



# HOSHIZAKI AMERICA, INC.

## SERVICE BULLETIN

**SB04-0008**

July 18, 2004

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### **Subject: MECHANICAL TO THERMOSTATIC BIN CONTROL CONVERSION WIRING INSTRUCTIONS**

Effected models: **KM-280M, KM-500M, KM-630M, KM-900M / KML-250,  
KML-350M, KML-450M, KML-600M**

We are seeing many instances where the mechanical bin control is being replaced with a thermostatic control and the service technician is wiring the new control incorrectly. It is critical the new thermostatic control be wired into the correct wire. Failure to wire the control correctly may cause the unit to cycle on the 3 beep error code (long freeze time). This Service Bulletin details the wiring of the control. It should be used as supplement to the kit instructions which also contain information about removing the mechanical control and installing the thermostatic.

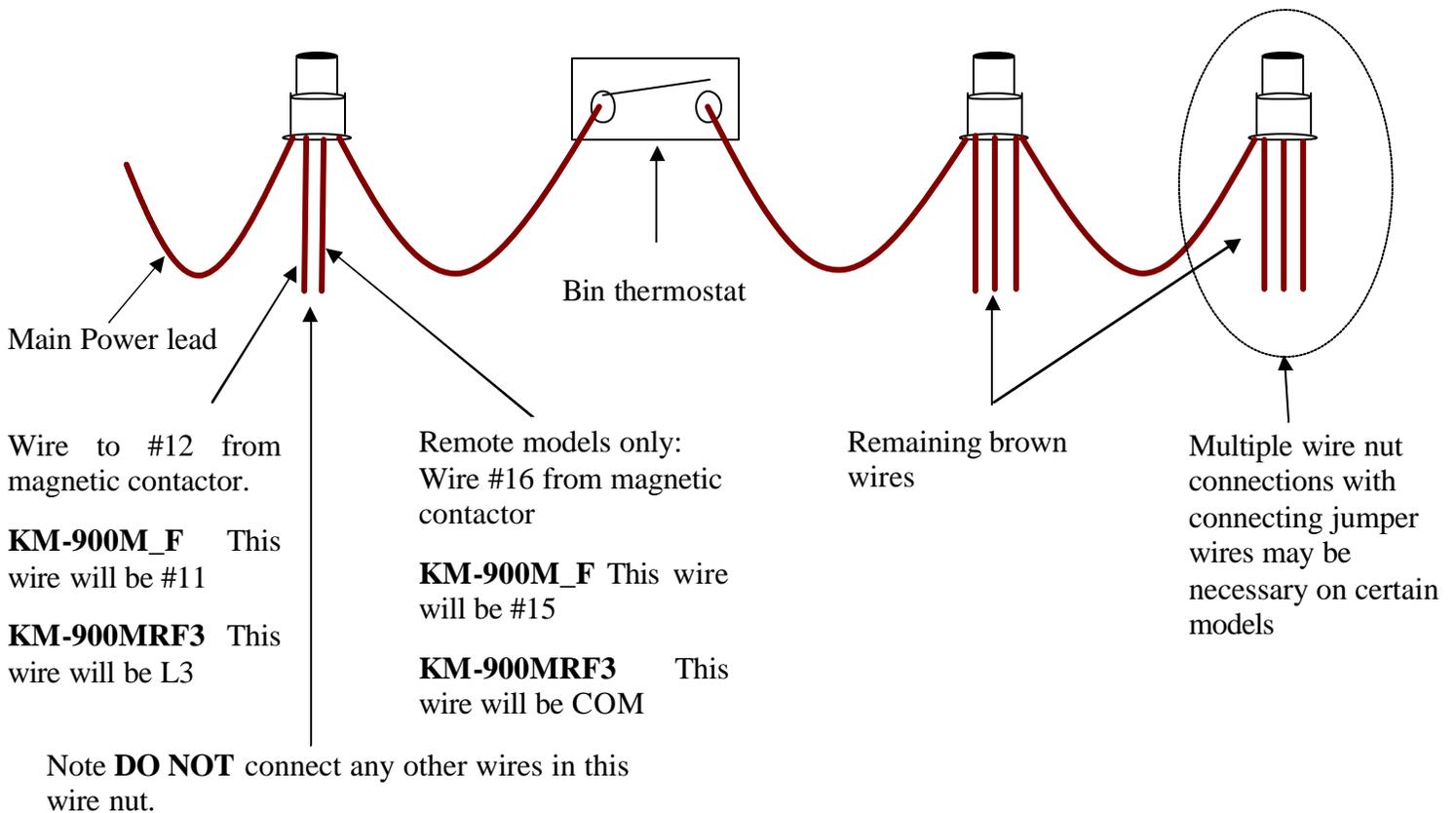
To accomplish the wiring correctly follow the steps below.

