



## Evaporative Cooling System Periodic Maintenance

### At Start-up

- Partially fill the Sump and Trough, and then drain the system to flush out any dirt that has accumulated.
- Set the initial water level 2" to 3" (51mm to 76mm) below the Mounting Screws in the back of the Sump (See Figure 1).

**Note:** The water level will rise 2" to 3" (51mm to 76mm) above the initial water level when the system shuts off after long periods of operation.

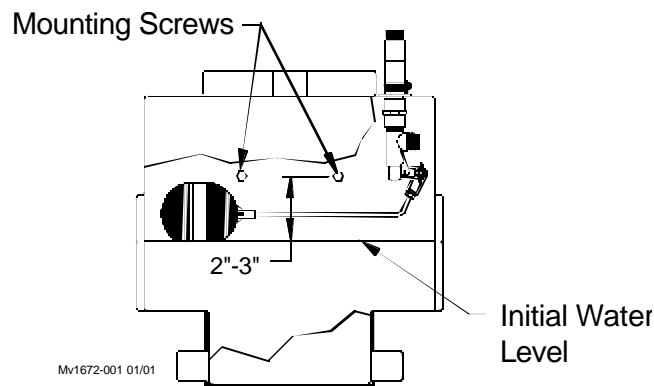


Figure 1. Initial Water Level

- Open the Ball Valve at the Sediment Trap end of the Distribution Pipe and turn on the Pump to flush the dirt out of the Distribution Pipe.
- Ensure that adequate incoming water is available during peak water demand. A rule of thumb is 1.9 gpm of water /100 ft.<sup>2</sup> (7.2 liters of water /9.3m<sup>2</sup>) of Pad. This rule is based upon the worst case conditions of 100 °F and 30% RH and an air velocity through the Pad of 425 fpm. See the Evaporative Cooling System manual for water requirements at other conditions.
- If possible, provide shade for your Pads to minimize algae growth.
- If bleed-off is being used to control the mineral concentration in the recirculating water, set the water flow rate from the bleed-off valve to .25 gpm of water /100 ft.<sup>2</sup> (1.1 liter of water /9.3m<sup>2</sup>) of Pad. An alternative to using bleed-off is to drain the system on a regular basis (**See Weekly**). Over time, adjust the bleed-off rate to prevent mineral deposits from building up on the face of the Pad. Increase the bleed-off rate when mineral deposits appear.
- To adjust the Water Flow, open the Ball Valve above the Pump as wide as possible without excess water splashing out of the system.

**Note:** During the first few days of operation while the Pads are being broken in, there will be more water splashing out of the Pads than there will be after the Pads are broken in.

### More on Other Side...

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## At Start-up Continued...

- At the beginning of each cooling season, check operation of the Pump, Float Valve, and Distribution Pipe prior to running the system.

### Daily

- Check that water is spraying from all the holes in the Distribution Pipe and spreading out evenly over the Deflector. If there are plugged holes in the Distribution Pipe, use a piece of wire to clean the hole, or push a Cleaning Brush through the inside of the Distribution Pipe to clean out the Pipe.
- Allow the Pads to dry out completely, at least once a day, to minimize algae growth.
- Flush the pads completely once a day if you are using a timer or pulse routine that doesn't call for complete Pad wetting.
- Adjust the Ventilation Control to minimize the number of wet/dry cycles of the Pad to increase Pad life.

### Weekly

- If bleed-off is not used, drain the water from the system completely to help remove the accumulated dirt and minerals in the water.
- Clean the Strainer to help maintain a proper supply of water to the Pads.
- Run a brush mounted to a PVC pipe through the distribution pipe to loosen any sediment and to clean out the holes in the pipe. With the Ball Valve at the Sediment Trap open, briefly run the Pump to flush the sediment out of the Distribution Pipe. Use a piece of wire to clean out any holes that may still be plugged.

### Monthly

- Gently brush and hose off the face of the Pads to remove any dirt or water deposits buildup.
- Drain and flush the system. This can be especially important in systems installed with Stand-Off Kits.

### General

- To winterize: completely drain the system, remove the Plug from the Sump, and remove the Pump and store it in an area that is not subject to freezing.
- Avoid contact with the Pad by contaminants such as dust, fertilizers, and harsh cleaners.
- The pH of the water being circulated through the system should be maintained between 6 and 9 to help extend the life of the Pads.