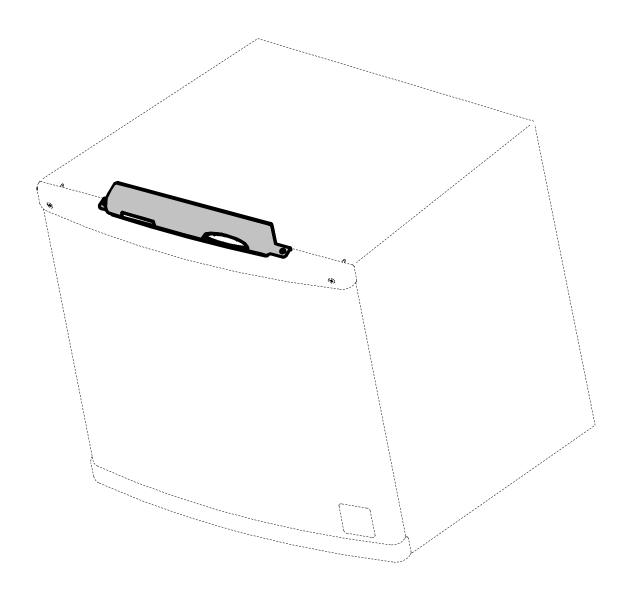


# GUARDIAN™ GSI200 Installation Use and Care Manual



Thank you for selecting a Manitowoc Guardian™ Slime Inhibitor. With proper installation, care and maintenance, your new Manitowoc Guardian™ GSI200 will provide you with many years of reliable and economical performance.



## **Model Numbers**

The GSI200 is compatible with the following ice machine models:

## Q MODELS

Self-Contained Air- Self-Contained		Remote Air Cooled			
Cooled	Water-Cooled	N = Traditional	C = Qui	C = QuietQube	
QR0200A	QR0201W				
QD0202A	QD0203W				
QY0204A	QY0205W				
QR0280A	QR0281W				
QD0282A	QD0283W				
QY0284A	QY0285W				
QR0320A	QR0321W				
QD0322A	QD0323W				
QY0324A	QY0325W				
QD0372A	QD0373W				
QY0374A	QY0375W				
QR0420A	QR0421W				
QD0422A	QD0423W				
QY0424A	QY0425W				
QR0450A	QR0451W	QR0490N			
QD0452A	QD0453W	QD0492N			
QY0454A	QY0455W	QY0494N			
QR0600A	QR0601W	QR0690N	QR0690C		
QD0602A	QD0603W	QD0692N	QD0692C	IB0624YC	
QY0604A	QY0605W	QY0694N	QY0694C	IB0622DC	
QR0801M	QR0801W	QR0890N	QR0890C		
QD0802A	QD0803W	QD0892N	QD0892C	IB0824YC	
QY0804A	QY0805W	QY0894N	QY0894C	IB0822DC	
QR1000A	QR1001W	QR1090N	QR1090C		
QD1002A	QD1003W	QD1092N	QD1092C	IB1024YC	
QY1004A	QY1005W	QY1094N	QY1094C	IB1022DC	
QR1300A	QR1301W	QR1390N			
QD1302A	QD1303W	QD1392N			
QY1304A	QY1305W	QY1394N			
NA	QD1603W	QD1692			
	QY1605W	QY1694N			
QR1800A	QR1801W	QR1890N			
QD1802A	QD1803W	QD1892N			
QY1804A	QY1805W	QY1894N			

#### **J MODELS**

#### **Self-Contained Self-Contained** Remote Air-Cooled N = Traditional Water-Cooled JR0200A JR0201W JD0202A JD0203W JY0204A JY0205W JR0320A JR0321W JD0322A JD0323W JY0324A JY0325W JR0420A JR0421W JD0422A JD0423W JY0424A JY0425W JR0450A JR0451W JR0490N JD0452A JD0453W JD0492N JY0454A JY0455W JY0494N JR0600A JR0601W JR0690N JD0602A JD0603W JD0692N JY0604A JY0605W JY0694N JR0800A JR0801W JR0890N JD0802A JD0803W JD0892N JY0804A JY0805W JY0894N JR1000A JR1001W JR1090N JD1002A JD1003W JD1092N JY1004A JY1005W JY1094N JR1300A JR1301W JR1390N JD1302A JD1303W JD1392N JY1394N JY1304A JY1305W JR1800A JR1801W JR1890N JD1802A JD1803W JD1892N JY1804A JY1805W JY1894N

