

## Restoring Ice Machine to Service

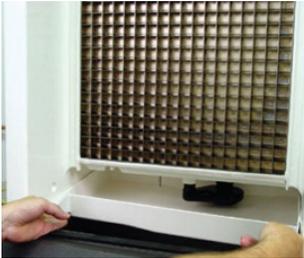
### Subject: Indigo NXT Ice Machines

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

Manitowoc recommends a **Factory Authorized Service company** or **Distributor Authorized Service Dealer** perform thorough preventative maintenance prior to restoring service of the Manitowoc 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, replenish AuCS chemical and replace the Luminice bulb if these Manitowoc accessories are used.

RESTORING TO SERVICE PROCEDURES	
	<p><b>1. Remove front panel.</b></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><b>2. Make sure ice machine off.</b></p> <p>Turn the ice machine OFF by pressing the power button.</p>
	<p><b>3. Disconnect main power at the service disconnect or breaker.</b></p> <p><b>⚠ WARNING</b></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><b>4. Empty ice bin, if not already empty.</b></p> <p>Use an ice scoop to remove all ice from the storage bin or dispenser.</p>
	<p><b>5. Remove top cover and evaporator dust cover (when used).</b></p> <p>Lift top cover to remove, then lift and remove evaporator dust cover.</p>
	<p><b>6. Remove water curtain or splash shield.</b></p> <p><b>Remove water curtain</b></p> <p>Gently flex the curtain in the center and remove it from the right side. Slide the left pin out.</p>

	<p><b>Remove splash shield 48" models.</b></p> <p>Lift the splash shield up and forward to remove.</p>
	<p><b>Remove splash shields (2) Dual Evaporator Models.</b></p> <p>Grasp the top center of splash shields. Lift up and then out.</p>
	<p><b>7. Remove water trough</b></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>Refer to Step 12 for Dual Evaporator Trough Removal.</p>

	<p><b>8. Remove the water level probe.</b></p> <p>Pull the water level probe straight down to disengage. Lower the water level probe to obtain access. The water level probe can be descaled and sanitized at this point without complete removal. If complete removal is desired, disconnect the ice thickness control wire from the control board.</p> <p>NOTE: Some models allow disconnection of the wire lead from the water level probe. Lower the water level probe until the wiring connector is visible, then disconnect the wire lead connector from the water level probe and remove from the ice machine.</p> <p>Refer to Step 11 for Dual Evaporator Water Pump and Water Level Probe Assembly Removal.</p>
	<p><b>9. Remove the water pump.</b></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>Refer to Step 11 for Dual Evaporator Water Pump and Water Level Probe Assembly Removal.</p>

	<p><b>Remove Ice damper(s) when used. (Dual Evaporators have two).</b></p> <p>Disengage the front and rear pins of the left damper and right damper.</p>		<p><b>12. Remove water trough.</b></p> <p>Once the water pump and water level probe are removed (step 11); slide the water trough forward-out of the ice machine.</p>
	<p><b>10. DUAL EVAPORATORS ONLY: Remove the water trough shield.</b></p> <p>Grasp the water trough shield in the center and the left end. Flex the water trough shield in the center and pull the left end forward until clear of the side wall. Repeat for the right end. Pull water trough shield forward to remove.</p>		<p><b>13. Remove the ice thickness probe(s) (Dual Evaporator have two).</b></p> <p>Compress the hinge pin on the top of the ice thickness probe. Pivot the ice thickness probe to disengage one pin then the other.</p> <p>The ice thickness probe can be cleaned at this point without complete removal. If complete removal is desired, disconnect the ice thickness control wiring from the control board.</p>
	<p><b>11. Remove the water pump and water level probe assembly.</b></p> <p>The water pump and water level probe are removed from the front right side of the machine. Pull up on the water pump and water level probe assembly to disengage.</p> <p>The water pump and water level probe can be descaled and sanitized at this point without complete removal. If complete removal is desired, disconnect at the molex connectors.</p>		<p><b>14. Remove the water distribution tube(s) (Dual Evaporator have two).</b></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. Disassemble the distribution tube by loosening the two (2) middle thumbscrews and dividing the distribution tube into two pieces. Remove both water distribution tubes on 48" and dual evaporator models.</p>

