

45-Point Evaporative Cooler Diagnostic Health Check





Cabinet

- First, we check the cabinet for damage or structural integrity
- Each Corner Post is inspected for damage and deterioration



Cooling Pads

- We make sure the pads are not damaged or deteriorated (those aged 5-7 years need replacing, because they lose their efficiency to hold water)
- Then we check that the pads are correctly fitted and clips are intact



Electrical Wiring

It's time to look for damage and loose connections, including Earth Spade Connections.



Fan Motor

- Your fan motor is tested to ensure it rotates freely and that the motor bearings are not worn. Confirm supply voltage is between 220V 240V.
- We check the motor speed sensor is clean, the beam sensors are vertically aligned, and that the sensor is correctly located in the motor's end plate.
- Your DC brake is inspected for correct operation (N-E1 control models only).



Fan

- Your fan impeller is checked to ensure it's centered within the bell housing.
- We ensure the Collet is tight and not worn.
 - Your motor stator bracket and mountings are inspected for damage.
 - The fan impeller is checked for correct tension, blade height and angle.
 - Your belt tension and alignment is inspected (Breezair Centrifugal fans).
 - And we make sure the pulley wheel ratio isn't causing the motor to exceed the maximum current draw (Breezair Centrifugal fans).



Fan Capacitor

We check that your Fan Capacitor is no more than 2 years old.



Printed Circuit Board

Printed Circuit Boards and Terminals are inspected for any visual damage (e.g., ants, diodes, resistors, burn marks).



Weather Seal Motor

- Your weather seal motor operation checked for correct operation, engaging and opening/closing servo seal and opening/closing drain snorkel.
- We make sure the Servo Seal louvres seal correctly in the closed position.
- A check is done on the Auto Winter Seal to make sure it operates correctly to the open and closed positions.



Water

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- We check the Water Inlet Solenoid and water supply hose have filters fitted and that they're clean
- The condition of your Water Inlet Valve ball float is inspected (if applicable)
- We ensure the Water Inlet Valve opens in the normal operation sequence and closes at the correct water level. (If applicable)
- And we check that your water pressure is sufficient to fill the tank within a 4-minute fill time if a Dump Valve is fitted (if applicable)



Water Pump

- We check the water pump and distribution pipes to ensure they are intact and secured in place.
- The pump operation is checked for noise and that the filter is clean
- Your pump water discharge is inspected for correct pad saturation.



Drain Valve

- Now we take a look at your Drain Snorkel, making sure it raises to the correct height above the High-Water Level Sensor.
- Then we check that the Drain snorkel lowers to the correct position, allowing the tank to be completely drained
- We check the Dump Valve inlet solenoid operation. (If applicable)
- And we inspect the Dump Valve outlet valve operation. (If applicable)



Flexible Hose Connection

- We're looking for deterioration and blockages when we inspect your water supply line.
- We inspect the Flexi Hose Connection
- And we look at your Cooler Isolation Tap



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Bleed-Rate Setting

Here, we check the Bleed discharge is correctly set for the model to maintain appropriate water quality and discharge concentration. You are advised if the bleed-rate settings are altered



Water Level Sensor

We test the Water Inlet Solenoid to make sure it closes at the contact of water at the High-Level Water Sensor and does not overflow out the Drain tube prior to the water being sensed at the High-Level



Float Valve

- The condition of your Water Inlet Ball Valve washer is checked.
- We check that the Water Inlet Valve opens in the normal operation sequence and closes at the correct water level



Water Drain

We make sure the drain discharge point is appropriate for the installation



Controller

- We check that your wall controller is operating and in good working condition
- We also make sure your wall controller is secured to the wall correctly



Air-Delivery System

- Your outlet diffusers are inspected for correct position and that the louvre blades are configured for best room air mixing.
- We check that air distribution is sufficient from all outlets.
- And we make sure there is adequate exhaust opening available for correct operation Include Security Relief Grill



Roof-Top Condition

Now we check around the work area for existing damaged tiles



Operation

And finally, we discuss best practices for your operating system