#### **B MODELS**

Self-Contained	Self-Contained	Remote
Air-Cooled	Water-Cooled	N = Traditional
BR0200A	BR0201W	
BD0202A	BD0203W	
BY0204A	BY0205W	
BR0320A	BR0321W	
BD0322A	BD0323W	
BY0324A	BY0325W	
BR0420A	BR0421W	
BD0422A	BD0423W	
BY0424A	BY0425W	
BR0450A	BR0451W	BR0490N
BD0452A	BD0453W	BD0492N
BY0454A	BY0455W	BY0494N
BR0600A	BR0601W	BR0690N
BD0602A	BD0603W	BD0692N
BY0604A	BY0605W	BY0694N
BR0800A	BR0801W	BR0890N
BD0802A	BD0803W	BD0892N
BY0804A	BY0805W	BY0894N
BR1000A	BR1001W	BR1090N
BD1002A	BD1003W	BD1092N
BY1004A	BY1005W	BY1094N
BR1300A	BR1301W	BR1390N
BD1302A	BD1303W	BD1392N
BY1304A	BY1305W	BY1394N
BR1800A	BR1801W	BR1890N
BD1802A	BD1803W	BD1892N
BY1804A	BY1805W	BY1894N

#### Warranty

#### LABOR COVERAGE

Labor to replace any defective part is not included.

#### **PARTS COVERAGE:**

Sachet packets and batteries are excluded from the warranty.

Parts that contain defects in material or workmanship are covered for a period of one (1) year under normal use and service.

#### **EXCLUSIONS**

The following items are not included in part warranty coverage:

Damage from improper installation, misuse or abuse, unauthorized modifications, acts of God, or lack of normal maintenance.

This product is intended exclusively for commercial application. No warranty is extended for personal, family, or household purposes.

#### **General Information**

Slime is a leading cause of ice machine breakdowns and biological growth is a health concern. Manitowoc's Guardian System releases chlorine dioxide on a controlled basis to inhibit the growth of bacteria and fungi that form slime and cause malodors in the food zone of ice machines.

The ice machine and bin/dispenser must be cleaned and sanitized before initial installation of the Guardian system. The GSI200 will not control mineral or other water borne buildup. Your water quality will determine the length of time before mineral buildup affects ice machine performance. Mineral buildup must be removed as often as necessary to ensure trouble-free operation of the ice machine.

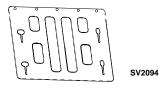
#### List of kit items



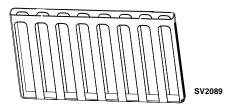
1. Timer Housing Assembly(1)



2. Timer Housing Back Cover (1)



3. Sachet Holder Mounting Plate (1)



- 4. Sachet Bag Holder (1)
- 5. Small Parts Bag
  - a. Batteries (2-AA)
  - b. Screws Pan Head (6)
  - c. Screw Flat Head (2)
- 6. Installation, Use and Care Manual (1)
- 7. Ice Sentry<sup>TM</sup> Sachet (1)

# ICE SENTRY™ SACHET REPLACEMENT FREQUENCY

Ice Sentry<sup>TM</sup> Sachet packet(s) require replacement every thirty (30) days or whenever they come in direct contact with water. Refer to chart below for requirements.

Ice Machine Model Q - IB - J - B	200 Gram Ice Sentry™ Sachet (K00206)	
200 280 320 370 420 450	Use 1	
600 800 1000 1300 1600 1800	Use 1 or 2*	

<sup>\*</sup>Although one Ice Sentry<sup>TM</sup> sachet is recommended, extreme conditions may necessitate using two sachet packets.

A green light will blink once every 7 seconds for 30 days. After thirty (30) days the green light deenergizes and a red light energizes and blinks every 4 seconds. The red light indicates that the Ice Sentry<sup>TM</sup> sachet packet(s) are due for replacement.

The timer receives power from two (2) AA batteries. Battery life is approximately three (3) years.

A reset button is located on the rear of the timer housing. After replacing the Ice Sentry<sup>TM</sup> sachet packet(s), press and hold the button for 3 seconds to reset the 30-day timer, then release the button.

Ice Sentry<sup>TM</sup> Sachet replacement packets are available through your local Manitowoc ice machine dealer.

# ICE SENTRY™ SACHET REPLACEMENT PROCEDURE

The size of the refill Ice Sentry<sup>TM</sup> sachet required is based on the amount of ice produced and depends upon the actual conditions of use. Most applications require one 200-gram Ice Sentry<sup>TM</sup> sachet; extreme conditions may necessitate two Ice Sentry<sup>TM</sup> sachets.

- 1. Remove front panel from ice machine.
- 2. Remove and discard spent Ice Sentry™ sachet packets.
- 3. Remove Ice Sentry<sup>TM</sup> sachet from foil package and install into holder. Removing the foil packet allows the moisture in the air to activate the packet contents.
- 4. A reset button is located on the rear of the timer housing. After replacing the sachet packet(s), press and hold the button for 3 seconds to reset the 30-day timer, then release the button. The green light will blink every 7 seconds for another 30 day period.
- 5. Reinstall ice machine front panel.
- 6. Discard used Ice Sentry™ sachet in trash.

