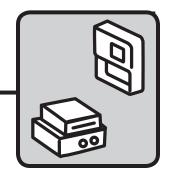
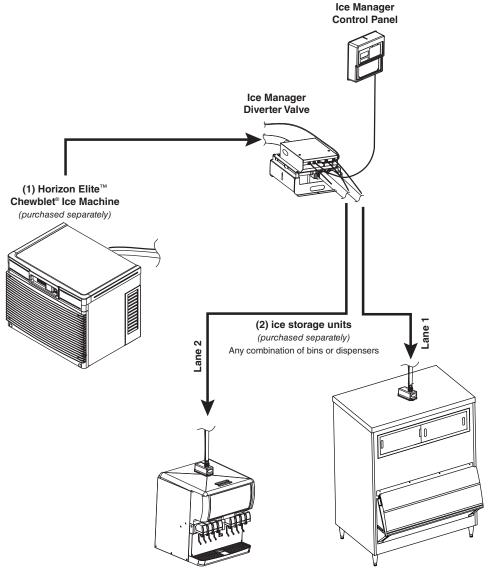
Ice Manager™ Diverter Valve System Installation Instructions Horizon Elite 1010, 1410, 1810 and 2110 Ice Machines

HCC1010AMS, HCC1410AMS, HCC1010WMS, HCC1410WMS, HCD/HCF1010RMS, HCD/HCF1410RMS, HCD/HCF1810RMS, HCD/HCF2110RMS, HCD1010NMS, HCD1410NMS, HCD1810NMS, HCD2110NMS (See model number configurator on page 2 for details.)

Order parts online www.follettice.com





Chewblet® Ice Machine Model Number Configurations

HC D 1810 A V S							
Icemaker	Voltage	Series	Condenser	Application	Configuration		
MC Maestro™ Chewblet® (425 Series) HC Horizon Chewblet (710, 1010, 1410, 1810, 2110 Series) HM Horizon Micro Chewblet		425 up to 425 lbs (193 kg) 710 up to 675 lbs (306 kg) 1010 up to 1061 lbs (482 kg) 1410 up to 1466 lbs (665 kg) 1810 up to 1790 lbs (812 kg) 2110 up to 2039 lbs (925 kg)	 A Air-cooled, self-contained W Water-cooled, self-contained R Air-cooled, remote condensing unit N Air-cooled, no condensing unit for connection to parallel rack system 	V Vision™ H Harmony™ B Ice storage bin J Drop-in M Ice Manager diverter valve system P Cornelius Profile PR150	S RIDE™ (RIDE remote ice delivery equipment) T Top-mount		

Special tools required

3.50" (88.9 mm) hole saw: Required for ice and beverage dispensers manufactured by others or existing bins

2.50" (63.5 mm) hole saw: Required for drop-in dispensers

1.75" (44.5 mm) hole saw: Required for drop-in dispensers

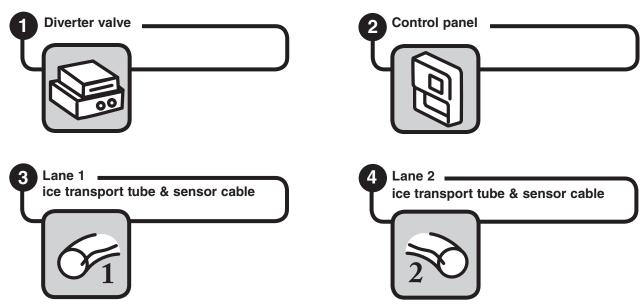
Ice Manager diverter valve system

The Ice Manager diverter valve system delivers ice to two ice storage units enabling a single ice machine to meet demand for ice at two locations. The system's sensors monitor ice levels in each storage unit and automatically switch ice delivery to the appropriate location.

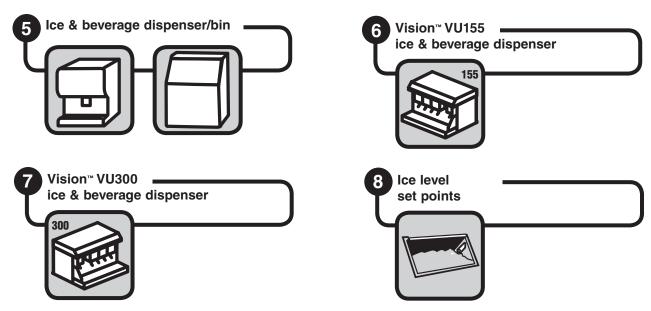
Carefully review system overview (pages 4 & 5) and be sure that you have a copy of the Follett approved site survey before proceeding with installation steps.

After thorough review of the site survey, install Horizon ice machine and dispenser/bin(s) using the installation guide provided with each unit.

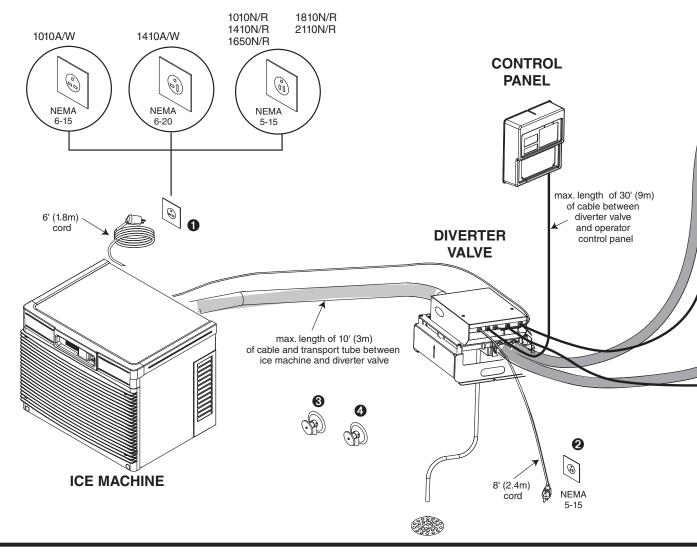
Read and complete installation sections 1 through 4.



Read and complete installation sections below that apply to your specific application.



