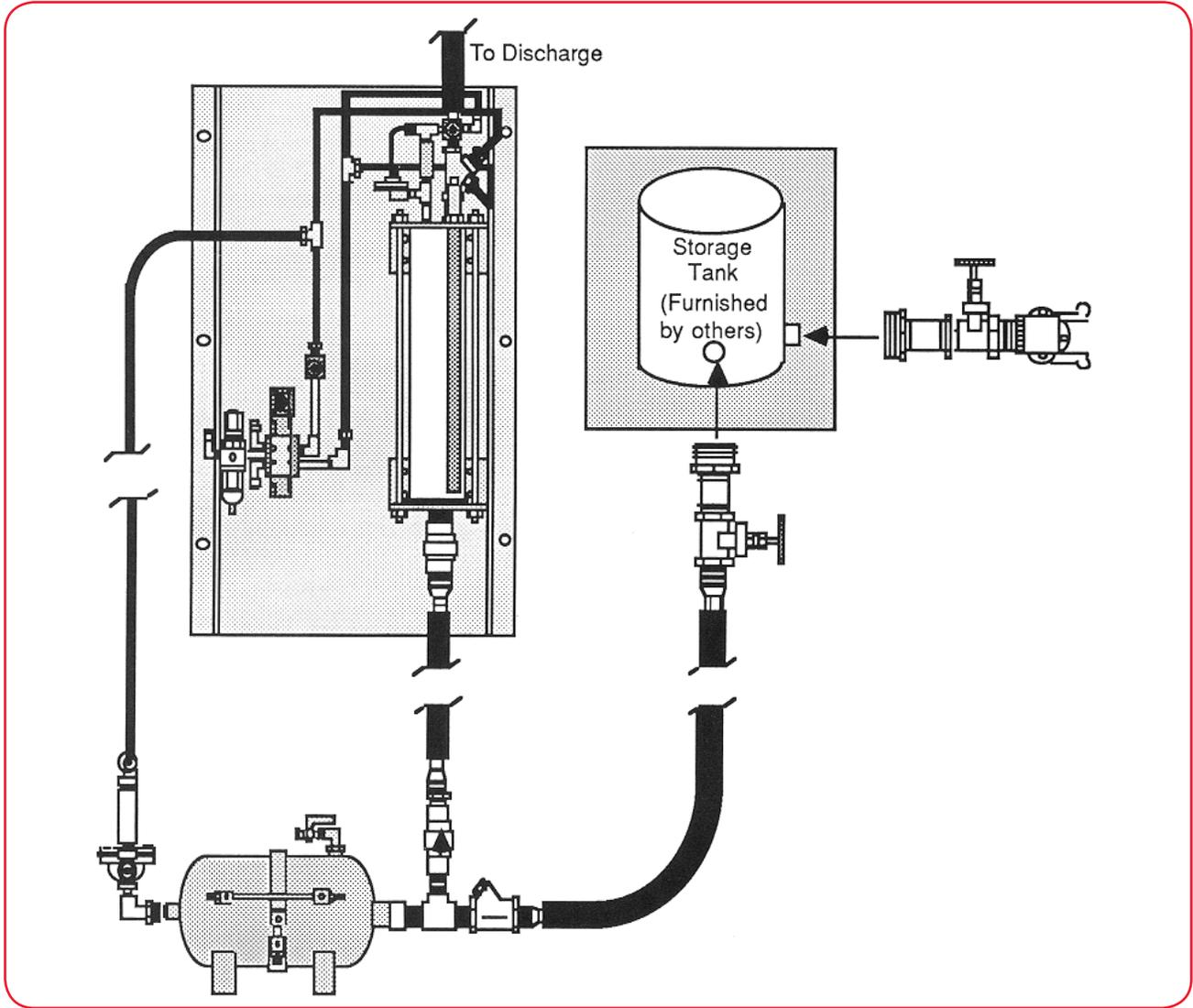




**Badger Meter**

# Admix Dispenser System

Three-Position Manual Control

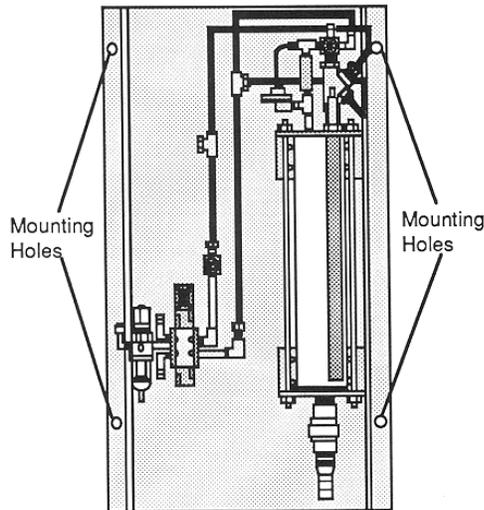


## INSTALLATION

### Mounting the Dispenser

Mount the dispenser 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" ply 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 to provide accurate readings of the measuring unit.

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



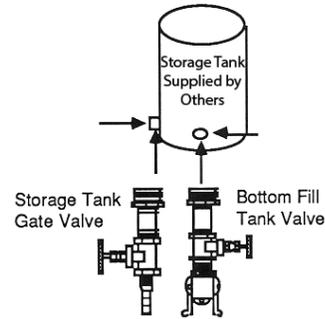
Use a minimum of 3/8" hex bolt and nut when mounting the dispenser to a metal or other bolt-through surface. Do not use lag bolts on plywood surfaces. If using lag bolts, a minimum of 1-5/8" thread bearing surface is required.

### Connecting the Pump Drum to the 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. Use a good quality Teflon® base pipe dope 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, WHICH MAY RESULT IN EXCESS PIPE DOPE ENTERING THE SYSTEM AND CAUSING BLOCKAGE OF VALVES OR OTHER FUNCTIONING COMPONENTS.**

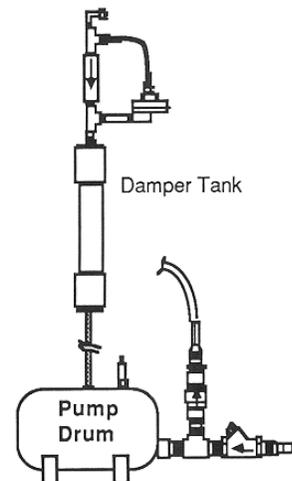


