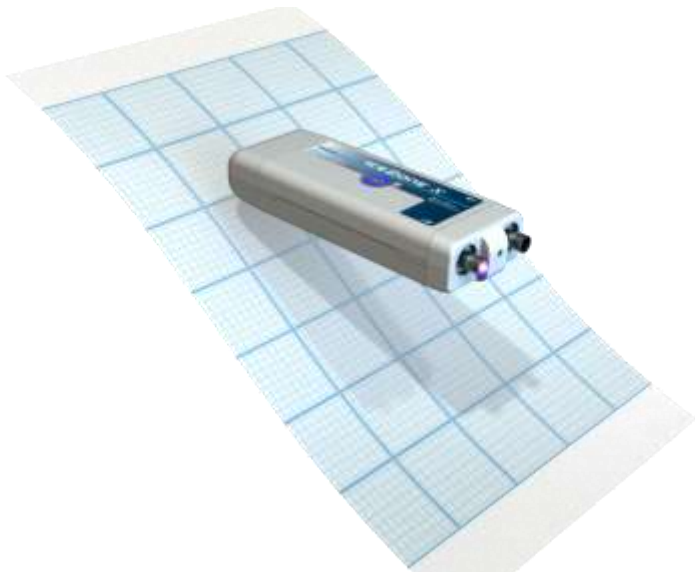


# Installation for Manitowoc Q-Series Ice Machines Standard Top-Mount Installation



This module will show the steps to install IceZone<sup>®</sup> X on the Manitowoc Q-Series Ice Machines. Please watch the entire video prior to installation.

**Caution: Installation should be done by a qualified technician using appropriate safety equipment and procedures.**

## Pre-Installation Requirements



## Clean and Sanitize Ice Machine Prior to Installation

Follow the manufacturer's guidelines for cleaning the ice machine thoroughly.



Before Installing IceZone<sup>®</sup> X, clean the interior of the ice machine thoroughly according to the manufacturer's guidelines. All surfaces should be free of slime and scale before starting the installation.

## Recommended Tools

Hand Drill

Phillips Bit Driver

7/8" Step Drill Bit

1/4" Nut Driver

Phillips Screwdriver

4ft Ladder

Safety Goggles

Hose Cutter or Utility Knife

1 1/4" Crescent Wrench

Marker to mark hole locations

File or knife to de-burr holes



This is the Manitowoc Q-Series ice machine in place above a drink dispenser in a typical restaurant installation.



Before working on the ice machine, the ice in the bin must be removed.

Turn the ice machine power switch to the **OFF** position.



Mark the location for the IceZone<sup>®</sup> X supply fitting.

This is the fitting where the plasma will enter the ice machine.

This should be directly over the evaporator and should deliver plasma behind the curtain.



Mark the location for the IceZone<sup>®</sup> return fitting. This is the fitting where the plasma will return to the IceZone<sup>®</sup>. This should be located on the right side of the top cover (*looking at the front of the ice machine*). This hole should be spaced off of the interior wall of the ice machine by 2.0 inches. The hole should be spaced from the front edge of the ice machine cover by 2.0 inches also.



**The proper spacing will prevent the return tube from interfering with the ice curtain operation**



Drill the holes as marked.

The final hole diameter should be 1.0" for each fitting.



Clean the burrs from the hole edges and prepare to install the fittings.



Assemble the supply fitting as shown.

This includes a single ended barb fitting, low profile nut and white rubber washer.



Install the supply fitting as shown.

This includes a second low profile nut and white rubber washer.

There should be no exposed threads on the interior surface of the lid per NSF guidelines.



Assemble the return fitting as shown.