Ice Manager - Site preparation and system overview



Electrical - ice machine 1

- 1010 (A/W) 208-230/60/1, 11A, max. ice machine fuse 15A
- 1410 (A/W) 208-230/60/1, -5%/+10% under peak load. 16A, max. ice machine fuse 20A
- 1010/1410/1810/2110 (R/N)
 Evap. 115/60/1, 6A; max. fuse 15A
- 1650 (R/N)
 Evap. 115/60/1, 6A; max. fuse 15A

Condenser (R models only)

	10	10R	14	10R	1810R		2110R	
	Single	3-Phase	Single	3-Phase	Single	3-Phase	Single	3-Phase
Electrical	208-230V, 60 Hz							
Max Circuit HVACR Breaker Size	15A	15A	30A	25A	45A	25A	45A	30A
Min Circuit Ampacity	10.7A	9.9A	19.3A	14.2A	26.2A	15.7A	27.1A	19.9A

Electrical - Ice Manager 2

• 115/60/1, 1.5 amps; max. fuse 15 amps

Drains

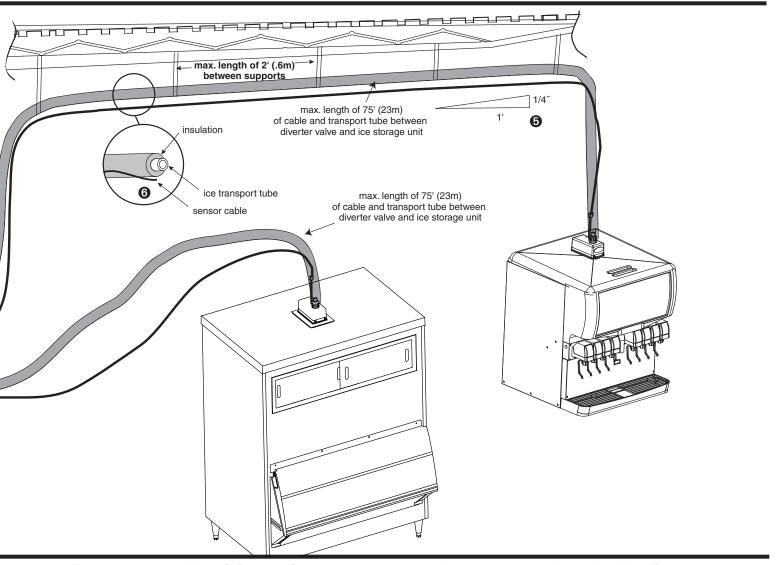
 Ice Manager - 3/8" (9.5mm) barb - 15 ft. (4.6m) 3/8" (9.5mm) I.D. tubing provided

Potable water supply - ice machine 3

- 10 70 psi (69 483kpa)
- 45 F to 90 F (7 C to 32 C)
- Follett recommends the use of an in-line water filter (item# 00130286)

Condenser water supply for water-cooled systems 4

- 10 psi min.; 150 psi max. (69kpa min.; 1034kpa max.)
- 45 F to 90 F (7 C to 32 C)
- 1.5 gallons per minute (5.68 liters per minute)



Temperature and humidity requirements

- All components, including ice transport tube, must be operated in ambient temperatures between 40 F and 120 F (5 C and 49 C)
- Relative humidity not to exceed 55%

Ice transport tube requirements

- Maximum vertical rise of 10' (3m) from ice machine to highest elevation of tube
- Use one continuous piece of ice transport tube. Do not splice.
- Horizontal run should be pitched so that melt water drains back to diverter valve. Ice transport tube run must have at least 1/4" per foot pitch (6.4mm/0.3m)
- Secure ice transport tube as needed to eliminate dips and traps
- Insulate all ice transport tube runs, making sure that sensor cable runs outside of the insulation **6**

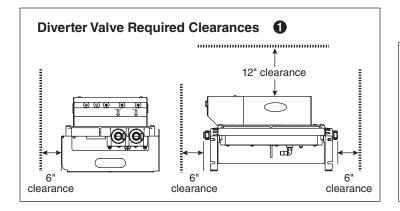
Ice transport tube and cable distance requirements

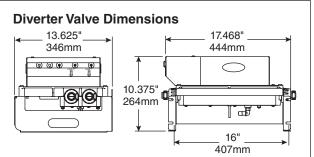
- Ice machine to diverter valve maximum run of 10' (3m)
- Diverter valve to operator control panel maximum run of 30' (9m)
- Diverter valve to ice receptacle maximum run of 75' (23m)
- Distance between ice transport tube supports maximum of 2' (0.6m)

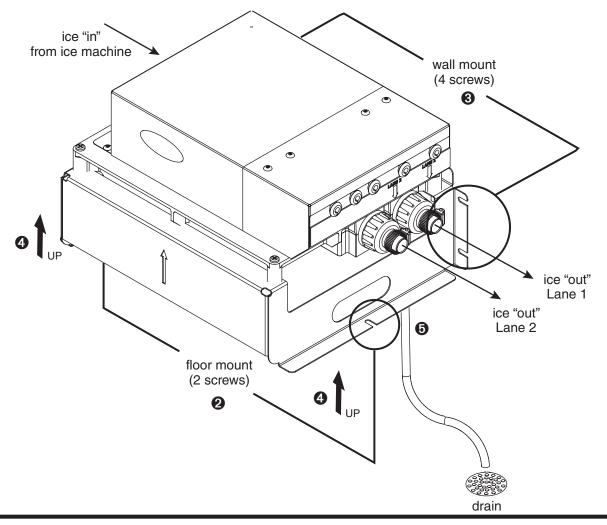
Operating temperature requirements

 Ice Manager diverter valve system components, including ice transport tube must be operated in ambient temperatures between 40 F and 120 F (4.5 C and 49 C)





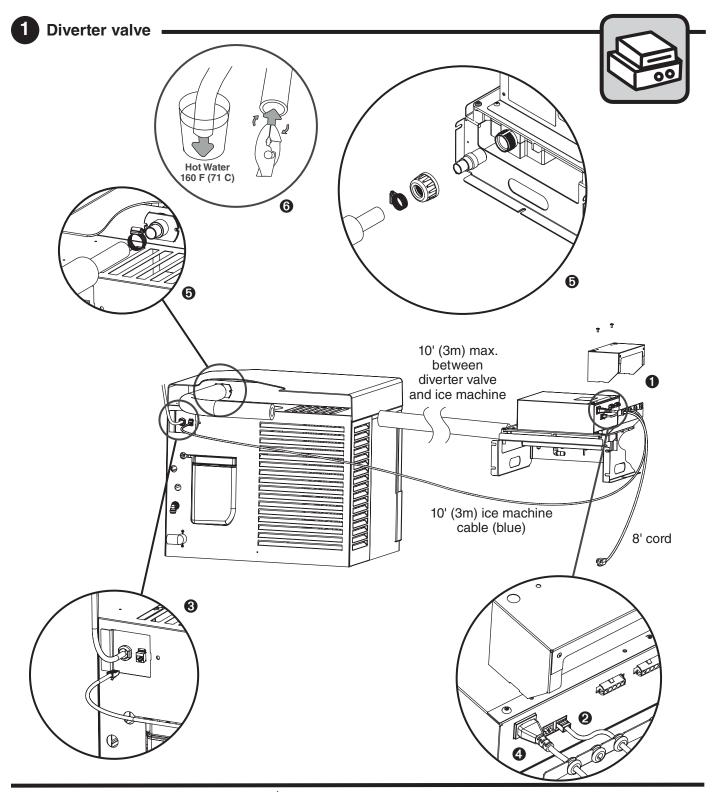




Mount diverter valve

- Minimum side clearances of 6" (153mm) required 1
- Minimum top clearance of 12" (305mm) required 1
- Diverter valve bracket may be mounted on the floor
 or on the wall
 using (4) anchors capable of supporting min. 40 lb (18kg)
- Diverter valve unit MUST face up 4

