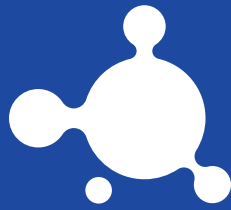


**ABRIO™
Operation
Manual**



VORTEX

- **Start-Up**
- **Winterization**
- **Maintenance**
- **Mobile App**

Abrio™ Operations & Maintenance Manual

Version 1 July 2024

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The background features a pattern of overlapping, wavy bands in two shades of blue (a darker navy blue and a lighter sky blue) on a white background. A prominent, rounded rectangular shape in a vibrant pink color is positioned horizontally across the middle of the image. The text 'Start-Up' is centered within this pink shape in a white, sans-serif font.

Start-Up

START-UP WET COMPONENTS (CONTINUATION)

To prevent slips and falls, **ensure proper drainage** and meticulous maintenance of surfaces in wet areas throughout the facility.

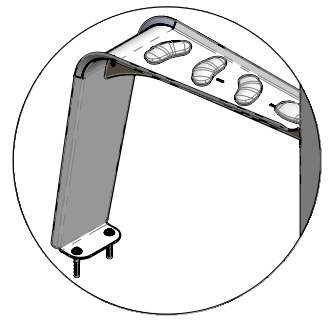
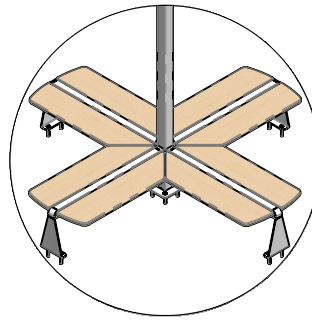
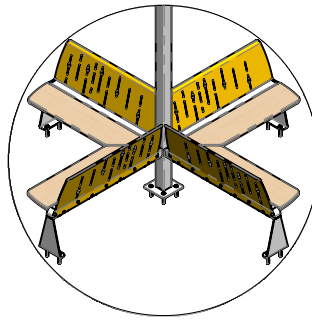
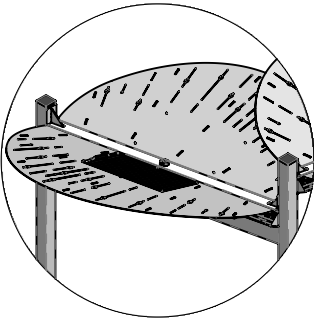
Inspect structural parts for damage.

START-UP WINTERIZATION DRY COMPONENTS

Check for any damage.

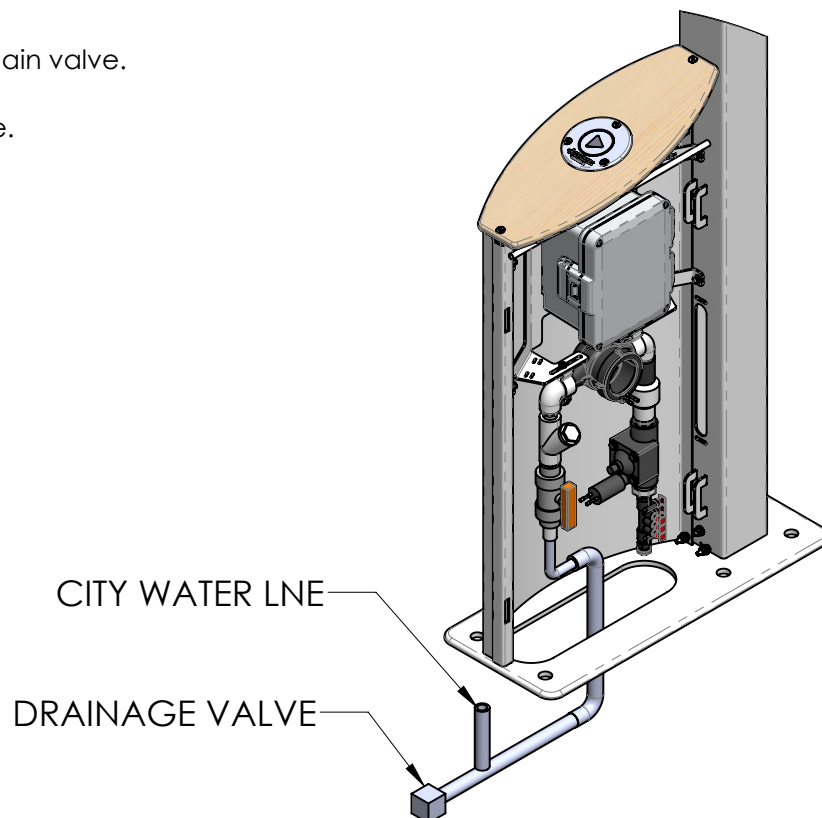
Inspect for any loose hardware and tighten as needed.

