

BUBBLE UP

I. DESCRIPTION

The Bubble Up is a vinyl air filled hemisphere supported by a stainless steel center column. The Bubble is surrounded by a landing pool and a fiberglass decking.

A fountain attached to the top of the vertical column creates a slippery sliding surface. Four orthogagal ropes fixed at all ends provide a means of scaling the Bubble surface.

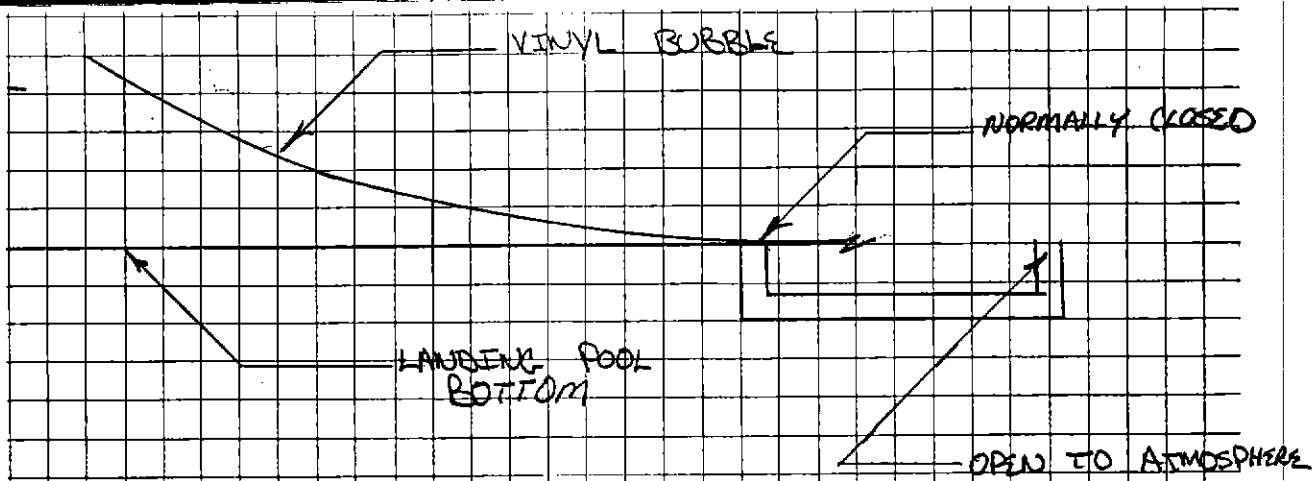
Deflated the Bubble drapes from the vertical support column.

II BUBBLE UP SYSTEMS

AIR:

- A. Two air pressure lines run from the filter room to the Bubble. The first line contains the blower and the second a return air valve to maintain the required operating pressure.
- B. The operator panel contains shut off switches for the air and rain drop (fountain).
  - 1. The fountain switch is a regulating device to sequence the riding periods.
  - 2. The air shut off switch is a manual blower override switch.
- C. Two air pressure regulating systems.
  - 1. A system consisting of a set of pipes running under the Bubble Up opening into the atmosphere. Under normal operating conditions, this system is closed by the vinyl due to the overlying water pressure. (see Fig. 1A)