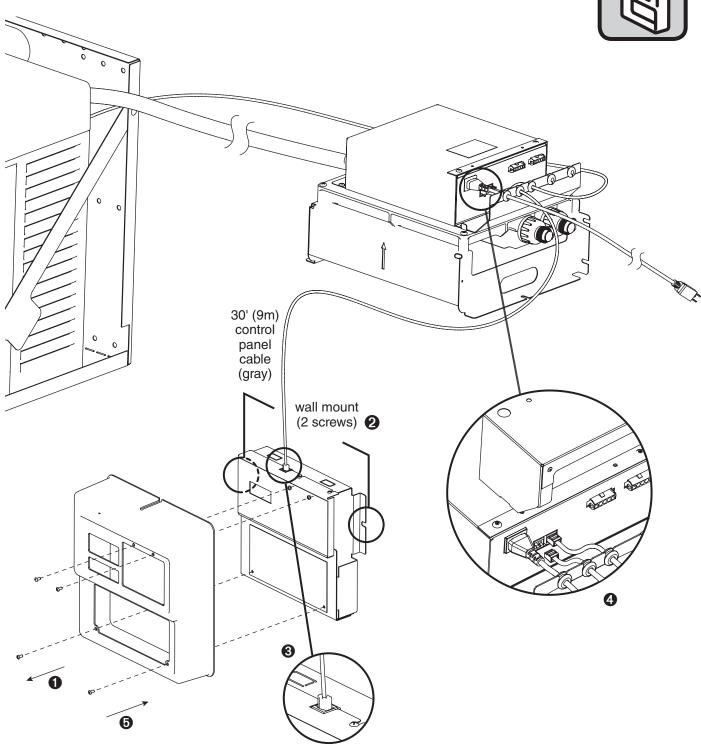
• Drain tube connects to fitting on underside of diverter valve **5**



Connect diverter valve to ice machine[†]

- Remove connection cover from diverter valve 1
- Connect blue ice machine cable to diverter valve 2
 Note: Control cable run not to exceed 10' (3m).
- Connect blue ice machine control cable to ice machine
- Connect power cord to diverter valve 4
- Run insulated ice transport tube to diverter valve
- **5** using guidelines in "Site Preparation Overview" on pages 4 & 5. Heat end of transport tube in cup of 160 F (71 C) hot water to soften and spread with pliers **6** before making connection to ease assembly and prevent stainless coupler edge from cutting inner wall of tube. **Note:** Ice transport tube run not to exceed 10' (3m).
- † If Horizon ice machine is an existing unit install applicable retrofit kit before completing this portion of installation (retrofit instructions are included with retrofit kit).





Mount control panel

- Remove cover from control panel 1
- Mount panel to wall 2 using wall anchors if needed

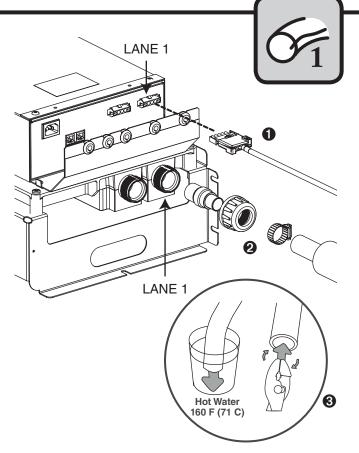
Connect control panel to diverter valve

- Connect gray control panel cable to control panel 3
- Connect gray control panel cable to diverter valve 4
 Note: Control panel cable run not to exceed 30' (9m).
- Replace control panel cover 6



Ice transport tube and sensor cable

- Use the site survey to identify lane 1 dispenser or bin
- Measure ice transport tube run and sensor cable run from lane 1 dispenser/bin to diverter valve
- Verify that run lengths comply with requirements on pages 4 & 5
- · Insulate ice transport tube
- Secure insulated ice transport tube and sensor cable as needed from dispenser/bin to diverter valve, being certain to prevent dips and traps from forming.
 See guidelines on pages 4 & 5.
- Pitch tube at least 1/4" per foot (6.4mm/0.3m). Tube must drain towards diverter valve.
- Connect lane 1 sensor cable 1 and insulated ice transport tube 2 to diverter valve
- Heat end of transport tube in cup of 160 F (71 C) hot water to soften and spread with pliers 3 before making connection to ease assembly
- Visually inspect inside of plastic coupling for burrs and remove as needed
- Hand-tighten cap nut on the coupling at diverter valve

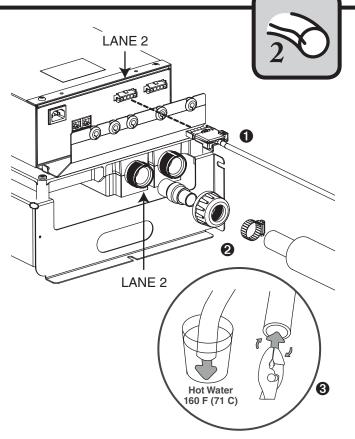


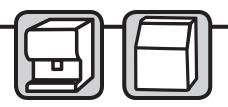


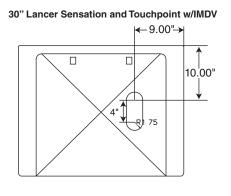
Lane 2

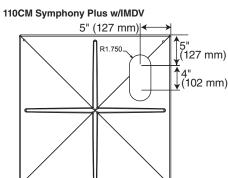
Ice transport tube and sensor cable

- Use the site survey to identify lane 2 dispenser or bin
- Measure ice transport tube run and sensor cable run from lane 2 dispenser/bin to diverter valve
- Verify that run lengths comply with requirements on pages 4 & 5
- Insulate ice transport tube
- Secure insulated ice transport tube and sensor cable as needed from dispenser/bin to diverter valve, being certain to prevent dips and traps from forming
- Pitch tube at least 1/4" per foot (6.4mm/0.3m). Tube must drain towards diverter valve.
- Connect lane 2 sensor cable 1 and insulated ice transport tube 2 to diverter valve
- Heat end of transport tube in cup of 160 F (71 C) hot water to soften and spread with pliers 3 before making connection to ease assembly
- Visually inspect inside of plastic coupling for burrs and remove as needed
- Hand-tighten cap nut on the coupling at diverter valve