Clean LED casings and panels. Lighting can be functional all year round.



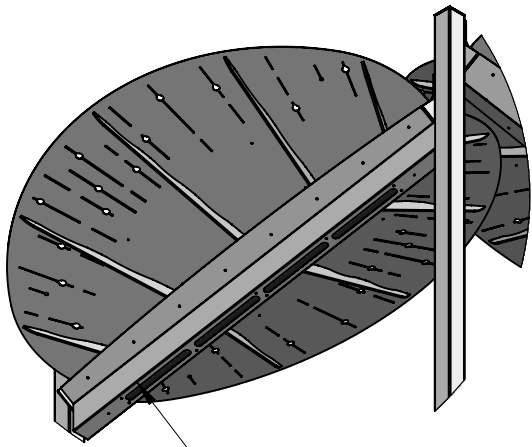
START-UP WET COMPONENTS

1. Open City water.
2. Open Abrio system main valve.
3. Close Drainage Valve.

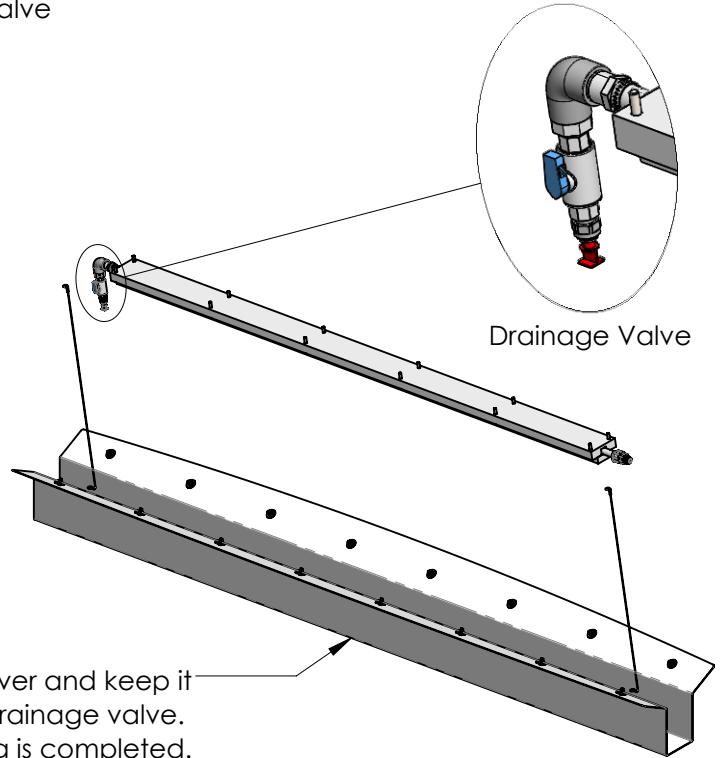


START-UP WET COMPONENTS (CONTINUATION)

