

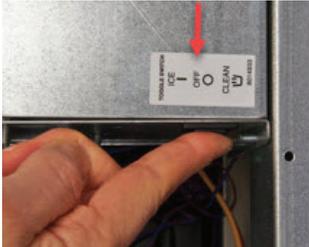
Restoring Ice Machine to Service

Subject: Koolaire Ice Machines

AIR-COOLED, WATER-COOLED & REMOTE AIR-COOLED ICE MACHINES

Manitowoc recommends a **Factory Authorized Service company or Distributor Authorized Service Dealer** perform thorough preventative maintenance prior to restoring service of the Koolaire ice machine, storage bin or dispenser. Section 4 (Maintenance) of the Installation, Operation and Maintenance manual should be followed to ensure proper cleaning and sanitizing steps are completed.

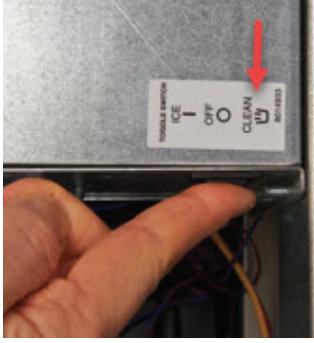
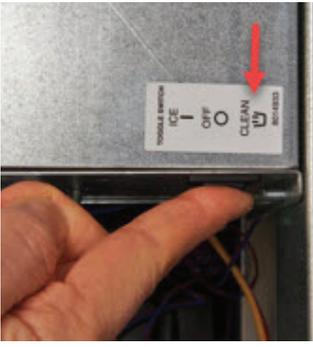
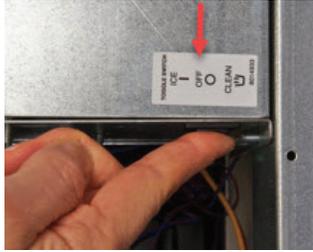
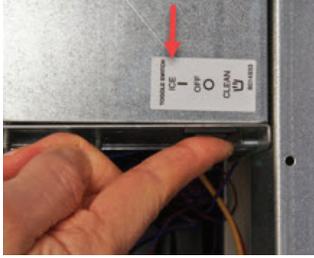
Water system components including the water inlet valve, water pump and dump valve may require removal for inspection or replacement depending on the potable water quality and the length of time the components had no use. Water cooled ice machines may require the condenser be cleaned and the refrigeration water regulating valve evaluated for proper performance. Air-cooled condensers should be cleaned. This is also a good time to replace water filtration or any Koolaire accessories.

RESTORING TO SERVICE PROCEDURES	
	<p>1. Remove front panel.</p> <p>Use a Phillips screwdriver to loosen the screw(s) securing the door. Do not remove screw(s) completely; they are secured to prevent loss.</p>
	<p>2. Make sure ice machine is off.</p> <p>Turn the ice machine OFF by putting the toggle switch into the OFF position.</p>
	<p>3. Disconnect main power at the service disconnect or breaker.</p> <p>⚠ WARNING</p> <p>Do not begin cleaning other parts of the ice machine until line voltage is disconnected from the ice machine and if applicable dispenser.</p>
	<p>4. Empty ice bin, if not already empty.</p> <p>Use an ice scoop to remove all ice from the storage bin or dispenser.</p>
	<p>5. Remove top cover and evaporator dust cover (when used).</p> <p>Lift top cover to remove, then lift and remove evaporator dust cover.</p>
	<p>6. Remove water curtain.</p> <p>Gently flex the curtain in the center and remove it from the right side. Slide the left pin out.</p>
	<p>7. Remove water trough</p> <p>Depress tabs on right and left side of the water trough. Allow front of water trough to drop as you pull forward to disengage the rear pins.</p>

	<p>8. Remove the ice thickness and harvest float switches.</p> <p>Pull the float switch straight down to disengage.</p> <ul style="list-style-type: none"> • Lower the float switch until the wiring connector is visible. • Disconnect the wire lead from the float switch. • Remove the float switch from the ice machine.
	<p>9. Remove the water pump.</p> <p>Grasp pump and pull straight down on pump assembly until disengaged and the electrical connector is visible. Disconnect the electrical connector. Remove the water pump assembly from ice machine.</p>
	<p>10. Remove the water distribution tube.</p> <p>Loosen the two outer screws (do not remove screws completely; they are retained to prevent loss). Pull forward on the distribution tube to release from slip joint. Remove the water distribution tube.</p> <p>Disassemble the distribution tube by loosening the two (2) middle thumbscrews and dividing the distribution tube into two pieces.</p>
<p>⚠ WARNING</p> <p>Wear rubber gloves and safety goggles (and/or face shield) when handling ice machine cleaner / descaler or sanitizer.</p>	