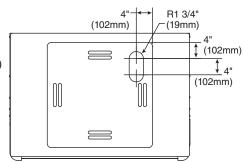


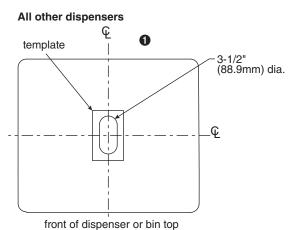






ED300 dispenser only



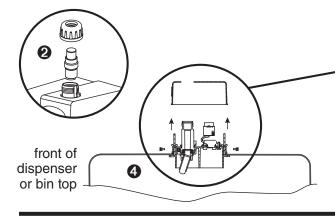


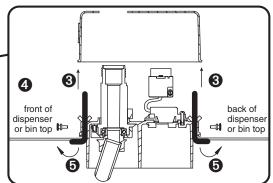
Freestyle 9000

REAR OF DISPENSER LID (UNDERSIDE)

REAR OF DISPENSER LID (UNDERSIDE)

REAR OF DISPENSER LID (UNDERSIDE)





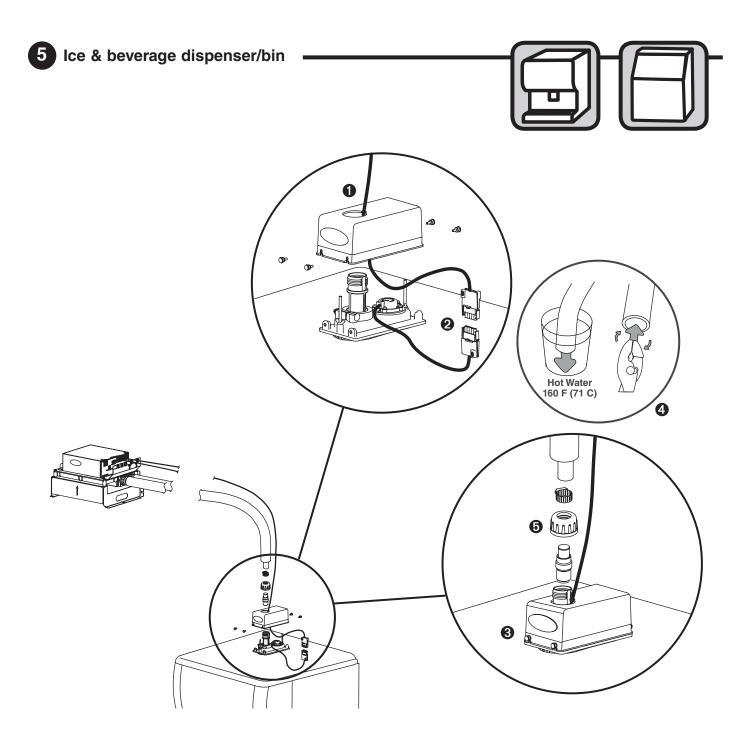
Prepare ice & beverage dispenser/bin top

- Using drawing above for your application, locate the proper location of ice & beverage dispenser (IBD) to place the supplied template
- Using supplied template and 3.5" dia. hole saw, cut holes per template

Note: Use a hand saw or similar tool to complete the cut out.

Mount sensor distribution unit

- Unscrew cap nut and remove center assembly 2
- Loosen screws and remove cover 3
- Turn short arm of angle rods so unit can be lowered into hole of IBD top
- Position unit into IBD top with tube at the front 4
- Turn angle rods to face outward 6
- Tighten wing nuts until arms of both rods press firmly against underside of IBD top securing body of sensor distribution unit

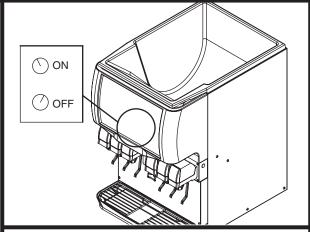


Connect ice transport tube & sensor cable

- Thread sensor cable through top of sensor distribution unit
- Connect sensor pigtail to sensor cable ②
- Tuck cable inside sensor unit replace top and tighten screws 3
- Heat end of transport tube in cup of 160 F (71 C) hot water to soften and spread with pliers before making connection to ease assembly and prevent stainless coupler edge from cutting inner wall of tube.
- Connect insulated ice transport tube



Agitation adjustments - CORNELIUS



Cornelius models ED, DB, DF, IDC and Flavor Fusion

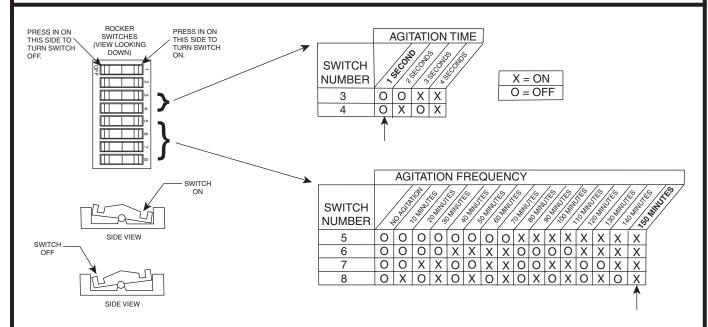
Adjust the agitation timer located on the Cornelius PC board to 1 second on, 1 hour off. **Note:** See Cornelius manual for more information.

Agitation adjustments – SERVEND

SerVend models only

No agitation adjustment required

Agitation adjustments – LANCER 4500 SERIES



Lancer 4500 series only

Adjust the agitation time to 1 second, and the agitation frequency to 150 minutes.

Note: See Lancer manual for more information.





Agitation adjustments - LANCER FS SERIES Initialization Screen (Boot Up Only) Lancer FS-16 Ver. 0.200 Main Menu Sub-Catagory FS-16 Setup Brands Per Side Major/Minor V:1 L:2 R:1 FS-16 Setup Bonus Key Setup V:1 T:F M:S B:W Config Bonus Key FS-16 Setup Soda/Plain Water Cancel O Enter Soda/Plain Water V:2 1:S 2:W 3:S 4:W Ю FS-16 Setup Dispense Delay V:1 B1 DLY1 Config Dispense Only Scrolls through Main Menu FS-16 Setup Set PC Mode Menu Press "Enter" to enter sub-catagory PC Mode Off On Moves curser to right or left On Time (MSEC) FS-16 Setup 05000 Changes value (number/letter) PC Time FS-16 Setup OFF Time (MIN) Press "Enter" to enter save changes Ice Stir Off 00150 Press "Cancel" to exit menu FS-16 Setup On Time (MSEC) 2nd Sub-Catagory 01000 Ice Stir On FS-16 Setup Selection Sold Out Sold Out #1 Sold Out Sold Out #1 Off FS-16 Setup Sold Out #1 Upper Lower 1000 500 V:1 Carb Sensors FS-16 Setup Ice Bin Optic Ice Bin Sensors 1000 12 0.104 0.104 FS-16 Setup 34 0.104 0.104 Valve Code Version 1 2 3 4 FS-16 Setup Number Of Valves On On On FS-16 Setup Reload Defaults?

