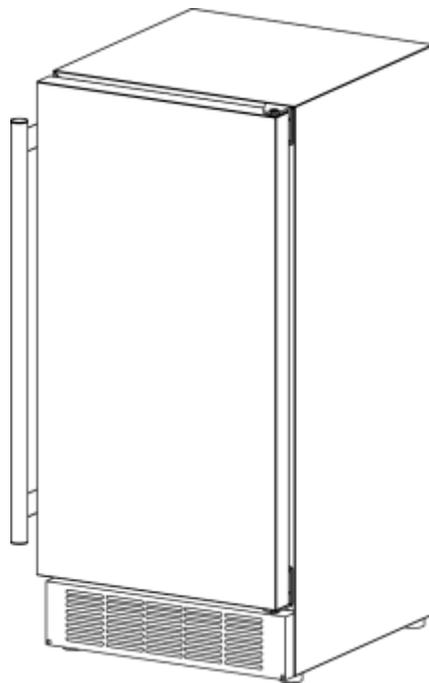


# SERVICE MANUAL

## Undercounter Crescent Ice Maker

MODELS:

IB250BL, IB250SS, IB250SSOD, and IB250WH



CAUTION: READ ALL SAFETY PRECAUTIONS IN THIS MANUAL BEFORE SERVICING THE UNIT

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## Safety Precautions

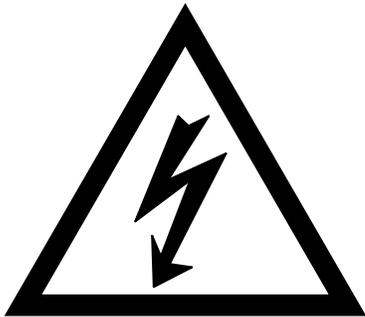
**WARNING: This manual and the information contained herein is intended for use by certified technicians. The manufacturer or seller is not responsible for the interpretation or misuse of the information provided, nor does it assume any liability in connection with its use.**

**The safeguards and warnings indicated in this manual do not cover all possible conditions which may occur. Common sense, caution, and care must be exercised.**

- To prevent electric shock, always unplug an appliance from the power supply before attempting any service.
- Disconnect the power cord by grasping the plug, not the cord.
- Do not bypass, cut, or remove the grounding plug.
- Prevent water from spilling onto electric elements or the machine parts.
- Always refer to the rating label on the appliance for rated current and voltage.
- Always check line voltage and amperage.
- Always use exact replacement parts.
- Any attempt to repair a major appliance may result in personal injury and property damage.

## Electrical Safety

- Do not exceed the power outlet ratings.
- It is recommended that the unit be connected to its own circuit.
- A standard electrical supply (120V, 60Hz), that is properly grounded in accordance with the National Electrical Code and all state and local codes and ordinances is required.
- Do not use outlets that can be turned off by a switch or pull chain.
- Always turn the unit off and unplug it from the outlet when cleaning.
- Unplug the unit if it is not going to be used for an extended period of time.
- Do not operate the unit with a power plug missing the ground plug, a damaged cord, or a loose socket.
- Be sure the appliance is properly grounded.
- Do not bypass, cut, or remove the grounding plug.
- If the power cord is damaged, it must be replaced by the manufacturer or a qualified technician.
- Do not use extension cords or power strips with this unit. You may need to contact an electrician if it is necessary to use a longer cord or if you do not have a properly grounded outlet. Do not modify the power cord's length or share the outlet with other appliances.
- Do not start or stop the unit by switching the electrical circuit's power on and off.
- Immediately unplug the unit if it makes strange sounds, emits an odor or smoke and contact customer service.
- Do not remove any part of the casing unless instructed by an authorized technician.
- Before the appliance is removed from service or discarded, remove the door and cut off the power cord.



