

# **BIM Beverage Ice Multiplex Unit Instruction Manual**

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**BIM Beverage Ice Multiplex Unit** 



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# **TOOLS REQUIRED**

- Two (2) Calibration Weights (PN 3235029)
- Scale Centering Tool (PN VMP00136)
- Oetiker Pliers (PN 00681815)
- 1/4" Drive Ratchet
- 1/4" Drive Socket Set (with 3/8" and 5/16")
- 3/8" Wrench
- 5/16" Nut Driver
- Phillips Head & Straight Screw Drivers, w/ magnetic tip
- Allen Wrench Set (with 5/64" and 5/32")
- · Caulk Gun
- · Soft Bristle Brush
- Flashlight
- Putty Knife
- Wet/Dry Shop Vacuum
- 5-Gallon (20 liter) Bucket
- · Cleaning Manifold & Cleaning Buckets (store supplied)

#### **PARTS REQUIRED**

- Black Silicone Sealant (Tube)
- Electrical Tape
- · Zip Ties
- Adhesive Fastener (For securing zip tie to surface.)
- TUNE UP KIT 020009018 (contents listed below)

QTY	DESCRIPTION	PART NUMBER
1	BLENDER BELT	VMP00124
1	SHAVER BELT	VMP00123
1	DRIVE SOCKET	VMP00167
1	ICE SHAVER GASKET	1706266
9	LMS VALVES	1706172
9	OETIKER CLAMPS	15.7-706R
2	O-RINGS	MCP00262
1	BIM SCREEN OVERLAY KIT	000-BIC-000C-S
1	SHAVER BLADE KIT	VMP00125
1	INSTRUCTIONS TUNE UP ENG	020009019
1	INSTRUCTIONS, TUNE UP FRENCH	020009048

#### RECOMMENDED TRUCK STOCK LIST FOR TUNE UP

QTY	DESCRIPTION	PART NUMBER
1	DISPENSE MANIFOLD COVER	1706148
1	MANUAL RINSE SWITCH	2162731
1	RINSE NOZZLE	3547765
1	SCALE PAD	VMP00130
1	SPLASH GUARD	000-BIC-0010-S

**NOTE**: Additional non-warranty parts used need to be invoiced on a separate invoice to the site. Manager or Operator must approve additional repairs.

NOTE: All right and left references are based from standing in front of the unit.

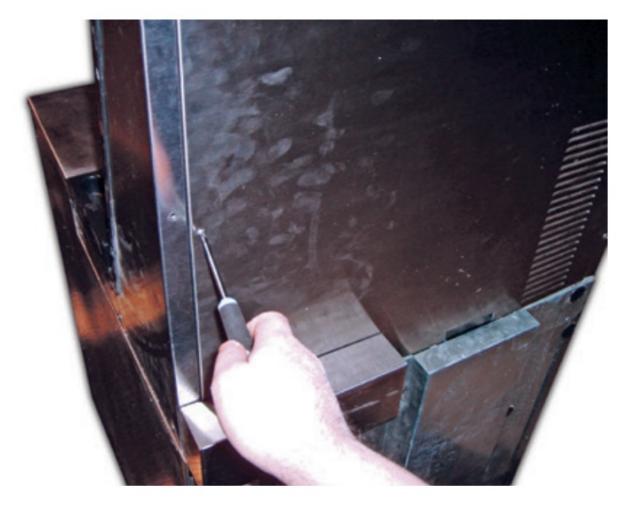


Ice shaver blade is sharp on both edges. Wear cut resistant gloves when handling.

#### **INSTRUCTION**

#### **PREPARATION**

- 1. Confirm operation of the BIM unit with the manager before beginning Tune Up. Make notes on BIM Tune Up checklist.
- 2. Check touch screen for black spots and responsiveness. Make notes on BIM Tune Up checklist.
- 3. Remove all product and bins from the unit and put in the walk in cooler.
- 4. Locate all of the BIM pitchers. Check for cracks, cloudiness or damage. Make notes on BIM Tune Up Checklist.
- 5. Remove two (2) Phillips head screws that secure the back panel.



