

## Step 1 - MOUNTING

The mounting location of the dispenser level is very important to ensure accurate readings of the measuring units. The dispenser should be mounted in a visible location for operators to verify the admix batches. For operator convenience, it's recommended to place the C-151 Control in the same proximity as other batch plant controls.

Figure 1 illustrates four pre-drilled holes on the steel back plate.

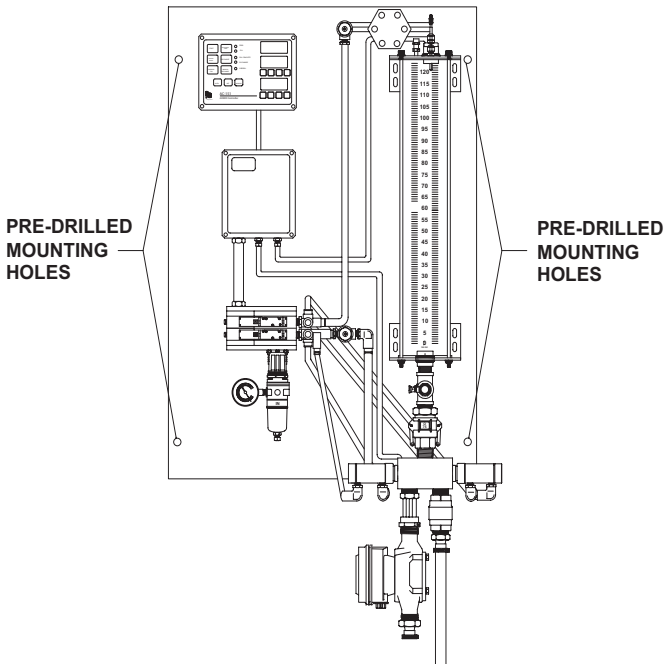


FIGURE 1

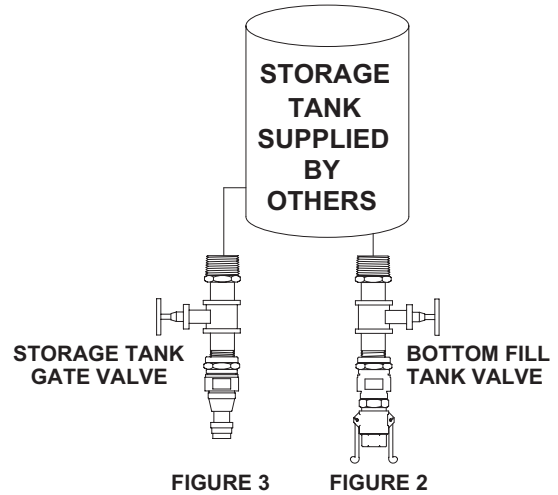
A minimum of 3/8" hex bolt and nut should be used when mounting the dispenser to a metal or other bolt through surface. If using lag bolts in plywood, a minimum of 1-5/8" thread depth is required.

## Step 2 - CONNECTING PUMP DRUM TO STORAGE TANK

With the storage tank in place and empty, attach the bottom fill tank valve assembly to the inlet port of the storage tank as shown in 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.

### **⚠ WARNING**

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.



The storage tank valve assembly should now be attached to the outlet port of the storage tank as shown in Figure 3. The bottom fill valve tank is only used as a 120 oz. Dispenser and air entraining. It 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 Teflon based pipe dop.

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 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 a small section of 1" rubber hose and clamps, 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. Use the 3 ft. sections of stand pipe supplied with the pump drum assembly. Attach the damper tank to the top of the pump drum as shown in Figure 4.

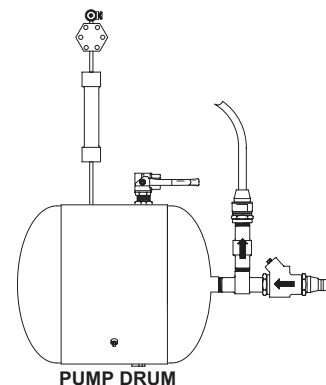


FIGURE 4

The damper tank must be mounted at a height that is higher than the top of the storage tank as shown in Figure 5. This will prevent the admix from back flowing through the damper tank. Also, the damper tank should be supported to prevent tipping of the pump drum, which could spill the admix.

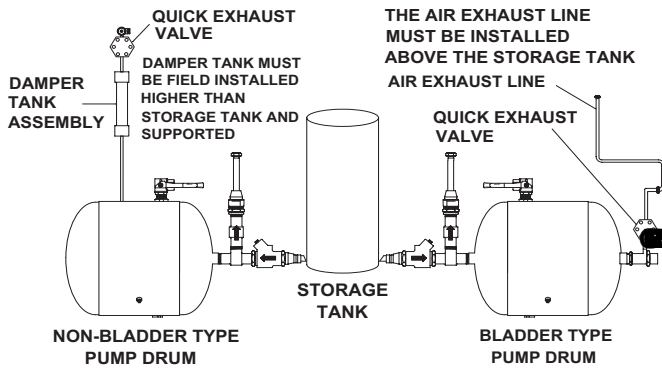


FIGURE 5

### 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 loading check valve on the pump drum to the air operated fill valve on the bottom fill/discharge assembly of the measuring unit as shown in figure 6. A 3/4" valve will be used for the 120 - 600 oz. units and a 1" valve will be used for the 950 - 800 oz. units.