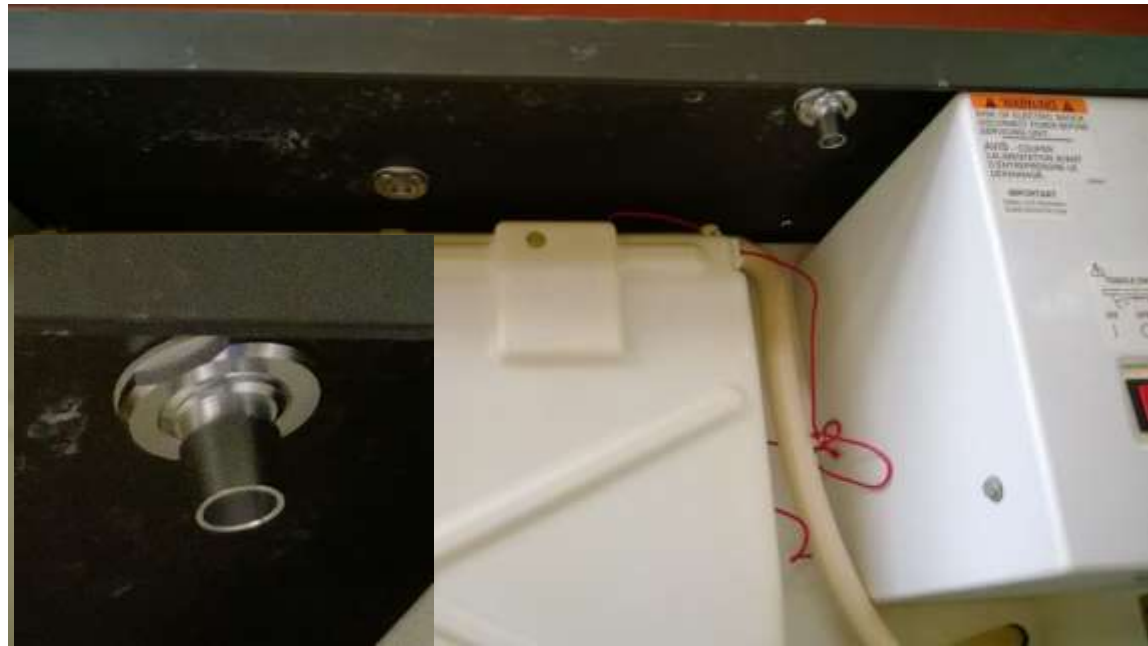
This includes a double ended barb fitting, low profile nut and white rubber washer.



Install the supply fitting as shown.

This includes a second low profile nut and white rubber washer.

There should be no exposed threads on the interior surface of the lid per NSF guidelines.



The top side of the lid should be completed as shown.

Ensure the fitting nuts are tight and prepare to mount the IceZone<sup>®</sup> unit.



Remove the service cover from the IceZone<sup>®</sup> unit.

This provides access to the lamp, power input and mounting boss.

As the screw is removed from the cover, be sure to keep it with the cover so it is available for re-assembly.





Remove the Input/Output cover from the IceZone<sup>®</sup> unit.

This provides access to additional mounting bosses.

As the screw is removed from the cover, be sure to keep it with the cover so it is available for re-assembly.