- 6. Remove the back panel by pulling it out and down.
- 7. Place an empty pitcher on the scale pad to collect dispensed product.
- 8. Verify the CO2 pressure regulator is set to 35 psi with one of the product pumps running. Record pressure on BIM Tune Up Checklist.
- 9. Empty product from pitcher in sink then place pitcher on the rinse station.
- 10. Verify the water pressure regulator is set to 35 psi while the pitcher is being rinsed. Record pressure on BIM Tune Up Checklist.
- 11. Perform the Zone 2 weekly cleaning using the instructions on the touch screen. Do not return the product to the cabinet during the weekly cleaning. Do not fill ice bin with ice.
  - **NOTE**: Product will be returned and ice will be filled toward the end of the tune up.
- 12. When removing ice during the weekly cleaning, operate ice shaver motor, confirm ice shaver motor is fully functioning. Make notes on BIM Tune Up Checklist.
- 13. Check cleaning manifold during cleaning and notify manager if replacement is needed.
  - **NOTE**: Additional non-warranty parts used need to be invoiced on a separate invoice to the site. Manager or Operator must approve additional repairs.
- 14. Power unit OFF and unplug.
- 15. Disconnect the water, CO2 and drain.
- 16. Move the unit to the back of the store if possible.
- 17. Place bucket under drain.
- 18. Pull small drain pan straight out from LEFT side of unit. Empty the small drain pan, clean and set aside.



- 19. Remove nine (9) Phillips head screws from the LEFT side panel.
- 20. Remove the LEFT side panel by pulling it towards the back of the unit and down.
- 21. Disconnect the red and black wires from the manual reset breaker in the left hand side panel to prevent damage.

#### **ICE SHAVER GASKET & BLADE**



Ice shaver blade is sharp on both edges. Wear cut resistant gloves when handling.

22. Remove the ice bin lid and check for cracks. Notify manager if replacement is needed.

**NOTE**: Additional non-warranty parts used need to be invoiced on a separate invoice to the site. Manager or Operator must approve additional repairs.

- 23. Remove the ice shelf.
- 24. Remove the auger nut and lift the ice auger straight up to remove it from the shaft.
- 25. Using a Phillips head screwdriver remove the four (4) screws that secure the ice bin to the condensate bowl.



26. Remove the ice bin by lifting it straight up. Be sure not to drop/lose the ice bin lid safety switch actuator rod, check for cracks or broken ice bin. Inspect the ice bin for damage and record notes on the BIM Tune Up Checklist.



# $^{ackslash}$ CAUTION

Be careful not to damage actuator rod when removing the ice bin. Push rod should not be bent or have pressure applied to it.

- 27. Remove the shaver gasket. You may find the gasket adhered to the bottom of the ice bin or the top of the dispense area cover.
- 28. Clean all surfaces where the old ice shaver gasket made contact.
  - **NOTE**: Use caution when handling the shaver blade, it is sharp.
- 29. Remove two (2) Phillips head screws that secure the shaver blade and shims. Note the position and type of shims before removing. Safely discard the shaver blade and keep the shims.



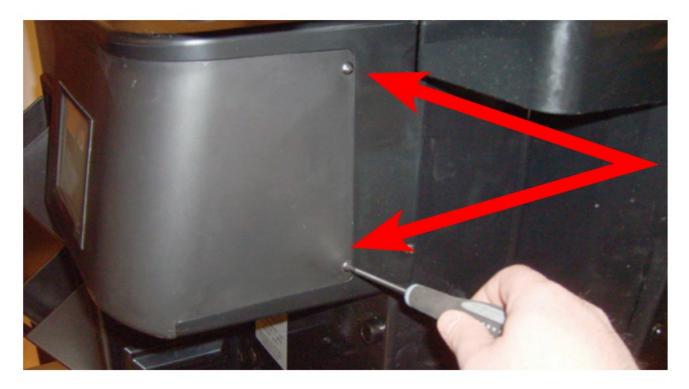
- 30. Wash, rinse and sanitize the ice bin, ice bin lid, ice shelf, auger and auger nut.
- 31. Verify the ice bin drain is draining. If it is not, remove the ice bin drain line and clear any obstructions found.
- 32. Wash, rinse and sanitize the ice bin drain pan.
  - NOTE: Use caution when handling the shaver blade, it is sharp.
- 33. With the two (2) Phillips head screws previously removed, install the new shaver blade with the words up and with the correct shims under the shaver blade.
  - **NOTE**: When installing the new Shaver Blade, be sure to mount it with the recessed side facing upward. Also note the number and type of shims underneath the blade. The unit should have two (2) #7 shims. Reuse the two (2) number 7 shims if they are not damaged. If damaged replace.
- 34. Two (2) #7 shims should be present under the shaver blade.
- 35. Be sure to tighten both ice shaver blade screws evenly.



