The control board is mounted on the front face and can be serviced by removing the front face and removing the 4 screws holding the cover over the board on standard models. On Icon model remove the two screws going form the front face into the bottom of the retainer. Tip the retainer up and pull it out to remove the control board (See Figure 35)

Current will be carried between the power board and the control board by a ribbon connector (See Figure 36). You can check the cable with a Ohm meter one run at a time if you suppect a bad cable.

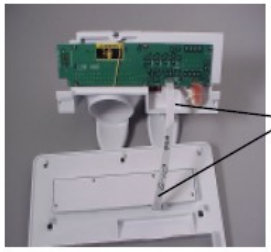
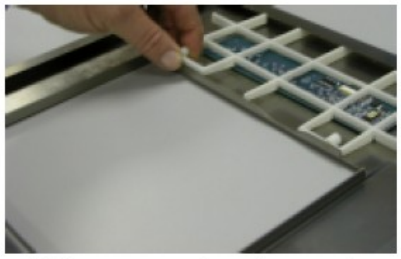
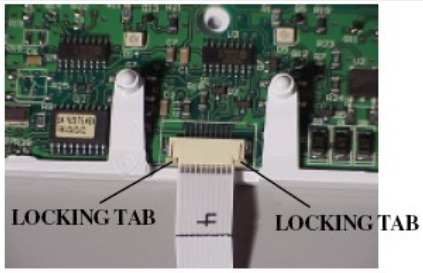


Figure 36



Lift up on power board support
Figure 35

The ribbon cable will be a replaceable part separate from the power and the control board. To test and/or replace the ribbon, unplug the product and remove the front face plate. Unplug the ribbon from the power board (See figure 36) by pulling straight out. Remove the control board from the front face plate and pull straight down on the lock tab holding the ribbon into the control board. (See Figure 37) Now you can unplug the ribbon from the control board. The ribbon can be tested with a Multimeter using the Ohm setting and test for continuity on each pass of the ribbon. When installing a ribbon into the power or the control board make sure the end of the cable i installed so the contact point on the cable is against the contact points on the board. Also clean the end of the ribbon with a pencil eraser to get a good clean surface for the connection.



RIBBON NOT IN

FIGURE 37

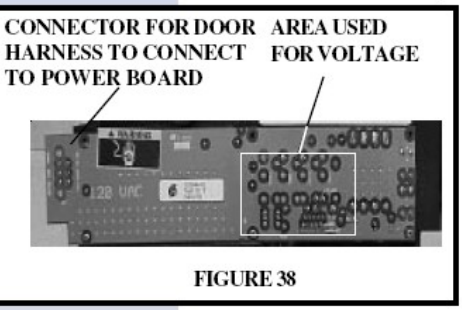


FIGURE 38

How To Test The Electronic Dispenser

Labeling was added to the face of the power board to aide the servicer in testing of the control and power board. (See Figure 38)

To test the input voltage from the door harness to the dispenser and the output voltage to the Auger Motor, Solenoid, Water valve and Extra Ice feature if equipped use the connector on the left side of the Power Board shown in figure 39. To Test;

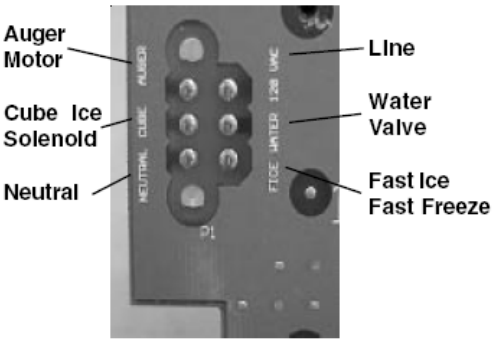


Figure 39

1. Check voltage between 120 VAC and NEUTRAL for input voltage to the dispenser. Should read line voltage.
2. Check between NEUTRAL and CUBE to check the power to operate the cube ice solenoid. Should show O voltage until the ice actuator is pushed in, then should show line voltage.
3. Check between NEUTRAL and AUGER to check the power to operate the Auger Motor. Should show O voltage until the ice actuator is pushed in, then should show line voltage.
4. Check between NEUTRAL and WATER to check the power to operate the single coil primary water valve and the Yellow coil of the secondary water valve. Should show O voltage until the Water Actuator is pushed in, then should show line voltage.
5. Check between NEUTRAL and FICE (Fast Ice Feature if equipped) to check the power to operate the 2 watt 115 V heater on the freezer control cap tube. The board will pulsate the heater so it is on 50 % of the time for a 12 hour period of time. (Should show O voltage until the Extra Ice button is pushed, then should show line voltage.)