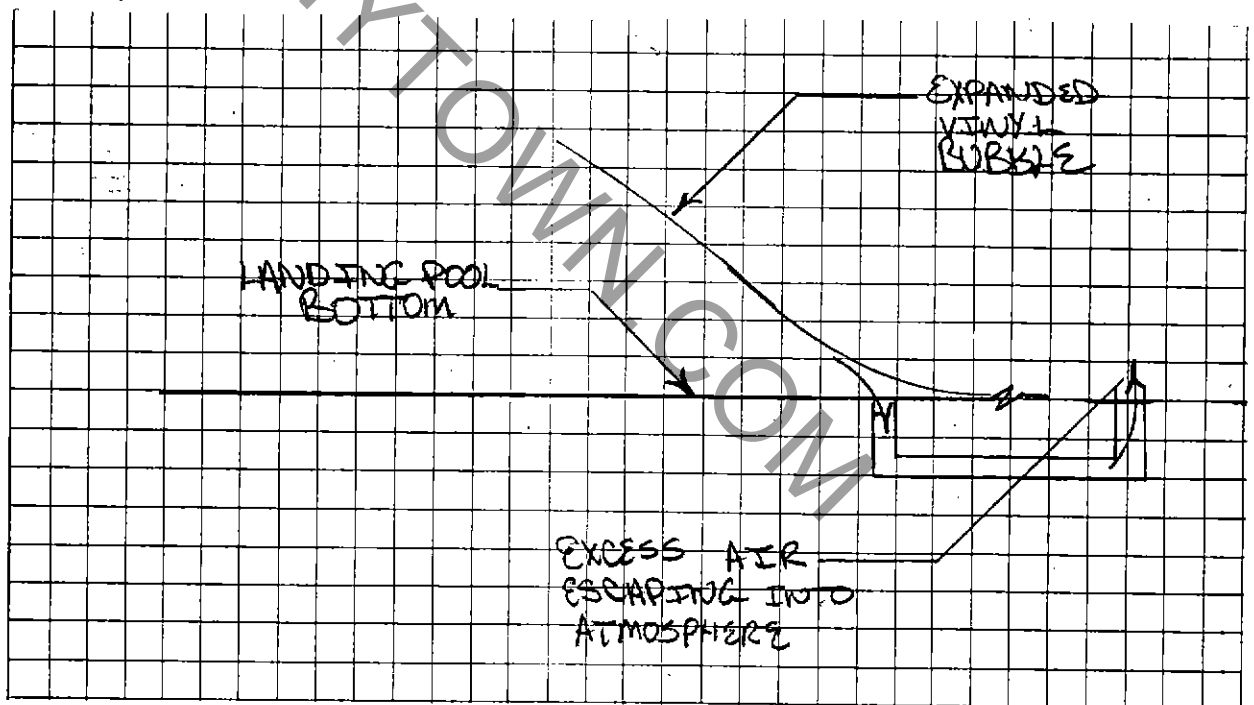
Figure 1A



- WHEN THE AIR PRESSURE EXCEEDS THE NORMAL OPERATING PRESSURE THE VINYL IS LIFTED TO OPEN THE PRESSURE RELIEF TUBES AND EXPELS THE EXCESS AIR INTO THE ATMOSPHERE. (SEE FIGURE 1B)

When the air pressure exceeds the normal operating pressure, the vinyl is lifted to open the pressure relief tubes and expels the excess air into the atmosphere. (see fig. 1B)

Figure 1B



2. 'Pressure Guard' is a pressure switch that shuts down the blower when operational pressure of \_\_\_\_\_ PSI is reached and resumes when the air pressure reaches working conditions. The air guard has a 2.0 PSI differential.

### III BUBBLE UP SYSTEMS: WATER

#### A. Filtration system

1. 16 drains  
12 water returns  
10 skimmers

2. The filtration system is a closed pump driven system.
3. The water level is maintained by a float system. The water should consume half DF the skimmer at the proper water level.

#### B. Raindrop (Fountain)

The raindrop is controlled at the operators station and is driven by its own pump.

### IV VINYL BUBBLE COVER

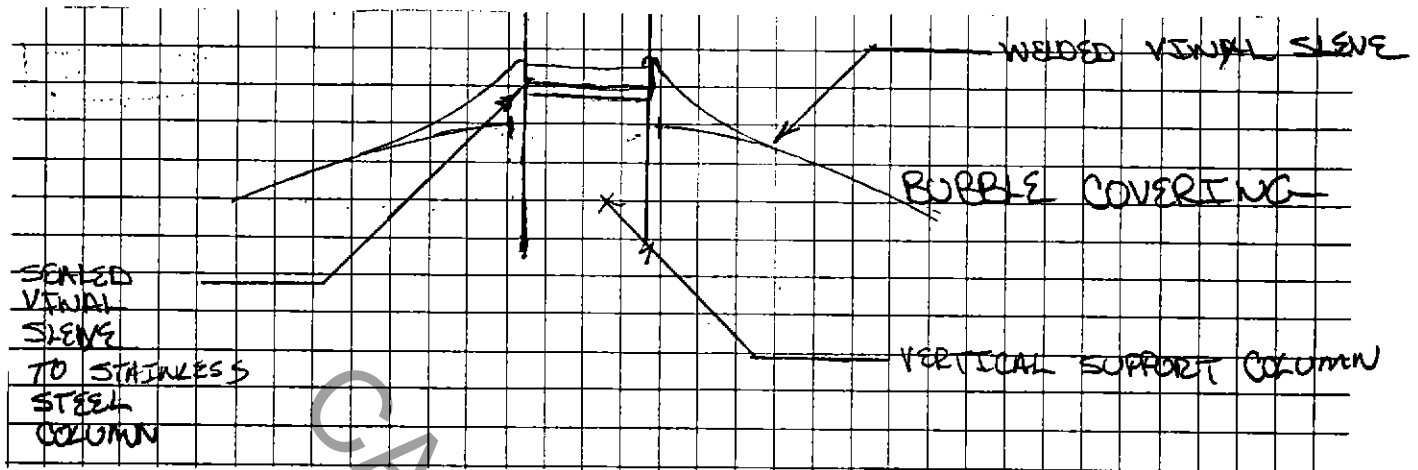
A. The liner is a polyvinyl chloride reinforced polyester material coated with an acrylic finish on both sides. The acrylic finish protects the vinyl from UV radiation as well as providing a smooth sliding surface.

