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### **Water Chemistry**

Water chemistry is the way in which you can tell if the proper levels of sanitizers are present, making it safe to interact with. Water chemistry can be very overwhelming --- but don't be confused or intimidated! Water Chemistry is easy. Simple chlorine test strips will making testing your water chemistry fast and easy. If you do not have test strips or are out, they can be purchased at your local pool supply store. Due to the storage tank in the ground, it is not in direct contact with the suns rays and other debris that interact harshly with the chemistry of your water. It is important to test your water weekly. With weekly testing and proper chemicals being kept up to par, you can insure the safe play of your new splash pad.



### **Pump**

Your pump motor is your systems heart. It is what pumps the water from the tank and through the filter then to your individual nozzles. Without the pump, your splash pad will not function. Fortunately, it does not require a lot of maintenance by the splash pad owner. Just make sure the pumps strainer basket is free from debris and that the lid is tightly secured. A leaky pump lid can allow air into your system causing it to lose prime.

Check the O-ring periodically and make sure it's properly lubricated so that it makes a tight seal. Also, look for leaks around the pump just to make sure it's working properly. If you see any leaks or feel your pump is not operating properly, please contact us immediately.

#### **Filter**

Your splash pad may use a cartridge filter or a sand filter. As the water passes through the filter, either a mesh material in the cartridges or sand in the sand filter traps the waste material. To clean the cartridge filter, simply remove the cartridges and hose them off removing the waste. The cartridges should be cleaned every 2 to 3 weeks or more often as needed. Please follow the manufactures specifications. To clean the sand filter, please follow the manufactures specifications and recommendations for backwashing.





#### **General Maintenance Check List**

- Check nozzles for any debris or adjustment issues (use nozzle tool).
- Check features for loose bolts or missing parts.
- Check sump drains for debris.
- Check tank auto fill float for proper function.
- Check tank for debris.
- Check pump baskets for debris.
- Check all pumps and fittings for leaks.
- Backwash filter or clean cartridge according to manufacturer's specifications.
- Check pump base bolts and tighten accordingly.
- Inspect suction line check valves for debris. This is located inside of holding tank.
- Check chemical feeders for leaks and levels in tanks.
- Check water chemistry by checking the available chlorine levels in the water and adjusting properly. This should be done with a chemical test kit like that of a swimming pool test kit.



### **Daily:**

- Run your splash pad at least 1 hour per day to circulate, filter and chlorinate the water. Local health code requirements may require additional recirculation time and you should adhere to their requirements.
- Check water chemistry daily making sure your levels of chlorine are within the proper limits.
- Follow all the recommended testing procedures with the test kit you purchase.
- Visually check the nozzles to make sure all are operating normal. Nozzles should be clear of all debris.

### Monthly:

- Backwash filter or clean filter cartridge. Follow manufacturer's specs.
- Check the chlorine levels in the chlorinator. Add tablets as needed.
- Check the auto fill line in tank to make sure it is operating at full capacity. If necessary, remove the auto fill out and inspect for debris in water line.
- Check water quality in tank. Clean water by filtering out water from filter and adding fresh water to maintain cleanliness.
- Check and clean the drain sumps on splash pad for debris caught in the bottom of the basins and baskets.



### **Spring Start Up**

#### **SPLASH PAD PREPARATION**

- 1. Clean splash pad from any dirt or other debris.
- 2. Clean out black drain sump boxes and drain baskets from debris.
- 3. Remove winterizing nozzles.
- 4. Check all features for loose or damaged parts.
- 5. Install features and nozzles.
- 6. Turn on water to tank auto fill. Allow tank to fill till float valve turns off. Check for leaks.
- 7. Locate and lube the o-ring that is around the underside of the clear top piece of the check valve. Put clear check valve lid with o-ring back into check valve body in the tank. Do not over tighten. Make sure the arrow indicating direction of flow is pointing in the same direction as the arrow on the pipe. The arrow of flow is critical for proper pump operation.
- 8. Make sure the ball valves to the features that are in the open position.

### **EQUIPMENT PREPARATION**

- 1. If equipped, tighten up all pump unions from winterizing.
- 2. Fill both pump baskets with water until they are completely full.
- 3. Turn on pump/timer breakers at main panel.
- 4. If equipped, set mechanical time clocks to operating hours. Set Filter pump timer to turn on 1-2 hrs earlier than feature pump and 1-2 hrs after feature pump turns off.
- 5. Turn on filter pump switch and prime. Check for leaks. Let run for a full day before running the splash pad feature pump. Clean filter on second day before running feature pump.
- 6. Make sure the Rain Deck controller has been plugged into the Rain Deck timer box's gfci outlet (grey box).
- 7. Turn on feature pump to prime by touching the foot activator on splash pad.
  Remember that to activate, you must touch it with your bare foot or bare hand. If
  equipped with a mechanical time clock, make sure operating hours on main timer is
  set and foot activator is activated within those preset hours
- 8. Adjust water feature heights by adjusting black 3way valve on return line of feature pump. You may also want to adjust the features independently by adjusting the ball valves connected to the solenoid manifold.
- 9. Enjoy your splash pad.



### Winterizing

### Steps for inside pump room

- 1. Turn off the water to the fresh water feed line that provides water to the tank.
- 2. Turn white valve located in front of sand filter to the backwash position.
- 3. Turn Filter pump on and allow the filter to back wash the water to just at half way. This is very important: The tank should NEVER be below half full at any time to ensure the tank does not float from pressure of ground water.
- 4. The tank water should NEVER be below half full.
- 5. Locate the  $\frac{1}{4}$ " plug under the feature pump and unscrew it and attach a  $\frac{1}{4}$ " quick disconnect for the air compressor hook up.

### Steps for splash pad surface

- 1. Remove all ground spray nozzles with nozzle tool.
- 2. Remove all the above ground features if applicable, and prepare them for winter storage.
- 3. Open up all solenoid valves manually to blow out. Set the air compressor to 40 psi.
- 4. Open up one solenoid located at the landscape box or wall mounted next to the splash pad. Proceed to blow out that line with up to 40 psi. Repeat for all the lines. Make sure to go back to each ball valve and solenoid valve at least 2 times. This will ensure all the lines are blown out. Keep the ball valves in a open position.
- 5. Remove the clear check valve lids at suction lines of all pumps by removing all the screws and carefully removing clear lid and o-ring. Make sure to remove each screw carefully as to not to drop into the tank.
- 6. Allow suction lines to tank to drain of all water.
- 7. Check with all manufacturers specifications.



### **Contact Information**

Please contact Rain Deck anytime for support! We are available to help in any way we can!

Email: info@raindeck.com Web: www.raindeck.com

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