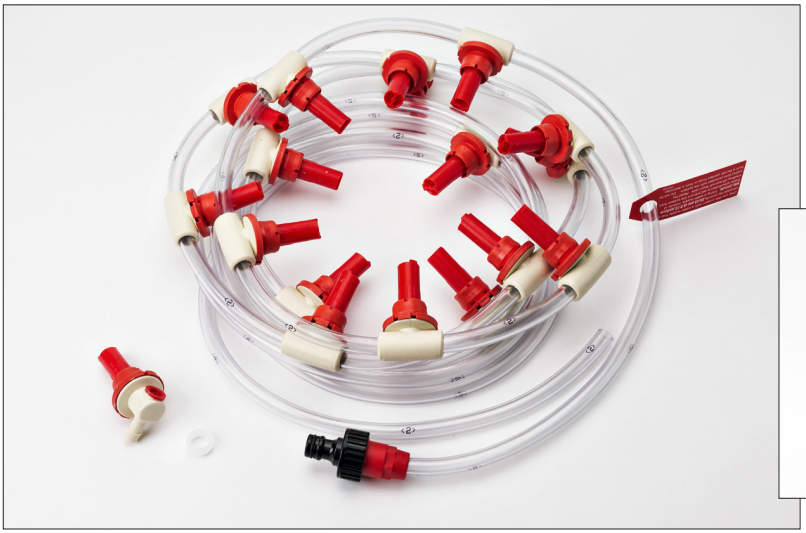
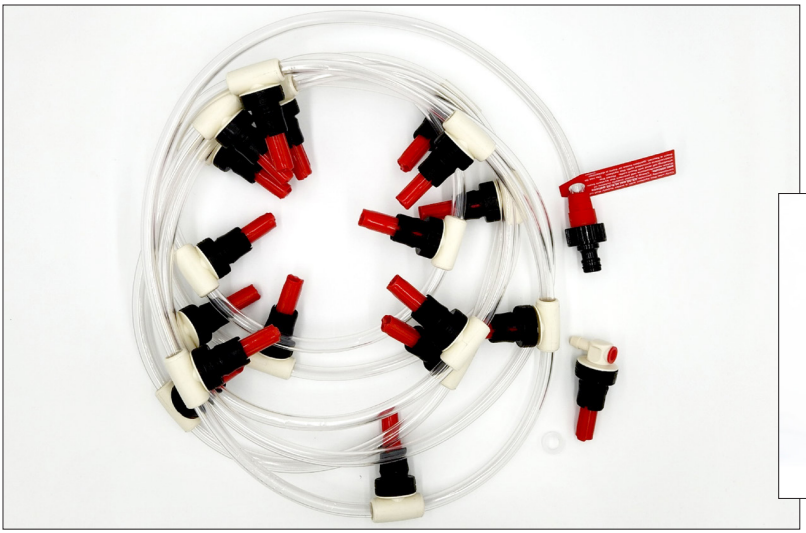
Philadelphia Scientific®
industrial battery innovation





Semi-Assembled Water Injector Classic System™
with Push-Fit Adapters





Semi-Assembled Water Injector Classic System™
with Flame-Arrestor Adapters

HEALTH AND SAFETY PRECAUTIONS

Batteries contain sulphuric acid, always wear approved protective clothing (gloves, goggles and apron).

Installation

1. Remove the vent caps. When this battery is eventually scrapped, it must be returned with these old vent caps; have your Water Injector System reconditioned for reuse.

2. Insert the Water Injector Valves into the vent oper the preferred layout for your battery as depicted i instructions. To install the valves into each cell si on the top of each valve. No separate adapter is the tubing to allow gentle bends of tubing betwee Injector. Do not run tubing in a straight line with



3. After all of the Injector Valves are installed, use marker to mark the tubing on each side of each

4. Slide the tubing out of the Injector to reveal the t Using the Water Injector Tubing Punch (INJ-311), centered between the two marks. Tolerance is ±3/ center. Punch only once, which will make two holes in the tubing. **Note:** This is a heavy duty punch.



5. Center the Water Injector over the newly punched between the black marks. **Warning- Failure to pu align holes with the Injectors will prevent the from properly watering cells.**



6. Insert the Terminating Injector (packed separately) by pressing it into the last vent opening. Trim the tubing long enough to totally cover the barbed end of the Terminating Injector. Install the collar onto the tubing. Push the tubing completely over the barb and groove. Slide the collar over the barb using a Collar Instalation Tool (INJ-601).