## **General Safety**

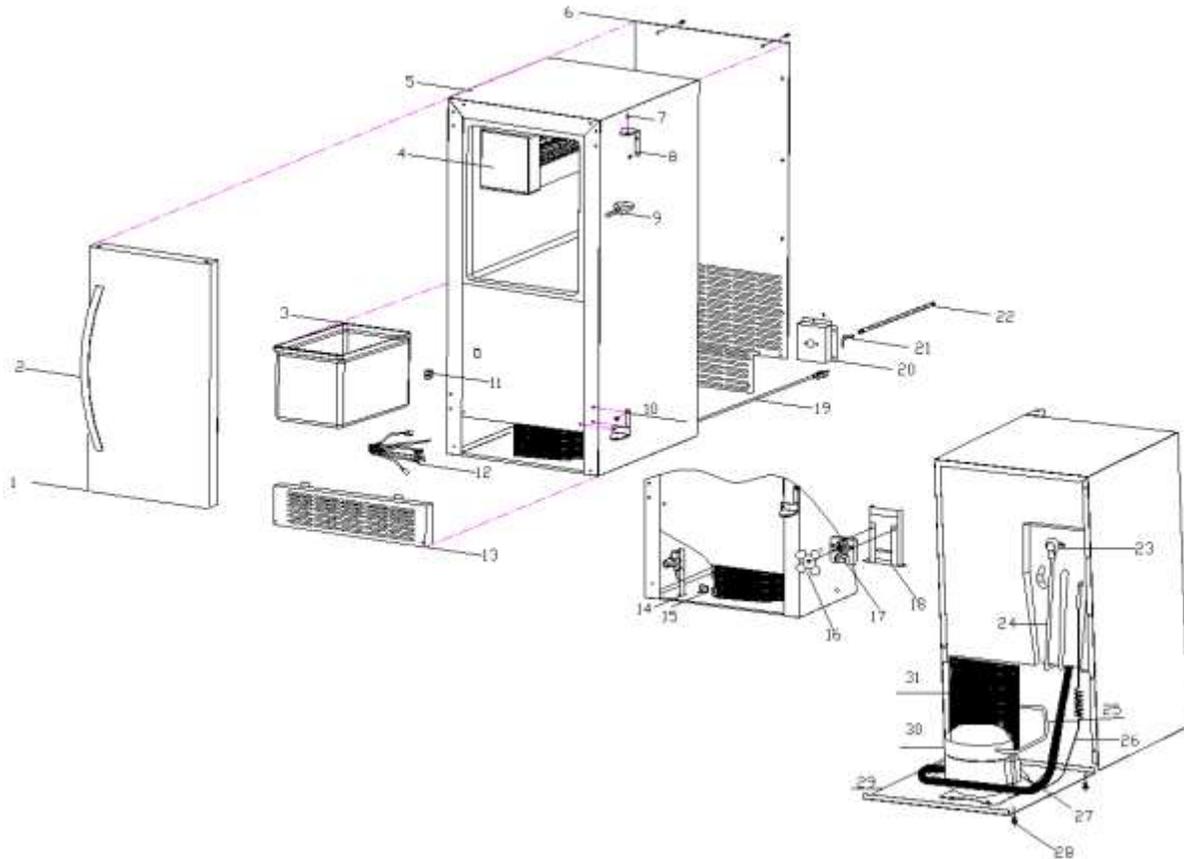
- Always unplug an appliance from the power supply before attempting any service. Disconnect the power cord by grasping the plug, not the cord.
- Do not allow children or pets to play on or in the appliance.
- This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the machine by a person responsible for their safety.
- Do not install or store this appliance where it will be exposed to the weather.
- Disconnect from the power socket before cleaning or maintenance.
- If the plug (power cord) is damaged, it must be replaced by the manufacturer or an authorized service representative.
- This machine shall be repaired only by an authorized service representative. Only genuine replacement parts should be used.
- If connected to a circuit protected by fuses, use time-delay fuses with this appliance.
- Do not lean items against the glass door.
- Please do not close the door with excessive force. If it is found difficult to close the door, please check for obstruction.
- When you plan to dispose of this unit in the future, please comply with the local waste disposal regulations. Remove the door so that children and pets will not be trapped in the unit.

# Specifications

<b>Model</b>	<b>IB250SS</b>
<b>General Features</b>	
Ice Production Capacity	25lbs/24 hrs
Ice Storage capacity	11lbs removable ice bucket
Ice Shape	Crescent Shaped Cube
Ice Size (Inches(mm))	1/2"x3/4"x2-1/2" (12x20x60)
Ice Weight (g)	9
Ice quantity per cycle	12
Ice making /harvesting rated current (amp)	1.8/1.5
Water Consumption	Use less than 3 gallons of water for approximately 23 lbs. of ice
Defrost Type	Manual
Controls	Mechanical Thermostat, monitors ice-making operation to ensure the maximum daily ice production.
Power on/off switch	On front of unit
Auto shut-off when ice bin is full	Yes
Cycles	On/Off
High/Low side pressure (PSIG)	380/130
Refrigerant	R134A, 2.3 OZ
<b>Installation</b>	
Electrical Requirements	115V/60Hz with USA plug
Volt Range	104V~127V
Maximum Amp Fuse	15 amps
Ambient Operating Range (F)	50~90°F
Water Pressure Operating Range (PSI)	20~120
Built-in Capable	Flush mounted, Built-in or Free-standing
Unit dimensions Width/Depth/Height	14 7/8" x 20 1/16" x 33 7/16"
Air Ventilation	Most ventilation from front, 3/4" clearance required at back of unit. No additional clearance required around the top or sides.
Removable Ice bucket	Yes

