SECTION ONE
INSTALLATION CONSIDERATIONS

LOCATION

The ice maker may be closed in on the top, rear and two sides. The front **MUST BE** unobstructed for proper air circulation and operation.

Installation should be such that the unit can be moved forward for servicing.

The installed area should be well ventilated, with ambient temperatures above 55°F (13°C) and below 110°F (43°C). **BEST RESULTS ARE OBTAINED BETWEEN 70°F (21°C) AND 90°F (32°C).**

The ice maker **MUST BE** installed in an area protected from the elements, such as wind, rain, water spray or drips.

Provisions for electricity, water supply and drainage should be determined prior to installation.

ELECTRICAL REQUIREMENTS

The ice maker requires an electrical branch circuit of 120 VAC, 60 Hz, single phase 15 amp. delayed action fuse or circuit breaker.

It is recommended that the ice maker is the only appliance plugged into the receptacle. Do not use an extension cord. Do not use a receptacle that is controlled by a wall switch.

**ELECTRICAL GROUND IS REQUIRED ON THIS APPLIANCE. DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE POWER SUPPLY CORD GROUND PRONG.**

WATER CONNECTION REQUIREMENTS

Materials needed for installation:

- ¼" OD copper tubing
- ¼" outlet, saddle-type shut-off valve  
  (**part no. 541057**)  
- ¼" x ¼" tube union  
  (**part no. 533812**)  

These materials can be obtained locally at a plumbing supply house or from FSP Parts Distribution by ordering **“Ice Maker Installation Kit” part no. 978567,** which includes 25’ of copper tubing. Do not use plastic tubing because it becomes brittle with age.

DRAIN CONNECTION REQUIREMENTS

The ice maker is equipped with a gravity drain or internal drain pump. The internal drain pump can be installed separately and is available from FSP Parts Distribution (Part No. 2185528).

The ideal installation has a standpipe (minimum 1¼” diameter) installed directly below the outlet of the drain tube.
There are three operating systems in the ice maker:

- Refrigeration System
- Water System
- Electrical System

**Refrigeration System**

The refrigeration system in the ice maker is very similar to the system used in other refrigeration appliances such as a refrigerator or freezer. The refrigerant used in this unit is R-134a.

There are two very important additions to the refrigeration system in the ice maker:

- **Hot Gas Valve** - This valve allows high pressure refrigerant gas to bypass the condenser and flow through the condenser accumulator tube.

- **Condenser Accumulator Tube** - the hot gas pushes liquid refrigerant in the accumulator tube into the evaporator, helping to evenly heat the evaporator plate so the ice slab releases quickly and evenly.
Water System

The water system provides the fresh water necessary for ice production and recycling this water as ice is produced. The water system also flushes away rejected minerals and contaminates, circulates cleaning solution during the CLEAN CYCLE and provides a means of drainage.

The hardness of the water supplied to the ice maker will affect the quality of the ice produced and may also affect the operation of the water system. (See Chart in Section Five, TROUBLESHOOTING and DIAGNOSTICS, page 16.)

A water softener or polyphosphate feeder will not cure all the problems associated with hard water, but they can be used to reduce scale buildup in the ice maker. **NOTE:** Some polyphosphate feeders will cause a slime buildup in the water system when the water supply has a low mineral content.
ELECTRICAL SYSTEM

The ice maker’s electrical system provides power for the refrigeration and water systems to operate, and controls the operational cycling of the ice maker.

Wiring Diagram shows unit in Ice Making Mode
OPERATIONAL CYCLES

There are three operational cycles of the ice maker:

- **ICE MAKING CYCLE**
- **HARVEST CYCLE**
- **DIAGNOSTIC/CLEAN CYCLE**

In addition, there are two operational **OFF** cycles of the ice maker:

- **OFF CYCLE** when the bin is full of ice and the service control switch is turned “ON”.
- **OFF CYCLE** when the bin is full and the service control switch is turned “OFF” while power is still supplied to the unit.