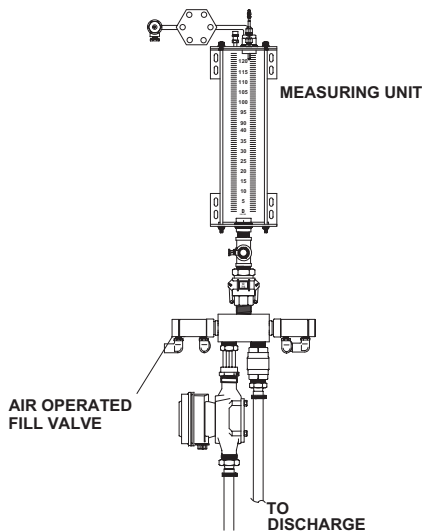


FIGURE 6

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 valves are attached to the measuring unit at the factory as shown in Figure 7.

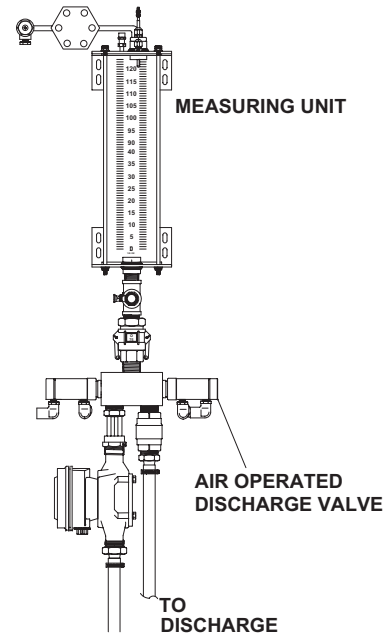


FIGURE 7

Using the clamps supplied with the dispenser, connect a 3/4" hose for the 120-160 oz. units or 1" hose for the 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. A 3/4" and 1" black rubber hose is available for this application from Badger, at additional cost.

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.

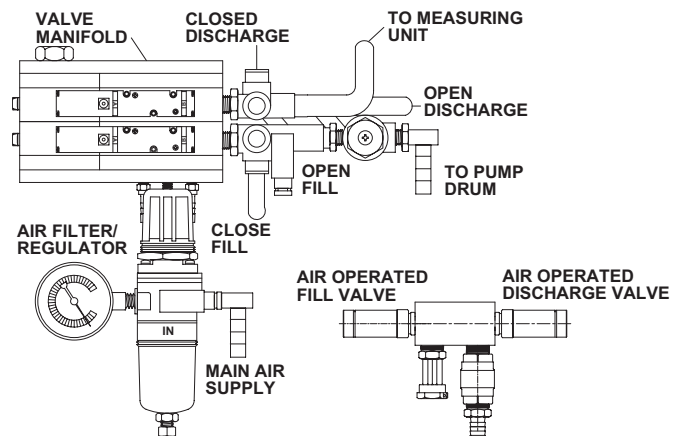
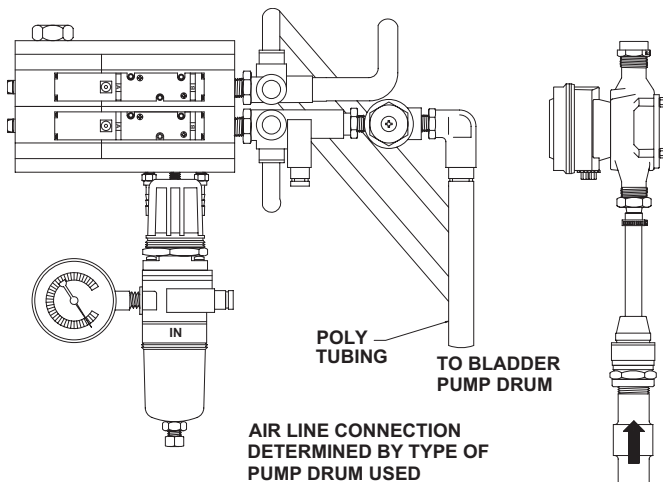


FIGURE 8

## Step 5 - AIR LINE CONNECTIONS

Next, connect the air supply line to the pump drum. Run 3/8" poly tubing from the 3/8" poly tubing union on the solenoid assembly to the air supply port of the pressure head assembly on the damper tank or pump drum, depending on which type of pump drum you are using, as demonstrated in 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 and plugging of small orifices.

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 air from the tank. Failure to do so will cause the pump to be inactive. Bleed air from the tank whenever it has been run completely dry.

## Step 6 - WIRING THE AC-151/ CONTROL

It is now time to wire the AC-151 Semi-Automatic Control. Complete wiring instructions are included in the Instruction and Operation Manual, included with your dispenser.

As an option, the semi-automatic dispenser can be purchased pre-wired from the factory, with a specified length of cable, ready for operation.

## Step 7 - 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 AC-151 Control as described in the Installation and Operation Manual. It is recommended that the AC-151 Control be operated in the manual mode or that the discharge hold feature be activated for the first few dispensing cycles. This will allow sufficient time between the fill and discharge cycles to check the dispensing fittings for air or liquid leaks. Any leaks should be repaired before operating the dispenser in production. If there are no leaks, proceed to the discharge cycle. The procedure should be repeated at least 3 times.

At the end of the discharge cycle, the material level in the measuring unit should be at the zero point of the graduated measuring strip. If it is not, adjust the zero point setting. To do this, loosen the locknut at the top of the zero probe, move up or down as required. When the proper setting has been achieved, tighten the zero probe lock nut.

## Step 8 - OPERATION

To operate the semi-automatic dispensing system, please refer to the instruction and operation manual supplied with the dispenser.

**OPTIONAL:** The Air Operated Globe Valves (AGV-100) are available as an option for this system.



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**BadgerMeter, Inc.**

6116 East 15th Street, Tulsa, OK 74112  
Telephone: (800) 364-9876 / Fax: (918) 832-9962  
[www.badgermeter.com](http://www.badgermeter.com)