



HOSHIZAKI AMERICA, INC.

SERVICE BULLETIN

SB09-0002R2

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*Updated May 13, 2010

Subject: Bin Control Change for KM-320/515/600/650/901M series.

The KM models listed above with serial code UxxxxxB and higher will be produced with a mechanical bin control and will utilize the new tan “G” control board. This control and board has been field tested on the KM-650MAH model with good results.

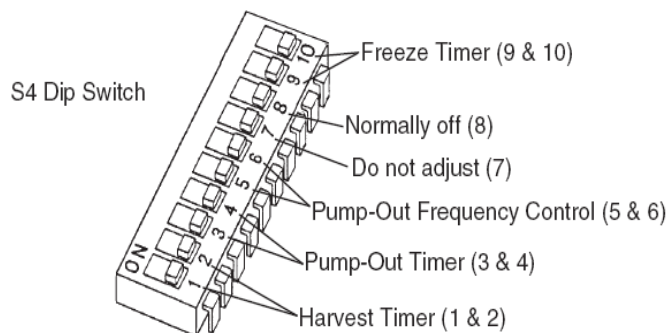
The following parts are used on these units and should be ordered if replacement is necessary...

Description	Part #	Description	Part #
Control Board - All	2A3792-01	Bin Control Switch - All	2A4393G01
Wiring Label – KM-320	3A5188-01	Switch Mount – KM-320/515/600/650	3A4463-01
Wiring Label – KM-515	3A5036-01	Switch Mount - KM-901	3A5210-01
Wiring Label – KM-600	3A4816-01	Wire Harness- KM-320/515/600/650	4A2200G04
Wiring Label – KM-650	3A4524-01	Wire Harness - KM-901	4A2200G05
Wiring Label – KM-901	3A5215-01		

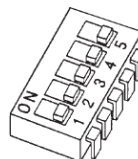
G Control Board: The dip switches on the G board are different from the E board. Note that dip switch # 7 has a different function on this application and must remain OFF. The only adjustments that should be made on the G board are to lengthen the Harvest Timer 1&2 and 5&6 to improve the built in cleaning feature and on these models.

* Dip Switch 1 & 2 extend the flush at the end of harvest. 5 & 6 adjust pump out frequency.

Dip Switch Setting		Time (Seconds)
No. 1	No. 2	
OFF	OFF	60
ON	OFF	90
OFF	ON	120
ON	ON	180
No. 5	No. 6	Frequency
OFF	OFF	1/1
ON	OFF	1/2
OFF	ON	1/5
ON	ON	1/10



S5 (do not adjust)



G Board Setting Chart:

Settings for S4 Switches			Code 1=ON 0= OFF							
Model	1	2	3	4	5	6	7	8	9	10
KM-320M	1	0	0	1	1	1	0	0	0	0
KM-515M	0	0	0	0	0	0	0	0	1	0
KM-600M	0	0	0	0	0	0	0	0	1	0
KM-650MA/W	0	0	0	0	1	1	0	0	0	0
KM-650MRH	0	0	0	0	1	1	0	0	1	0
KM-901M	1	0	1	0	1	1	0	0	0	1
S5 Switches	1	2	3	4	5					
All Models S5	0	0	0	0	0					

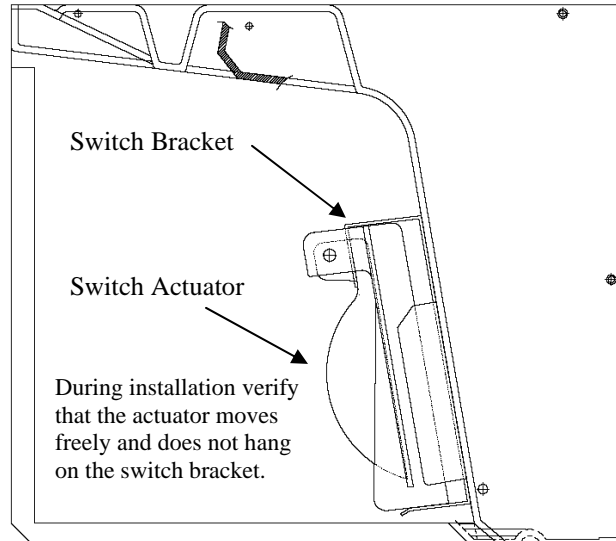
There are additional switches on a separate block labeled S5. These switches, 1~5 are all OFF for this application and **should not be adjusted**.

Note: Do not adjust dip's 3, 4, 7, 8, 9 & 10 from factory setting. Dip's 7 & 8 must remain OFF.

Mechanical Bin control location

The mechanical bin control assembly is located in the same area as the original thermostatic bin control bulb. A switch mount plate is attached with four thumbscrews.

- When no ice is contacting the switch actuator, the magnetic switch is closed calling for ice production. This energizes the green LED on the G control board marked BC CLOSED.
- When the bin is full, ice pushes the actuator towards the right and opens the magnetic switch. This lights the yellow BC OPEN LED.



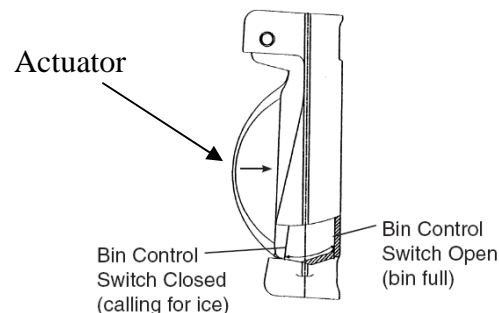
Example: KM-320/515/600/650M Base & Ice Drop

Operation: The mechanical bin control is connected to the red K4 connector on the control board through a wiring harness. This harness is simply a connector wire. The K4 connector on the G board senses an open and closed circuit depending on the position of the actuator.

The mechanical bin control will only shut the unit down during the first 5 minutes of the freeze cycle. When the actuator is pushed to the right during the first 5 minutes of the freeze cycle, the yellow LED will light and the control board will shut the unit down within 15 seconds. If the mechanical control actuates and remains in the right hand position after the first 5 minutes of the freeze cycle, the yellow LED will light and the control board will shut the unit down after the next harvest cycle is complete.

Checkout: Check the mechanical control by watching the green and yellow LED's as you move the actuator. You can also check the mechanical control using an ohm meter:

Disconnect the red K4 connector and check the control for a closed circuit when the actuator is in the normal position (swings to the left). You will read an open circuit when the actuator is pushed to the right position.



Note: This is a new control for the KM-M model. If you have any issues with this control application or operation, contact Hoshizaki Technical Support at 800-233-1940 immediately.