B. Repair to the vinyl can be achieved by welding the vinyl or gluing vinyl sections to the Bubble.

C. A vinyl sleeve is used to seal the inner Bubble and to absorb any vertical displacement.  
(see fig. 4A)

1. This seal should be periodically checked to ensure proper seal and sleeve displacement.
2. Adjust collar when sealing to allow maximum amount of slack in sleeve.

Figure 4A



V INSPECTION TUNNEL (Describe insp. tunnel)

- \* Important - when manhole cover is removed for inspection rapid loss of air pressure will occur.

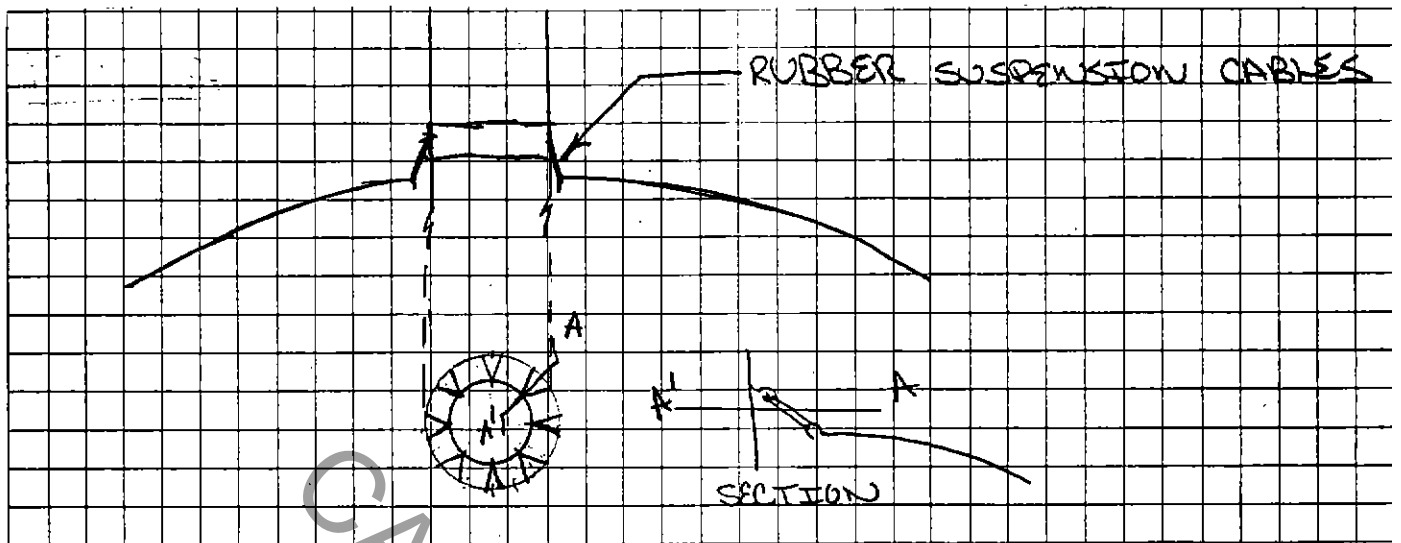
While the Bubble is being inspected, it is not operational.

- \* Important - Reseal Bubble manhole cover to prevent any unnecessary loss of air pressure.