Soft Rain water feature (*): Close the drainage valve



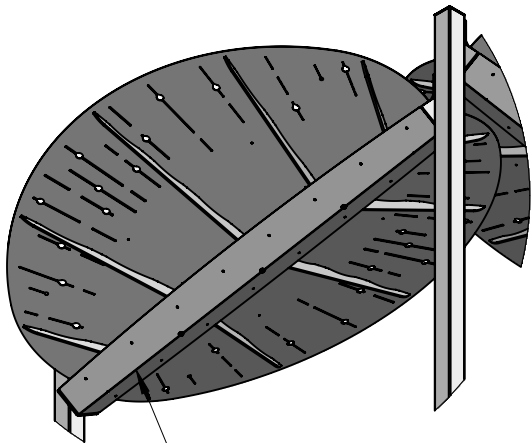
Soft Rain feature and cover



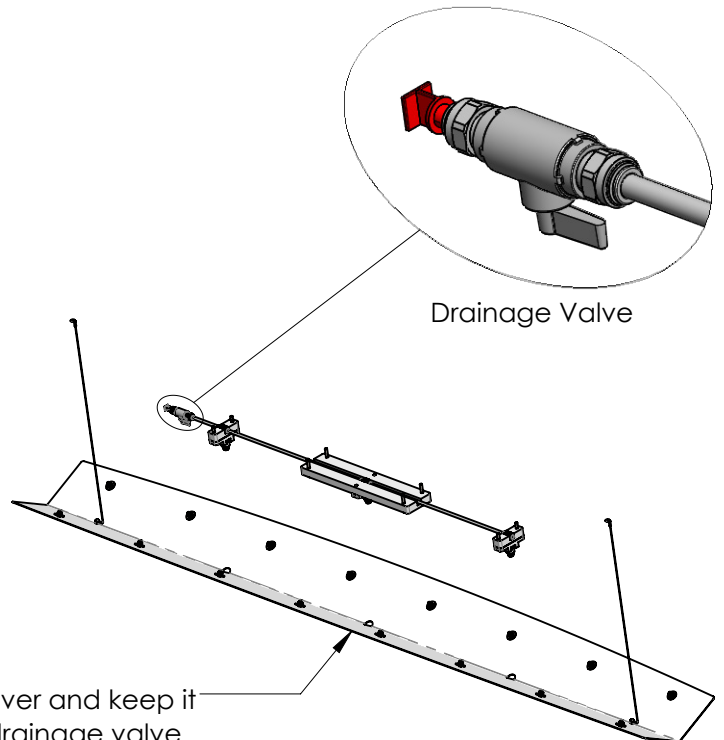
Drainage Valve

Remove the Soft Rain cover and keep it suspended using the cables to access the drainage valve. Replace the cover once testing is completed.

