

6BARM Control Upgrade

Affected Models: 6BARM built prior to November 24, 2008

Complaint: Customer complains the unit is too warm, and the display temperature does not reach the desired set point.

This service kit is available for models built prior to November 24, 2008. This date can be found by referencing the twelve digit serial number. This date will appear as the first 8 digits of the serial number as follows:

The first 4 digits = year produced for example 2008
digit 5 and 6 = month produced for example 11 = November
digit 7 and 8 = day produced for example 08 is the 8th day, and 24 is the 24th day.
digit 9 to 12 = sequential number that have no reference to the date code.

The serial plate is located inside the cabinet, on the top left side towards the front. (See Photo 1).

Service Kit #42247111 (6BARM Control Upgrade kit)

Kit includes: (1) control; (1) P-Clamp; (1) #8x5/8" tapping screw; (1) instruction sheet; (1) postage paid envelope.

This procedure requires the re-location of the thermistor sensor bulb and the swap out of the control. The new control has a 39°F minimum set point, 3°F cut in/cut out differential, and has (2) 30 minute defrost periods in a 24 hour day. The defrost period is not based on compressor run time but has an internal timer built into the program which starts counting forward at initial start up. Sequential defrosts will occur every 12 hours afterwards.

There is also a programmed mode to activate the defrost period at a desired time. This is activated only when the "colder" button is depressed for 2 seconds. This action will initiate an immediate defrost, sequential defrosts will occur at 12 hour intervals. This will not affect the control when the set point is being lowered in the set mode.

The old control is to be returned to the factory in the postage paid envelope provided.

To the following address:
Attn: Customer Service
Northland-Marvel
1260 E. VanDeinse St.
Greenville MI 48838

Serial
Plate



Instructions for Installing the 6BARM Control Upgrade Kit Service Assembly #42247111



WARNING: Before servicing unit, disconnect it from the power source. Always verify that power has been disconnected.

Object: To achieve lower average cabinet temperatures while improving the display versus set point reading.

Method: Change thermistor location and control.

Kit Includes: (1) 1/4" P clamp
(1) #8 x 5/8 self drilling tapping screw
(1) Control
(1) Instruction Sheet
(1) Postage Paid Envelope

Tools Required: 1/4" hex driver for drill motor
5/16" nut driver approximately 6" long
electric or battery operated drill motor
8" of masking tape

Relocating the Thermistor

- 1) Remove the top glass shelf
- 2) Use a 6"-8" length of masking tape and place above and horizontal to the top glass shelf guide on the thermistor side of the cabinet. (see Figure 1).



Figure 1

Instructions for Installing the 6BARM Control Upgrade Kit Service Assembly #42247111

- 3) Measure inward from the front cabinet flange $5\text{-}7/8"$ and mark a vertical line on the masking tape.(see Figure 2).



Figure 2



Figure 3

- 4) Measure upwards $6\text{-}1/2"$ from the bottom glass shelf and draw a horizontal line intersecting the first line drawn on the masking tape.(See figure 3). The intersection of the two lines drawn on the masking tape will be the new screw location for the sensor bulb.



Figure 4

- 5) Use the drill motor with a $1/4"$ hex driver to install the #8 self drilling screw from the kit into the sidewall. Some pressure will have to be applied as there is a metal backing plate behind the plastic liner.(See Figure 4).



Figure 5

- 6) Remove the screw after the hole has been tapped and remove the masking tape from the sidewall. (See figure 5).

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- 7) At this time a non abrasive cleaner should be used to clean any residue left by the masking tape. Rub gently. (See Figure 6).



Figure 6



Figure 7

- 8) Loosen the current self tapping screw and P-Clamp that secures the thermistor to the cabinet sidewall. Do not remove the screw and P- clamp.(See Figure 7).