# Parts Breakdown

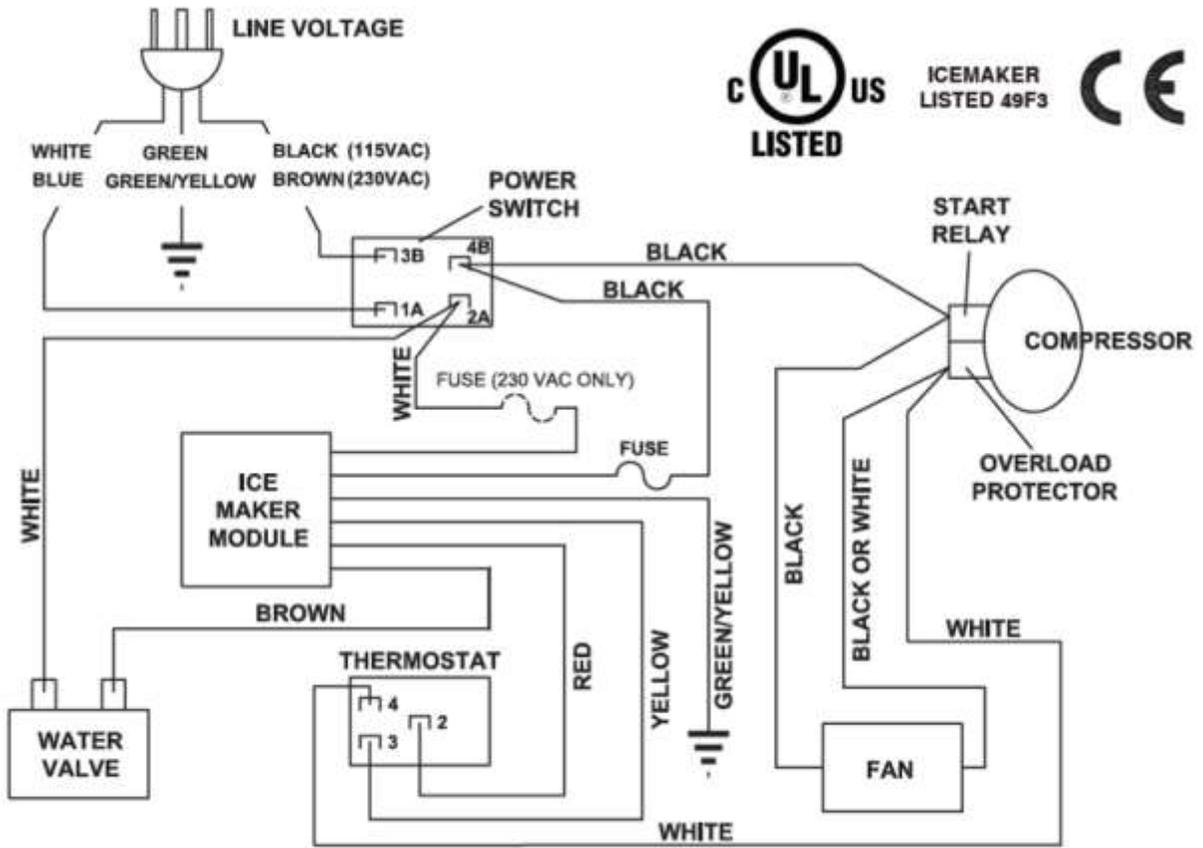
## Exploded View



## Parts List

No.	Part Name	No.	Part Name
1	Door	17	Fan motor
2	Handle	18	Fan motor bracket
3	Ice storage bin	19	Power cord
4	Ice making module	20	Water inlet panel
5	Cabinet	21	Water inlet connector
6	Back panel	22	Water inlet pipe
7	Hinge pin	23	Water inlet pipe connector
8	Top hinge	24	Water supply hose
9	Ice scoop	25	Discharge pipe
10	Bottom hinge	26	Capillary tube
11	Power switch	27	Filter dryer
12	Wiring harness	28	Leveling leg
13	Kick plate	29	Compressor base plate
14	Water inlet valve	30	Compressor
15	Thermostat	31	Condenser
16	Fan blade		