Mist water feature (*): Close the drainage valve



Mist feature and cover

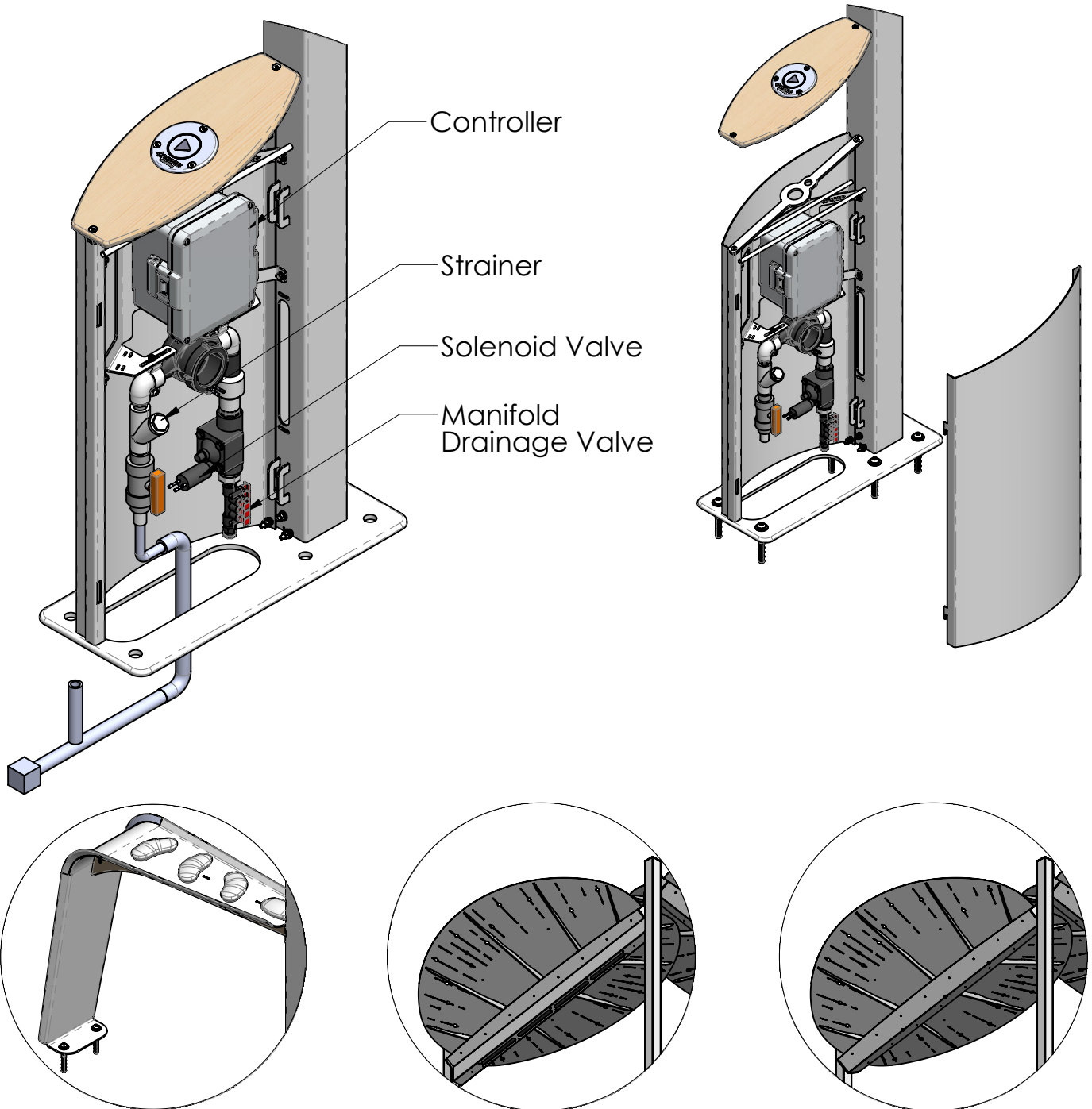


Drainage Valve

Remove the Mist cover and keep it suspended using the cables to access the drainage valve. Replace the cover once testing is completed.

START-UP WET COMPONENTS (CONTINUATION)

1. Open the WMS by unscrewing the top activator plate and then removing the side casing panel.
2. Download the controller ABRIO app (link)
3. Turn on the water function in the controller. (**)
4. Close the manifold drainage valve.
5. Open the main valve on the WMS.
6. Open the solenoid on the WMS using the app.
7. Test the wet feature. In case of malfunction, refer to the maintenance index.
8. Put back covers on water features (*), once testing is completed.
9. Close the WMS by replacing the side casing and then the top activator panel.



The background features a pattern of overlapping, wavy, ribbon-like shapes in two shades of blue (a darker navy blue and a lighter sky blue) against a white background. A prominent, rounded rectangular shape in a vibrant pink color is centered horizontally, serving as a backdrop for the text.

Winterization

WINTERIZATION WET COMPONENTS (CONTINUATION)

Drain the main water line and close the water valve.

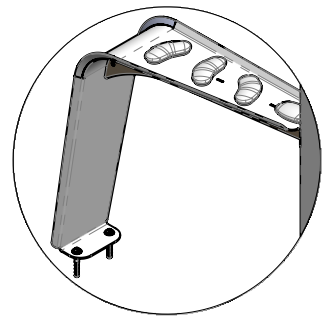
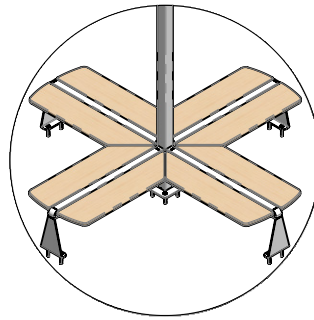
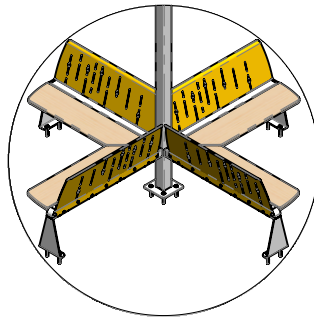
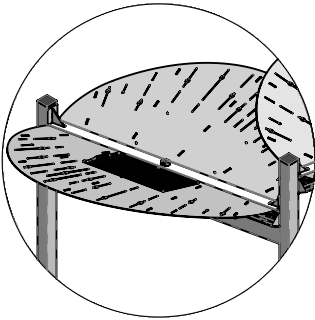
Turn off the water function in the controller using the ABRIO app.

WINTERIZATION DRY COMPONENTS

Check for any damage.

Inspect for any loose hardware and tighten as needed.

