

CME256, 506, 656, 806: AutoIQ™ Cubers

Service Diagnosis: Controller Diagnostic Light Analysis

Problem or Symptom	Possible Cause	Probable Correction	
Machine is off	Bin is full, ice in cube port	Use some ice	
	Power is off, check controller lights.	If all lights are out, check power supply, restore power if off	
	Transformer is open	If all lights are out and there is power, check transformer output for 24 vac	
	Unit has been switched off Off lite is glowing	Push and release Freeze button to restart unit.	
	Compressor will not start	Not enough water or water not sensed.	
	Unit has Shut Down	Check for Refrigeration or Water Error	
Unit is off & Water diagnostic light is ON or BLINKING	Water inlet valve malfunction	Check water diagnostic light, if it blinks 2 times and repeats, check the water inlet valve for proper water flow.**	
	Water pump malfunction	Check that pump hose is attached and if pump is plugged in and working.	
	Water level not sensed or not high enough	Check harness from sensor. Check levelness, check standpipe height.	
Unit is off & Refrigeration diagnostic light is ON or BLINKING	Low discharge or long freeze cycle	If the Refrigeration light is glowing steadily, there is a probable refrigeration problem	
	Harvest problem	If the Refrigeration light blinks once and repeats, look for a harvest problem.** On controllers 17-1 and higher, this also indicates that cubes were “sensed” by the bin controls.	
	Hot Gas Valve failure	Check hot gas valve operation.	
	High Discharge Temp	If the refrigeration diagnostic light blinks 3 times and then repeats, check for a reason for high discharge temperatures.	
	Harvest problem	Controllers 17-1 and higher, if the lite blinks 2 times and repeats, check for a harvest error - no cubes sensed.	
	Unit does not go into harvest - exceeds maximum freeze time		Push and release Off button. Push and release Freeze button. Check operation.
			Push cube size float down and check operation.
Exceeds maxi harvest time		Check for cause of long harvest cycle**	
Unit runs and both Diagnostic lites are ON	Temperature sensors out of range	Replace the temperature sensor set (water and discharge).	
Same, but 1 light is on	Reservoir temp. wrong	Reset and check water temp and sensor.	

* Machine may be reset by pushing and releasing the Off button, then pushing and releasing the Freeze button. ** See following pages

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Problem or Symptom	Possible Cause	Probable Correction
Unit is off because of a "Harvest Problem"	Bin controls did not sense ice falling, unit stayed in harvest until the maximum harvest time ran out.	Check bin controls. The bin full light should be off. If it is on or blinking the bin controls may be dirty. Clean if dirty. The board and bin controls may also need to be checked. Push and release Off button. Push and release Freeze button. Check machine operation. Check if ice is made and harvests.
	Bin controls or System Controller may have failed.	See "Unit does not shut off" below..
	Other components may have failed	Check the next page
Cubes are too large	Cube size float sticking.	Check/clean
Cubes are too small	Not enough water	Check for leak in reservoir
Two plate models making ice thicker on one plate than another	A - D series - refrigerant distributor restricted	Change distributor
	CME506 E series - expansion valve bulbs on wrong suction line	Switch bulbs to correct suction lines
	CME506 E series - one TXV not metering	Check TXV, replace if there is poor ice formation on its plate
Low ice capacity	Dirty condenser or filter	Replace filters, clean condenser
	Recirculation of air	Block air re-circulation or move condenser
	Low refrigerant charge	Check system. If there is a low charge, find the leak, recover the refrigerant, repair the leak, replace the dryer, evacuate and weigh in the nameplate charge.
	Cube size set wrong	Re-adjust cube size
Unit does not shut off	Bin control system may have failed.	Check bin controls. Check bin full light, if off, place something between the electric eyes. The bin full light should begin to blink (after 20 seconds of continuous blockage it will glow steadily). If not, check operation of electric eyes by unplugging #4 and jumping out the two pins on the controller (first discharge any static electricity by touching the cabinet with the tool). If the bin full light blinks, replace the bin controls. If it does not blink, replace the controller. Note: Leaving #4 unplugged and jumped for 20 seconds will shut the machine down on a bin full (at the end of the harvest cycle). It will restart after 4 minutes or may be reset by pushing the Freeze button.

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Service Diagnosis: Components

Problem or Symptom	Possible Cause	Probable Correction
Fan motor does not turn. Refrigeration light may be on steadily or blinks 3 times and repeats.	Open motor windings, or seized bearings	Replace fan motor
	No power to fan motor	Fan motor unplugged, check for voltage from controller. If none, replace controller.
		Some models have a fan control switch, check it for continuity above 240 PSIG.
Pump motor does not turn	Open motor windings, or seized bearings	Replace pump
	No power to pump	Check electrical connections. If the unit is in Freeze, Clean or Harvest the pump should have power to it. If not, replace the System Controller.
Hot Gas Valve does not open.	Open solenoid coil.	Replace hot gas valve
	Stuck valve	Replace hot gas valve
	No power to coil in Harvest	Check wire connections, if ok, replace System Controller
Hot Gas Valve leaks thru (warm tube temperatures on both sides of valve during freeze)	Mechanical problem in valve	Replace valve
Water Inlet Valve does not open	Open solenoid coil	Replace valve
	Stuck valve	Replace valve
	No power to valve (early part of harvest)	Check wire connections, if ok, replace System Controller
Water Inlet Valve does not flow enough water	Restriction in water supply	Check water filters and/or inlet screen.
Water Inlet Valve leaks thru	Mechanical problem in valve	Replace valve
Compressor does not work	Unit in Clean cycle	Push and release Freeze button.
	Contactors coil open	Replace contactor
	Open starting components	Check and replace
	Open windings	Check and replace compressor
	Internal valve failure	Replace compressor
	Water level too low or not sensed	Unit must be full of water before controller will start compressor. Check water level and sensor and harness.