1. First trace the main brown power lead from the back of the unit to the first wire nut connection.
2. Remove the wire nut and pull out this lead.
3. Next locate the wire that goes to number 12 on the magnetic contactor (See note below if you are working on a **KM-900M\_F/3**). In many cases this wire will be in the same bundle as the main brown power supply. However, depending on the model and when the unit was manufactured, it may be in another brown wire bundle. If this is the case remove the wire nut and then the wire you are tracing.
4. If the model you are converting is a remote it will also be necessary to trace the wire connecting to number 16 from the magnetic contactor (See note below if you are working on a **KM-900M\_F/3**). Again, this wire may not be in the same bundle if not remove the necessary wire nuts.
5. Attach one of the brown wires with spade connectors supplied with the conversion kit to one side of the thermostatic control.
6. Using the appropriate size wire nut or crimp nut, connect the stripped end of the wire from the bin control, the brown power supply wire, the wire from #12 and the wire from #16 if it is a remote unit. (See note below if you are working on a **KM-900M\_F/3**). Note **DO NOT** connect any other wires in this wire nut.
7. Attach the other brown wire supplied with the conversion kit to other side of the thermostatic control.

8. Using the appropriate size wire nut or crimp nut connect the second wire from the thermostatic control to all remaining brown wires. Depending on the model and manufacturing date, it may be necessary to have multiple brown wire bundles connected using “jumper wires”.
9. The end result should be that the brown power lead from the back of the unit, the wire going to #12 on the magnetic contactor, the wire going to #16 on the contactor (for remote units only) and one wire feeding voltage to the bin control be connected together on one side of the bin control. The remaining brown wires should all be connected together on the other side of the thermostatic control. There may be multiple wire nut connections on this side of the bin control, depending on model and manufacture date.

**Note:** For the **KM-900M\_F** trace the wires connected to #11 and #15 (#15 for remote models only) instead of #12 and #16.

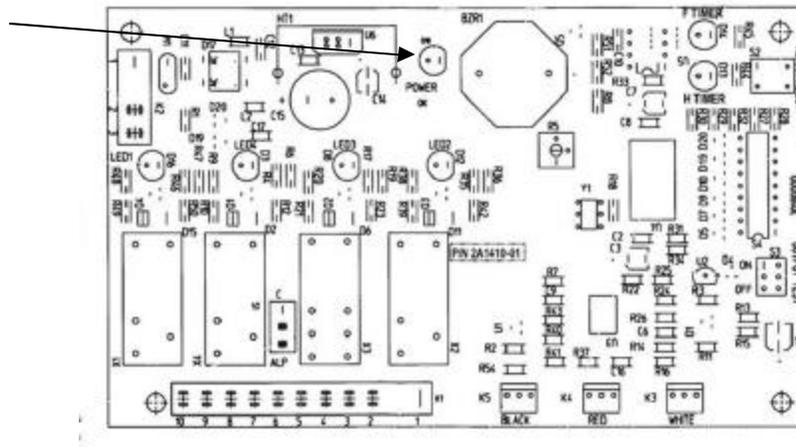
For the **KM-900MRF3** trace the wires connected to L3 and COM instead of #12 and #16 shown



10. After the installation is complete, turn on the power supply and place the control switch to the ICE position. Test the bin control operation by holding ice against sensing bulb and confirm the following three items:

1. The unit shuts down in 2 to 10 seconds.
2. When the unit shuts down the red LED D18 on the control board goes off.

Red LED D18



3. 115VAC is still supplied to number 12 and 16 (on remote units) on the magnetic contactor.  
**Note: KM-900M\_F** check for voltage at #11 and #15 (remote models only) instead of #12 and #16.  
**KM-900MRF3** check voltage at wires connected to L3 instead of #12 and #16.

Note: If any of these items do not occur, re-check your wiring through the previous steps and test again.

If you have any questions concerning these instructions contact Technical Support at 1-800-233-1940.