector too far into stem.

5. To install the replacement air cell two people are recommended. With the aid of the nylon line, one person should guide the valve stem through the valve stem hole while the other person pushes the air cell through the drain opening. Note: The nylon line should only be used to guide the stem and not to pull the air cell into the tank. (For older models, attach air cell to top fitting and then drop air cell into tank).

6. Attach metal washer and nut to valve stem. Hand tighten nut at this time so that air cell is able to spin freely in tank. Remove valve stem connector. (Older models may need to attach plastic spacer to valve stem before attaching metal washer and nut).

7. Place bottom drain pipe (8) through side hole in base (7) and hold drain so that securing pin hole is pointing out through top hole of base. Hold securing pin, at bottom of replacement air cell, with channel locks about 1/4" above locking wings and push into securing pin hole. Be sure the pin locks into position. Note: Applying silicon to chamfer around securing pin hole will aid in assembly.

8. Thread bottom drain assembly, turning clockwise, into tank and hand tighten until O-ring is snug. Using wooden dowel, tighten drain 1/4 to 1/2 turn. (For older models, tighten top fitting). Note: Do not over tighten drain assembly.

9. Stand tank upright.

10. Inflate air cell until pressure is 4 psig (.28 bar) lower than the minimum cut-in pressure of the pump.

11. Tighten metal nut (3) on valve stem.

12. Replace valve cap (2) and dust cap (1).

13. Reinstall tank to water supply line.

14. Close all faucets and start pump. Check to see that system is operating properly.