Ice Making Cycle

Electrical System

In the electrical system, power is supplied through the service control switches to the primary side of the voltage step down transformer (120VAC to 8.7VAC for the cutter grid and bin light) and the electronic control board. The electronic control board in turn supplies 120 VAC to the water recirculating pump, water inlet valve, hot gas solenoid, condenser fan motor and compressor.

Refrigeration System

In the refrigeration system, the hot gas refrigerant, under high pressure, is forced through the condenser into a liquid, and flows through the drier and capillary tube into the evaporator. Under low pressure in the evaporator, the liquid refrigerant absorbs heat from the water flowing over the evaporator. The refrigerant evaporates into a gas and passes into the accumulator. As a low-pressure gas, the refrigerant flows back through the suction line of the heat exchanger to the compressor.

During ICE MAKING cycle, some of the hot gas that is in the condenser accumulating tube condensens to a liquid and remains in the accumulating tube.

During the later stages of the ICE MAKING cycle, as the ice slab forms on the evaporator freezing plate, some of the refrigerant passing through the evaporator will not evaporate into a gas, but will remain a liquid. This liquid refrigerant will settle in the accumulator while the refrigerant vapor is sucked off through the suction tube at the top of the accumulator. This accumulated liquid refrigerant will eventually be evaporated by the warmed refrigerant gas passing through the accumulator during the HARVEST cycle and during the beginning of the next ICE MAKING cycle.

**NOTE:** It is very important the accumulator is not tilted out of a horizontal position.

Water System

In the water system, the water recirculating pump moves the water from the reservoir pan up to the distributor, where it flows out over the evaporator freezing plate.

Water that does not freeze on the evaporator plate runs off the front edge and falls back into the reservoir, where it is recycled back to the distributor.

As the ice slab forms, the minerals in the water are on the surface of the ice. The water flowing over the top of the ice slab washes these minerals back into the water reservoir pan. The water continues to recycle until the ice slab reaches the desired thickness.
Harvest Cycle

Electrical System

In the electrical system, when the set temperature of the evaporator thermistor is reached, the evaporator thermistor terminates power to the condenser fan and water recirculating pump, and supplies power to the hot gas valve solenoid and the water fill valve solenoid.

Refrigeration System

In the refrigeration system, the hot gas valve opens, allowing high pressure refrigerant gas to bypass the condenser and flow through the condenser accumulating tube. The hot gas pushes the liquid refrigerant that has accumulated in the accumulator tube up into the evaporator. The hot liquid refrigerant evenly heats the evaporator plate so the ice slab releases quickly and evenly.

The ice slab, when released, slides off of the evaporator plate onto the cutter grid.

Water System

In the water system, the water valve opens, allowing water to flow into the water reservoir pan. As the reservoir fills, the mineral-laden water from the previous ICE MAKING cycle is flushed out the overflow tube.

As a result of the hot gas flow and the ice sliding off evaporator plate, the temperature rises, and the evaporator thermistor switches the unit to the ICE MAKING cycle. This cycling, between the ICE MAKING cycle and the HARVEST cycle, continues until the ice bin is full.

Table 1-1 shows how the electronic control board controls the various components and systems in the ice maker for each of the ICE MAKING CYCLE and HARVEST CYCLE.

When the ice maker’s service control switch is in the “ON” position, and the bin is not full of ice, the evaporator thermistor determines whether the unit will be in the ICE MAKING CYCLE or the HARVEST CYCLE.

<table>
<thead>
<tr>
<th>ON CYCLE</th>
<th>SECONDS</th>
<th>POWER ON START UP ONLY</th>
<th>ICE MAKING</th>
<th>HARVEST</th>
<th>ICE BIN FULL</th>
<th>ICE BIN NOT FULL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>120 60 120</td>
<td>&gt;6.5°F</td>
<td>&lt;35°F</td>
<td>&lt;52°F</td>
<td>&gt;41°F</td>
</tr>
<tr>
<td>WATER VALVE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONDENSER FAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOT GAS VALVE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WATER RECIRC. PUMP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPRESSOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1-1
Clean Cycle

Electrical System

In the electrical system, power is supplied to the water recirculating pump through the service control switch.

