

# Pressure System Quick Installation

## All Pressure Systems Include:



## The Installer Will Also Need:

(For mounting bracket installation only)



A 2" Male Adaptor

A length of 2" PVC pipe long enough to reach the bottom of the basin



## Step 1: Pressure Bell Mounting Options

### Mounting Bracket



When using the mounting bracket to install the pressure bell start by placing the bracket against the tank wall and mark the holes for the anchors. Drill the holes in the side of the tank and fasten the bracket to the tank. The bracket should be mounted near the top of the tank with access from the manhole cover.

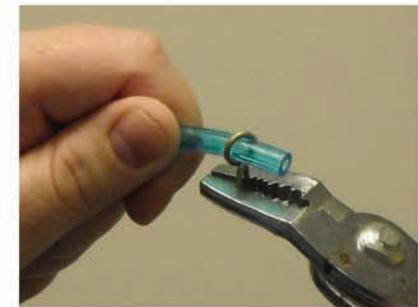
### Tether Kit



When using the tether kit simply slide the 8 lb donut over the top of the pressure bell and thread the nipple into the pressure bell. Then, suspend the bell using the provided poly rope tied on to bolt through the nipple.

## Step 2: Preparing the Pressure Bell

Once the mounting bracket is installed, you will need to cut the PVC pipe to the desired length. The length of the PVC pipe = Depth of Basin - 14 inches (for the pressure bell) - an additional 6 to 12 inches (so the pressure bell is off the bottom of the basin). Once the length has been determined and the PVC has been cut attach the 2" male adaptor to one end of the pipe.



Use pliers to slide tubing clamp onto the end of the tubing approximately 1 inch.



Push tube onto barbed fitting all the way, until it is against the base of the fitting. Then use pliers to slide tubing clamp down tubing to below the barb.



With the tubing securely attached to the Pressure Bell, feed it through the PVC pipe from the side with the male adaptor already attached.

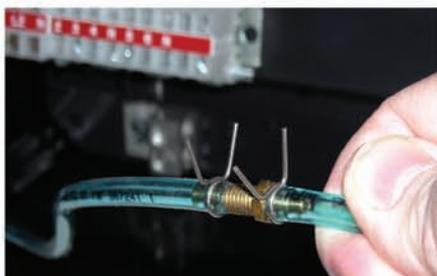


Finally, with the tubing securely fastened to the Pressure Bell and all the tubing fed through the pipe, thread the adaptor to the Bell.

### \*CAUTION!

Wear eye protection when installing tubing clamps, as they can slip out of the pliers and become projectiles.

## Step 3: Connect the Tubing to the Control Panel



With the control panel mounted in a convenient location to the basin, attach the other end of the 1/4" poly tubing to the control panel. Install spring clamps at the barbed coupler similar to STEP 2. To help insure that your system does not leak air it is best to not cut or splice the tubing and leave enough extra length coiled up at the mounting bracket to allow the pressure bell to be removed for maintenance. If your installation requires cutting the tubing to exit a junction box make sure that you use the CSI brass coupler with tubing clamps to insure a proper air seal.

## Step 4:

## Installing the Pressure Bell



With all the 1/4" tubing connected, you will need to remove the "Do Not Push or Pull the Diaphragm" sticker from the bottom of the pressure bell. Do not push the bottom of the pressure bell, but feel to make sure the rubber is tight against the cup and make sure all tubing is connected between the pressure bell and the control panel before submersing the bell in liquid. Note: Should the tubing become disconnected while the pressure bell is in the liquid you will need to pump the station down manually before reconnecting the pressure tubing. If there is an air leak or the diaphragm is not seated properly the system will not give an accurate measurement. The Pressure Bell can be mounted at any height off of the bottom of the basin that you desire. Remember that the lowest you will be able to measure will be at the top surface of the large union nut on the Pressure Bell.

## Step 5:

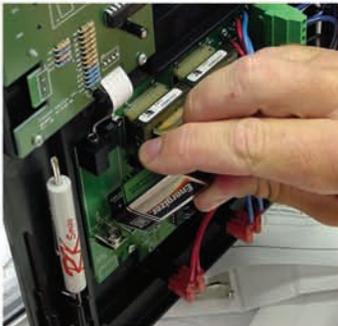
## Adjusting the Settings



With all the tubing connected and the pressure bell installed in the basin, you are now ready to adjust your level settings. All settings are made at the control panel not in the confined space. To adjust the on and off settings of the pumps and high water alarms turn the dials to the desired depth in inches on the faceplate. The inches on the dials are measured from the top of the union nut surface on the Pressure Bell upward. You can also turn the pumps on manually by pushing the hand run button once to run and again to stop. The button switches to momentary contact after low level setting is past. When the pumps are running in run mode they will run until they reach the pump off mark. If the pumps need to be run further the hand buttons can be held in until the desired depth is reached. Remember: All settings are relative to the top of the large union nut on the pressure bell in the basin.

## Step 6:

## Installing Battery Backup



The alarm circuitry in the pressure systems are 9-volt battery backed-up. The 9-volt power will sound the audible alarm and light the red alarm light on the front of the Sub-Door. It will not light the flashing red light on the top of the panel. To install the 9-volt battery open the subdoor and insert the 9 volt battery into the clip on the circuit board.

## Fine Adjustments

With the pressure units the settings can be adjusted to a precise measurement. Using a digital volt meter, set on DC-Volt setting. Carefully, place the negative lead (black) onto the GND test point on the back of the circuit board and the positive lead (red) onto the test point you wish to view (as shown in the picture below). The volt meter will give a reading in inches by moving the decimal to the right one number. So a reading of 1.514 is the equivalent of 15.14 inches.

Your panel type will determine available setpoints.  
Simplex (One pump) - Provides Pump Off, Pump On & High Level  
Duplex (Two pumps) - Provides Pumps Off, Lead Pump On, Lag Pump On & High Level

That's how easy it is to install the RK pressure system from CSI.  
If you need any additional help please call the factory for technical assistance.

1-800-363-5842

www.CSIcontrols.com