The 1" storage tank valve assembly should now be attached to the outlet port of the storage tank. The 1" bottom fill valve is used for the 120 ounce dispenser and air entraining admix only. This will prevent the mixing of air entraining admixes with other types of admixes. As with the bottom fill valve,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

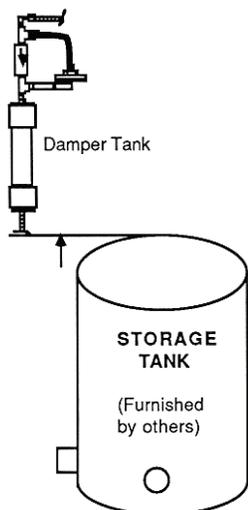
When both valves have been attached to the storage tank, be sure that the valves are in the CLOSED position to prevent any dirt from entering the storage tank before it has been filled. The CLOSED position will also prevent accidental dumping of the admix from the storage tank through the tank gate valve. 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 foot 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, attach the damper tank at this time. Using the 3 foot sections of stand pipe supplied with the pump drum assembly, attach the damper tank to the top of the pump drum.

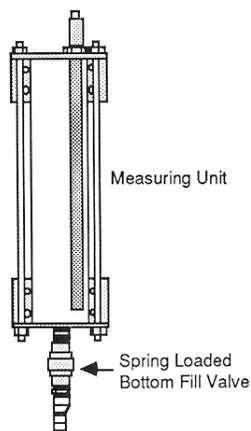


Mount the damper tank at a height that is higher than the top of the storage tank to prevent the admix from back flowing through the damper tank. Also, the damper tank should be supported to prevent it from tipping the pump drum over and spilling the admix.



