

Water Treatment System Spring Start-Up Check List

For detailed instructions on maintaining and starting up your Waterplay Water Treatment System (WTS), please refer to the Operations & Maintenance Manual. Your park's Owner's Manual will also have information on spring start-up. An inspection of the park and WTS system should be completed prior to spring start-up so that repairs can be completed and replacement parts or nozzles ordered.

INSPECTION INFORMATION

Facility Name

Inspection by

Date

RECOMMENDED TOOLS AND SUPPLIES

- Park manuals
- Security tools
- Fasteners
- Wrenches / pliers / screwdrivers
- Nozzle removal tools
- Display nozzles
- Lubricant (vaseline)
- Ladder
- Cleaning solution

•••-

HOLDING TANK

Inspect the interior of the tank for damage that might have occurred over the shutdown period.

Inspect the tank for cleanliness and clean if required.

If RV anti-freeze (propylene glycol) was used in the tank, dispose of it according to local codes. DO NOT PUT IT THROUGH THE SAND FILTER.

Refill tank with clean potable water.

•••-

CONTROLLERS

Inspect inside controllers to ensure there has not been any accumulation of moisture.

Inspect controllers for any loose or damaged wires.

Turn power supply on to E-Series, WTS, Chemical Controller and UV controllers.

Set time and date on E-Series controller ~ see manual for assistance.

Check hours of operation.

CHEMICAL CONTROL SYSTEM

Always wear appropriate personal protective equipment before working with chemicals. Review the MSDS for the chemicals for more information.

Add sodium hypochlorite (chlorine) and diluted muriatic acid to the correct storage tanks. Muriatic can be used full strength or diluted with water up to 1:4, practice safe operating procedures when mixing muriatic acid with water.

Muriatic acid and sodium hypochlorite will form toxic chlorine gas when mixed. Use caution when handling.

Retrieve the ORP and pH probes from storage and reinstall them into the sample cell and connect to chemical controller. The probes should have been stored in a saline solution and should not have dried out. If the probes are dry, they may need to be replaced. Once spring start-up is complete and the WTS is operational, the pH probe will need to be calibrated.

The peristaltic chemical feed pumps should be shut off until there is consistent water flow through the sample cell. The feed pumps can be turned on at this time and adjusting the water chemistry in the holding tank can begin.

Best Practices: When handling chemicals, always use extreme caution. Never mix chemicals and always ensure you are working in a well ventilated area. Muriatic Acid is an alternative name to hydrochloric acid, also known as spirits of salt. The chemical formula for muriatic acid is HCI—it has many common home and commercial uses in addition to controlling PH levels in aquatic environments.

- • •

MANIFOLD

Ensure the proper values on the manifold are opened to allow flow to the bypass or components.

Retighten all unions and inspect the manifold for cracks or damage.

Readjust the pressure setting on the Pressure Sustaining Valve on the bypass line if installed on your WTS and if required. The pressure setting will depend on the WTS and park spray components but 30-40 psi is typical.

•••-

SAND FILTERS

Replace the drain plug.

Inspect the interior of the filters and note the condition of the sand and distribution arms.

If there are low spots in the sand, the laterals may be damaged. The sand should be removed and the laterals inspected.

Position the multi-port valve to "backwash" and backwash the sand filters once the filter pump checks have been completed.

Open air bleeder valves to release the air pressure.

- • • -

FILTER PUMP

Replace drain plugs in the pump and strainer basket.

Ensure all unions are tight and inspect all line and fittings for cracks or damage.

Fill strainer basket with water.

Start pump and allow to prime. Review pump manufactures process.

Once chemical probes have stabilized to the water, use the chemical controller to add chemicals to achieve desired water quality.

UV SYSTEM

Note: UV maintenance should be completed by an authorized technician to maintain product warranty.

Retrieve the drain plugs and replace them on the bottom of the radiation chamber.

Once the system is in operation, check that the fan is running correctly and record the lamp currents. The UV Probe and Wiper may need to be calibrated.

- • •

FEATURE PUMP

Replace drain plugs in pump and strainer basket.

Fill strainer basket with water.

Start pump and allow to prime. Review pump manufactures process.

Once pump has primed use the E-Series controller to test each valve to flush out any dirt that may be in the line and check that the line does not leak. Prior to flushing, all nozzles should be removed so debris will be flushed from the lines. All blank nozzles installed for winterization should be replaced with the proper spray nozzles for the component.