Lancer FS series only

Hold down "cancel" and "left button" to get to hidden menu

Reset Defaults

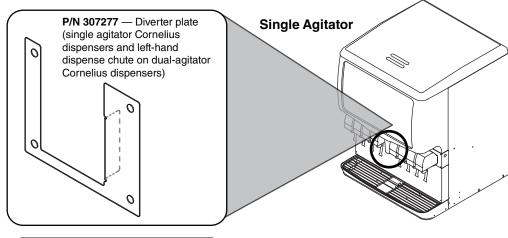
- Type in code 6655
- Type in 150 minutes "off time" and 1010 milliseconds (1 second of time) as the preferred setting
 Note: See Lancer manual for more information

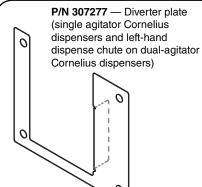
Yes

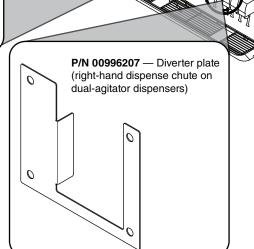




Dispenser diverter plate overview - CORNELIUS, ED, DF AND DB SERIES







Dual Agitator

Cornelius ED, DF and DB series only

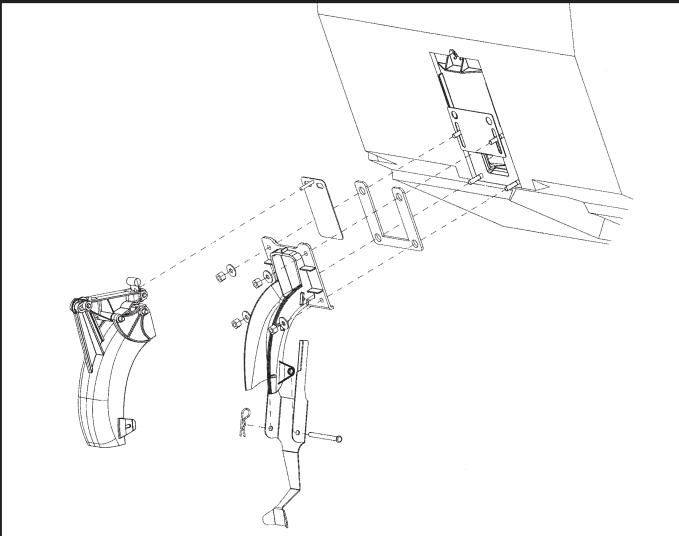
These dispensers require the installation of an ice diverter at the dispenser opening.

- · Disassemble chute assembly
- Discard factory restrictor plate 1
- Replace with alternate diverter plate 2 (supplied)





Restrictor plate adjustment - CORNELIUS IDC and FLAVOR FUSION



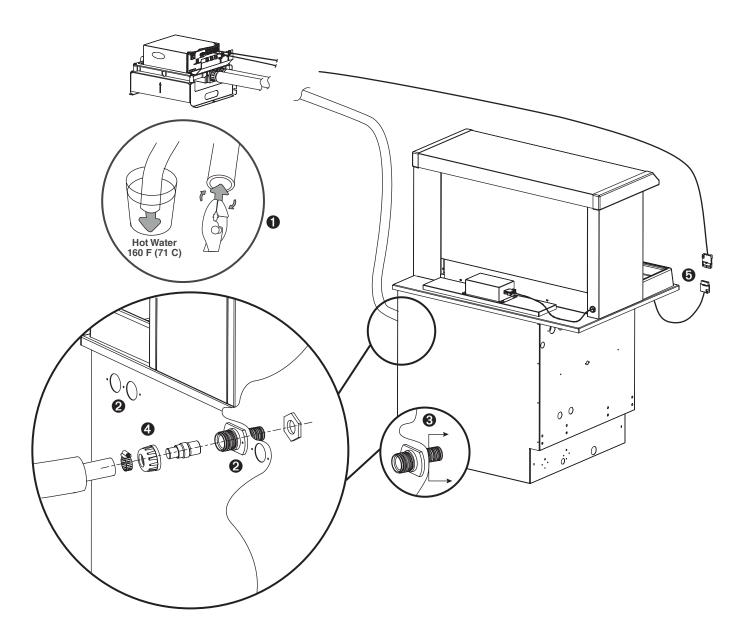
Cornelius IDC and Flavor Fusion

These dispensers require adjustment of the restrictor plate.

- Loosen four nuts on ice chute assembly 1
- Adjust restrictor plate to fully open position ②
- Replace four nuts and tight to 50 in. lbs. (max.)

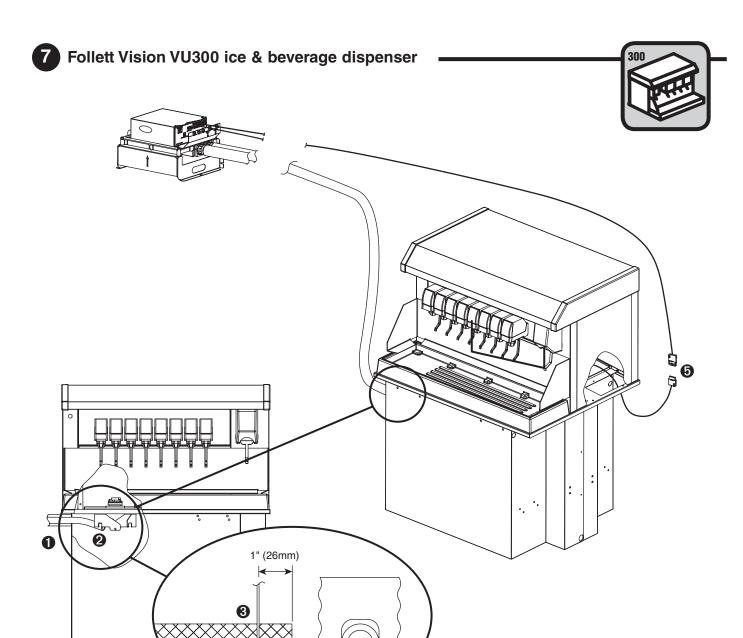






Vision VU155 dispenser ice transport tube and sensor cable[†]

- Heat end of transport tube in cup of 160 F (71 C) hot water to soften and spread with pliers before making connection to ease assembly and prevent stainless coupler edge from cutting inner wall of tube
- Install ice transport tube fitting in one of four predrilled rear holes in VU155 dispenser
 Note: If threaded end extends into dispenser it must be cut flush to inner nut.
- Attach ice transport tube to fitting 4. Cut transport tube to proper length and support the tube at least every 2 ft. (.6m) to avoid dips or traps that will result in standing water.
- Connect sensor pigtail to sensor cable 6
- † If VU155 is an existing unit install retrofit kit part# 00185165 before completing this portion of installation (retrofit instructions included with retrofit kit).