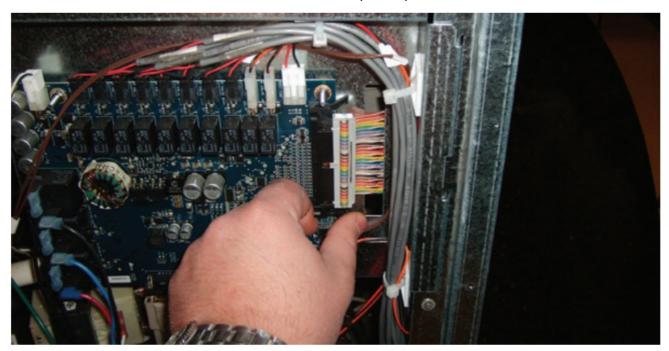
- 36. Dry the contact points for the ice shaver gasket. Install the new shave gasket. Ensure the gasket does not block any of the ice chute opening.
- 37. Verify the three (3) rubber ice bin grommets are still on the ice bin.
- 38. Make sure adhesive on top of new ice shaver gasket is exposed before installing the ice bin.
  - **NOTE**: Actuator rod must be in actuator rod sleeve so it can depress the safety actuator switch just below the bowl.
- 39. Install the ice bin. Be sure the ice bin lid actuator rod is in place with the clamp closer to the top of the ice bin.
- 40. Use four (4) previously removed Phillips head screws to secure ice bin.
- 41. Install the ice auger over the shaft in the ice bin and tighten the ice auger nut on the shaft.
- 42. Set the ice shelf in place in the ice bin.
- 43. Place the ice bin lid on the ice bin.

#### LMS VALVES

44. Remove two (2) Phillips head screws on the right hand side of the touch screen.



45. Disconnect the ribbon cable from the touch screen at the Input/Output board located at back of unit.



- 46. Remove the touch screen by pressing the front bottom left hand corner in and sliding it to the right and lifting it out.
- 47. Remove three (3) Phillips head screws that secure the chase cover. Remove the chase cover.
- 48. Remove the Phillips head screw that secures the LMS valve brackets.



49. Remove the divider from between the hoses in the chase.



- 50. Wash, rinse and sanitize the dispense manifold cover and the dispense manifold cover area.
- 51. Remove two (2) Phillips head screws that hold the plastic and metal LMS valve brackets together. Also remove two (2) Phillips head screws that hold the water LMS valve to the dispense manifold cover.



52. Using snips or Oetiker pliers, cut the existing Oetiker clamps that secure the product tubing to the LMS valves. Remove the existing LMS valves and discard.

**NOTE**: The entire valve body must be replaced.

53. Install the new LMS valves and secure with the supplied 15.7 Oetiker clamps.



**NOTE**: The product tubing is numbered 1-8. The dispenser head bracket is also numbered 1-8, be sure to these numbers match up when installing.

- 54. Replace the water dispense LMS valve using the same procedures as previous steps. The water dispense valve is located to the left of the product valves.
- 55. Wash, rinse and sanitize the LMS area and the dispense manifold cover.
- 56. Attach water LMS valve to dispense manifold cover using two (2) previously removed Phillips head screws.
- 57. Install the LMS bracket in the dispense manifold cover with the one (1) previously removed Phillips head screw.

  Do not over tighten the screw.

