CM Cubed Service Diagnosis - Main Chart

No Ice, Machine Off

Remove Front Panel, Check if Controller Has Any Lights On.

Any Lights On? No → Check power to unit, see Power Page

Check which light is on.

Water and Off? Yes → See Chart W

Refrigeration & Off? Yes → See Chart R

Bin Full? Yes → See Chart B

Off? Yes → See Chart O

Clean? Yes → See Chart C

Freeze or Harvest? Yes → See Chart F
Chart W

From Main Chart

Water Diagnostic Light Blinks Once and Repeats
   Yes → Check water pump, see Pump Page
   No

Water Diagnostic Light Blinks Twice and Repeats
   Yes → Check for slow or no water fill, see Water Page
   No

Water Diagnostic Light is On without blinking
   Yes → Check for water inlet valve leak thru, see Water Page
   No

Water AND Refrigeration Lights are On without blinking
   Yes → Thermistor harness may be unplugged
   No → Harness plugged in?
   Yes → Replace Thermistor Set
   No → Plug In

Machine Operating

Yes

No
Chart R

From Main Chart

1. Refrigeration Diagnostic Light blinks once and repeats
   - Yes: Check for cause of slow harvest, see Harvest Page
   - No

2. Refrigeration Diagnostic Light blinks twice and repeats
   - Yes: Check for cause of no ice being harvested or sensed. See Harvest Page
   - No

3. Refrigeration Diagnostic Light blinks three times and repeats
   - Yes: Check for cause of high discharge temperature
   - No

4. Refrigeration Diagnostic Light is on without blinking
   - Yes: Check for cause of long freeze cycle, see Freeze Page
Chart B

From Main Chart

Check for ice between photo-eyes

Ice in between? Yes

Remove ice, machine will start in less than 4 minutes

No

Scale on eyes? Yes

Clean photo-eyes with ice machine cleaner

No

Eyes in alignment? No

Line up eyes

Yes

Eyes dry? No

Dry the photo-eyes

Yes

Replace eyes
From Main Chart

Machine should be operating, check loads for voltage

Power to contactor coil?
  Yes
  Coil OK?
    Yes
    Push Off, then Freeze
    Machine starts?
      Yes
      Normal
      Yes
      Replace controller
    No
    No
    Replace contactor
  No

Power to water pump?
  No

Power to fan motor?
  No
  In harvest?
    Yes
    Normal
    Yes
    Replace harness
  No
  Harness OK?
    Yes
    Replace harness
    No
    No
    Replace harness
Chart O

From Main Chart

- Machine switched off by user
  - Push freeze, ask user why unit switched off

Chart C

From Main Chart

- In Clean cycle
  - Is Clean light on but blinking?
    - No: Push Freeze
    - Yes: Push Clean

Power Page

From Main Chart

Power

- Yes: Check Transformer
- No: Restore Power

Check Transformer

- Transformer OK?
  - Yes: Check for voltage to controller
  - No: Replace transformer

Check for voltage to controller

- Voltage?
  - Yes: Check for lights
  - No: Check harness, clean pins

Check for lights

- Lights?
  - Yes: Machine operating
  - No: Replace controller
From Chart W

Water Diagnostic Light Blinks Once and Repeats

Yes

Check water pump

Pump OK?

No

Check voltage to pump

Voltage OK?

Yes

Replace pump

No

Check harness and pins
From Chart W

Water Diagnostic Light Blinks Twice and Repeats

Yes → Check for slow or no water fill

No → Water to unit?

Yes → Water filters restricted?

No → Water valve OK?

Yes → Is valve screen dirty?

Yes → Clean screen

No → Check for power to valve

No → Water diagnostic light is ON without blinking?

Yes → Check for water inlet valve leak thru

No → Water valve leaking thru?

Yes → Voltage to coil?

Yes → Voltage at pins but not valve?

Yes → Replace harness

No → Replace controller

Yes → Replace valve

No → Reset controller

No → Replace valve

Yes → Machine Operating
Harvest Page

From Chart R

Refrigeration Diagnostic Light blinks once and repeats

Check for cause of slow harvest

Hot gas valve opens fully?

Yes

Ice path restricted?

No

Refrigerant charge correct?

No

Remove restriction

Locate leak, repair and recharge

Voltage?

Yes

Replace hot gas valve

No

Reset controller

Machine operates

No ice being harvested or sensed

Can photo-eyes see ice?

No

Clean photo-eye emitter and receiver

Yes

Check harness

Pin and harness OK?

Yes

Replace controller

No

Clean pins or replace harness

Hot gas valve blinks twice and repeats

Lime scale on evaporators?

Yes

Clean water system

No

Check voltage to hot gas valve

Check harness and pins

Pins and harness OK?

Yes

Replace controller

No

Clean pins or replace harness

Check harness from #4, short pins together

Bin full light blinks?

No

Replace photo eyes

Yes
Freeze Page

From Chart R

Refrigeration Diagnostic
Light is ON without blinking

Yes

Check for cause of long freeze cycle

No

Fan motor turns?

Yes

Replace Fan Motor

No

Condenser dirty?

Yes

Clean condenser

No

Check/Clean pins

Yes

Power to Fan?

Yes

Machine Operates

No

Replace controller

Reset controller

If water cooled check for water having been shut off

Water shut off?

Yes

Check harness

No

Replace harness

Harness OK?

Yes

Check condenser filter or fins for dirt

Replace controller

Voltage to motor?

Yes

Replace Fan Motor

No

Check harness

Voltage to motor?