Water System

In the water system, water recirculating pump circulates the cleaning solution that has been added to the reservoir up to the distributor, across the evaporator, and back into the reservoir where it is recirculated while the service control switch is in the “CLEAN” position.

Table 1-2 shows how the electronic control board controls the various components and systems during the DIAGNOSTIC/CLEAN CYCLE.

<table>
<thead>
<tr>
<th>SECONDS</th>
<th>DIAGNOSTICS</th>
<th>CLEAN CYCLE 47 MINUTES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>WATER VALVE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONDENSER FAN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOT GAS VALVE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WATER RECIRC. PUMP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPRESSOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LED</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The first 25 seconds of this cycle will operate each one of the electrical components for five (5) seconds each.

Table 1-2
SECTION THREE
COMPONENT ACCESS

COMPONENT LOCATION
ACCESSING THE CONTROL BOX

Models with Full Length Doors (KitchenAid)

The control box is located behind the door on automatic ice makers with full length doors. (Fig. 3-1)

![Control Box](image)

Fig. 3-1

Models with Shorter Length Doors (Whirlpool)

The control box is located behind the control box escutcheon above the door on automatic ice makers with shorter length doors. (Fig. 3-7)

Removing the Control Box Escutcheon

1. Disconnect the Ice Maker from the electrical power supply.

2. Remove the two (2) Phillips-Head screws securing the control box escutcheon to the mounting plate. (Fig. 3-8) Remove the control box escutcheon from the mounting plate and disconnect the wires from the switch assembly terminals. Set the control box escutcheon aside.

3. Remove the four (4) Hex-head screws securing the escutcheon mounting plate to the cabinet.

![Control Box Escutcheon](image)

Fig. 3-7

![Two (2) Screws](image)

Fig. 3-8
ACCESSING THE COMPONENTS IN THE CONTROL BOX
(This procedure is the same for long and short door units.)

Removing the Control Box

1. Remove the three (3) Phillips-Head screws securing the cutter grid cover to the cutter grid. (Fig. 3-2)

2. Disconnect the three wiring harness plugs from the connectors at the bottom of the control box. (Fig. 3-3)

3. Remove the Hex-head screw securing the cutter grid mounting bracket to the right side of the cabinet liner. (Fig. 3-4)

4. Loosen, but do not remove the Hex-head screws securing the cutter grid mounting bracket to the left side of the cabinet liner. (Fig. 3-4) Then, lift the front of the cutter grid up to release the Hex-head screw from the key slot in the left side mounting bracket and pull the cutter grid from the cabinet.

5. Remove the four (4) Hex-head screws securing the control box to the top of the ice maker cabinet. (Fig. 3-5)

**NOTE:** The screws at the front of the control box are recessed.

6. The control box can now be lowered into the service position.
Removing the Electronic Control Board

1. With the control box in the service position, disconnect the three (3) wiring harness plugs from the connectors on the electronic control board. (Fig. 3-9)

2. Remove the two (2) Hex-head screws securing the electronic control board to the mounting stubs in the control box. (Fig. 3-9)

Removing the Push Button Switch Assembly

The push button switch assembly can be removed with the control box remaining in the service position.

1. Disconnect the wires from the switch assembly terminals.

2. Remove the decorative overlay from the front of the control box. (Fig. 3-10)

3. Press in on the four locking tabs at the back of the switch assembly and push the entire switch assembly.

**NOTE:** If the push button switch assembly must be replaced, the service replacement assembly must be ordered by using the specific model number of the ice maker. The service replacement switch assembly comes with a new decorative overlay.
ACCESSING THE COMPONENT COMPARTMENT

1. Open the ice maker door and remove the four (4) Phillips-Head screws securing the component compartment front cover to the cabinet. *(Fig. 3-14)*

2. Pull the ice maker from its installed position. It may be necessary to disconnect the water supply line and drain line from the ice maker.