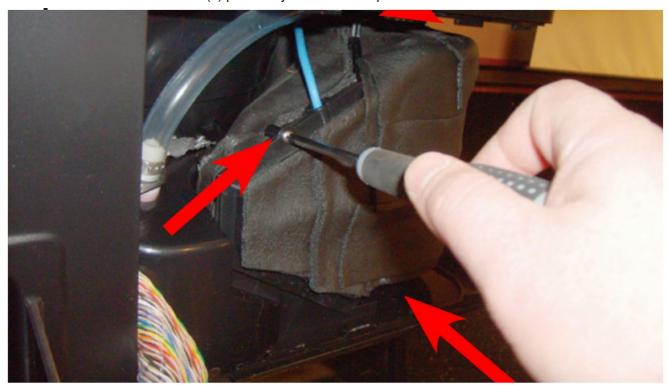


58. Install the divider in between the hoses in the chase.

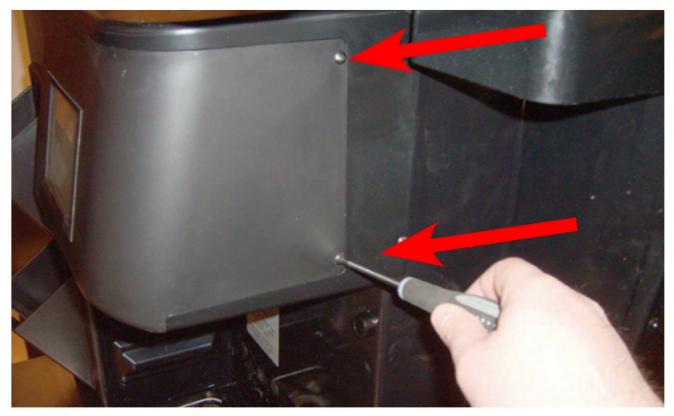
The divider must be correctly installed for the chase to maintain the proper temperature.



59. Install the chase cover with three (3) previously removed Phillips head screws.



- 60. Wash, rinse and sanitize the front top panel.
- 61. Check the front top panel for cracks and discoloring.Record the findings on the BIM Tune Up Checklist.
- 62. Reinstall the touch screen with two (2) previously removed Phillips head screws.



# **DRIVE SOCKET**

- 63. Remove the splash guard.
- 64. Wash, rinse and sanitize the splash guard.

- 65. Dry the rinse basin wall over the scale pad.
- 66. Inspect Scale Pad. Make notes on BIM Tune Up checklist.
- 67. Lift the front right hand corner of the scale pad and locate the set screw in the drive socket.



68. Use a 5/64" Allen wrench to loosen the set screw.



- 69. Remove drive socket.
- 70. Remove the scale pad by lifting it off the scale plate.
- 71. Ensure scale pad is in good condition with a snug fit.
- 72. Check advanced bearing assembly for wear. If loose, wobbly, or worn discuss with store manager about replacing.

**NOTE**: Additional non-warranty parts used need to be invoiced on a separate invoice to the site. Manager or Operator must approve additional repairs.

- 73. Place the scale pad on the scale plate.
- 74. On the new drive socket use a 5/64" Allen wrench and tighten the set screw up to clean the threads out of it. Do not over tighten the set screw or the drive socket will be damaged and unusable. Do not loosen the set screw.
- 75. Be sure the shaft of the advanced bearing assembly is clean and then set the drive socket with the 5/64" Allen wrench attached on to the advanced bearing assembly shaft.
- 76. Press down on the drive socket and loosen the set screw until the drive socket drops onto the shaft.
- 77. Once the drive socket falls into place tighten the set screw with the 5/64" Allen wrench until the set screw makes contact with the advanced bearing assembly shaft, do not over tighten the set screw. Then back the set screw off 1/4 a turn. There should be a little up and down movement in the drive socket.
- 78. Remove the rinse nozzle from the rinse basin and clean it out in the three compartment sink.



- 79. Wash, rinse and sanitize the rinse basin.
- 80. Reinstall the rinse nozzle on the rinse basin.
- 81. Thoroughly dry and then apply black silicone to the seam where the rinse basin meets the work top surface.
- 82. Clear and clean any drain line obstructions.
- 83. Check the scale beam serial cable connection and verify it is fastened to the left Vitamix support. If not use a zip tie and a stick back fastener to attach it to the support.



- 84. Locate the blender motor tachometer wires, these wires are red, black, and green. The wires go from the Vitamix control board to the blender motor. Check the connection in the wiring and verify it is fastened to the Vitamix control board housing and sealed with electrical tape or heat shrink wrap.
- 85. Verify the connection is dry and not corroded. If the connection is corroded, cut the connection out and use three (3) butt wire connectors to connect the wires together.
- 86. Wrap the connection with electrical tape or heat shrink wrap and attach it to the Vitamix control board housing with a zip tie and a stick back fastener.