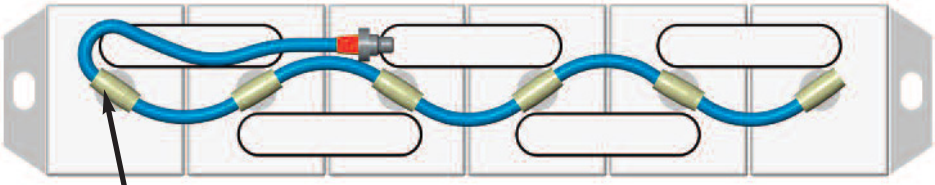
7. To prevent the tubing from moving during use, wrap six turns of installation tape (INJ-202) around the tubing, directly behind the first Water Injector. **Note:** Do not use electrical tape as it unwraps and will deteriorate over time. Tuck the Quick-Connect Input Coupling on top of the battery.



Recommended Layouts

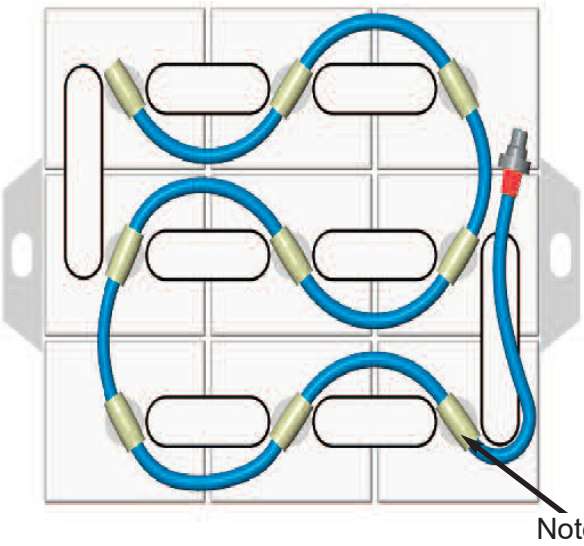
Tubing can run either over or under cables depending on clearances. If battery has raised vent wells, tubing can be routed over the intercell connectors, maintaining some slack between Injectors. Be sure all cables are tied down with cable ties to prevent system damage.

6-cell Batteries



6-cell Single Pos

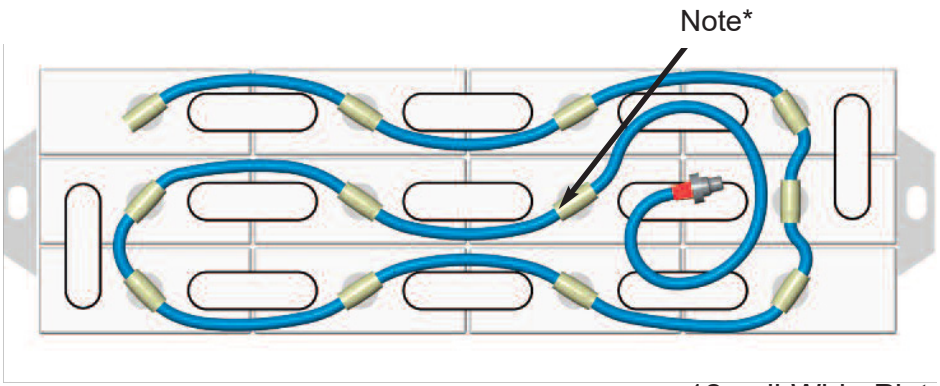
9-cell Batteries



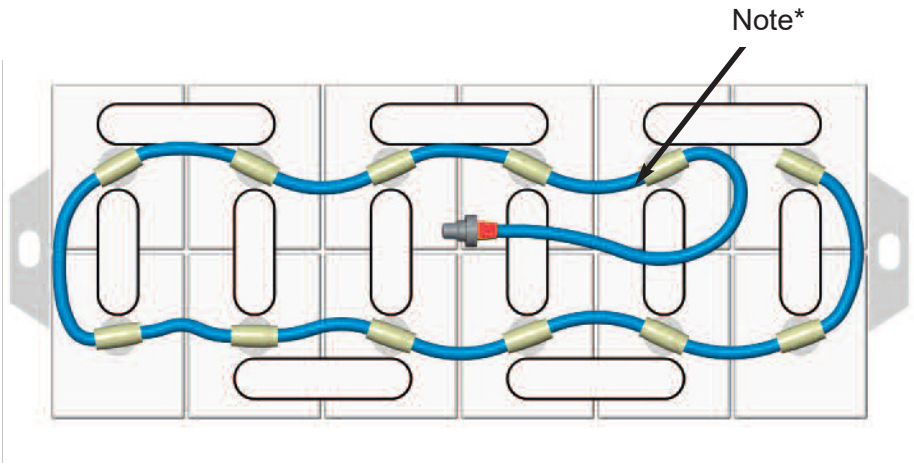
9-cell Single Pos

***Note:** The tubing between the 1st Water Injector in the layout and the Input Assembly should only be long enough to allow the operator to water the battery. It should not be so long that the Input Assembly would hang over the side of the battery or exceed 24 inches. Philadelphia Scientific recommends at minimum 6 wraps of installation tape behind the 1st Water Injector for strain relief.