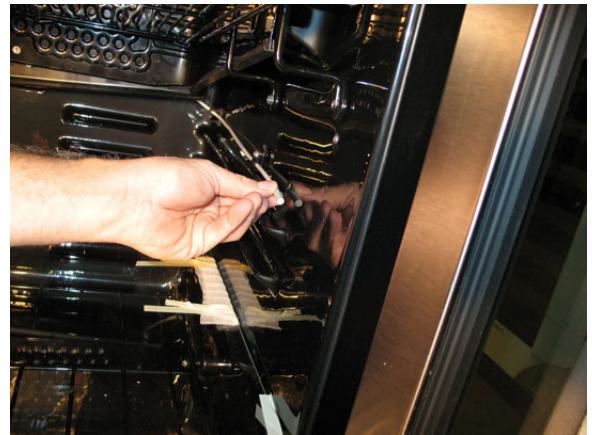


Figure 8

- 9) Slide the thermistor forward from its present location to the new screw location. (See Figure 8).

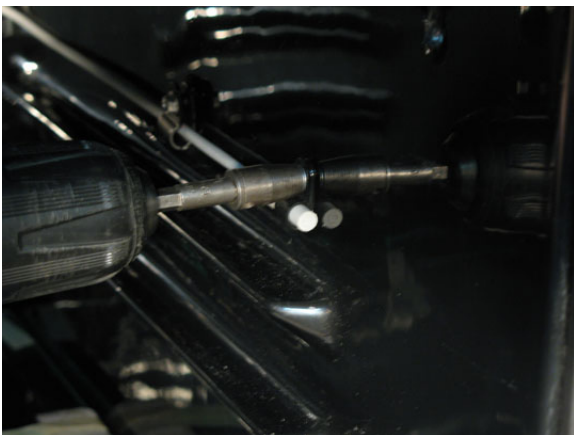


Figure 9

- 10) Insert the P-Clamp from the kit and center around the sensor bulb. Place the #8 screw from the kit through the hole on the P-clamp and tighten the screw. (See figure 9).

Instructions for Installing the 6BARM Control Upgrade Kit

Service Assembly #42247111

- 11) At this time, tighten the original screw and P-Clamp around the cable to secure it against the cabinet sidewall. (See Figure 10).
- 12) Make sure the thermistor and cable are level and secured against the sidewall.
- 13) Check the thermistor cable to insure it is still secured to the nylon retaining clip at the back corner.
- 14) Neatly dress the thermistor cable by removing the slack out of the cable and tucking the excess length behind the evaporator and away from the shelf area.

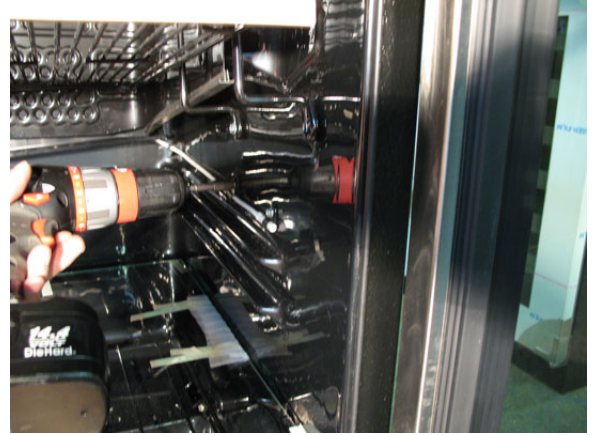


Figure 10

Changing the Control



Figure 11

- 1) Remove the (2) 5/16" hex head screws securing the front of the top wire shelf. A screw is located on each side of the shelf (See Figure 11).
- 2) Carefully lower the front of the wire shelf. (See Figure 12)
- 3) Loosen the (2) 5/16" hex head screws located underneath and inside of the front edge of the control housing. Do not remove the screws. (See Figure 13).



Figure 12



Figure 13

Instructions for Installing the 6BARM Control Upgrade Kit Service Assembly #42247111



Figure 14

- 5) Slide the control box forward and gently let it suspend (See Figure 15).