The cover requires a firm pull while rotating towards the top for removal

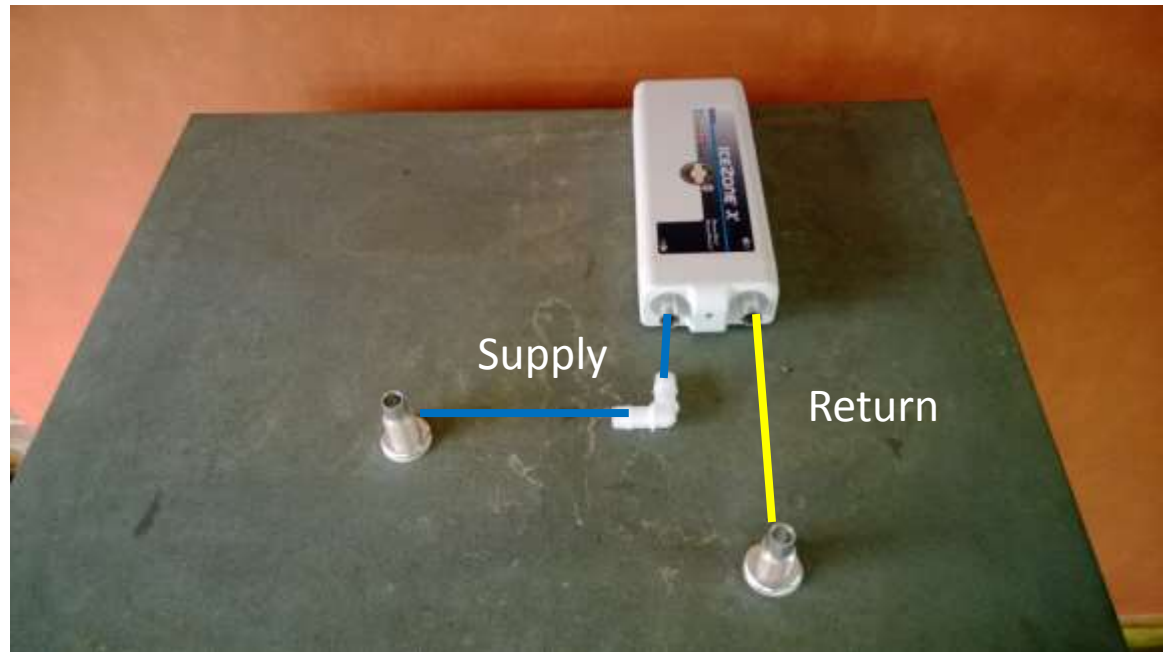


Place the IceZone<sup>®</sup> Unit on the lid and layout the routing of the supply and return tubing.

The IceZone<sup>®</sup> Unit should be placed in the back right corner of the cover (*looking at the front of the ice machine*)

Place the 90 degree hose Barbs in place to visualize the routing.

Observe the flow direction arrows on the IceZone<sup>®</sup> Unit.



Mark the holes to mount the IceZone® Unit on the lid.

Use a pen to locate the three mounting holes.



Drill the holes to mount the  
IceZone<sup>®</sup> Unit on the lid.

Drill three 1/8" holes.



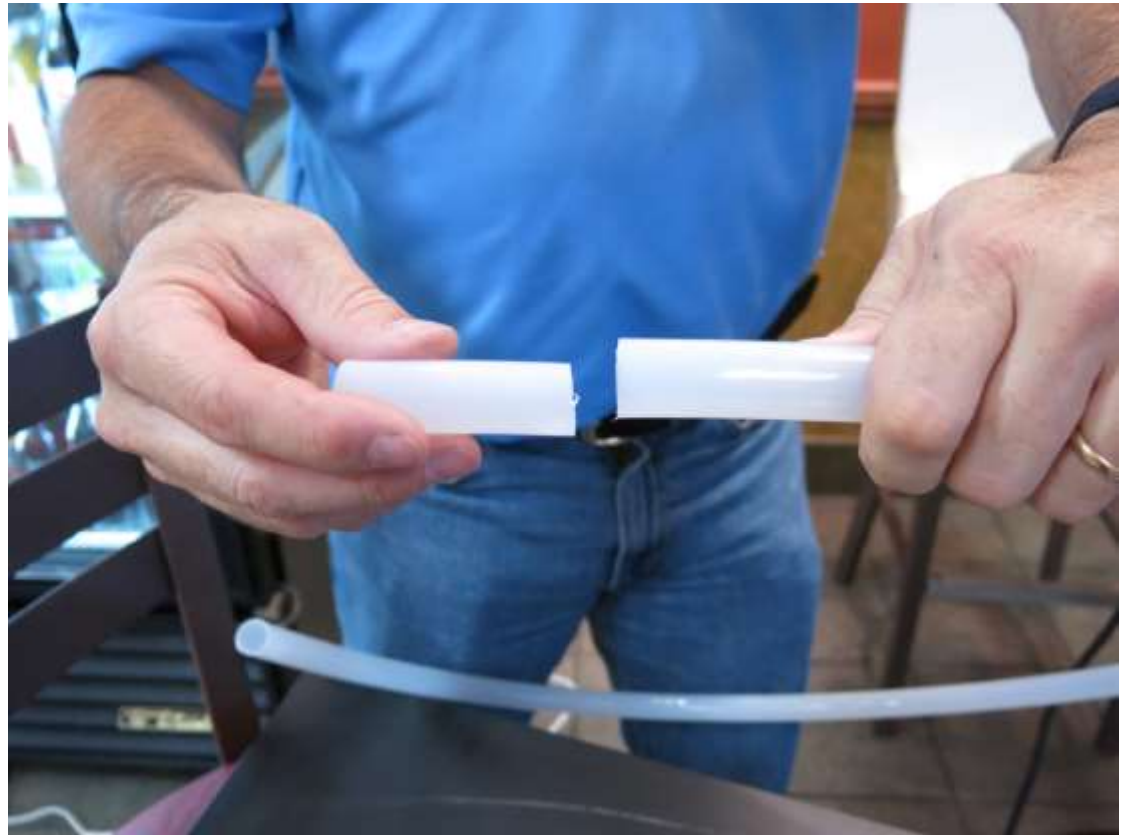
Place the mounting rivets or self drilling screws into the mounting holes.



