

## Step 1 - MOUNTING

The dispenser should be mounted in a location that allows the operator easy access to the control valve and measuring unit. The control valve can be mounted remotely. To do so, use 3/8" poly tubing and unions to extend the fill and discharge air lines to the new control valve location. It is particularly important that the dispenser be mounted level. This will help to insure accurate readings of the measuring unit.

Four pre-drilled holes are provided on the steel back plate. See figure 1.

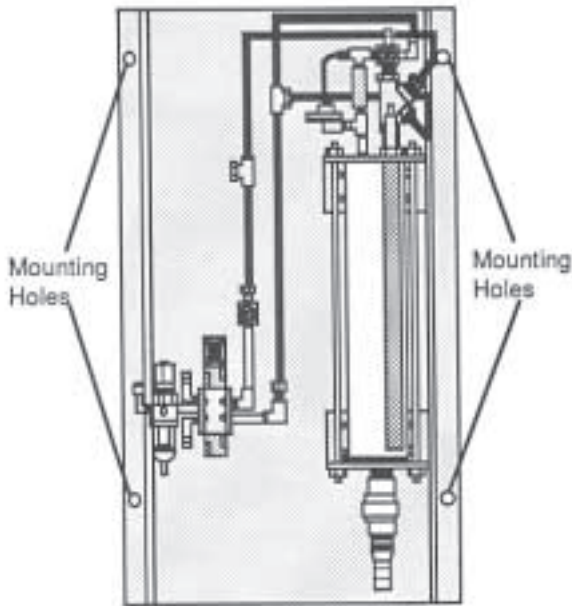


Figure 1

A minimum of 3/8" hex bolt and nut should be used when mounting the dispenser to a metal or other bolt through surface. Do not use lag bolts on plywood surfaces. If using lag bolts, a minimum of 1-5/8" thread bearing surface is required.

## Step 2 - CONNECTING PUMP DRUM TO STORAGE TANK

Assuming that the storage tank is in place and empty, attach the bottom fill tank valve assembly to the inlet port of the storage tank. See figure 2. A good quality Teflon base pipe dope is recommended when making this connection as well as all threaded pipe connections during the assembly of the dispenser system. **Do not use excessive amounts of pipe dope.** This may result in excess pipe dope entering the system and causing blockage of valves or other functioning components.

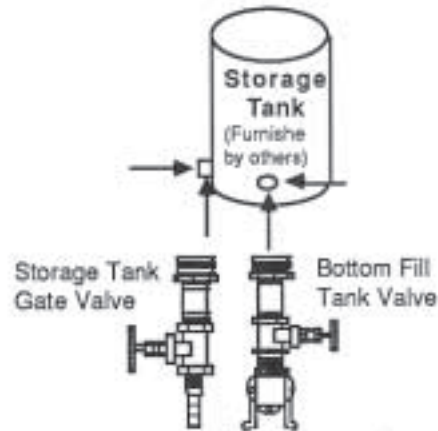


Figure 3

Figure 2

The 1" storage tank valve assembly should now be attached to the outlet port of the storage tank. See figure 3. The 1" bottom fill valve is used for the 120 oz. dispenser and air entraining admix only. This will prevent the mixing of air entraining admixes with other types of admixes. As with the bottom fill valve, be sure to use a good quality pipe Teflon based dope.

When both valves have been attached to the storage tank, be sure that the valves are in the closed position. This will prevent any dirt from entering the storage tank before it has been filled. It will also prevent accidental dumping of the admix from the storage tank through the tank gate valve. Both valves should be supported to relieve the weight and stress, caused by the other plumbing fixtures.

After the tank valve assembly has been attached to the storage tank, position the pump drum as close to the storage tank as possible. Using the 4 ft. section of 1" black rubber hose and hose clamps, supplied with the dispenser, connect the pump drum valve assembly to the hose fitting on the storage tank valve assembly.

If you are using a pump drum with a damper tank, the damper tank should be attached at this time. Using the 3 ft. sections of stand pipe supplied with the pump drum assembly, attach the damper tank to the top of the pump drum. See figure 4.

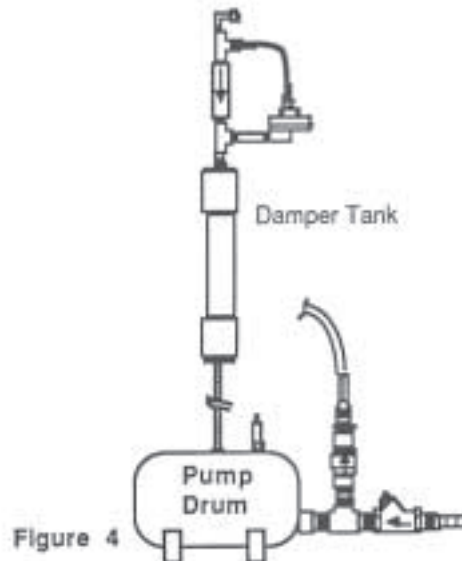


Figure 4

The damper tank must be mounted at a height that is higher than the top of the storage tank. See figure 5. This will prevent the admix from back flowing through the damper tank. Also, the damper tank should be supported to prevent it from tipping the pump drum over and spilling the admix.