3. Turn the front leveling legs out until they disengage from the cabinet. *(Fig. 3-14)*

4. Remove the two (2) front bolts securing the component compartment base to the cabinet.

5. Tilt the entire ice maker cabinet back far enough to gain access to the component compartment. *(Fig. 3-15)* Be careful not to kink any of the sealed system tubing or pinch any wiring while tilting the cabinet backward.

**NOTE:** Secure the cabinet to avoid any possibility that it will tip back any further or fall forward while repairs are being performed.

Removing the Condenser Fan

1. Remove the two (2) Hex-head screws securing the condenser fan assembly to the condenser and the two (2) Hex-head screws securing the condenser fan assembly to the component compartment base. *(Fig. 3-16)*

2. Remove the three (3) hex-head screws securing the fan motor to the fan bracket. *(Fig. 3-17)*
Removing the Water Valve

The water valve can be serviced with the unit in the installed position by removing the component compartment cover.

1. Disconnect the wiring harness connector from the water valve solenoid terminals.
2. Disconnect the water supply lines from the inlet and outlet of the water valve.

**NOTE:** Water may be present in these lines. Have a small pail available to bleed lines.

3. Remove the two (2) Hex-head screws securing the water valve to the side of the cabinet liner. *(Fig. 3-18)*

Removing the Hot Gas Solenoid

The hot gas valve can be serviced with the unit tilted back in the service position.

1. Disconnect the wiring harness plug from the solenoid terminals.
2. Remove the hex-head screw securing the solenoid to the mounting bracket. *(Fig. 3-19)*
Quality ice is defined as hard, clear, cold and free of taste or odor. All ice makers will provide this type of quality ice only if the water used to produce the ice is pure and free of mineral or chemical contamination. The chart below helps diagnose problems that can affect ice production.

### AFFECT ON ICE QUALITY

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>EFFECT</th>
<th>CORRECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algae</td>
<td>Objectionable Taste and Odor</td>
<td>Carbon Filter</td>
</tr>
</tbody>
</table>
| Minerals:  | Cloudy Ice  
Sodium    | Slow Cutting  
Potassium | Refreezing  
Magnesium | |
| Calcium    | |

### AFFECT ON ICE MAKER

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>EFFECT</th>
<th>CORRECTION</th>
</tr>
</thead>
</table>
| Iron       | Staining (Aesthetics only) | 1. Ice Machine Cleaner  
P/N 8171307.  
2. Water softener AND iron filter |
| Chlorine   | Scale | 1. Abrasive cleaning  
2. Polyphosphate feeder or water softener reduces or eliminates need for abrasive cleaning |
| Manganese | Scale | 1. Liquid or nickel safe ice machine cleaner  
2. Polyphosphate feeder or water softener reduces frequency of cleaning by 50% |
| Permanent Hardness | Scale | 1. Abrasive cleaning  
2. Polyphosphate feeder or water softener reduces or eliminates need for abrasive cleaning |
| Calcium or Magnesium | Scale | 1. Liquid or nickel safe ice machine cleaner  
2. Polyphosphate feeder or water softener reduces frequency of cleaning by 50% |
| Sulfates   | Scale | 1. Liquid or nickel safe ice machine cleaner  
2. Polyphosphate feeder or water softener reduces frequency of cleaning by 50% |
| Chlorides  | Scale | 1. Liquid or nickel safe ice machine cleaner  
2. Polyphosphate feeder or water softener reduces frequency of cleaning by 50% |
| Nitrates   | Scale | 1. Liquid or nickel safe ice machine cleaner  
2. Polyphosphate feeder or water softener reduces frequency of cleaning by 50% |
| Temporary Hardness | Scale | 1. Liquid or nickel safe ice machine cleaner  
2. Polyphosphate feeder or water softener reduces frequency of cleaning by 50% |
| Calcium or Magnesium Carbonates | Scale | 1. Liquid or nickel safe ice machine cleaner  
2. Polyphosphate feeder or water softener reduces frequency of cleaning by 50% |