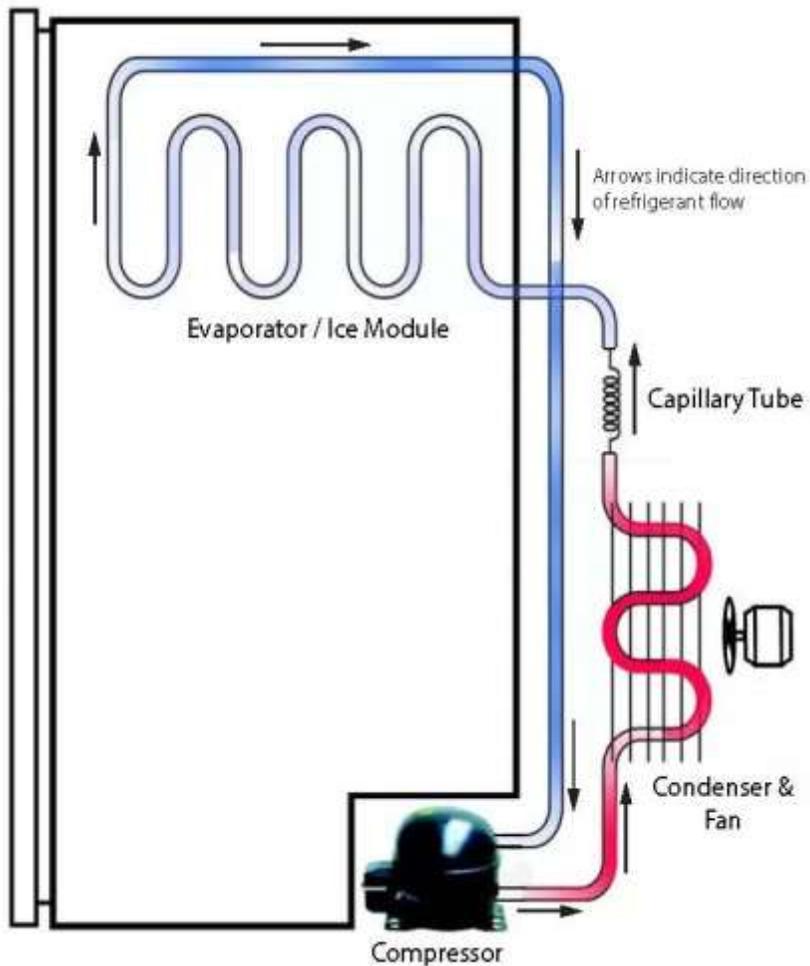
# Wiring Diagram



ICEMAKER LISTED 49F3



## Refrigeration System Diagram



**During the ice making stage** the hot refrigerant gas is pumped out of the compressor to the condenser. The hot gas is cooled by fan forced air after passing through the condenser. The evaporator / ice module is cooled by the refrigerant. Ice is formed in the module after water from the water inlet valve fills the ice mold. Low pressure refrigerant gas goes back to the compressor from the evaporator.

**During the ice harvest stage** the ice module heater warms and the ice touching it is slightly thawed and releases from the ice mold. The harvested ice then falls into the ice storage bin.

