

TROUBLESHOOTING GUIDE

| PROBLEM | POSSIBLE CAUSE | REMEDY | PROBLEM | POSSIBLE CAUSE | REMEDY |
|---------------------------|--|--|------------------------------|---------------------------------|-------------------------------------|
| Inadequate Cooling | 1. Cooler undersized | 1. Replace with larger cooler | Blower fails to start | 1. No fuse or blown fuse | 1. Replace fuse |
| | 2. Clogged or dirty filters | 2. Replace filters | | 2. Loose electrical connections | 2. Check all electrical connections |
| | 3. Dry filters or lack of water while cooler is in operation | 3. Adjust water troughs <ul style="list-style-type: none"> • Check water distributing system for obstruction • Check pump | | 3. Defective switch | 3. Replace switch |
| | 4. Insufficient air discharge openings or inadequate exhaust from area being cooled causing humidity build-up and discomfort | 4. Make sure there is adequate air exhaust | | 4. Motor burned out | 4. Replace motor |
| | 5. Excessive humidity | 5. In some areas, there may be a few days during the summer when the relative humidity is high resulting in complaints about poor cooling <ul style="list-style-type: none"> • Limitations of an evaporative cooler should be explained to the customer | | 5. Belt or pulley loose | 5. Check belts and pulleys |
| | 6. Blower turning backwards | 6. Re-connect motor for correct rotation | | 6. Belt broken or missing | 6. Install new belt |
| | 7. Blower installed backwards | 7. Remove and re-install blower wheel to turn in correct direction | | | |
| | 8. Blower running too slowly | 8. Check motor amps and readjust variable pitch motor pulley to increase blower speed, if needed | | | |
| | 9. Belt slipping | 9. Tighten belt by readjusting position of motor <ul style="list-style-type: none"> • Replace belt if worn | | | |

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| Motor overheats or burns out | 1. Belts too tight | 1. Check belt tension | Pump fails to operate | 1. Pump motor failure | 1. Replace complete pump |
| | 2. Improper adjustment of variable pitch motor pulley causing motor overload | 2. Check variable pitch motor pulley for proper adjustment <ul style="list-style-type: none"> • A variable pitch motor pulley can be adjusted to accommodate the speed of the blower to the ductwork used • Adjust pulley so motor amperes do not exceed full load amperes shown on motor name plate | | 2. Improper wiring of pump leads to motor and switch | 2. Re-check pump leads connected to power and switch |
| | 3. Low voltage | 3. Check voltage and consult with power company, if low | | 3. Loose electrical connections | 3. Check electrical connections |
| | 4. Incorrect power supply | 4. Check power supply against motor name plate specifications | | 4. Pump switch faulty | 4. Replace pump switch |
| | 5. Incorrect motor, motor has been changed | 5. Be sure motor is correct size for cooler | | Pump runs but doesn't circulate water/Pump runs but filters lack water | 1. Insufficient water in bottom of cooler pan |
| Belt slipping or wearing excessively | 1. Belt loose | 1. Adjust belt | 2. Pump screen clogged | | 2. Clean screen |
| | 2. Pulleys out of line | 2. Align pulleys | 3. Clogged tubing | | 3. Clean tubing |
| | 3. Moisture getting on belt | 3. Check for loose water connections | 4. Foreign matter lodged in the water distributor | | 4. Remove pump hose from the tee and clean out foreign matter |
| | 4. Worn belts | 4. Replace belts | | | |
| | 5. Worn or imperfect pulleys | 5. Replace pulleys | | | |

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| Cooler noisy | 1. Wheel rubbing on housing | 1. Re-position wheel | Foam or suds (rarely experienced) | 1. When filter pads are installed where the water supply is relatively soft, or if the wood has a higher than normal amount of spaonin, the pump may churn up suds | 1. Drain and refill cooler sump with fresh water • May need to be repeated for severe cases |
| | 2. Wheel out of balance due to dirt | 2. Check wheel and clean | | | |
| | 3. Cooler delivering more air than needed | 3. Ajdust motor pulley to slow down blower | Unpleasant odor | 1. Cooler located near source of unpleasant odor 2. Algae in sump water 3. Filters remain wet after shut down 4. Water level too high; keeps lower edge of filter wet | 1. Remove source of odor or place a barrier between cooler and source of odor 2. Drain cooler bottom, clean, re-fill, and install new filters 3. Allow blower to run for about 10 minutes after pump is shut off to dry out filters 4. Re-adjust water level so filters are above water in cooler bottom |
| | 4. Improper alignment of blower bearings | 4. Adjust blower shaft set collars - snug but not too tight | | | |
| | 5. Belt squealing | 5. Tighten belt by adjusting motor • Apply belt dressing to belt • In some cases, belt may need to be replaced | | | |
| Continuous overflow of water | 1. Float valve adjustment incorrect | 1. Adjust float valve | Rapid formation of white depositis on pads and louvers | 1. High mineral content of supply water | 1. Install drain connections from cooler with a shut-off valve in a convenient location. • Open valve once a week to flush out all the water in the cooler • Frequency of flushing depends on the hardness of water supply and amount of usage of the cooler |
| | 2. Valve stuck open due to lime deposits | 2. Clean valve and adjust | | | |

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| Water being thrown into room | 1. Loose tubing or pump hose connections | 1. Check and tighten all tubing and hose connections | Dust and alkali pulling off pads | 1. Filters dry when cooler started up | 1. Turn pump on about 10 minutes before blower is turned on |
| | 2. Break in tubing or pump hose | 2. Replace any cracked or broken tubing or hose | | 2. Loose paint or scale in cooler cabinet or ducts | 2. Clean and repaint where necessary |
| | 3. Cover not installed on float valve to prevent spray | 3. Install cover on float valve to prevent spray | | | |
| | 4. Filters not properly installed in Grip-Lock filter holders and have sagged | 4. Make sure filters are properly installed in Grip-Lock holders to prevent sagging filters | | | |
| | 5. Discharge ends of water distribution tubing do not fit into the water distributing troughs in top of filter cartridges | 5. Make sure water distribution tubing discharges water into water distributing troughs in top of filter cartridges | | | |
| | 6. Old filters that have developed thin spots | 6. Replace with new filters | | | |
| | 7. Pump delivering excessive water to filters | 7. Install hose clamp on hose to restrict supply of water | | | |
| | 8. Aspen fiber sticking through netting on inside of pad | 8. Remove projecting fibers or replace with new filters | | | |