To test the voltage from the power board located in the dispenser to the control board located in the front face plate use the low voltage section of the power board as shown in figure 40. To test:

1. Check voltage between GND and V - IN for input voltage from power board to control board. (Should read 12 VDC + or - 10% voltage.)
2. Check voltage between the two terminals shown in figure 3 under LIGHT for testing power from the control board the relay that operates the dispenser light relay.Should read 0 voltage until the light switch button is pressed or a actuator is pushed in, then you should read 5 VDC + or - 10%.
3. Check voltage between the two terminals shown in figure 3 under WATER for testing power from the control board the relay that operates the water valves. (Should read 0 voltage until the water actuator is pushed in, then you should read 5 VDC + or - 10%.)
4. Check voltage between the two terminals shown in figure 3 under CUBE for testing power from the control board the relay that operates the solenoid. (Should read 0 voltage until the ice actuator is pushed in, then you should read 5 VDC + or - 10%.)

NOTE

Dispenser control board must be set for CUBE to operate the cube ice solenoid light relay. Should read 0 voltage until the light switch button is pressed or an actuator is pushed in, then reading should be 5 VDC + or - 10%.

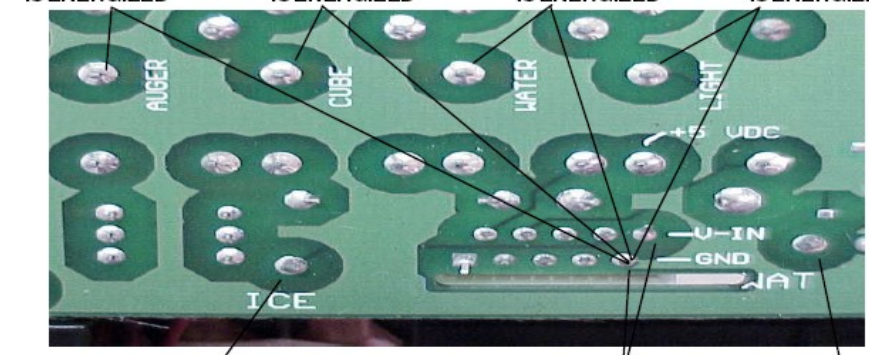
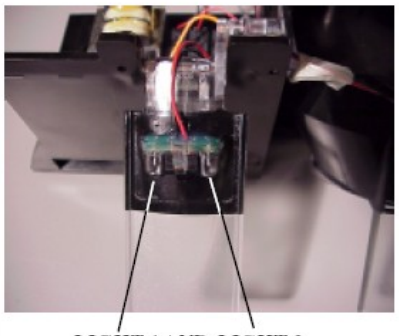


FIGURE 40

3. Check voltage between the two terminals shown in figure 3 under WATER for testing power from the control board to the relay that operates the water valves. (Should read 0 voltage until the water actuator is pushed in, then you should read 5 VDC ± 10%.)
4. Check voltage between the two terminals shown in figure 3 under CUBE for testing power from the control board to the relay that operates the cube ice solenoid. (Should read 0 voltage until the ice actuator is pushed in, then you should read 5 VDC ± 10%.)
5. Check voltage between the two terminals shown in figure 3 under Auger for testing power from the control board to the relay that operates the auger motor. Should read 0 voltage until the ice actuator is pushed in, then you should read 5 VDC ± 10%.

There are lighted paddles in the dispenser on all counter depth models (See Figure 41).

The lights operate off the dispenser power board. (See Figure 42.) If the lights (There are two lights on each paddle.) fail, the paddle needs to be replaced. The paddles mount in the dispenser in the same manner as the non-lighted paddle we have used for the last 3 years. The only difference is there are two small wires coming off the paddle with a plug on the end. This plug will connect to pins on the power board. (See Figure 42 and 43.) This will allow the servicer to replace the paddle with the lights attached. Models with lighted paddles will use a different power board then models with the standard dispenser light off to the side. The difference being, the two identical connection points on the board for the paddle lights. (See figure 43)



LIGHT 1 AND LIGHT 2
FIGURE 41

PADDLE CONNECTION ON BOARD

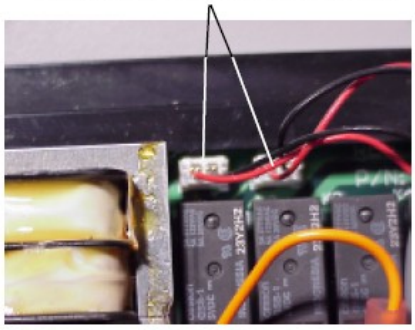
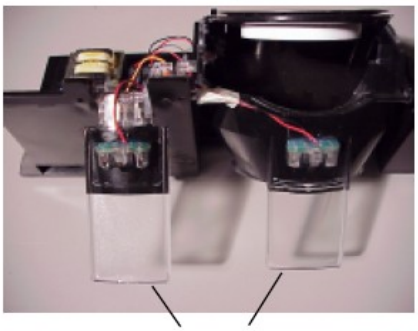


FIGURE 43



BOTH PADDLES ARE LIGHTED
FIGURE 42