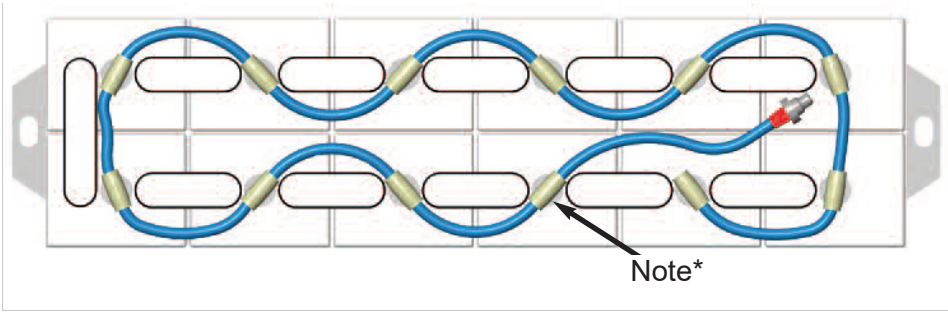
12-cell Batteries



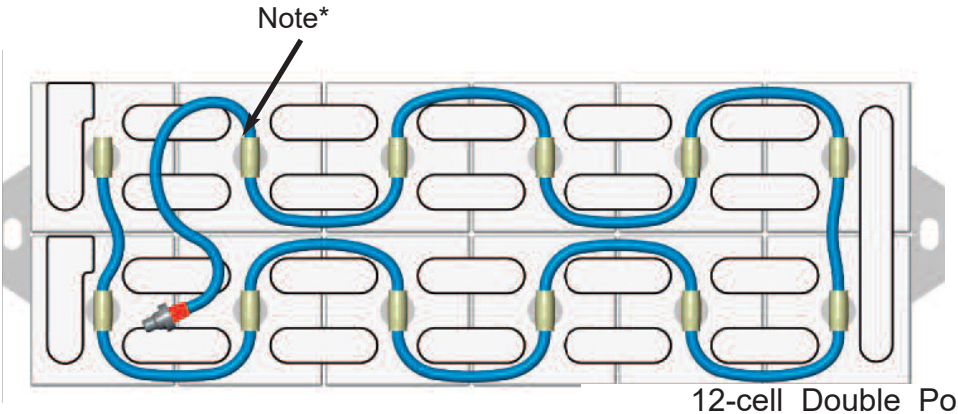
12-cell Wide Plate



12-cell Single Post

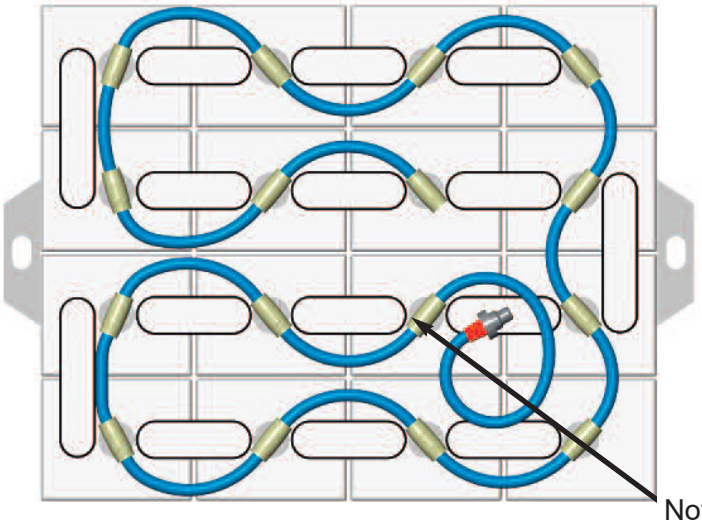


12-cell Single Post



12-cell Double Post

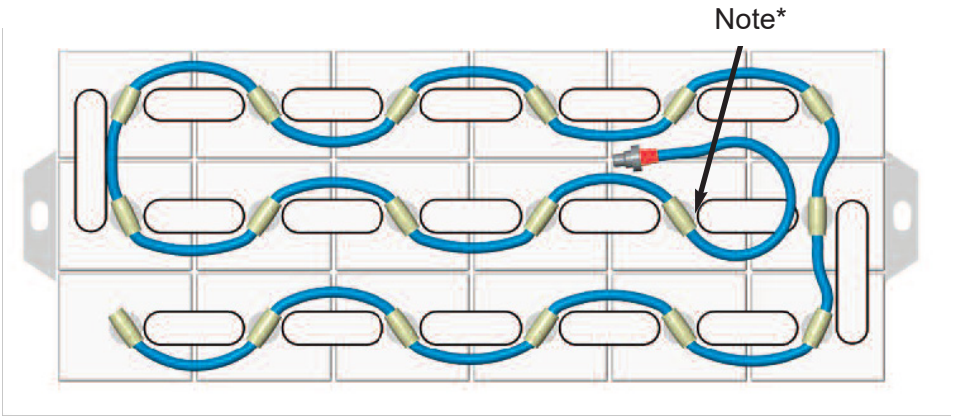
16-cell Batteries



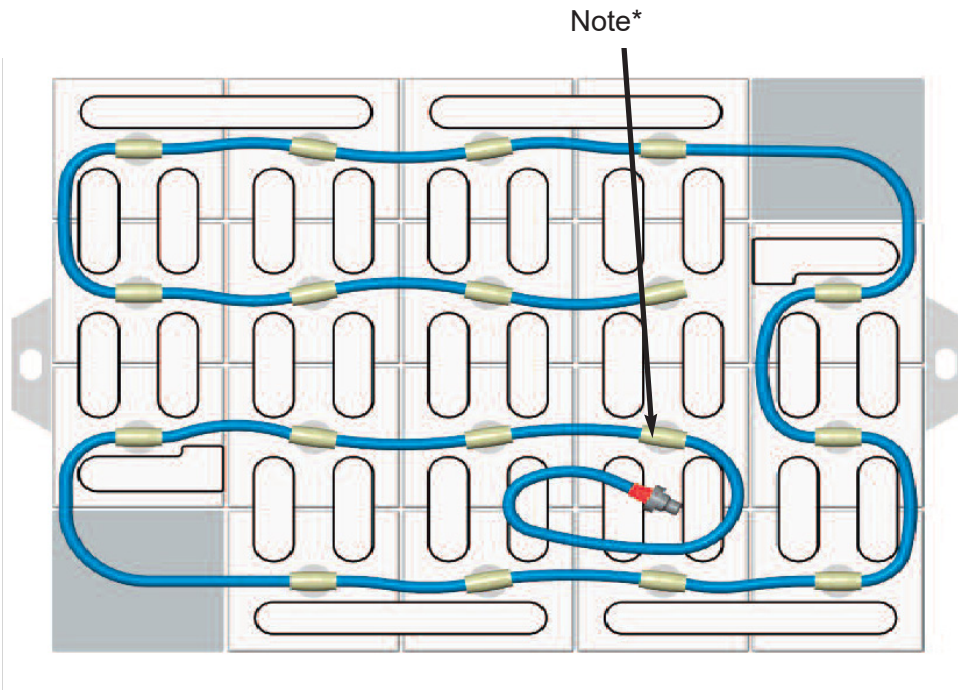
16-cell Single Post

***Note:** The tubing between the 1st Water Injector in the layout and the Input Assembly should only be long enough to allow the operator to water the battery. It should not be so long that the Input Assembly would hang over the side of the battery or exceed 24 inches. Philadelphia Scientific recommends at minimum 6 wraps of installation tape behind the 1st Water Injector for strain relief.