### Connecting Pump Drum to the Measuring Unit

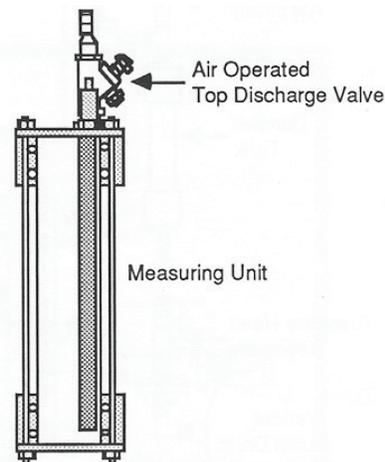
To connect the pump drum to the measuring unit, attach 3/4" or 1" rubber hose to the spring-loaded bottom fill valve on the pump drum to the bottom fill valve of the measuring unit. Use a 3/4" valve for the 120...600 ounce dispensers or a 1" valve for the 950...1900 ounce dispensers.



Black rubber hose in 3/4" and 1" sizes is available in multiples of 50 foot lengths from Badger Meter® for an additional cost.

### Connecting the Discharge Line to the Measuring Unit

The air-operated top discharge valve is attached to the measuring unit at the factory.

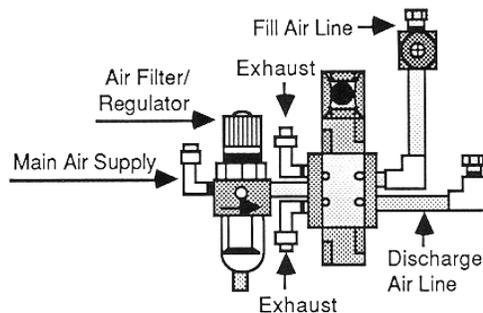


Using the clamps supplied with the dispenser, connect a 3/4" hose for 120...600 ounce dispensers or a 1" hose for the 950...1900 ounce dispensers to the hose fitting on the discharge valve. The hose should be long enough to reach the discharge point of the admix. Black rubber hose in 3/4" and 1" sizes is available in multiples of 50 foot lengths from Badger Meter for an additional cost.

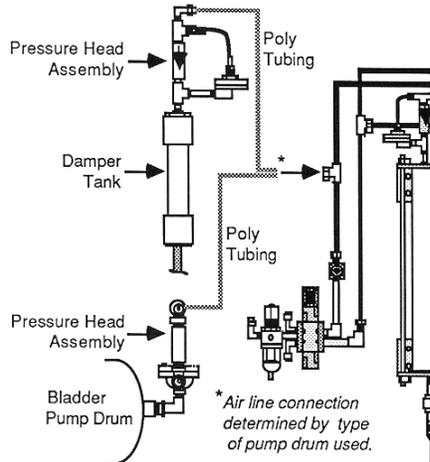
If the discharge line is connected to the water line, use a spring-loaded check valve in the discharge line to prevent water from entering the measuring unit.

### Air Line Connections

The dispenser air line connections have been made at the factory. Using 3/8" poly tubing (available in 100 foot lengths from Badger Meter for an additional cost) connect the main air supply to the filter/regulator mounted on the control valve. Set the filter/regulator to 60 psi.



To connect the air supply line to the pump drum, run a 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).



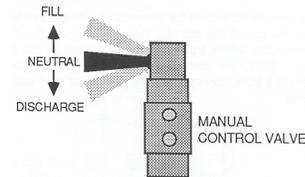
The air used to operate the dispenser cannot be lubricated air, which will coat the valves and measuring unit.

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 to 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.

## DISPENSER STARTUP

When the dispenser installation is complete, check for fluid or air leaks. Fill the dispenser with admix using the three-position manual control valve. The middle position is NEUTRAL, the up position is the FILL and the detent down position is DISCHARGE.



Hold the valve handle in the FILL 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 detent DISCHARGE position to discharge all of the admix from the measuring unit and the 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, adjust the zero point setting of the measuring unit by removing and repositioning (or replacing) the graduated measuring strip to correspond with the actual zero point.

## OPERATION

To operate the manual dispenser use the same procedure as described in "Dispenser Startup". Hold the control valve lever in the FILL 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 DISCHARGE position. The valve is a detent and will not return to the NEUTRAL position automatically. Keep the valve in the discharge position long enough to completely empty the measuring unit and all plumbing lines. However, do not leave the valve in the DISCHARGE position for an extended period. Doing so allows air to continuously flow through the system and deplete the air supply of your compressor.

## Control. Manage. Optimize.

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