Figure 15

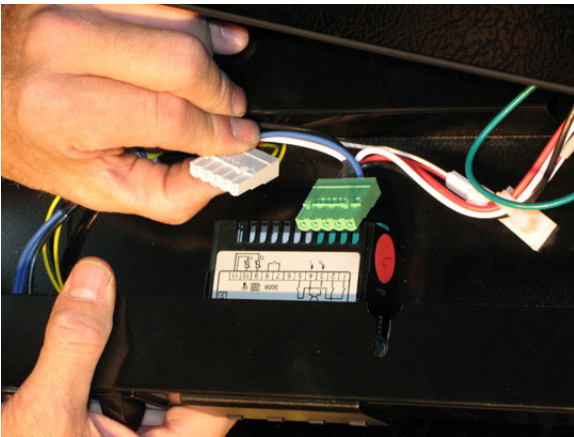


Figure 16

- 6) Remove the white and green power connections on the rear of the control. Use your thumb and index finger to firmly push the connectors backwards to the rear of the control housing. (See Figure 16).

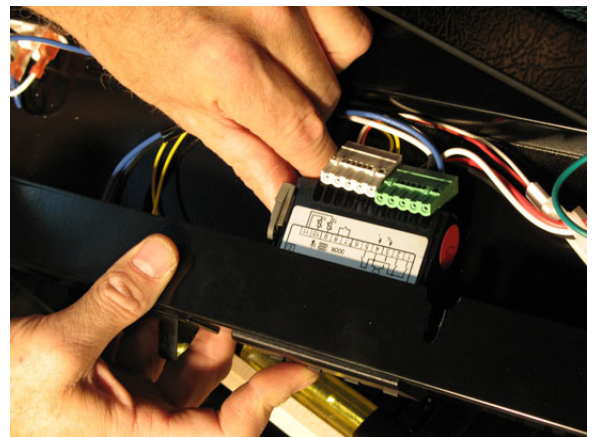


Figure 17

Instructions for Installing the 6BARM Control Upgrade Kit Service Assembly #42247111

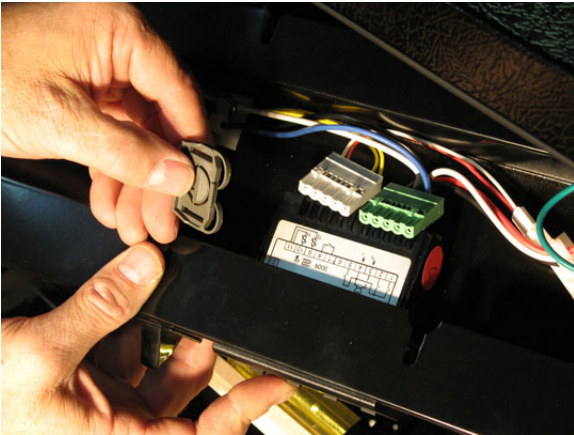


Figure 18

- 7) Remove the (2) plastic clips on each side of the control. Each clip has a serrated thumb release located in the center. To release the clip from the control depress the release and slide each clip back towards the rear of the control. Once each clip has been released it will fall away from the control body. (See Figure 17 and Figure 18).



Figure 19

- 8) At this point the control can be slid forward and removed from the control housing. (See Figure 19).
- 9) Replace the control by sliding the new control from the kit into the housing from the front. (See Figure 19).
- 10) Re-attach the white and green power connectors. (See Figure 16).
- 11) Install the (2) side clips into the grooves on each side of the control. Make sure the serrated thumb release is facing outward from the control. Push forward on each clip, a clicking sound will be audible as they are pushed forward. Continue pushing until the clips forward motion stops. (See Figure 17).
- 12) Visually inspect the front edge of the control to make sure it is securely attached. There should be no play in the control if it is attached correctly.
- 13) To re-fasten the control housing, carefully align the front and rear guide slots on the housing with the (3) screws loosened in step #3 and #4. Tighten each screw firmly in place.
- 14) Raise the front of the wire shelf back in position and secure with the (2) screws removed previously in step #1.
- 15) Replace the glass shelf.
- 16) Plug the power cord back into the electrical outlet.

Change the Set Point of the Control

- 1) After the above changes are made it will be necessary to lower the actual display set point to 39°F.
- 2) Depress the set key until the current set point temperature is displayed. The display set point can then be lowered by depressing the colder key until 39°F is displayed. The set key can now be released.
- 3) At this point the control is set to achieve the coldest setting possible to correlate with the above fix.

Mail the old control back to Northland-Marvel in the postage paid envelope provided in the kit.