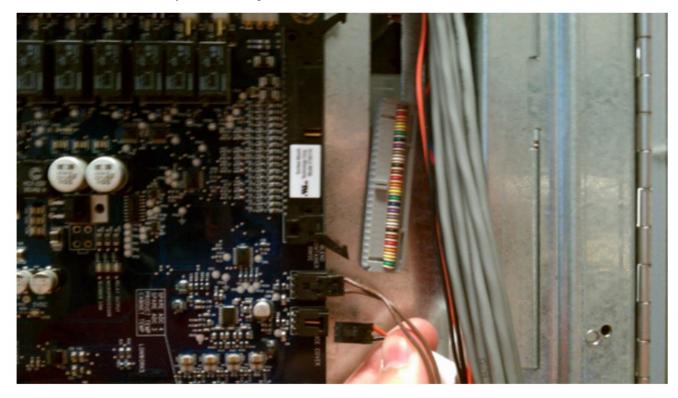


- 87. Reconnect the red and black wires from the manual reset breaker in the left hand side panel that were disconnected in Step 16.
- 88. Install LEFT side panel using the nine (9) Phillips head screws.
- 89. Install the drip tray by sliding it into the left hand side panel.



# **SHAVER BELT**

90. Disconnect the ice bin safety switch wiring from the I/O board.



91. Remove the two Phillips head screws that hold the I/O board bracket in place.



- 92. Lift the I/O board bracket out of the grooves on the support and lay the I/O board and bracket down on the back of the unit.
- 93. Use a 3/8" open end wench and/or a 1/4" drive ratchet and a 3/8" socket to loosen the four bolts that hold the shaver motor to its support.



- 94. Remove the shaver belt.
- 95. Install the new shaver belt.
  - A. Slide the shaver motor towards the back of the unit to tighten the shaver belt.
  - B. Tighten the four 3/8" head bolts that hold the shaver motor.
- 96. Lift the I/O board bracket up and insert it into the grooves in the support.
- 97. Install the two previously removed Phillips head screws to hold the I/O board bracket in place.
- 98. Reconnect the ribbon cable from the touch screen to the I/O board.
- 99. Reconnect the ice bin safety switch wiring to the I/O board.

## **BLENDER BELT**

100. Inside the refrigerated cabinet, remove two (2) 5/16" screws that secure the top of the center product divider.



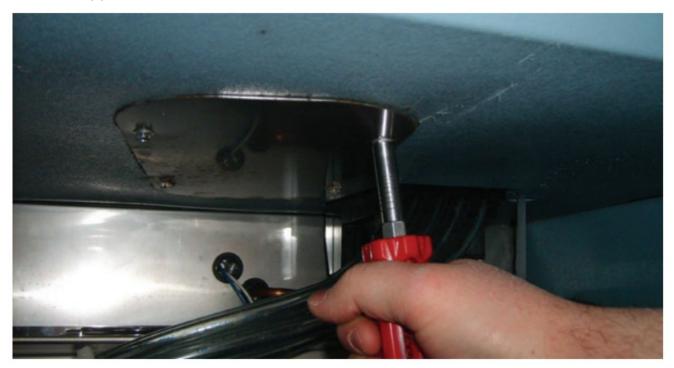
- 101. Remove two (2) Phillips head screws (with 3/8" head acorn nuts on them) securing the center product divider bottom.
- 102. Pull the center divider out of the unit.



103. Remove two (2) Phillips head screws on the top product bin support plate. Do not remove the product fittings. The plate can sit on top of the support plate below it.



104. Remove four (4) 5/16" head screws that secure the blender belt access cover. Remove the cover.



- 105. Remove the blender belt.
- 106. Install the new blender belt on the advanced bearing assembly pulley and the blender motor pulley.
  NOTE: From inside the cabinet, turn the pulley connected to the raised bearing assembly while holding the blender belt over the edge of pulley. This will aid in moving the new blender belt onto the pulley.
- 107. Verify the blender belt is tight and motor is fully functioning.
- 108. Install the blender belt access cover with four (4) previously removed 5/16" head screws.



- 109. Install the top product bin support plate with two (2) previously removed Phillips head screws.
- 110. Install the center product divider with two (2) 5/16" head screws attaching it to the top of the refrigerated cabinet.
- 111. Use two (2) Phillips head screws with 3/8" head acorn nut to attach the bottom of the center product divider to the bottom product bin support plate.

## **CONDENSER & CONDENSATE PAN**

- 112. Use a soft bristle brush to remove the dust, dirt and debris out of the condenser coil.
- 113. Use the shop vacuum to clean the condensate pan under the compressor.



114. Disconnect the condensate drain line at the condensate pan and clean. Verify the drain is clear of obstructions and reconnect the condensate drain line.