Vision VU300 dispenser ice transport tube and sensor cable[†]

- Insert ice transport tube through one of the four pre-drilled holes in the VU300 dispenser.

 Be sure to cut transport tube to proper length to avoid dips or traps.
- Locate mounting tabs
- Using a 3/16" bit, drill through the ice tube 1" (26mm) from end of ice transport tube creating two holes 3

- Slightly compress end of tube to engage holes in mounting tabs 4
- Connect sensor cable 6
- † If VU300 is an existing unit install retrofit kit part# 00185173 before completing this portion of installation (retrofit instructions included with retrofit kit).



Ice level set points are set at the factory and normally do not need to be changed. Setting recommendations are shown in the table below. Please contact Follett Technical Services toll free at (877) 612-5086 or +1 (610) 252-7301 prior to changing ice level set points.

	Factory settings		
LANE 1	Full 10" Min 14" Dif 3"		
LANE	Full 10"		
2	Dif 3"		

To view ice levels

 Locate LCD screen on Ice Manager control panel. Initial screen will show ice levels for lane 1 and lane 2 and diverter valve status (Fig. 1).

To view set points

- Press and hold both MODE SELECT and LANE 1 buttons until LANE 1 SETUP appears on the display (Fig. 2).
 - Note: Default/factory-set ice level sensor settings are shown.
- 2. To view Lane 2, press MODE SELECT to navigate to lane 2 setup (Fig. 3).

To change set points

- 1. Press and hold both MODE SELECT and LANE 1 buttons until LANE 1 SETUP appears on the display (Fig. 2).
 - **Note:** Default/factory-set ice level sensor settings are shown.
- 2. Press LANE 1 button to move through FULL, MIN and DIF ice level sensor settings. When selected, choice will flash (Fig. 4).
- 3. Press MODE SELECT button to change ice level sensor set point (Fig. 5).
- 4. Press LANE 1 button to increase ice level sensor set point and LANE 2 to decrease ice level sensor set point, (Fig. 6) to correspond to the drop-in dispenser ice level sensor settings listed in table above.
- Press MODE SELECT to save new ice level sensor setting (Fig. 7).
- 6. Press LANE 1 to continue to navigate through and set the Full, Min, and Dif ice level sensor settings for lane 1 (Fig. 8).
- 7. Press MODE SELECT to navigate to lane 2 setup (Fig. 9).
- 8. Repeat steps 2 through 6 to complete changes to lane 2 ice level sensor settings.



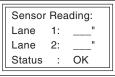




Fig. 2

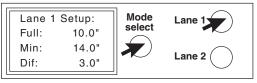


Fig. 3

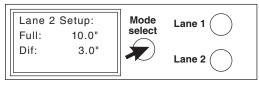


Fig. 4

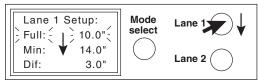


Fig. 5

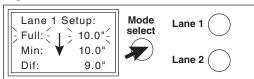


Fig. 6

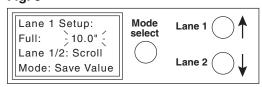


Fig. 7

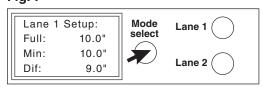


Fig. 8

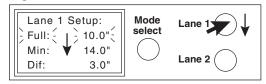
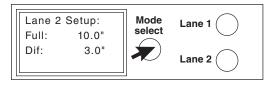


Fig. 9



Before Operating Equipment

Ice Manager Diverter Valve System must be cleaned and sanitized.

Note: Do not use bleach to sanitize or clean the ice machine or diverter valve.

⚠ WARNING

· Wear rubber gloves and safety goggles (and/or face shield) when handling ice machine cleaner or sanitizer.

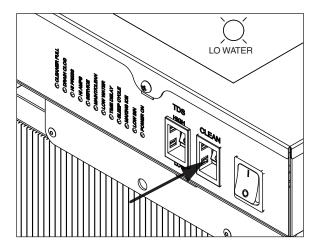
CAUTION

- Use only Follett approved SafeCLEAN Plus™ (item# 01050863) and NU-CALGON IM-III Sanitizer.
- Do not mix SafeCLEAN Plus™ and NU-CALGON IM-II solutions together
- DO NOT USE BLEACH
- It is a violation of Federal law to use these solutions in a manner inconsistent with their labeling
- · Read and understand all labels printed on packaging before use

Note: Complete procedure for cleaning an sanitizing MUST be followed. Ice must be collected for 10 minutes from each lane before putting ice machine and Ice Manager back into service.

1. Press the CLEAN button. The machine will drain. The auger will run for a short time and then stop. Wait for the LOW WATER light to come on.

Fig. 1



- Mix 1 gal. (3.8L) 120 F (49 C) water and one 7 oz. (198 g) packet of Follett SafeClean Plus (P/N 01050863).
- **3.** Using a 1 quart (1L) container, slowly fill cleaning cup until CLEANER FULL light comes on. Do not overfill.
- **4.** Place one Sani-Sponge[™] in remaining sanitizing and cleaning solution and retain for Step 39.

Note: Do not use bleach to sanitize or clean the icemaker.

5. Replace cover on cleaner cup. Machine will clean, then flush 3 times in approximately 15 minutes. Wait until machine restarts.