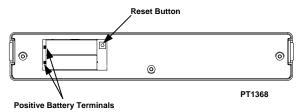
# CLEAN UP PROCEDURE FOR DAMAGED SACHET PACKET

- 1. Remove all ice from bin/dispenser and discard.
- 2. Initiate a cleaning and sanitizing sequence on the ice machine (refer to Ice Machine Installation, Use and Care Manual).
- 3. Clean the bin/dispenser. Flush the drain thoroughly to prevent future drain blockage.
- 4. Sanitize the bin/dispenser.
- 5. Install a replacement sachet packet and reinstall all covers.

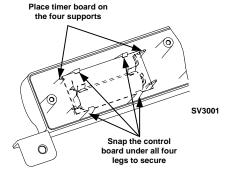
## **Assembly Instructions**

#### **ALL MODELS**

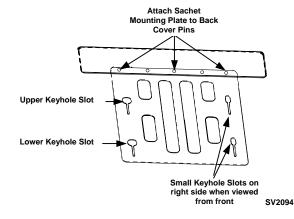
1. Install two (2) AA batteries in timer housing noting proper polarity (+/-).



Verify timer circuit board is in the correct position. The circuit board is incorrectly positioned if both lights (red and green) flash at the same time when the rear cover is installed. Snapping the control board under all four legs will correctly position the control board.

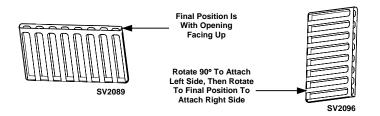


2. Verify the small key slots are on the right side when viewed from the front of the timer housing. Align sachet holder mounting plate holes with pins in the timer cover housing and snap into place.



3. Use four pan head screws to secure the back cover/sachet mounting plate to the timer housing.

- 4. Attach sachet holder to mounting plate. Final assembly will be with sachet holder opening facing up.
  - a. Rotate sachet holder 90° clockwise.
  - b. Refer to table to determine if upper or lower keyhole slots are used. Place left side pin in the sachet mounting plate keyhole.
  - c. Rotate sachet holder 90° counterclockwise and place right side pin in keyhole slot.
  - d. Push sachet holder down into keyhole slots to secure.



Model	Correct Keyhole Slot
Q, J or B 200/280/320/370/420	Use <b>lower</b> keyhole slots
Q, J or B 450/600/800/ 1000/1300/1600/1800	Use <b>upper</b> keyhole slots
QuietQube Models Q600C/Q800C/Q1000C IB600C/IB800C/IB1000C	Use <b>upper</b> keyhole slots

- 5. Remove front cover from ice machine.
- 6. Clean and sanitize ice machine and bin/dispenser.

7. Remove 13" (33 cm) foam tape from interior of front panel. Refer to chart below for location.



#### Model Q320/370/420 or Q, J or B 450/600/800/1000/1300/1600/1800 QuietQube Models Q600C/Q800C/Q1000C

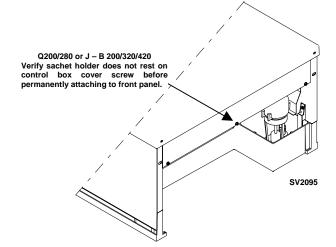
GSI200 will be centered on the front panel. Measure 6.5" (16.5 cm) left and right of center

#### Model Q200/280 or J - B 200/320/420

GSI200 will be offset ½" (1.27 cm) on the front panel. Measure 6.0" (15 cm) left and 7.0 (17.8 cm) right of center. Verify the ice machine control box cover screw aligns with a slot in the sachet holder. This prevents bulging of the front panel.

#### QuietQube® Models IB600C/IB800C/IB1000C

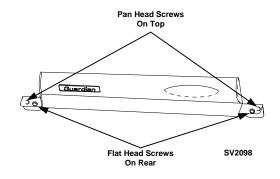
GSI200 will be offset 3.5" (8.9 cm) to the left on the front panel. Measure 10.0" (25.4 cm) left and 3.0 (7.6 cm) right of center. Verify the GSI200 does not interfere with the water curtain (at the ice thickness probe).



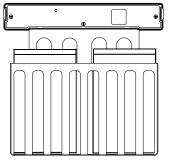
- 8. Remove backing from double-sided tape on the bottom of the timer housing.
- 9. Locate the timer housing on the front panel where the foam tape was removed in step 7, then press to seal tape.
- 10. Mark and drill four 3/32" pilot holes (two on top, two at rear). Secure timer to front cover with screws.

Top - Use two pan head screws

Rear – Use two flat head screws



11. Remove Ice Sentry<sup>TM</sup> sachet packet(s) from foil package and install into holder. Removing the foil packet allows the moisture in the air to activate the packet contents.



SV2097

12. Replace ice machine front cover

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Specifications and design are subject to change without notice.