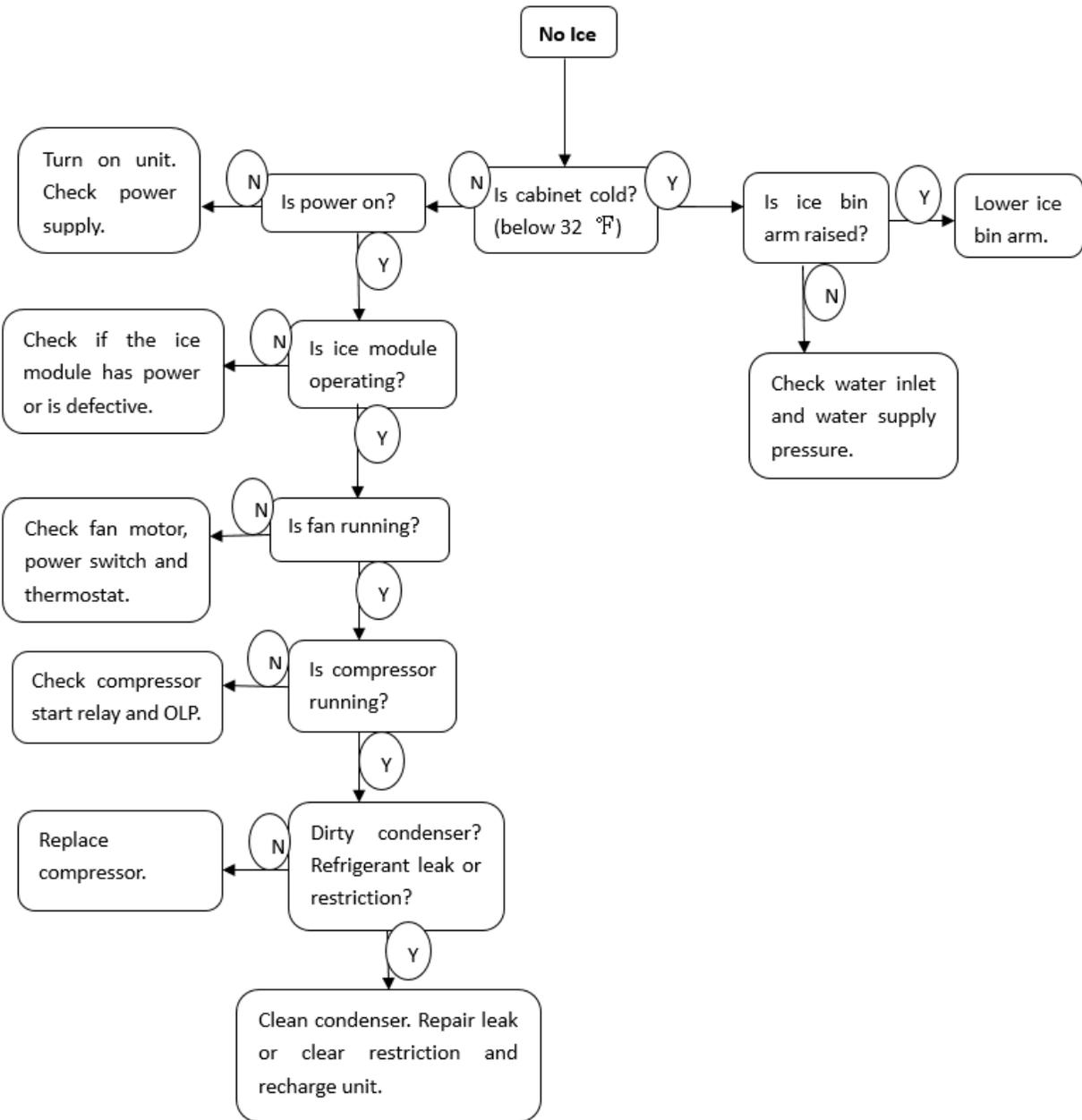
# Service Diagnosis Overview

**WARNING:** Only a qualified technician should service this product. Equipment damage, injury or death could result from the improper servicing of this unit. EdgeStar accepts no responsibility or liability for damage to equipment, injury or death that may result from improper service or operation of this product.

## Troubleshooting Guide

Problem	Possible Cause	Probable Correction
The ice maker doesn't operate.	The ice maker is unplugged.	Plug in the ice maker.
	The breaker is tripped.	Check the breaker. If the problem occurs again, call service to check for a short circuit in the unit.
	The ice maker's power button is set to OFF.	Switch the ice maker's power button to ON.
	The ice storage bin is full of ice.	Remove some of the ice. Be sure the ice bin arm is free to move and not locked in the upward position.
The water doesn't feed in after the ice maker starts.	The water supply tap is turned off.	Turn on the water supply tap.
	The water supply pipe is not properly connected.	Reconnect the water supply pipe.
The machine makes ice, but at a very slow rate.	The condenser is dirty.	Clean the condenser.
	The air flow to the ice maker is obstructed.	Check the installation to ensure the air flow to the ice maker is not blocked.
	The ambient temperature is too high, or the unit is near a heat source.	Check the installation to ensure the ambient temperature is in the proper range.
Water is leaking out of the unit.	The water supply connection is leaking.	Tighten the fitting.
The unit accumulates frost and has to be defrosted often.	The door is left open or opened too often.	Defrost the ice maker as needed. Keep the door closed as much as possible. Make sure the door seal is air tight.
The ice cubes are partially formed.	There is not enough water in the water trough.	Check if the water supply pressure is below 20 psig. The water supply or filter may be restricted.
There is noise during operation.	The unit may not be leveled and locked.	Level and secure the unit.
No ice is produced.	The bin arm is locked in the upright position.	Lower the bin arm.
	No water is being supplied to the unit.	Turn on the water or contact a plumber.

## Troubleshooting Flowchart



# Servicing the Ice Maker

## Adjusting the Water Fill Level

Remove the white cover from the front of the ice module to access the fill control screw.



The amount of water that fills the ice mold is controlled by the length of time the water valve is open. The adjustable range is 5 to 9 seconds with a default setting of 6 to 6.5 seconds. Turning the screw clockwise decreases the amount of water coming into the mold, and turning it counter-clockwise increases the amount.