6. Press power switch OFF.

Fig. 2

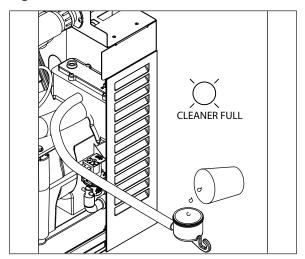


Fig. 3

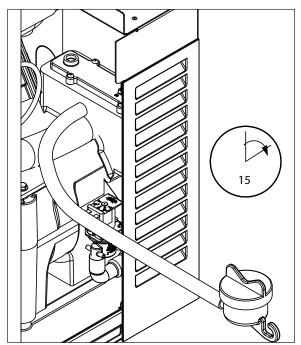
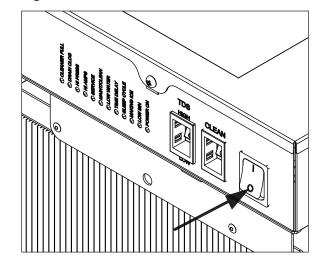
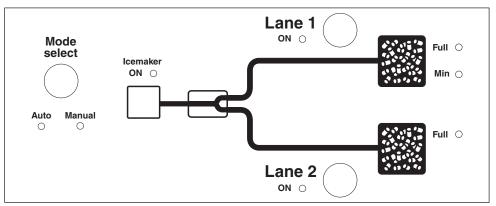


Fig. 4



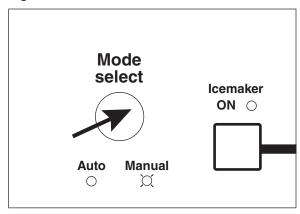
7. Locate Ice Manager control panel.

Fig. 5



8. To sanitize Lanes 1 and 2, diverter valve must be in manual mode. Press the MODE SELECT button on the Ice Manager control panel. Manual light will come on. If auto light comes on, press MODE SELECT button again.

Fig. 6



9. To sanitize Lane 1 – Press LANE 1 button. Lane 1 light will come on.

Fig. 7

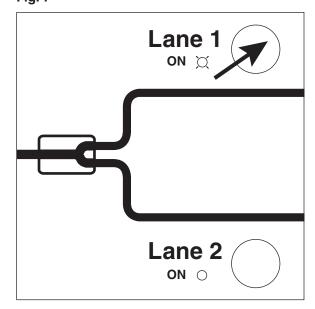
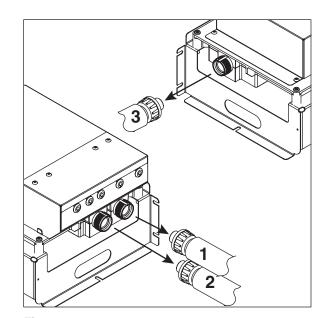


Fig. 8

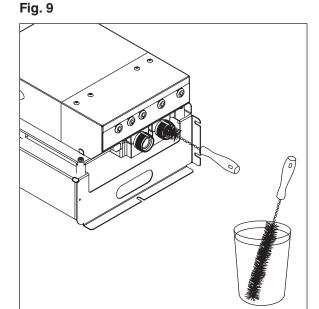
10. Disconnect ice transport tubes from diverter valve unit. Be sure to note Lane 1 (Fig. 8.1), Lane 2 (Fig. 8.2) and inlet (Fig. 8.3) ice transport tube connections to avoid confusion when reattaching.



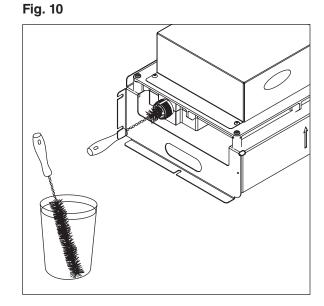
11. Mix 1 gallon 120 F (49 C) water and 1.6 oz (48 ml) NU-CALGON IMS-III SANITIZER.

Note: Do not use bleach to sanitize or clean the diverter valve.

12. Soak supplied brush in sanitizer solution and scrub inside of the diverter valve Lane 1 for at least 60 s, re-wetting the brush with sanitizer as needed.

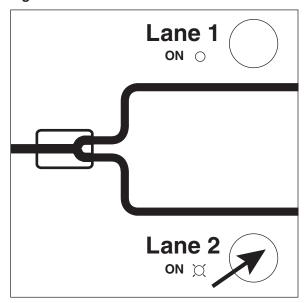


13. Re-wet brush with sanitizer and scrub diverter valve inlet for at least 60 s, re-wetting the brush with sanitizer as needed.



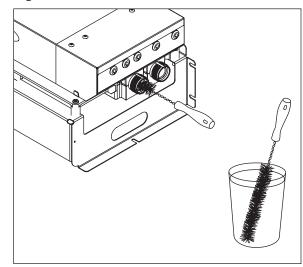
14. To sanitize Lane 2 – Press LANE 2 button. Lane 2 light will come on.

Fig. 11



15. Soak supplied brush in sanitizer solution and scrub inside of the diverter valve Lane 2 for at least 60 s, re-wetting the brush with sanitizer as needed.

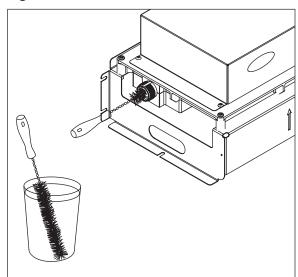
Fig. 12



16. Re-wet brush with sanitizer and scrub inlet for at least 60 seconds, re-wetting the brush with sanitizer as needed.

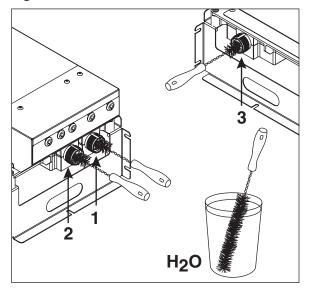
Note: Inlet must be scrubbed with both Lane 1 and Lane 2 settings to be sure each lane is cleaned and sanitized.

Fig. 13



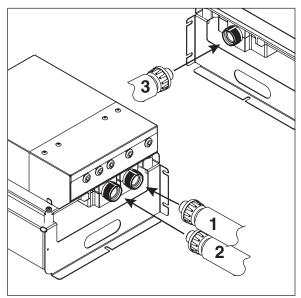
17. Rinse brush in potable, 120 F (49 C) water. Rinse Lane 1 (Fig. 14.1), Lane 2 (Fig. 14.2), and inlet (Fig. 14.3) with clean potable water for at least 60 s to be sure each lane is rinsed thoroughly.

Fig. 14



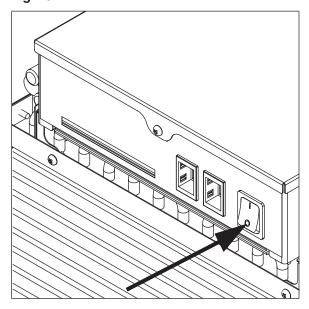
18. Re-connect ice transport tube to Lane 1 (Fig. 15.1), Lane 2, (Fig. 15.2) and inlet (Fig. 15.3).

Fig. 15



19. To sanitize Lane 1 ice transport tube – Press ice machine power switch OFF.

Fig. 16



20. Verify that Ice Manager is in manual mode. Manual light should be on. If auto light is on, press MODE SELECT button to switch to manual mode.