	<p>Cleaner / Descaler (9405463) and Sanitizer (9405653) Usage</p> <p>Important</p> <p>Ice machine cleaner /descaler is used to remove lime scale and mineral deposits. Ice machine cleaner / descaler should be used every six months, although in cases of extremely hard water conditions it may be necessary to descale more often. For the range of water hardness allowed for potable water standards, it should not be necessary to descale more frequently than every two months. Use of an approved filtration system with a polyphosphate scale inhibitor is highly recommended for all ice machine installations and will significantly reduce the need to descale in hard water applications.</p> <p>Ice machine sanitizer disinfects and removes algae and slime. Sanitizer must be used a minimum of once every six months.</p>
	<p>⚠ CAUTION</p> <p>Do not immerse the water pump motor or electrical connector in liquids. Only soak the water pump impeller and impeller housing. Do not immerse above the red line on the graphic.</p>
<p>Notice</p> <p>Electrical connectors must never be exposed to any liquids.</p>	

	<p>11. Remove scale deposits from removed parts.</p> <p>Mix 16 oz Manitowoc ice machine cleaner / descaler (9405463) with one gallon of potable water in a three-compartment sink. Place the plastic parts in the solution and allow to soak for 10-15 minutes. Use a soft bristle brush on heavy scale or mineral buildup as required.</p>		<p>14. Rinse and sanitize plastic parts.</p> <p>Mix two ounces of ice machine sanitizer (9405653) with three gallons of potable water in a three-compartment sink. Add five gallons of clear potable water to third sink compartment. Remove plastic parts from cleaner / descaler solution & rinse in clear potable water. Place the plastic parts in the sanitizer solution and allow to soak for at least one minute.</p>
	<p>12. Clean scale deposits from surface areas of ice machine.</p> <p>Use a clean towel or sponge soaked in cleaner / descaler solution to wipe ice machine surfaces, including the sides walls, base (area above water trough), and the bin or dispenser.</p>		<p>15. Sanitize surface areas of ice machine.</p> <p>Use a clean sanitizer-soaked towel to sanitize ice machine surfaces, including the side walls, base (area above water trough), and the bin or dispenser. Spray surfaces with sanitizer solution and wipe down. Manitowoc sanitizer is classified as a no rinse sanitizer - Do not rinse sanitized surfaces.</p>
	<p>13. Rinse Surface Areas of Ice Machine.</p> <p>Use a clean towel or sponge soaked in potable water to wipe ice machine surfaces, including the sides walls, base (area above water trough), and the bin or dispenser.</p>	<p>Notice</p> <p>When re-installing the floats, ensure the rubber gaskets are sealed against the base of the ice machine and that any electrical connectors or wires remain free from moisture.</p>	
	<p>CAUTION</p> <p>Do not soak the water pump motor in rinse water or sanitizer solution. Be sure to only rinse/soak the water pump impeller and impeller housing. Do not immerse above the red line on the graphic.</p>	<p>16. Reinstall plastic evaporator parts.</p> <p>Return the parts to the ice machine and reassemble. (Perform Steps 6 to 10 in reverse order).</p>	
<p style="text-align: center;">Notice</p> <p>Electrical connectors must never be exposed to any liquids.</p>			

	<p>17. Restore power to the ice machine.</p> <p>Restore power to the ice machine (and dispenser if applicable) at the circuit breaker.</p>		<p>21. Place the toggle switch in the CLEAN position.</p> <p>Water will flow through the water dump valve and down the drain. Wait until the water trough refills, then add the proper amount of ice machine cleaner.</p>
	<p>18. Place the toggle switch in the CLEAN position.</p> <p>Water will flow through the water dump valve and down the drain. Wait until the water trough refills, then add the proper amount of ice machine cleaner.</p>		<p>22. Add Manitowoc sanitizer (9405653) to the water trough.</p> <p>Add the correct amount of sanitizer for your model by pouring between the evaporator and water curtain. The bottle is marked with 2 oz (60ml) graduations.</p> <p>KT0300/KT0420/KT0450 KT0500/KT0700/KT1000 3 ounces (90ml)</p> <p>KT1700 6 ounces (180ml)</p>
	<p>19. Add Manitowoc cleaner / descaler (9405463) to water trough.</p> <p>Add the correct amount of cleaner / descaler for your model by pouring between the evaporator and water curtain. The bottle is marked with 2 oz (60ml) graduations.</p> <p>KT0300/KT0420/KT0450 KT0500/KT0700/KT1000 3 ounces (90ml)</p> <p>KT1700 9 ounces (265ml)</p>		<p>23. Reinstall evaporator dust cover and top cover (when used).</p> <p>Reinstall evaporator dust cover and then reinstall top cover.</p>
	<p>20. Allow clean cycle to run.</p> <p>Wait until the clean cycle is complete (approximately 24 minutes) then place the toggle switch in to the off position.</p>		<p>24. Place the toggle switch in the ICE position after 30 minutes.</p> <p>After the sanitizing cycle is complete, switch to the ICE position to return to making ice.</p>

	<p>25. Reinstall front panel and tighten screws.</p>
	<p>26. Clean exterior. Wipe surfaces with a damp cloth rinsed in water to remove dust and dirt from the outside of the ice machine.</p>