Re-attach the Input/Output cover and secure with the original screw.



Cut two 2.5 inch pieces of tubing to connect the supply and return fittings to the 90 degree hose barbs.



Assemble the supply and return fittings to the 90 degree hose barbs using the 2.5 inch pieces of tubing.

***Installer's Tip:*** Heating the tubing in hot water eases the installation of the tubing onto the fittings.

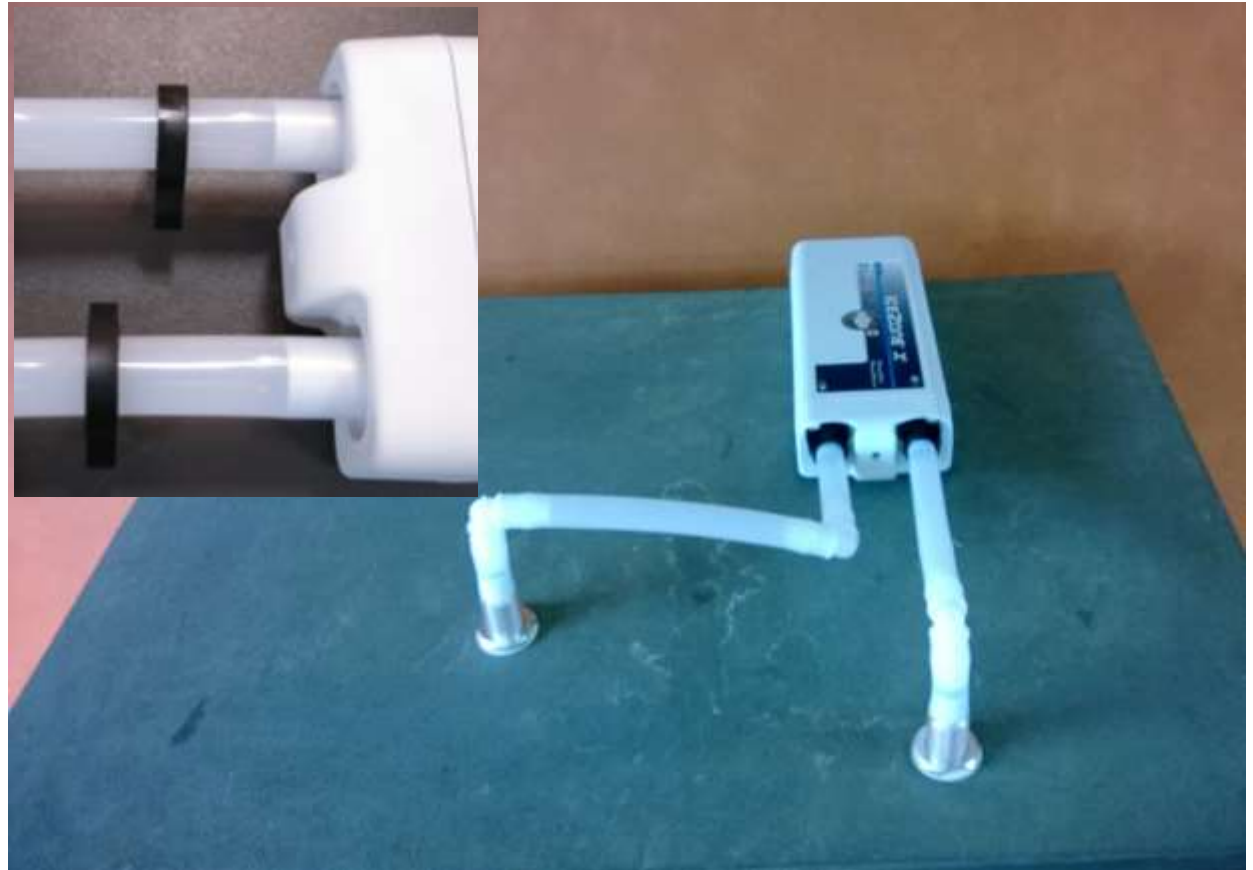




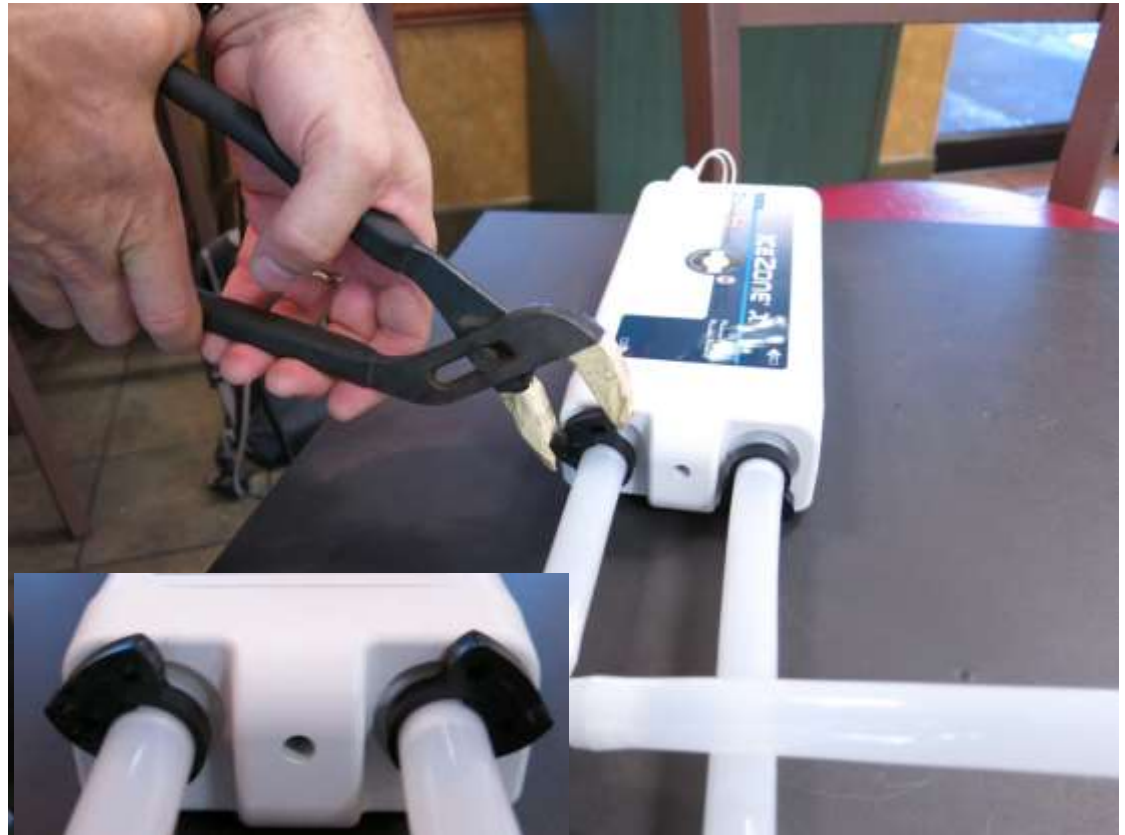
Cut and assemble the remaining supply and return tubing and fittings. There should be >12" of unused tubing.