18-cell Batteries

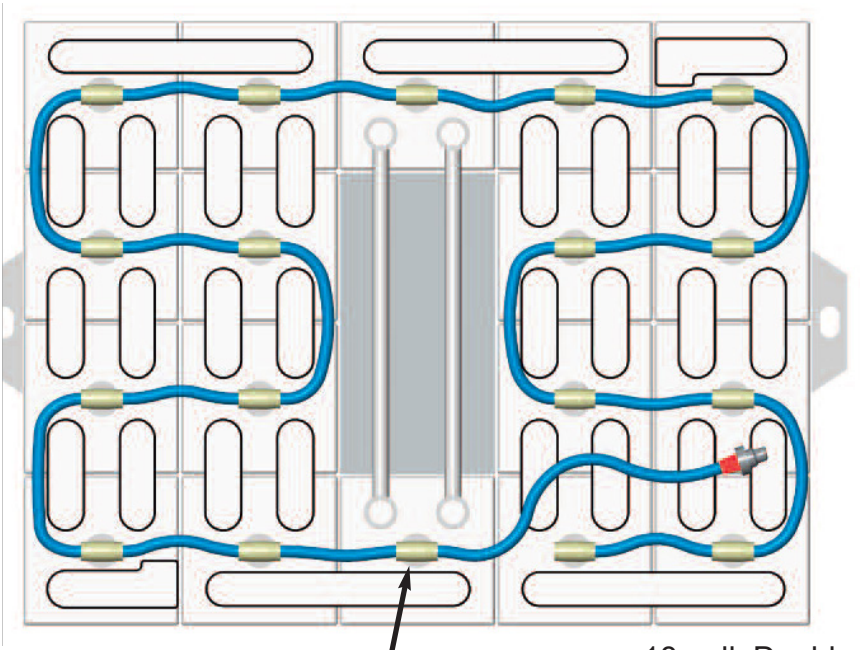


18-cell Single Post

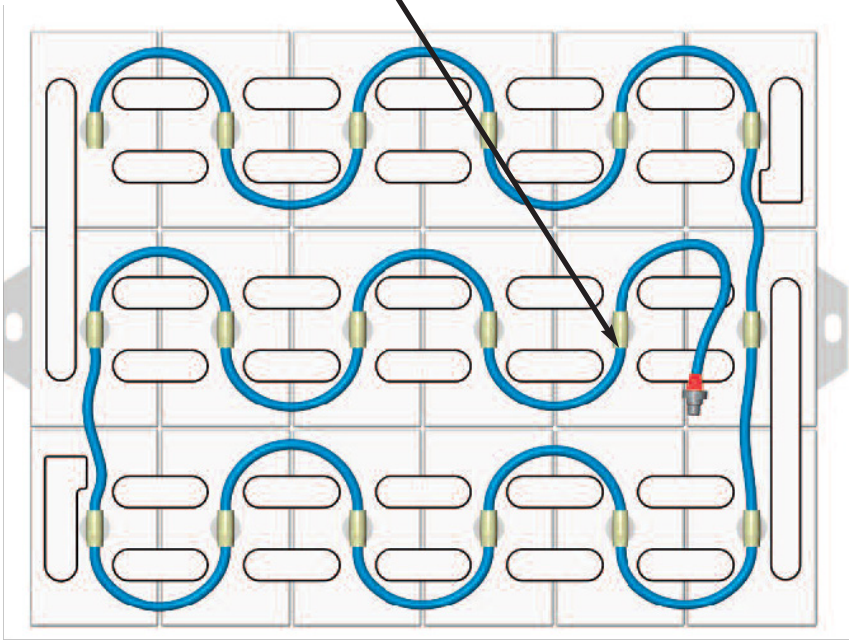


18-cell Double Post

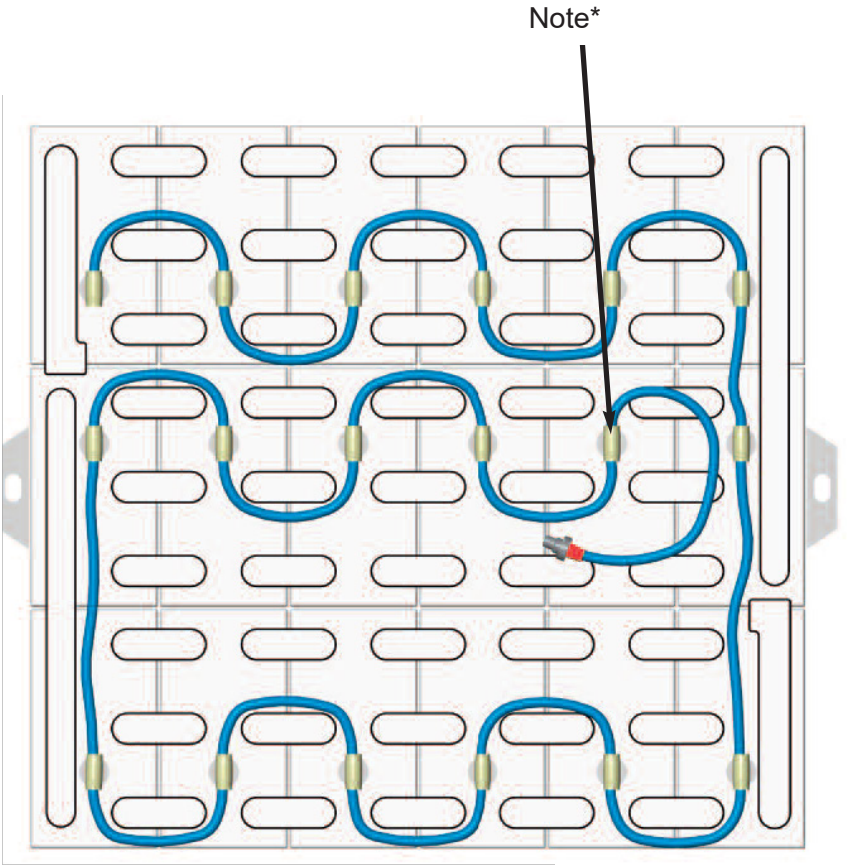
Note: The tubing between the 1st Water Injector in the layout and the Input Assembly should only be long enough to allow the operator to water the battery. It should not be so long that the Input Assembly would hang over the side of the battery or exceed 24 inches. Philadelphia Scientific ecommends at minimum 6 wraps of installation tape behind the 1st Water Injector for strain relief.