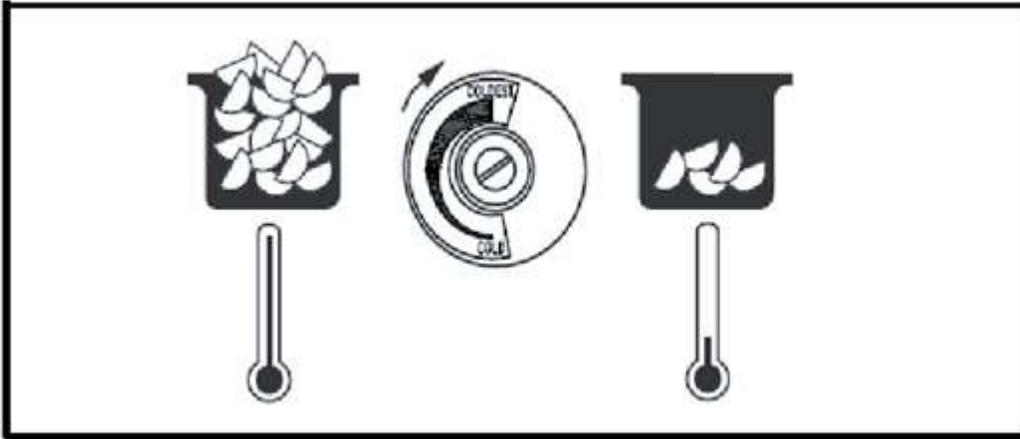


## Adjusting the Thermostat and Ice Harvest Time

The ice harvest control adjusts the temperature at which the ice is harvested from the ice mold. A colder setting results in harder ice, which is slower to melt, but also increases ice production time. A warmer setting speeds up ice production time.

To adjust the Ice Harvest Control:

1. Unscrew the two screws on the front kick plate and remove it.
2. Use a flathead screwdriver to turn the adjusting screw in small increments. Turn the adjusting screw clockwise for a colder setting, harder ice and slower ice production. Turn the adjusting screw counterclockwise for a warmer setting and faster ice production.
3. Replace the kick plate and tighten the two screws to secure it in place.



## Replacing the Compressor Start Relay and Overload Protector

**Warning:** Unplug the unit before servicing to avoid electrical shock.

The compressor cover has a lock tab. Note: Compressor covers may vary in color.



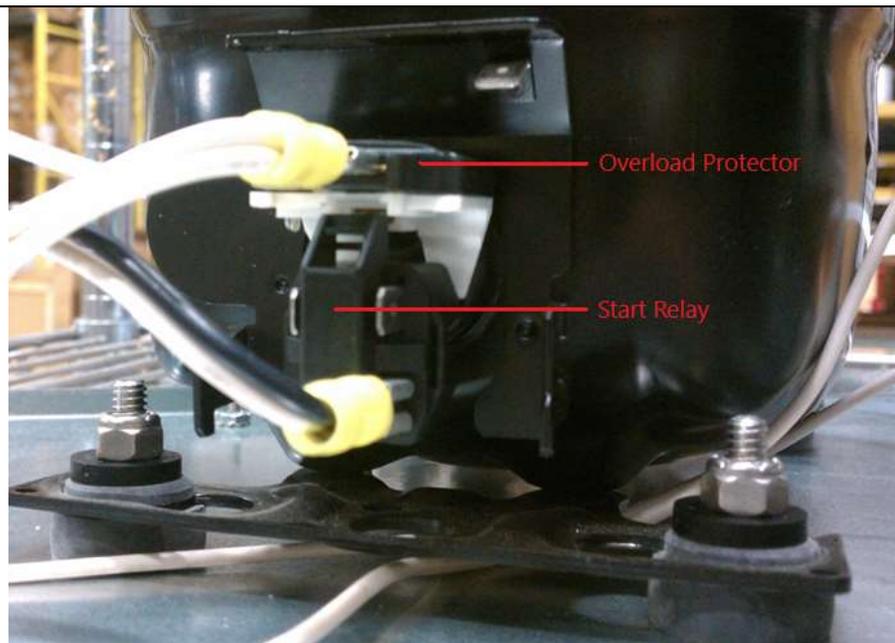
To remove the cover first insert a flat tip screwdriver into the tab.



Next, push down to unlock and remove the cover.



Pull off the start relay first, then the overload protector. Remove the wires and connect them to the new start relay and overload protector. Replace the overload protector first, then the start relay. Replace compressor cover.