### RECOMMENDATIONS:

Water softeners or polyphosphate feeders are not cure-alls, but do reduce and, in some cases, prevent scale buildup. Use Ice Maker Cleaner (P/N 8171307).

**CAUTION:** Some polyphosphate feeders cause slime buildup. Their use in low mineral content water should be carefully considered.

**NOTE:** Reverse Osmosis filters are NOT RECOMMENDED with this unit. These filter can limit the water flow to the unit and limit its capacity to produce sufficient ice.

**Water Hardness Test Kit:** A Water Hardness Tes Kit (P/N 4171690) is available from FSP Part Distribution.
SERVING INFORMATION

<table>
<thead>
<tr>
<th>SERVICEABLE ELECTRICAL COMPONENTS</th>
<th>Part No.</th>
<th>Wattage</th>
<th>Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPRESSOR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Run Winding</td>
<td>2176659</td>
<td>244</td>
<td>1 - 5Ω</td>
</tr>
<tr>
<td>Start Winding</td>
<td></td>
<td></td>
<td>3 - 11Ω</td>
</tr>
<tr>
<td>RELAY</td>
<td>2183410</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVERLOAD</td>
<td>2183404</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WATER RECIRC. PUMP</td>
<td>2185748</td>
<td>26 - 30</td>
<td>15.95Ω</td>
</tr>
<tr>
<td>WATER VALVE (.31 gpm)</td>
<td>2185531</td>
<td>12 nom.</td>
<td>277.5Ω</td>
</tr>
<tr>
<td>SOLENOID COIL (HGV)</td>
<td>759112</td>
<td>7 - 9</td>
<td>376Ω</td>
</tr>
<tr>
<td>THERMISTOR (Bin)</td>
<td>2185679</td>
<td></td>
<td>10K@77°F (25°C)</td>
</tr>
<tr>
<td>THERMISTOR (Evap)</td>
<td>2185680</td>
<td></td>
<td>10K@77°F (25°C)</td>
</tr>
<tr>
<td>PC BOARD</td>
<td>2185621</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>TRANSFORMER</td>
<td>2185657</td>
<td>40</td>
<td>360Ω</td>
</tr>
<tr>
<td>COND. FAN MOTOR</td>
<td>2183437</td>
<td>12 - 15</td>
<td>277 - 275Ω</td>
</tr>
<tr>
<td>DRAIN PUMP (optional)</td>
<td>2185528</td>
<td></td>
<td>6.9Ω</td>
</tr>
</tbody>
</table>

1. Refrigerant charge must be applied to the high side only.
2. This unit operates on 120 VAC except for the cutter grid, electronic control board and optional light, which operate at 8.7 VAC.
3. The transformer, cutter grid and electronic control board remain energized in ON and CLEAN modes.

THERMISTOR OPERATING PARAMETERS

<table>
<thead>
<tr>
<th>EVAPORATOR THERMISTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICE THICKNESS</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>NORMAL</td>
</tr>
<tr>
<td>THICK</td>
</tr>
<tr>
<td>THIN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ICE BIN THERMISTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIN SHUT-OFF</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

If evaporator thermistor is not present or open, the electronic control will continue to make ice based on time instead of temperature. (20 minutes for ice making and 3 minutes for harvest.)
SECTION FIVE
TECH TIPS
WIRING DIAGRAM

Wiring Diagram shows unit in Ice Making Mode.
1. Ice Making Mode

NOTE: If the unit is run through the Ice Making Mode with no water running across the Evaporator Plate, a complete frost pattern will appear. After three (3) minutes, the unit will go into the Harvest Mode.