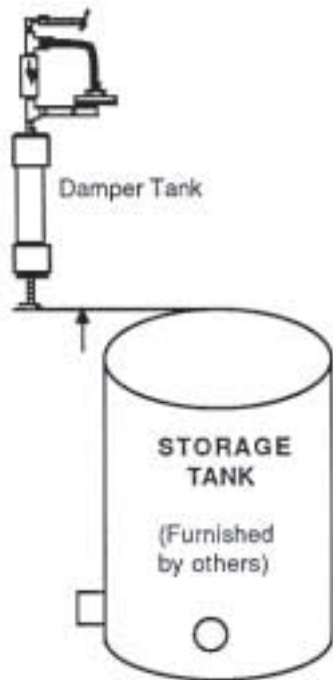


Figure 5

### Step 3 - CONNECTING PUMP DRUM TO MEASURING UNIT

You are now ready to connect the pump drum to the measuring unit. Attach 3/4" or 1" rubber hose to the spring loaded bottom fill valve on the pump drum to the bottom fill valve of the measuring unit. See figure 6. A 3/4" valve will be used with the 120 oz. - 600 oz. dispensers and a 1" valve will be used for the 950 oz. - 1900 oz. dispensers.

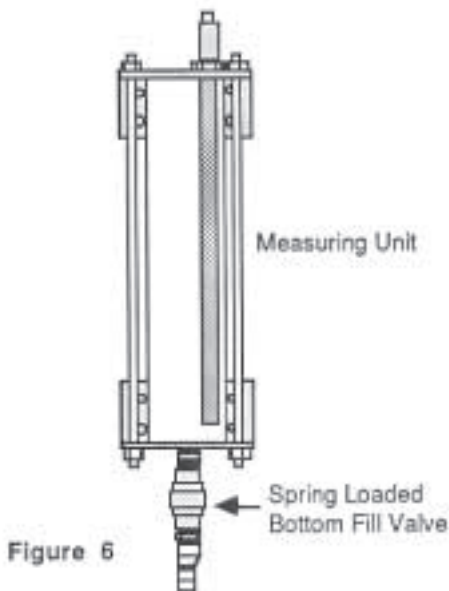


Figure 6

3/4" and 1" black rubber hose is available in multiples of 50 ft. lengths from Badger®, at additional cost.

### Step 4 - CONNECTING DISCHARGE LINE TO MEASURING UNIT

The air operated top discharge valve is attached to the measuring unit at the factory. See figure 7.

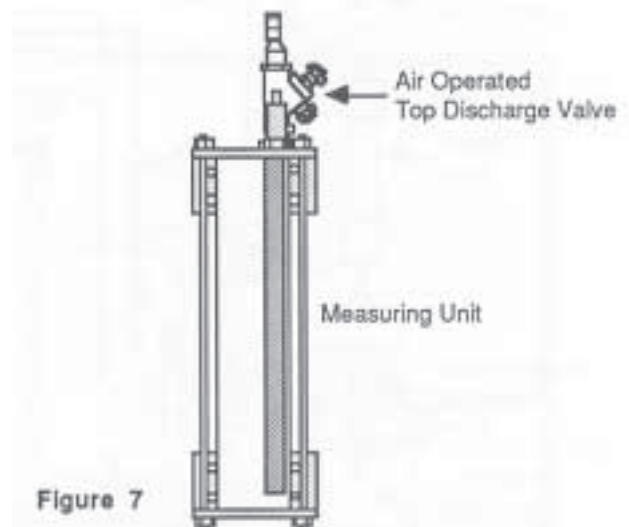


Figure 7

Therefore, using the clamps supplied with the dispenser, connect a 3/4" hose for 120 - 600 oz. units or a 1" hose for 950 - 1900 oz. units, to the hose fitting on the discharge valve. The hose should be long enough to reach the discharge point of the admix. 3/4" and 1" black rubber hose is available for this application from Badger, at additional charge.

If the discharge line is connected to the water line, a spring loaded check valve should be used in the discharge line to prevent water from entering the measuring unit.

### STEP 5 - AIR LINE CONNECTIONS

The dispenser air line connections have been made at the factory. Using 3/8" poly tubing (available from Badger at additional cost in 100 ft. lengths) connect the main air supply to the filter/regulator mounted on the control valve. See figure 8. The filter/regulator should be set to 60 PSI.