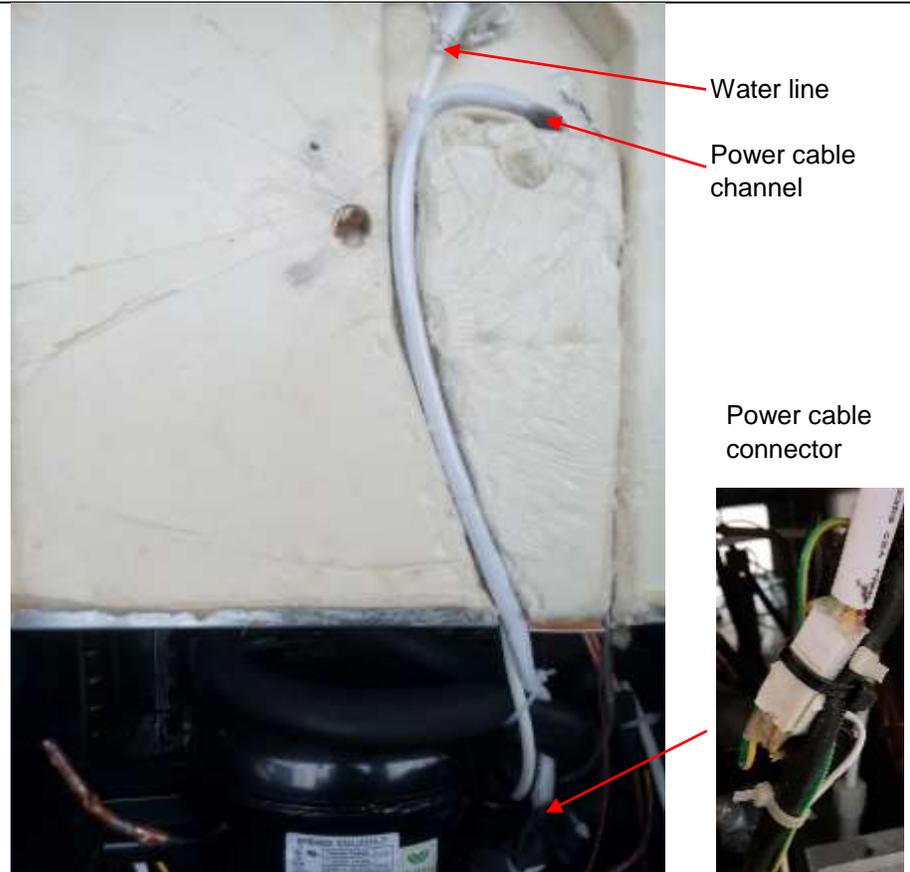
## Replacing the Ice Making Module

**Warning:** Unplug the unit before servicing to avoid electrical shock.

Remove the back panel and then remove the styrofoam block covering the ice making module's power cable.



Disconnect the power cable for the ice module at its connector. Remove the caulking around the channel for the power cable in the back of the cabinet so the cable can be pulled through when the module is removed.



Remove the three (3) screws from the bottom of the module and take off the bottom plate.



Loosen the two (2) screws attaching the ice module to the side of the cabinet wall about 1/4 ". The ice module hangs on the screws so they do not need to be completely removed.



Carefully remove the ice module and thermal pad (pad, pictured here in yellow, may vary in color.) Pull the power cable through the channel in the rear of the cabinet. Make sure not to damage the thermostat wire and evaporator coil.



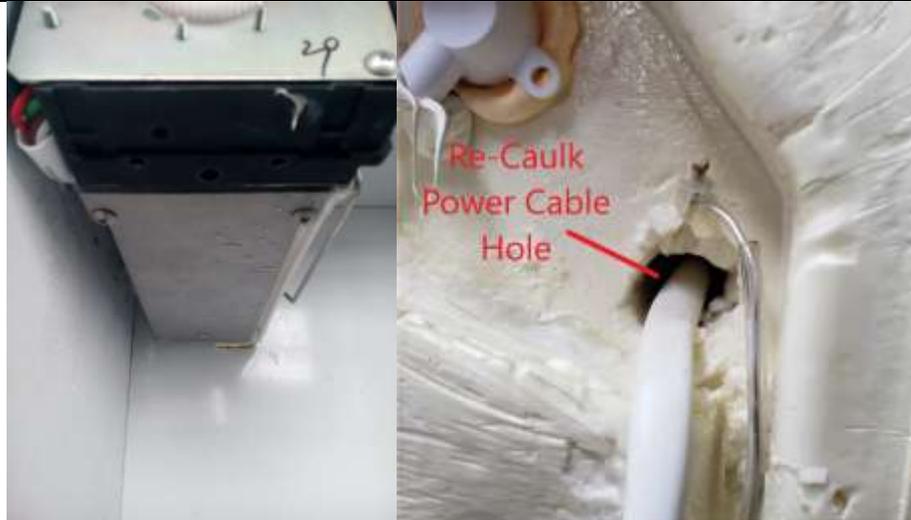
Replace the old thermal pad by adhering the new one to the bottom of the new ice module.



Install the new ice module by feeding the power cord through the channel in the back of the cabinet. **Make sure** the thermostat wire is inserted into hole in the back of the ice module as you slide it back into place. Hang the ice module on the two screws in the side of the cabinet then tighten them to secure the module. When installed correctly the thermal pad will be between the ice module and the evaporator coil as pictured.



Reinstall the bottom plate to the module with the three screws removed previously. Reconnect the power cable. Re-caulk the power cable hole in the back of the unit.