18-cell Double Post



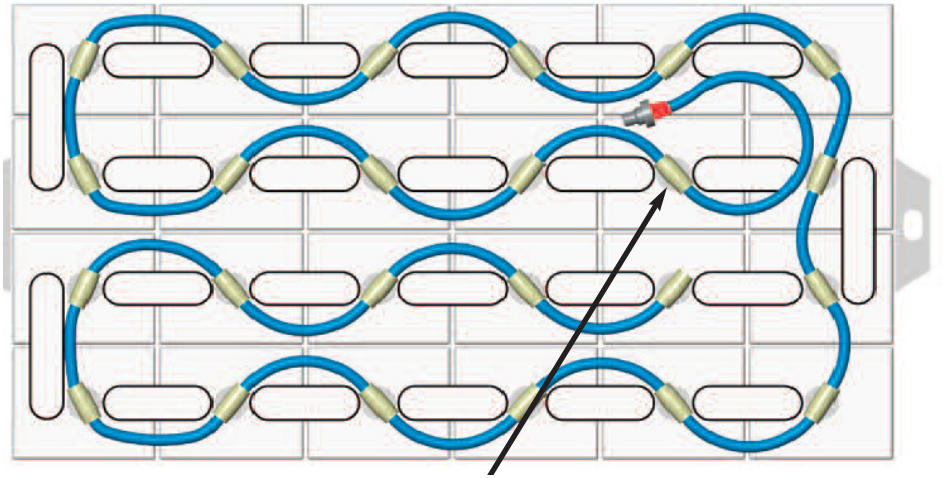
18-cell Double Post



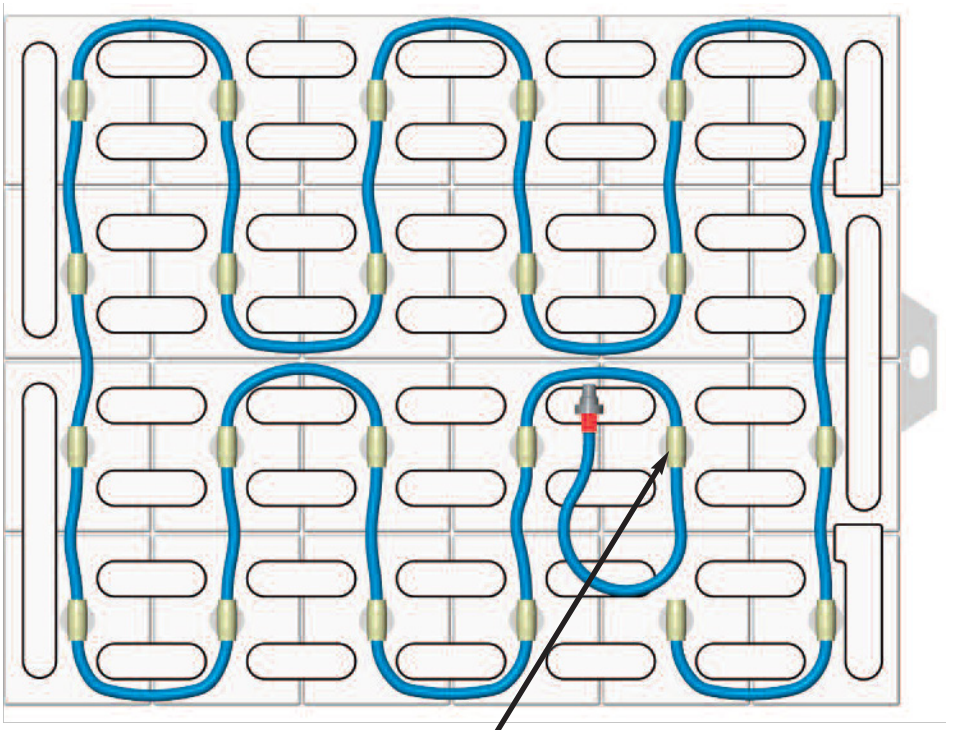
18-cell Triple Post

Note: The tubing between the 1st Water Injector in the layout and the Input Assembly should only be long enough to allow the operator to water the battery. It should not be so long that the Input Assembly would hang over the side of the battery or exceed 24 inches. Philadelphia Scientific ecommends at minimum 6 wraps of installation tape behind the 1st Water Injector for strain relief.