2. Harvest Mode
3. **First 25 Seconds of Diagnostics/Clean Mode**

Each switch on the Electronic Control Board closes for five (5) seconds in consecutive order. LED remains on throughout the entire Diagnostic Cycle.

3. **Last 47 Minutes of Diagnostics/Clean Mode**

LED remains on throughout the entire Clean Cycle.
CYCLE CHARTS

<table>
<thead>
<tr>
<th>SECONDS</th>
<th>POWER ON START UP ONLY</th>
<th>OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ICE MAKING</td>
<td>HARVEST</td>
</tr>
<tr>
<td></td>
<td>120</td>
<td>ICE BIN FULL</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>&quot;ICE BIN NOT FULL</td>
</tr>
<tr>
<td>WATER VALVE</td>
<td>&gt;6.5°F</td>
<td>&lt;52°F</td>
</tr>
<tr>
<td>CONDENSER FAN</td>
<td>&lt;35°F</td>
<td>&gt;41°F</td>
</tr>
<tr>
<td>HOT GAS VALVE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WATER PUMP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPRESSOR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Return to Ice Making

CLEAN CYCLE

<table>
<thead>
<tr>
<th>SECONDS</th>
<th>DIAGNOSTICS</th>
<th>CLEAN CYCLE 47 MINUTES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>WATER VALVE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONDENSER FAN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOT GAS VALVE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WATER PUMP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPRESSOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LED</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Press CLEAN switch for diagnostic mode.
To exit Clean/Diagnostic Cycle press ON or OFF.
If a short or open thermistor is detected the LED will flash for 5 seconds before the Clean Cycle is started.

THERMISTOR OPERATING PARAMETERS

<table>
<thead>
<tr>
<th>EVAPORATOR THERMISTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUT-IN</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>ICE THICKNESS</td>
</tr>
<tr>
<td>NORMAL</td>
</tr>
<tr>
<td>THICK</td>
</tr>
<tr>
<td>THIN</td>
</tr>
</tbody>
</table>

The evaporator thermistor is clipped to the outlet tubing of the accumulator after the 180° bend.
If evaporator thermistor is not present or open, the electronic control will continue to make ice based on time instead of temperature. (20 minutes for ice making and 3 minutes for harvest.)

<table>
<thead>
<tr>
<th>ICE BIN THERMISTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIN SHUT-OFF</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
CIRCUIT BOARD JUMPERS
(To Adjust Ice Thickness)

P1 CODE

1 4

3 6

NORMAL

Cut-Out Values
6.5°F ± .3°
69.3kΩ±1%

P1 CODE

1 4

3 6

THICK

Cut-Out Values
4.5°F ± .3°
73.5kΩ±1%

P1 CODE

1 4

3 6

THIN

Cut-Out Values
8.5°F ± .3°
65.3kΩ±1%
Optional Drain Pump

The optional drain pump consists of a motor, a pump that is magnetically coupled to the motor, a water reservoir with sensing devices and an electronic control board that controls the water level in the reservoir by using the sensing probes.

How It Works

1. Water enters the drain pump reservoir from the ice machine bin drain and the overflow tube in the water reservoir.

2. The drain pump reservoir has three probes for sensing water level:
   - High Water Cut-In
   - High Water Shut Off
   - Common

As the water level rises to contact the high water cut-in probe in the reservoir, a signal is sent to the electronic control board. The control board performs a low voltage comparison by water contact between the high water cut-in and common probes. If water is contacting both probes the pump motor turns on and the pump runs.

Once the water level drops and breaks the contact between the high water cut-in and common probes, the electronic control board will turn the pump motor off after a built-in 12 second delay. This delay prevents the motor from short cycling and over heating.