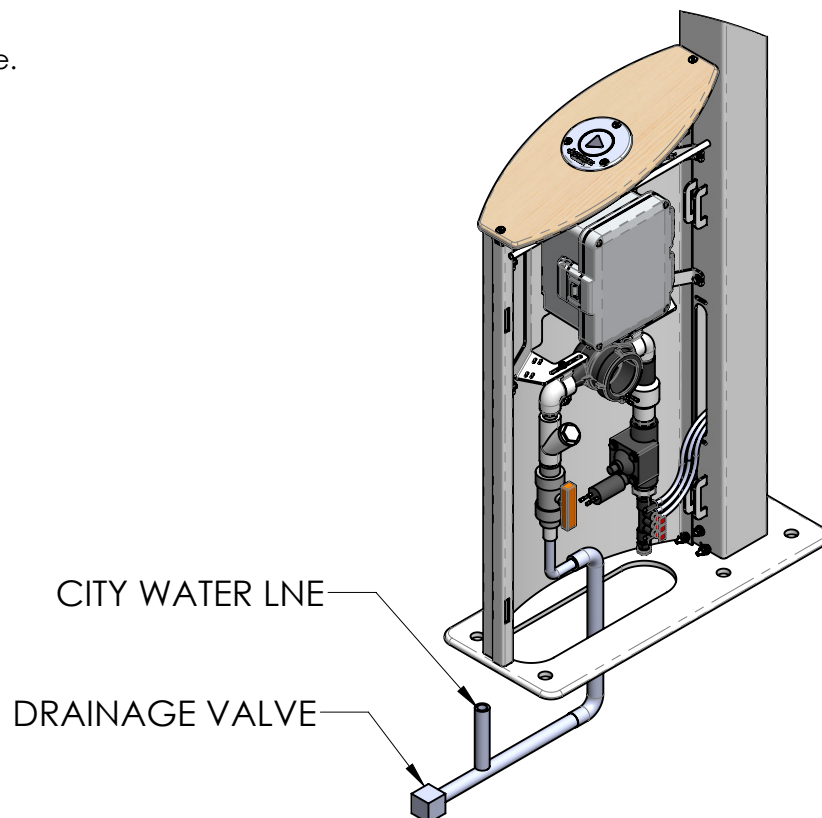
Clean LED casings and panels. Lighting can be functional all year round.



WINTERIZATION WET COMPONENTS

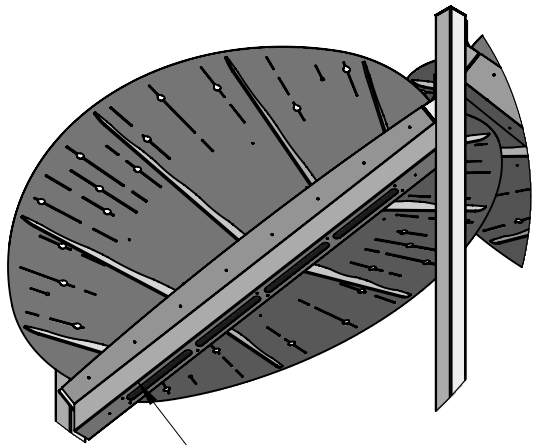
1. Close City water.

2. Open Drainage Valve.

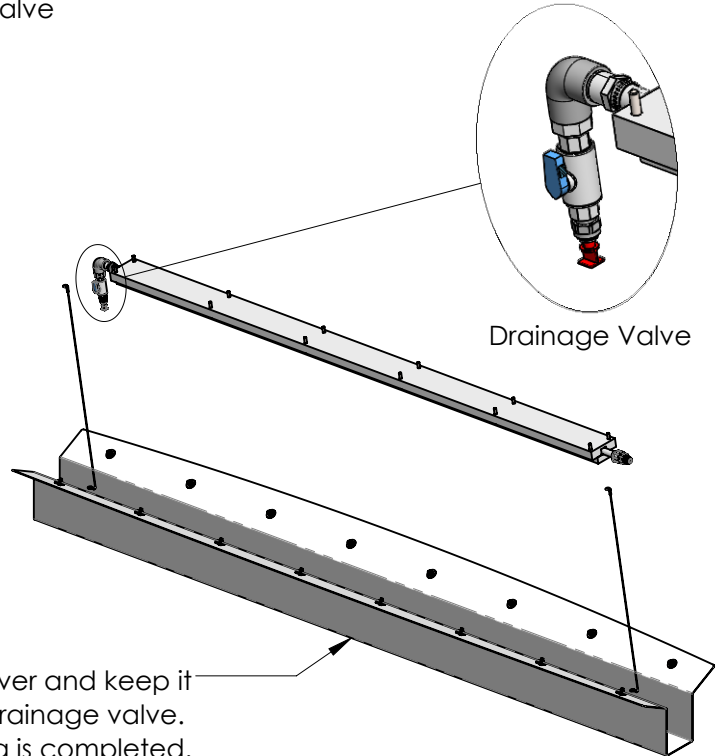


WINTERIZATION WET COMPONENTS (CONTINUATION)