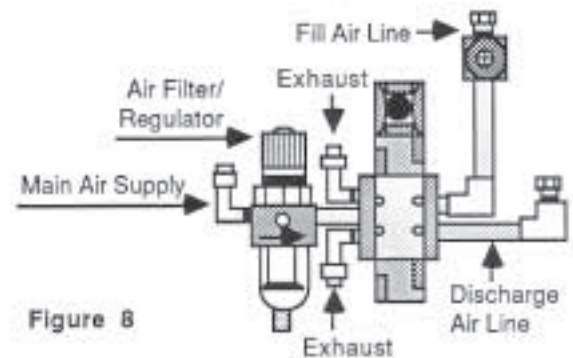


Figure 8

The next step is to connect the air supply line to the pump drum. This is accomplished by running 3/8" poly tubing from the "T" fitting in the fill air line to the air supply port of the pressure head assembly on the damper tank or pump drum (depending on which type of pump drum assembly you are using). See figure 9

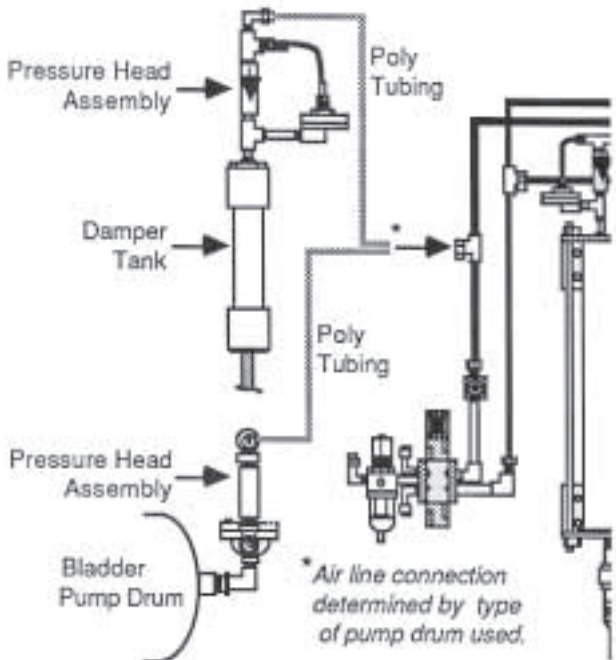


Figure 9

**The air used to operate the dispenser cannot be lubricated air.** This will result in coating of the valves and measuring unit.

When using the bladder type pump drum, run a bleed line from the quick exhaust valve to a level higher than the top of the storage tank. This will prevent any leaks that may occur in the bladder from draining through the quick exhaust valve.

Before using the bladder type pump drum, be certain to bleed the air from the tank. Failure to do so will cause the pump to be inactive. Bleed air from the tank whenever it has been completely run dry.

### Step 6 - DISPENSER START UP

The dispenser installation is now complete. To check for fluid or air leaks, fill the dispenser with admix. Do this by operating the 3 position manual control valve. The middle position is neutral, the up position is the fill and the detented down position is discharge. See figure 10.

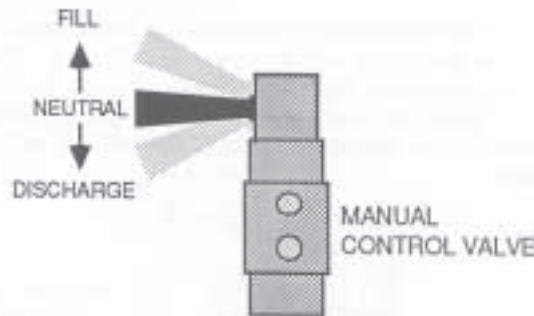


Figure 10

Hold the valve handle in the up position to fill the measuring unit to the desired level and release the valve. It will automatically return to the neutral position. Check the dispenser connections and fittings for leakage. If there are any leaks, repair them before operating the dispenser in production.

If there are no leaks, proceed to the discharge cycle. Push the valve control lever to the detented down position (see figure 10) and discharge all of the admix from the measuring unit and discharge hose. Repeat this cycle at least three times. This will purge all of the air from the system. At this point the material level in the measuring unit should be at the zero point of the graduated measuring strip. If it is not, you should adjust the zero point setting of the measuring unit. To do this remove and reposition or replace the graduated measuring strip to correspond with the actual zero point.

### OPERATION

To operate the manual dispenser use the same procedure as described in the 'Dispenser Startup' section (step 6). Hold the control valve lever in the up position to activate the fill cycle and release the valve lever when the desired amount of admix has been dispensed into the measuring unit. To discharge the admix into the batch, move the control lever to the down position. The valve is detented in this position and will not return to the neutral position automatically. The valve should be left in the discharge position long enough to completely empty the measuring unit and all plumbing lines. However, do not leave the valve in discharge for an extended period. This will allow air to continuously flow through the system and deplete the air supply of your compressor.

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