Place the handy clamps (black) on the tubing which is placed over the ports on the IceZone<sup>®</sup> Unit.

**Installer's Tip:** Heating the tubing in hot water eases the installation of the tubing onto the fittings.



Tighten the handy clamps with a pliers to secure the tubing on the IceZone<sup>®</sup> unit.



Insert the DC plug from the wall adapter through the “P” shaped hole in the service cover.

Plug the DC connector into the IceZone<sup>®</sup> Unit's power input plug.



Reinstall the service cover and secure with the original screw.



The completed installation on the cover should look like the picture shown.



The completed installation on the ice machine should look like the picture shown.

The supply fitting is located above the curtain and the return fitting is located in front and to the right side of the curtain.



Install the remaining 12 inch length of tubing onto the return fitting.

The return tube should be located next to the curtain and not interfere with the “bin full” switch.

Sanitize the surfaces inside the ice machine, turn the machine on, and replace the cover.



Plug the IceZone<sup>®</sup> X into a nearby 100VAC outlet that is not switched off. The IceZone<sup>®</sup> runs 24 hours/day, 7 days per week.

Check to make sure the blue light is lit on the top of the IceZone<sup>®</sup> X.





When IceZone<sup>®</sup> is connected to power correctly and the the operation is normal a blue light shows on top of the unit.



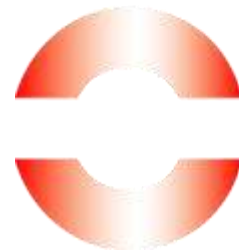
**Blue:**  
**Operation Normal**

When the red light is steady on top of the IceZone<sup>®</sup>, the lamp needs to be changed.



**Red:**  
**Replace Bulb**

When the red light is flashing on top of the IceZone<sup>®</sup>, the unit requires service.

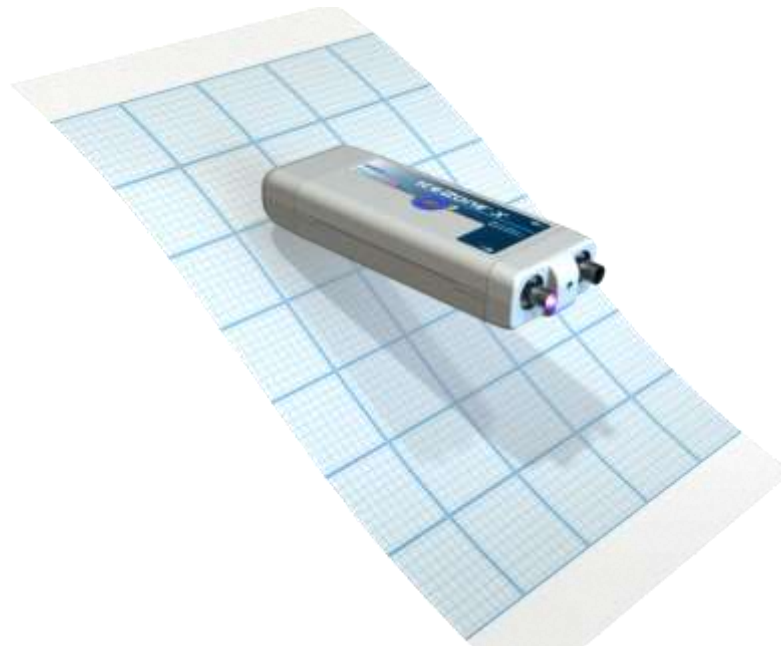


**Flashing Red:**  
**Service Required**

**BIOZONE**<sup>®</sup>  
SCIENTIFIC INTERNATIONAL

**ICEZONE**<sup>®</sup> *x* Installation

Thank you for purchasing  
**ICEZONE**<sup>®</sup> *x*



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