- Soft Rain water feature (*): Open the drainage valve



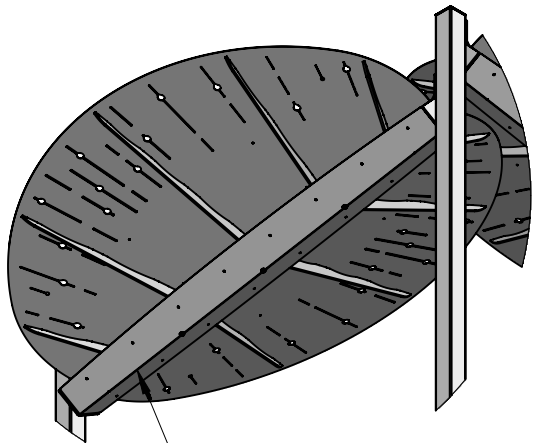
Soft Rain feature and cover



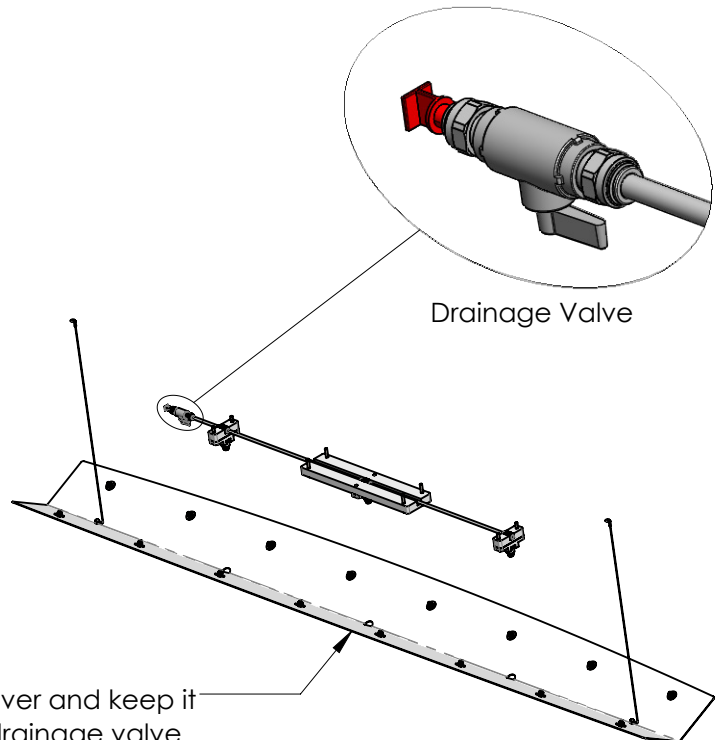
Drainage Valve

Remove the Soft Rain cover and keep it suspended using the cables to access the drainage valve. Replace the cover once testing is completed.