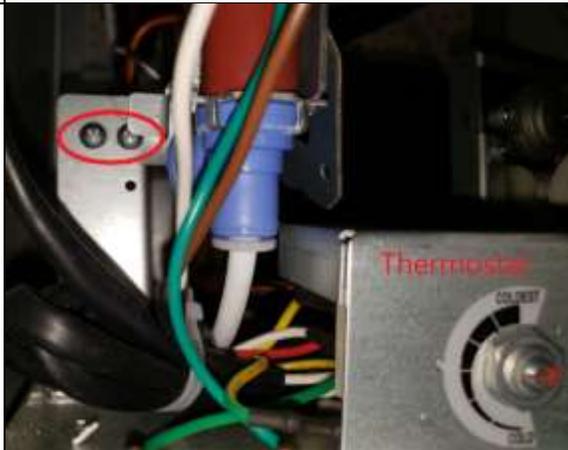


## Replacing the Water Valve

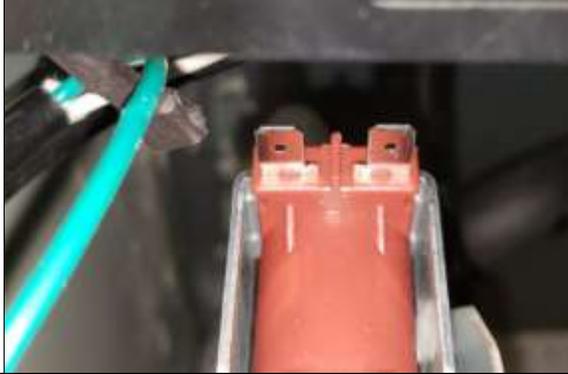
Remove the two screws securing the kick plate to the front of the unit and then remove the kick plate.



Locate the water valve on the bottom left side of the unit (behind the thermostat.) Remove the two screws securing the water valve to its bracket.



Disconnect the wires to the water valve.



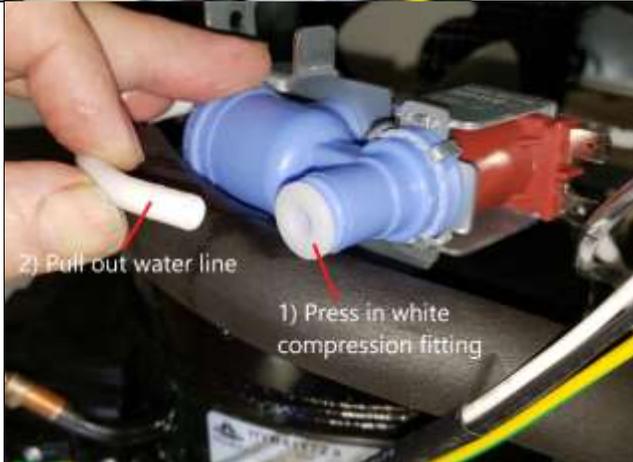
Remove the back panel from the unit. Carefully maneuver the water valve through the back of the unit so you can access the valve and the two water lines connected to it.



Remove the blue lock ring with fingernail or small flathead screwdriver.



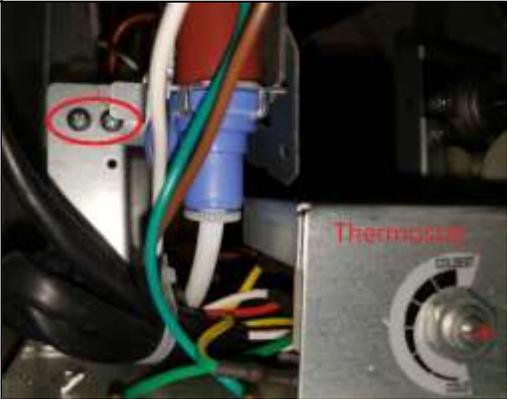
Press the white compression fitting toward the blue valve housing then pull the water line free from the valve. Do this for both water lines then remove the old valve.



Insert the water lines into the new valve in the correct ports by simply pushing them in until they stop. The compression fittings will hold the lines securely. Replace the blue lock ring on the module port.



Carefully reposition the new water valve in through the back of the unit and resecure it to its bracket behind the thermostat with the two screws. Finally, Replace the kick plate.



## Replacing the Condenser Fan

Remove the back panel and locate the condenser fan. Carefully lay the unit on its back and remove the two screws from the bottom that secure the fan in place.



Stand unit upright and access the fan through the back. Carefully remove old fan, remove it's wire connections and replace with new fan. Make sure wire connections are secured to new fan motor.



Replace the two screws on the bottom of the unit that secure the fan in place.



## Replacing the Thermostat

Remove the back panel to access the thermostat wire. Carefully pull and remove the thermostat wire from its hole in the back of the unit.



Remove the front kick plate to access the thermostat. Remove the two screws that secure the thermostat dial to the base of the unit.



Remove the wire connections from the old thermostat and secure them onto the new thermostat in their correct positions.



Secure the thermostat to the baseplate with the two screws and reattach the kick plate. Insert the new thermostat wire into its hole in the back of the unit, secure it with a dab of caulk, and replace the back panel.



DATE	REVISION NOTES
10/17/2018	INITIAL DOCUMENT