<b>⚠ WARNING</b>	
Wear rubber gloves and safety goggles (and/or face shield) when handling ice machine cleaner / descaler or sanitizer.	
	<p>Cleaner / Descaler (9405463) and Sanitizer (9405653) Usage</p> <p style="text-align: center;"><b>Important</b></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 style="text-align: center;"><b>⚠ CAUTION</b></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>
<b>Notice</b>	
Electrical connectors must never be exposed to any liquids.	

	<p><b>15. Remove scale deposits from removed parts.</b></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><b>16. Clean scale deposits from surface areas of ice machine.</b></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><b>17. Rinse Surface Areas of Ice Machine.</b></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 style="text-align: center;"><b>⚠ CAUTION</b></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>
<b>Notice</b>	
Electrical connectors must never be exposed to any liquids.	

	<p><b>18. Rinse and sanitize plastic parts.</b></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 &amp; rinse in clear potable water. Place the plastic parts in the sanitizer solution and allow to soak for at least one minute.</p>		<p><b>21. Restore power to the ice machine.</b></p> <p>Restore power to the ice machine (and dispenser if applicable) at the circuit breaker.</p>
	<p><b>19. Sanitize surface areas of ice machine.</b></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><b>22. Press CLEAN button.</b></p> <p>Follow the screen prompts to start the clean cycle. Wait until the prompt to add cleaner is displayed (approximately 2 minutes) then continue with next step.</p>
<p style="text-align: center;"><b>Notice</b></p> <p>When re-installing the water level probe, ensure the rubber gasket is sealed against the base of the ice machine and that any electrical connectors or wires remain free from moisture.</p>			<p><b>23. Add Manitowoc cleaner / descaler (9405463) to water trough.</b></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><b>IF0300/IT0420/IT0520 IT0620</b> 3 ounces</p> <p><b>IT0450/IT0500/IP0500 IF0600/IBF0620C/IT0750 IBF0820C IF0900/IT0900/ IBT1020C/IT1200</b> 5 ounces</p> <p><b>IF1400C/IT1500/IF1800C IT1900/IF2100C</b> 9 ounces</p>
	<p><b>20. Reinstall plastic evaporator parts.</b></p> <p>Return the parts to the ice machine and reassemble. (Perform Steps 6 to 13 in reverse order).</p>		

	<p><b>24. Allow clean cycle to run.</b></p> <p>The ice machine will automatically run through a wash cycle and several rinse cycles. The entire cycle lasts approximately 30 minutes. Countdown clock will let you know duration and time remaining.</p>		<p><b>27. Reinstall evaporator dust cover and top cover (when used).</b></p> <p>Reinstall evaporator dust cover and then reinstall top cover.</p>
	<p><b>25. Press the CLEAN button.</b></p> <p>Follow the screen prompts to start the sanitize cycle. Wait until the prompt to add sanitizer is displayed (approximately 2 minutes) then continue with next step.</p>		<p><b>28. Press the POWER button.</b></p> <p>After the sanitizing cycle is complete, press the power button to return to making ice.</p>
	<p><b>26. Add Manitowoc sanitizer (9405653) to the water trough.</b></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><b>IF0300/IT0420/IT0450</b>  <b>IT0500/IP0500/IT0520</b>  <b>IF0600/IT0620/IBF0620C</b>  <b>IT0750/IBF0820C/IF0900/IT0900/IT1200</b>          3 ounces (90ml)</p> <p><b>IBT1020C</b>          3.5 ounces (104ml)</p> <p><b>IT1500/IT1900/</b>          6 ounces (180ml)</p> <p><b>IF1400C/IF1800C/IF2100C</b>          12 ounces (355ml)</p>		<p><b>29. Reinstall front panel and tighten screws.</b></p>
			<p><b>30. Clean exterior.</b></p> <p>Wipe surfaces with a damp cloth rinsed in water to remove dust and dirt from the outside of the ice machine.</p>