- Mist water feature (*): Open the drainage valve



Mist feature and cover

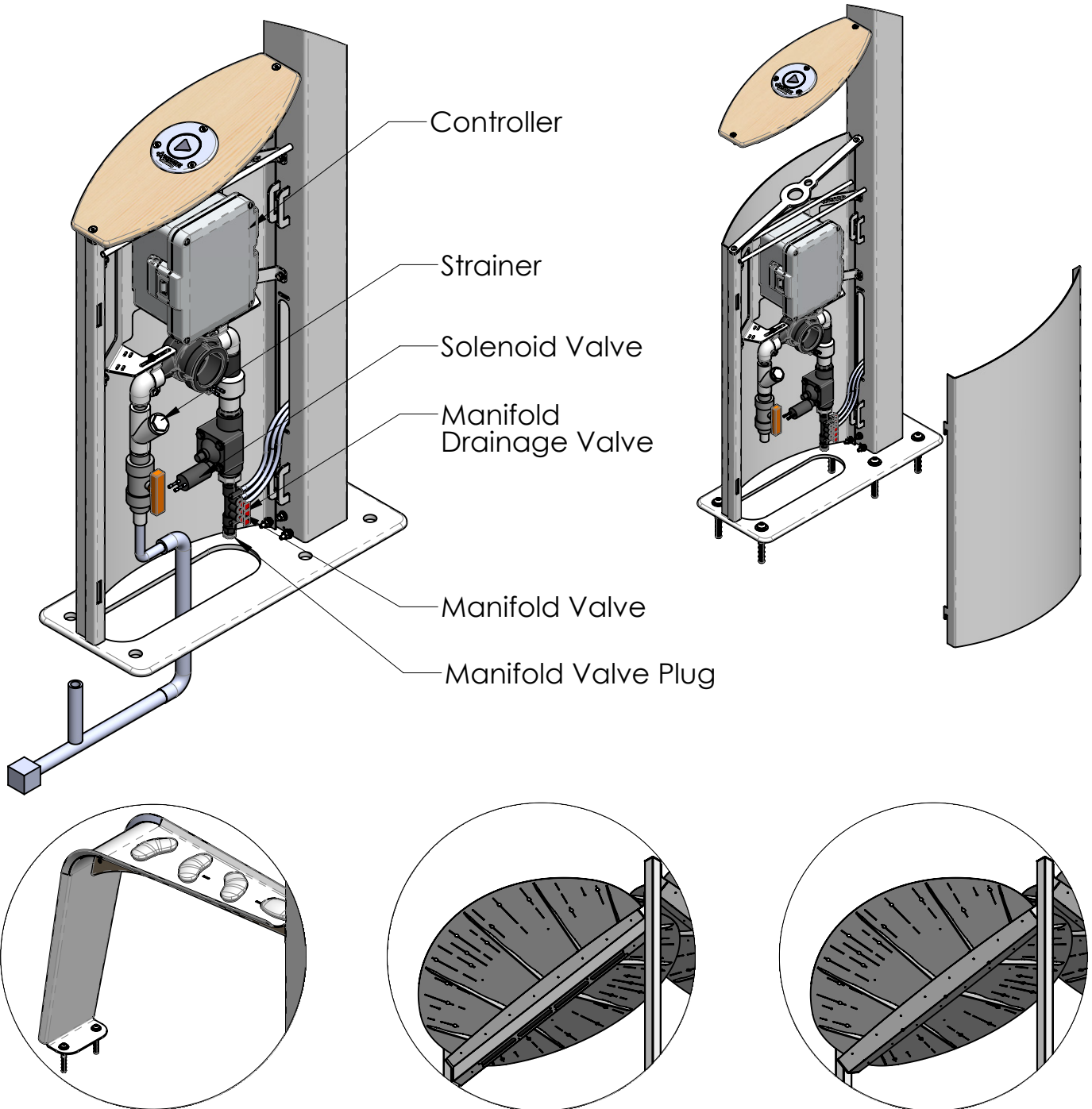


Drainage Valve

Remove the Mist cover and keep it suspended using the cables to access the drainage valve. Replace the cover once testing is completed.

WINTERIZATION WET COMPONENTS (CONTINUATION)

1. Open the WMS by unscrewing the top activator plate and then removing the side casing panel.
2. Turn off the water function in the controller. (**)
3. Open drainage valve.
4. Empty and clean Strainer mesh.
5. Remove drainage valve plug and apply 40-50 PSI of pressurized air, to expel water from the tubes and compensate nozzle. Once completed put back plug.
6. Close Solenoid on WMS with App. (**)
7. Put back covers on water features. (*)
8. Close the WMS by replacing the side casing panel, then screwing the top activator panel.