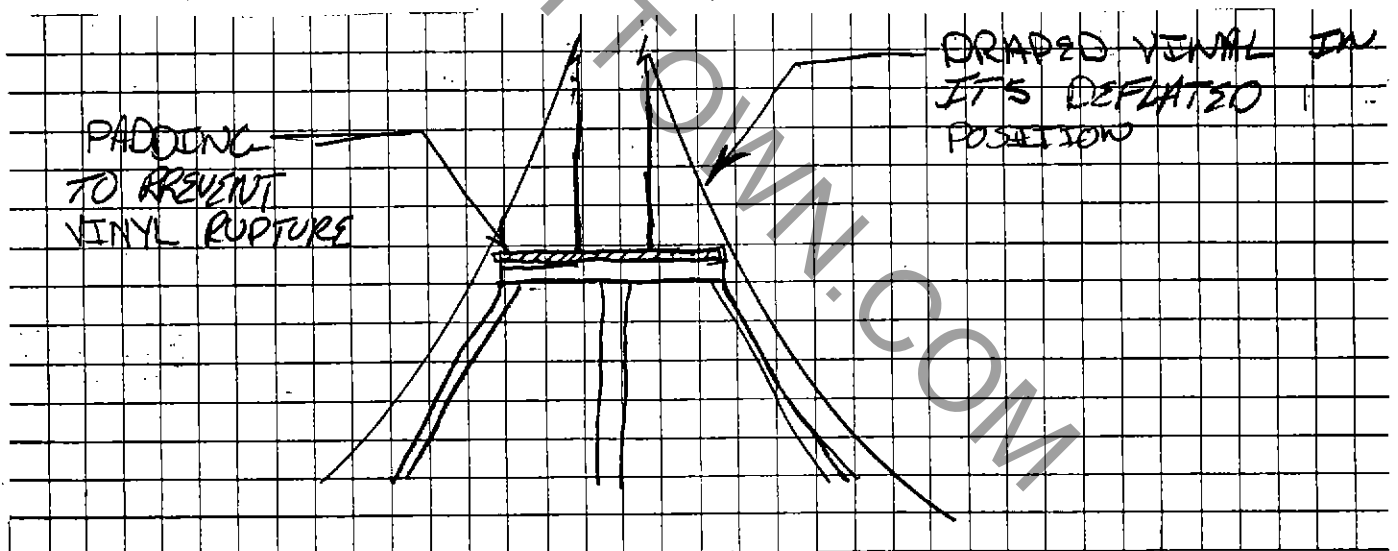
VI INSPECTION UNDER BUBBLE

- A. Absolutely no water under Bubble. Localize and resolve any water leakage.
- B. Check Bubble suspension cables for ware and breakage. Any damaged cables must be replaced.

Figure 6A



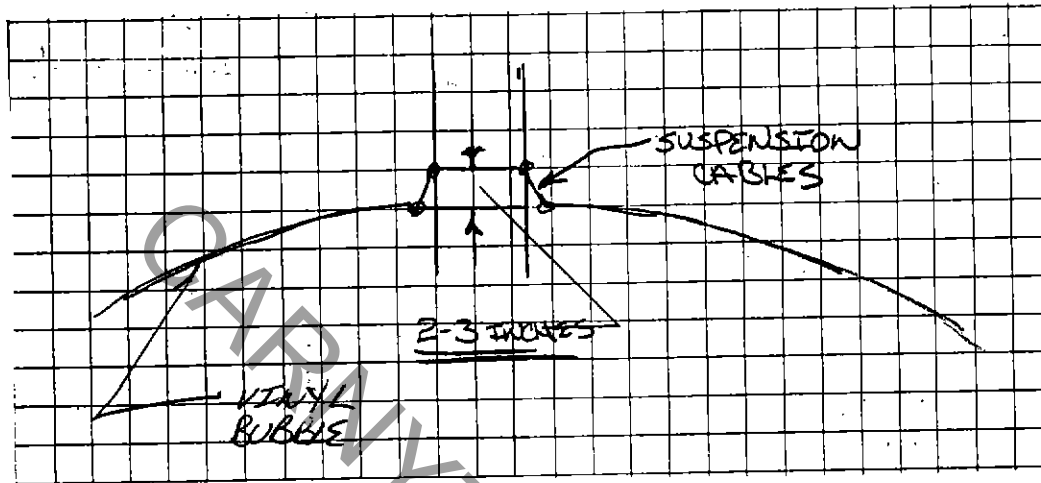
- C. Check for platform padding placement and look for any rubbing or ware on Bubble surface. (see fig. 6B)



## VI INSPECTION UNDER BUBBLE (cont.)

D. Make sure slippage has not occurred.  
Check orientation of rubber suspension cables.

- \* The vertical distance between the upper and lower suspension cables should be 2-3 inches.  
(see fig. 6C)



E. Make sure that the area under the Bubble is free of any debris.

## VII PRE-OPERATING CHECKLIST

1. Clean pool (no heavy machines)
2. Clean Bubble surface with 'Certified, NM50' or similar detergent (when needed)
3. Check relief valve in pump room is open and air is circulating.
4. Make sure that the butterfly valve shuts properly when blower is shut down.
5. Check the emergency relief pipes are clear of blockage. (visual inspection)
6. Weekly check the pressure guard shut off by blocking air return valve with hand. The blower should shut down.

NOTE: Be sure that emergency pressure relief pipes are free of any blockage before this test is performed.

7. Check fiberglass decking for missing or loose screws periodically.
8. Check skimmer for missing screws periodically.
9. Check the padded covers on rope connections to ensure that they have not slipped away from connection.