21. Press LANE 1 button. Lane 1 light will come on.

 ${\bf 22.}\ {\sf Disconnect}\ {\sf coupling}\ {\sf from}\ {\sf ice}\ {\sf machine}\ {\sf as}\ {\sf shown}.$

Fig. 17

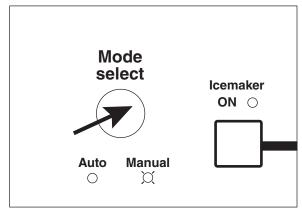


Fig. 18

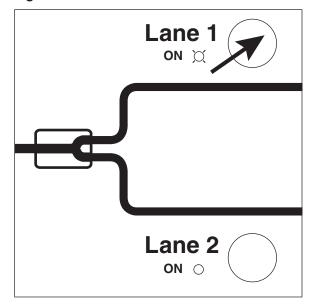
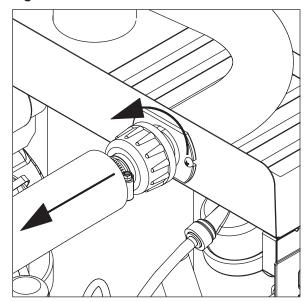


Fig. 19



- **23.** Using disposable food service grade gloves, insert dry Sani-Sponge.
- **24.** Insert Sani-Sponge soaked in SafeClean Plus (from Step 4).
- **25.** Push both Sani-Sponges down ice transport tube with supplied pusher tube.

26. Remove 16" (407 mm) pusher tube.

27. Reconnect coupling. Press ice machine power switch ON. Ice pushes Sani-Sponges through tube.

Fig. 20

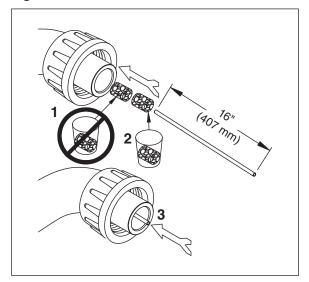


Fig. 21

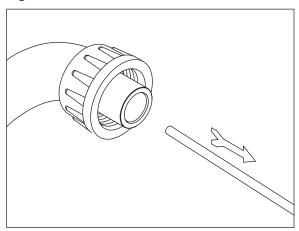
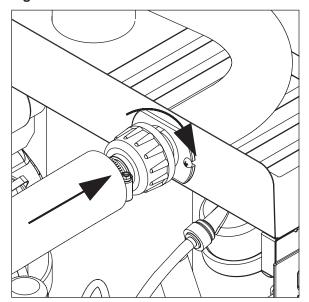
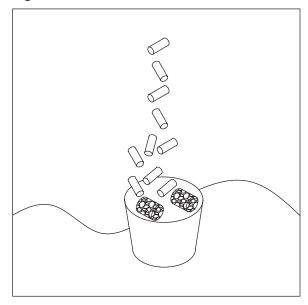


Fig. 22



28. Place a sanitary (2 gallon or larger) container in bin or dispenser to collect Sani-Sponges and ice for 10 minutes. Collect 5.5 lbs (3 kg) of ice from unit. Discard ice and Sani-Sponge.

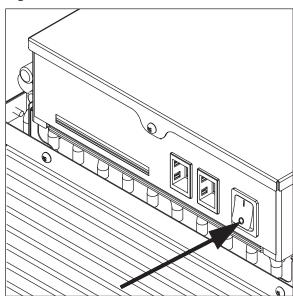
Fig. 23



29. To sanitize Lane 2 ice transport tube – Press ice machine power switch OFF.

Fig. 24

Fig. 25

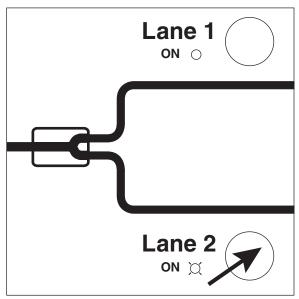


30. Verify that Ice Manager is in manual mode. Manual light should be on. If auto light is on, press MODE SELECT button to switch to manual mode.

Mode select Icemaker ON O

31. Press LANE 2 button. Lane 2 light will come on.

Fig. 26



32. Disconnect coupling from ice machine as shown.

Fig. 27

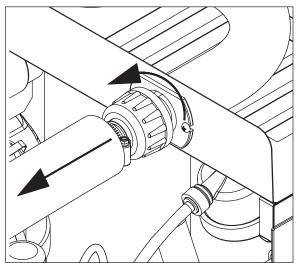
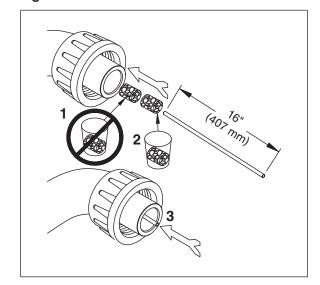


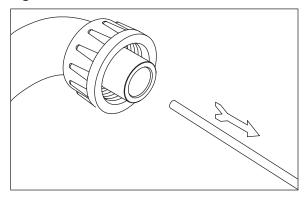
Fig. 28



- **33.** Using disposable food service grade gloves, insert dry Sani-Sponge.
- **34.** Insert Sani-Sponge soaked in SafeClean Plus (from Step 4).
- **35.** Push both Sani-Sponges down ice transport tube with supplied pusher tube.

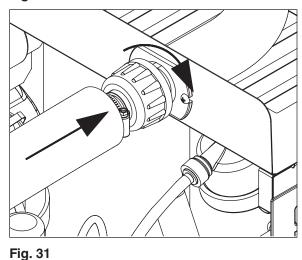
36. Remove and discard 16" (407 mm) pusher tube.

Fig. 29



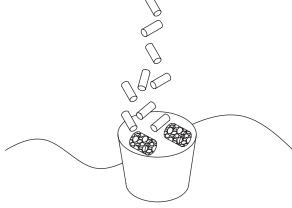
37. Reconnect coupling. Press ice machine power switch ON. Ice pushes Sani-Sponges through tube.

Fig. 30



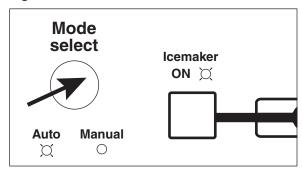
3

38. Place a sanitary (2 gallon or larger) container in bin or dispenser to collect Sani-Sponges and ice for 10 minutes. Collect 5.5 lbs (3 kg) of ice from unit. Discard ice and Sani-Sponges.



39. Press MODE SELECT button on Ice Manager control panel to switch to auto mode. Auto light will come on.

Fig. 32



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