(*) Depending on your options specified during purchase (**) See Mobile App Index

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Maintenance

MAINTENANCE CHECKLIST

MAINTENANCE ITEMS (Daily)

- Quick visual inspection before opening
- Clear area of all debris

MAINTENANCE ITEMS (Weekly)

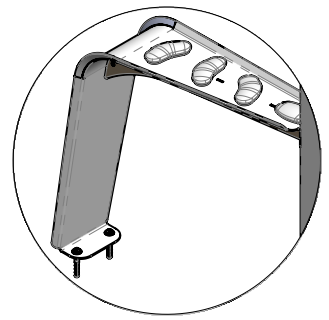
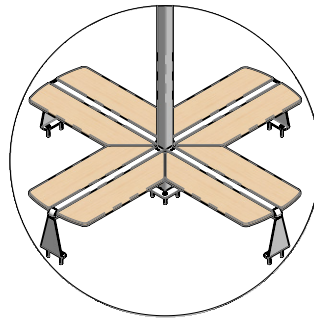
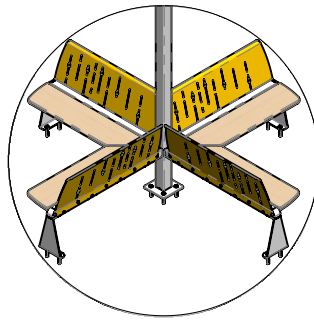
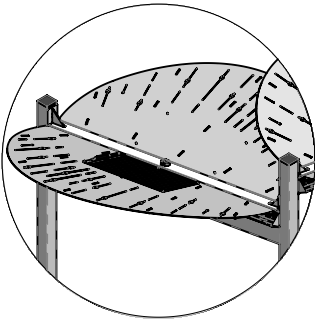
- Clear area of debris.
- Ensure proper water.
- Verify all product for loose or missing hardware.
- Look for cracked or broken plastics.
- Clean spray nozzles if blocked.
- Check WMS Strainer and clean if necessary.
- Check for chipped paint or stains.

MANAGEMENT GENERAL

- Clean the surface of all visible debris.
- Make sure that no plastic panels are cracked.
- Inspect structural parts for damage.
- Check status of valves.
- Ensure no water loss or leaks at drainage valves.
- Check for loose hardware.

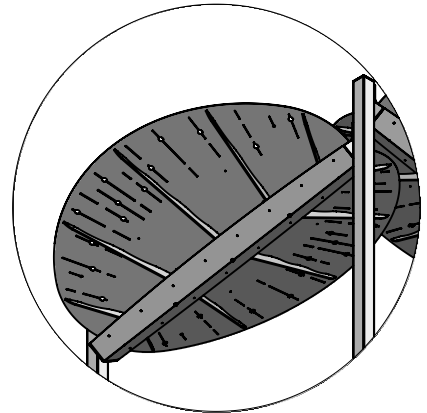
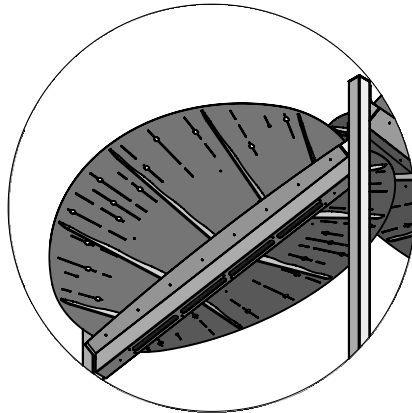
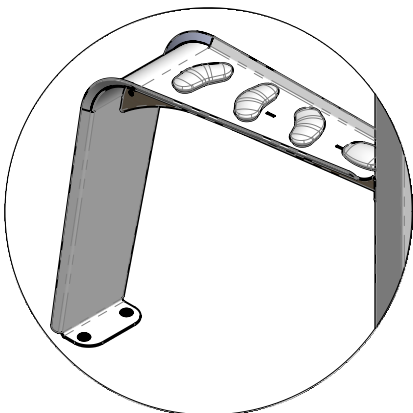
MANAGEMENT DRY COMPONENTS

- Check for chipped paint or stains.
- Tight hardware if necessary. See for anchoring and assembly hardware.
- Clean LED casings and panels. Lighting can be functional all year round.



MANAGEMENT WET COMPONENTS

- Mist (*), Soft Rain (*), and River Maze (*) may require seasonal cleaning with an acidic solution if necessary.
- Mist (*), nozzles could need more attention in hard water areas. Clean or change nozzles if blocked close main valve on WMS and remove nozzles for cleaning. Use acidic solution clean-up.
- If Soft Rain (*) and River Maze * shows different issues call VORTEX C.S. for evaluation.



WINTERIZATION WET COMPONENTS (CONTINUATION)

APPLICABLE ONLY ON MIST

- Close WMS Main Valve.
- Unscrew with a 9/16" ratchet extension.
- Soak the nozzle in an acid solution.
- Rinse with water before reinstallation.