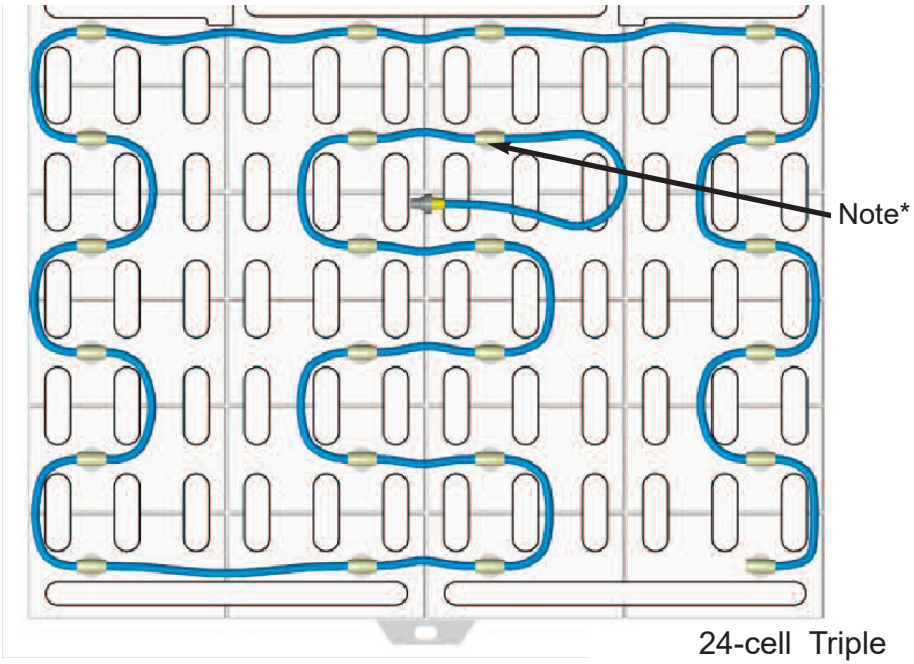
24-cell Batteries



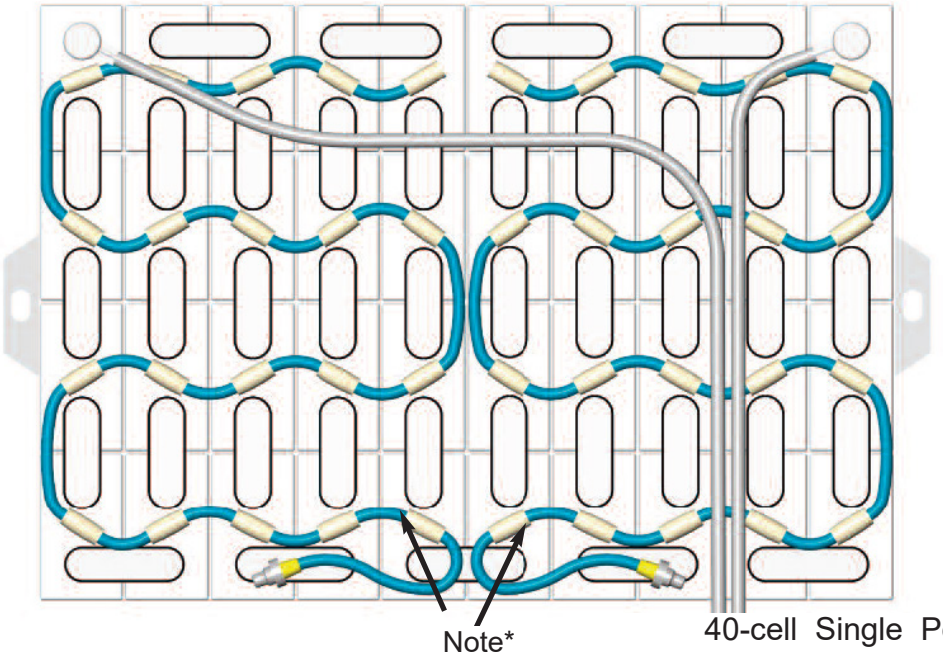
24-cell Single Post



24-cell Double Post

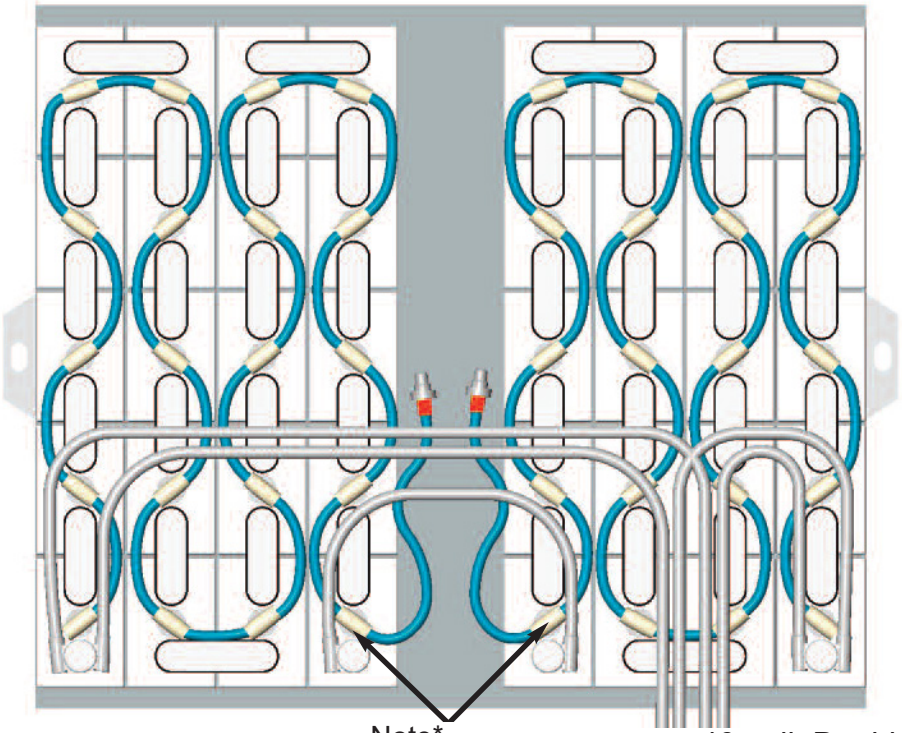


24-cell Triple Post **40-cell Batteries (requires 2 systems)**



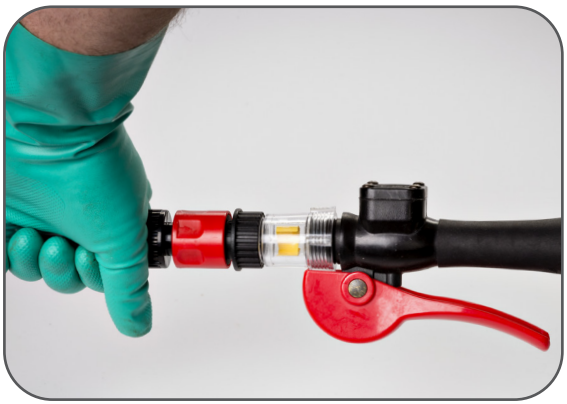
40-cell Single Post

***Note:** The tubing between the 1st Water Injector in the layout and the Input Assembly should only be long enough to allow the operator to water the battery. It should not be so long that the Input Assembly would hang over the side of the battery or exceed 24 inches. Philadelphia Scientific recommends at minimum 6 wraps of installation tape behind the 1st Water Injector for strain relief.



40-cell Double Post

Operation Instructions: Filling the Battery
Using a factory authorized water supply (shown on the last page).



Connect the Instant Valve Pro™ to the Input Assembly of the Water Injector System installed on the battery.



Squeeze the lever completely to fill the battery.

Do Not Partially Squeeze the Lever.



Watch the spinner on the Instant Valve Pro. When it stops spinning, the filling is complete (about 15 seconds,usually). Note: The spinner may not come to a complete stop, especially in larger systems. The battery is filled when the spinner slows enough to clearly see the inner blades/vanes.



Release the lever. Disconnect the Instant Valve Pro from the Water Injector System and move on to the next battery that needs water.

Factory Authorized Water Supplies for the Water Injector System



HydroCart Mini
Part Number INJ-MINI



HydroCart Max
Part Number INJ-HCT



DirectFill
Part Number INJ-DF



Water Buffalo
Part Number INJ-719



Extractor Mounted Water Supply
Part Number
INJ-PMWT-WOT



Pump Controller 2
Part Number
INJ-PMWT-PC2

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11/2026