



## Troubleshooting/FAQ (RL Models)

### Ice Flaker will not run

1. Unplugged or defective Photo Eye(s).
  - Ensure Photo Eyes are properly and securely connected. Place a wire jumper between terminals labeled "Blue" and "Black" at the Control Panel. If ice flaker starts, Photo Eyes may be defective and need to be replaced.
2. Defective Level Control Relay
  - Place a wire jumper between terminals #5 and #6 at the Level Control Relay. If ice flaker starts, Level Control Relay may be defective and need to be replaced.
3. No secondary voltage from transformer
  - Check voltage across terminals #1 and #2 at Control Module. If 24 VAC not present, transformer may be defective and need to be replaced.
4. Open switch or loose wiring
  - Place a wire jumper between terminals #2 and #3 at Control Module. If ice flaker starts, trace voltage from terminal #3. Check all wire terminals and tighten as necessary.
5. Defective Control Module
  - Place a wire jumper between terminals #2 and #3 at Control Module. If ice flaker does not start, Control Module may be defective and need to be replaced.

### Ice Flaker does not shut down when Ice Bin is full

1. Defective Emitter Photo Eye
  - Unplug Emitter Photo Eye and wait longer than Off-Delay setting. If ice flaker stops, Emitter Photo Eye may be defective and need to be replaced.
2. Defective Receiver Photo Eye
  - Unplug Receiver Photo Eye and wait longer than Off-Delay setting. If ice flaker stops, Receiver Photo Eye may be defective and need to be replaced.
3. Level Control Relay is jumper out
  - Check for a wire jumper between terminals #5 and #6 at Level Control Relay. If present remove wire jumper.
4. Defective Control Module
  - Remove wire from terminal #3 at Control Module and wait longer than Off-Delay setting. If ice flaker does not stop, Control Module may be defective and need to be replaced.

### Solenoid Valve will not open

1. Low Water Cutoff Switch (2000-4000)
  - Remove sump cover and turn upside down. If flaker starts, verify water levels are correct inside sump. (1/4"-1/8" below water return)
2. Low Water Cutoff Switch (6000-101)

- Lift sump cover and manually engage switch by lifting white cylindrical piece. If flaker starts, verify water levels are correct inside sump. (1/4"-1/8" below water return)
3. Defective Control Module
    - Verify 24VAC present across terminals #1 and #3 at Control Module. Remove wires and check for continuity between terminals #7 and #8. If the contacts remain open, Control Module may be defective and need to be replaced.
  4. Blown/Upside Down fuses
    - Check for control voltage/correct orientation across FU1 fuses. Replace as needed.
  5. Defective Water Pump Relay
    - Place a wire jumper between terminals #14 and #21 at Water Pump Relay. If Solenoid Valve opens, Water Pump Relay may be defective and need to be replaced.
  6. Defective Solenoid Valve
    - Verify control voltage at terminals Sol A1 and Sol A2 in the Control Panel. If voltage is present, Solenoid Valve may be defective and need to be replaced.
  7. Loose wiring
    - Check all wire terminals and tighten as necessary.

#### Drive Motor will not run/Overload Condition

1. Defective Control Module
  - Verify 24 VAC present across terminals #1 and #3 at Control Module. Check voltage between terminals #1 and #6. If no voltage present, Control Module may be defective and need to be replaced.
2. Defective Drive Motor
  - Verify control voltage at terminals T1 Driv and T2 Driv in the Control Panel. If voltage is present, Drive Motor may be defective and need to be replaced.
3. Sleeve Bearings are seized
  - Remove the Gear Motor from the mounting hub or the Speed Reducer from Top Casting and try to push the Ice Blade by hand. If the Ice Blade will not move, the Sleeve Bearings may be seized and need to be replaced.
4. Speed Reducer is seized
  - Remove Speed Reducer and bring voltage to the Drive Motor. If the output shaft cannot turn while not attached to the ice flaker, it may be seized and need to be replaced.
5. Motor Overload setting is too low
  - Raise the Motor Overload setting at the Control Module. Verify the amperage draw is in correspondence with the nameplate.
6. Loose wiring
  - Check all wire terminals and tighten as necessary.
7. Physical obstruction
  - Visually inspect pathway of Ice Blade and Ice Deflector. If obstruction is present, remove obstruction or replace part causing obstruction.
8. Wire/Coil Loop
  - Ensure number of loops is correct for model.

- Bypass loop and replace control module to confirm.

#### Water Pump will not run

1. Defective Control Module
  - Verify 24 VAC present across terminals #1 and #3 at Control Module. Check voltage between terminals #1 and #6. If no voltage present, Control Module may be defective and need to be replaced.
2. Blown/Upside Down fuses
  - Check for control voltage/correct orientation across FU1 fuses. Replace as needed.
3. Defective Water Pump
  - Verify control voltage at terminals T1 Pump and T2 Pump in the Control Panel. If voltage is present, Water Pump may be defective and need to be replaced.
4. Loose wiring
  - Check all wire terminals and tighten as necessary.

#### No ice harvesting at bottom of Evaporator

1. TXV is underfeeding
  - Adjust refrigeration to ice flaker.
2. System is short of refrigerant
  - Check for bubbles in the Sight Glass. If present, charge system as needed.
3. Improper location of TXV sensing bulb
  - Relocate bulb to 4:00 clock position as originally set by factory.

#### No ice harvesting on entire Evaporator surface

1. Sleeve Bearings are worn
  - Remove Speed Reducer or Gear Motor and check for “play” in Sleeve Bearings. Replace if worn.
2. Ice Blade clearance is too high
  - Adjust Ice Blade clearance to proper setting.

#### Ice accumulates on Bottom Casting Ribs

1. Ambient temperature is too low
  - If ambient temperature is below 50°F, relocate ice flaker to warmer area. Contact Howe about Low Ambient Kit.

#### Ice Blade is frozen in place

1. Motor Overload setting is too high

- Adjust the Motor Overload setting at the Control Module.
- 2. Ice is freezing too thick or too hard
  - Adjust refrigeration to ice flaker.
- 3. Drive Motor has stopped
  - See “Drive Motor will not start” above.
- 4. Flex Coupling is broken
  - Check and replace Flex Coupling as necessary.

#### Ice Flaker not meeting rated capacity

1. Incorrect Evaporator temperature
  - Adjust refrigeration to ice flaker.
2. Supply water temperature is outside mandatory range
  - Adjust supply water to between 45°F and 90°F. For temperatures below range, contact Howe about Low Temperature Mixing Valve.
3. Ambient temperature is outside mandatory range
  - Adjust temperature to between 50°F and 90°F. If unable to adjust, relocate the ice flaker. For temperatures below range, contact Howe about Low Ambient Kit.

#### Ice freezes together in Ice Bin

1. Water Distribution Pan is overflowing
  - Adjust Water Regulating Valve so the Water Distribution Pan is halfway to  $\frac{3}{4}$  full.
2. Water from Side Spouts or Lead Spout is not reaching freezing surface of Evaporator
  - Clean spouts of any debris or blockages. Make sure all spouts are perpendicular to and within reasonable distance from surface of Evaporator.
3. Water is “ramping” off rings of ice formed on Evaporator
  - Adjust refrigeration to the ice flaker.
4. Ice Bin is not draining properly
  - Check that all drains are flowing freely and pitched away from Ice Bin.
5. Ice turnover is low and Ice Bin inventory has become stale and clumped by lengthy storage time
  - Use or discard ice within a reasonable time of producing it. Contact Howe about Energy Saver Ice Production Management System.