- 115. Install the back panel with two (2) previously removed Phillips head screws.
- 116. Remove and replace the o-rings on the water line and CO2 quick connects going to the unit. Use food grade lubricant on the o-rings.



## WHIP CREAM DOOR

- 117. Open the whip cream door and verify the whip cream can bracket is attached to the door. Make notes on BIM Tune Up Checklist If the whip cream can bracket is broken.
- 118. Check the whip cream door trim and verify it is not broken or cracked. Make notes on checklist if the whip cream door trim is broken or cracked. Make notes on checklist if refrigerated base door is damaged.
  NOTE: Additional non-warranty parts used need to be invoiced on a separate invoice to the site. Manager or Operator must approve additional repairs.

#### **CONNECTIONS**

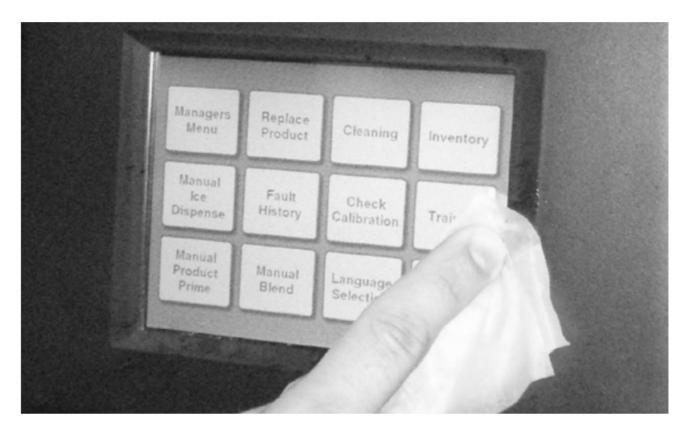
- 119. Move unit from backroom to correct location.
- 120. Reconnect the water line and CO2 line.
- 121. Reconnect the drain line.
- 122. Reconnect the electrical.

## **TOUCH SCREEN OVERLAY**

- 123. Remove the old touch screen overlay.
- 124. With wet towelette carefully wipe touch screen and beveled surface around screen until both are free of product, dirt and smudges.



125. With a dry towelette carefully dry the touch screen and beveled surface around screen. Dust and smudges must be removed so there is a clean smooth connection with the touch screen.



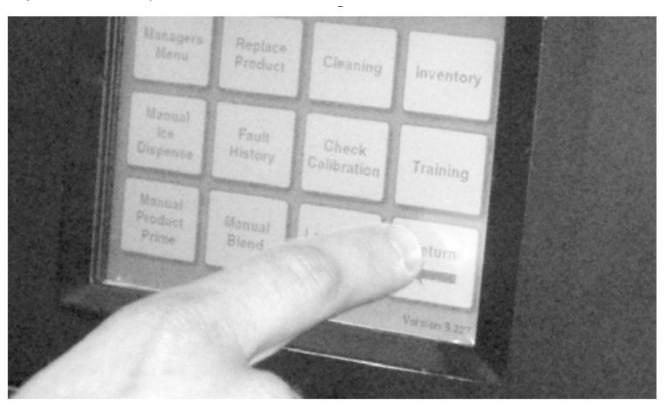
126. Using the same towelettes, clean and dry the protective overlay. Slowly remove adhesive backing from the back side of the new touch screen protective overlay.



127. Slowly and carefully place overlay into position over the screen. DO NOT press on the adhesive portion of the overlay yet. The overlay should self position itself and fit naturally into the screen opening. DO NOT FORCE the overlay into position.



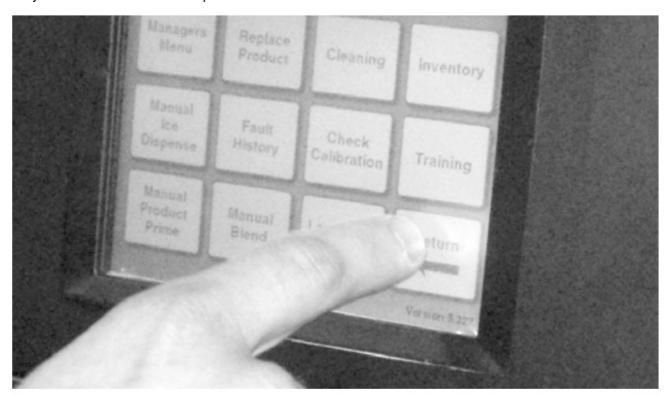
128. Verify that the screen responds to touch commands.