3. If the drain outlet becomes clogged to the point where water will not be allowed to be pumped out or a large volume of water enters the reservoir quickly, the high water shut off probe will come in contact with the water. If this occurs, the signal sent to the electronic control board will trigger a complete shut down of the ice machine. The pump motor will continue to function in this mode until the reservoir is empty or the motor cycles off from over heating. (The motor is equipped with a resettable thermal fuse.)

Drain Pump Installation

1. Pull the ice machine from its installed position.

2. Disconnect the power supply cord from the wall outlet.

3. Remove the seven screws securing the rear component compartment cover to the cabinet.

4. Slide the drain pump into the back of the cabinet.

5. If the unit already has a drain tube connected to the ice bin outlet, remove it and the clamp attached to the bin. (Clamp will be used later.)

6. Install the new drain tube (Part No. 2185672) provided in the drain pump kit. Use the clamp removed earlier to secure the new drain tube to the bin. (Fig. 1)
7. Install the drain pump. Carefully slide in, aligning the tab on the pump base to the rectangular slot in the unit base. (Fig. 2)

8. Attach the drain tube from the bin to the pump inlet. Install the vent tube and drain tube to the household drain before securing the pump to the unit base. The vent tube and drain tube should be threaded through the component compartment cover. (Fig. 3)

9. Coil the power cord from the Ice Maker into a figure 8. Wrap electrical tape around the center of the figure 8. Place the wrapped cord between the compressor and the drain pump. Install the plug on the power cord to the electrical outlet of the drain pump.

10. Line up the two (2) holes at the rear of the pump with the two holes in the unit base and install two (2) #8 x ½” hex-head screws. (Fig. 3)

11. Secure the vent tube to the back of the ice maker using three (3) clamps and three (3) #8 x ½” hex-head screws supplied in the drain pump kit. (Fig. 4)

12. Check all connections for leaks.

13. Reinstall the component compartment cover.

14. Connect the power cord from the drain pump to the house hold electrical supply in accordance with National Electrical Code and local codes and ordinances.
### MODEL/SERIAL NUMBER PLATE

**SERIAL NUMBER DESIGNATOR**

<table>
<thead>
<tr>
<th>SERIAL NUMBER</th>
<th>MANUFACTURING SITE</th>
<th>YEAR OF MANUFACTURE</th>
<th>WEEK OF MANUFACTURE</th>
<th>PRODUCT SEQUENCE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>E J 36 50001</td>
<td>E = Evansville, IN</td>
<td>J = 1999</td>
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<td></td>
</tr>
</tbody>
</table>

**WHIRLPOOL MODEL NUMBER DESIGNATOR**

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>PRODUCT GROUP</th>
<th>PRODUCT IDENTIFICATION</th>
<th>MODEL SIZE</th>
<th>FEATURE/VARIATION</th>
<th>YEAR OF INTRODUCTION</th>
<th>COLOR CODE</th>
<th>ENGINEERING CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>G I 1500 X H N 0</td>
<td>G = Gold Series</td>
<td>I = Ice Maker</td>
<td>1500 = 15&quot; Width</td>
<td>X = Feature Not Defined</td>
<td>H = 1999</td>
<td>W = White N = Almond B = Black</td>
<td>0 = Basic Release; 1 = First Revision; 2 = Second Revision</td>
</tr>
</tbody>
</table>