- 129. If the screen does not respond to touch, gently pull the overlay off the screen and re-position it.
- 130. After verifying the screen is still responsive with the overlay in place, firmly run a finger around the black border of the overlay to set the adhesive.



131. Verify the touch screen is still responsive.



# **SCALE CALIBRATION**

- 132. Using the touch screen, navigate to the manager menu.
- 133. Enter 93078 and press "Enter".
- 134. Press "Reset System Parameters".
- 135. Press "Return".
- 136. Press "Scale Calibration".
- 137. Press the scale pad down and the scale weight should go to 113.8 and should return to 5 to 7 or below.
- 138. If the scale weight does not go to 113.8 and/or does not return to 7 or below, continue onto the next step. If it

- does, skip to Step 143.
- 139. Verify the scale collar is firmly pressed down into place and check the scale weight again.
- 140. Verify the drive socket is not obstructing the scale plate.
- 141. Verify the scale plate is correctly installed.
- 142. If the scale weight still will not go to 113.8 or below 7, call 1-844-742-2273 to speak with a service technician.
- 143. Place a clean dry pitcher on the scale pad.
- 144. Press update container weight.
- 145. Press "Tare".
- 146. Remove the pitcher and place one calibration weight inside the pitcher.
- 147. Place the pitcher back on the scale pad and press "Weigh".
- 148. Remove the pitcher and place the second calibration weight inside the pitcher.
- 149. Place the pitcher back on the scale pad and press "Weigh".
- 150. The screen will display the weight calculations.
- 151. Press "Load Calibration".
- 152. The screen will then indicate that one cup of water equals eight (8) ounces, and two cups of water equals sixteen (16) ounces.
- 153. Press "Exit" and "Return" to go back to the drink selection menu.
  - **NOTE**: Cabinet and chase temperatures need to be 39°F (4°C) or below before returning product to unit.
- 154. Retrieve the product from the walk in cooler and return to the assigned slots. Place a blending pitcher on the scale and prime each flavor using the following procedure.
  - Select MENU
  - Select MANUAL PRODUCT PRIME
  - · Press PRIME until the line is clear of air
- 155. Make a small drink to confirm the drink size and consistency. Each drink will have between one to three ounces of product left over after the cup is properly filled. If more product is left over or not enough product is made to fill the cup, go back to step 132 and recalibrate the unit.

#### **CONFIRM OPERATION**

- 156. With the manager present make sample drinks of each size.
- 157. Confirm operation of all functions.
- 158. Complete the BIM Tune Up Checklist and fax to 920-683-7592 or email to rise.callcenter@welbilt.com
- 159. Maintain a copy of the BIM Tune Up Checklist to be submitted along with the invoice for payment.
- Submit claim for service work through Multiplex Claims Processing System.

#### **BIM TUNE UP CHECKLIST**

% Verify operation of unit with Manager before beginning Tune Up.

Note any manager concerns:

- % Is touch screen functional?
- % Does touch screen have black spots?
- % Check the pitchers.
- · Are any of the pitchers cracked? YES NO

#### Notes

• Are any of the pitchers discolored or cloudy? YES NO

Notes:

% Record the CO2

pressure while one of the product pumps is running.

- %. Record the water pressure while the unit is rinsing the pitcher.
- % Performed the Zone 2 weekly cleaning.
- % Checked cleaning manifold for damage.
- %. Checked for cracked / broken ice bin.
- ‰ Replaced the ice shaver gasket.
- %. Checked ice bin drain / cleared.
- % Replace the shaver blade.
- % Replaced the LMS valves.
- ‰ Inspect scale pad. See Step 67 on page 4. YES NO

#### Notes:

- % Installed new drive socket.
- % Checked advanced bearing assembly.
- % Cleaned & sanitized rinse nozzle.
- % Applied silicone to seams as instructed.
- % Check blender tachometer connection.

## **Customer Support**

MULTIPLEX 645 PARK EAST BLVD SUITE 5, NEW ALBANY, IN 47150 844-724-CARE

#### WWW.MULTIPLEXBEVERAGE.COM

Refreshing the Experience



#### **Documents / Resources**



MULTIPLEX BIM Beverage Ice Multiplex Unit [pdf] Instruction Manual BIM Beverage Ice Multiplex Unit, BIM Beverage, Ice Multiplex Unit, Multiplex Unit

Manuals+.