**KITCHENAID MODEL NUMBER DESIGNATOR**

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>PRODUCT GROUP</th>
<th>PRODUCT IDENTIFICATION</th>
<th>MERCHANDISING SCHEME</th>
<th>MODEL SIZE</th>
<th>FEATURE/VARIATION</th>
<th>YEAR OF INTRODUCTION</th>
<th>COLOR CODE</th>
<th>ENGINEERING CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>K UI S 15 5 H WH 0</td>
<td>K = KITCHENAID</td>
<td>UI = Undercounter Ice Maker</td>
<td>S = Standard</td>
<td>15 = 15&quot; Width</td>
<td>5 = 50 Pounds</td>
<td>H = 1999</td>
<td>WH = White NL = Almond BL = Black SS = Brushed Stainless Steel SB = Brushed Stainless/Black</td>
<td>0 = Basic Release; 1 = First Revision; 2 = Second Revision</td>
</tr>
</tbody>
</table>
For one year from the date of purchase, when this product is operated in a residential or light commercial setting, and is maintained according to the instructions furnished with the product, KitchenAid will pay for FSP® replacement parts and repair labor to correct defects in materials or workmanship. Service must be provided by a KitchenAid designated service company.

In the second through fifth years from the date of purchase, KitchenAid will pay for replacement parts and repair labor costs to correct defects in materials or workmanship in the sealed refrigeration system. These parts are compressor, evaporator, condenser, drier and connecting tubing. Service must be performed by a KitchenAid designated service company.

KitchenAid will not pay for:

1. Service calls to correct the installation of your ice maker, to instruct you how to use your ice maker, to replace house fuses or correct house wiring or plumbing, or replace light bulbs.

2. Repairs when your ice maker is used in locations where usage exceeds ice making capabilities of unit (about 50 pounds in 24 hours.) This ice maker is intended only for residential and/or light commercial use that does not exceed these capabilities.

3. Damage resulting from accident, alteration, misuse, abuse, fire, flood, acts of God, improper installation or installation not in accordance with local electrical or plumbing codes or use of product not approved by KitchenAid.

4. Replacement parts or repair labor costs for units operated outside the United States.

5. Pickup and delivery. This product is designed to be repaired in the home.

6. Repairs to parts or systems resulting from unauthorized modifications made to the appliance.

KITCHENAID CORPORATION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion or limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Outside the United States, a different warranty may apply. For details please contact your authorized KitchenAid dealer.

If need service, first see the “Troubleshooting” section of this book. After checking “Troubleshooting”, additional help can be found by checking the “Requesting Assistance or Service” section by calling the KitchenAid Consumer Assistance Center, 1-800-422-1230 (toll-free) from anywhere in the U.S.A.

For warranty information in Canada:

Please contact your authorized KitchenAid dealer or call Consumer Assistance at 1-800-461-5681 (toll-free) between 8:30 a.m. and 6 p.m. EST from anywhere in Canada.
WHIRLPOOL ICE MAKER WARRANTY

ONE-YEAR FULL WARRANTY ON ICE MAKER
For one year from the date of purchase when this product is operated in a residential or light commercial setting, and is maintained according to the instructions furnished with the product, Whirlpool will pay for FSP® replacement parts and repair labor to correct defects in materials or workmanship. Service must be provided by a Whirlpool designated service company.

FIVE-YEAR FULL WARRANTY
In the second through fifth years from the date of purchase, Whirlpool will pay for replacement parts and repair labor costs to correct defects in materials or workmanship of the compressor only. Service must be performed by a Whirlpool designated service company.

Whirlpool will not pay for:

1. Service calls to correct the installation of your ice maker, to instruct you how to use your ice maker, to replace house fuses or correct house wiring or plumbing, or replace light bulbs.

2. Repairs when your ice maker is used in locations where usage exceeds ice making capabilities of unit (about 50 pounds in 24 hours.) This ice maker is intended only for residential and/or light commercial use that does not exceed these capabilities.

3. Damage resulting from accident, alteration, misuse, abuse, fire, flood, acts of God, improper installation or installation not in accordance with local electrical or plumbing codes or use of product not approved by Whirlpool.

4. Replacement parts or repair labor costs for units operated outside the Untied States.

5. Pickup and delivery. This product is designed to be repaired in the home.

6. Repairs to parts or systems resulting from unauthorized modifications made to the appliance.

KITCHENAID CORPORATION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.
Some states do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion or limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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