

carson



Evaporative Cooler - CV550

User Manual

[Revision 1.0 October 2018]

READ THIS MANUAL CAREFULLY BEFORE USE – FAILURE TO DO SO MAY RESULT IN INJURY, PROPERTY DAMAGE AND MAY VOID WARRANTY. • KEEP THIS MANUAL FOR FUTURE REFERENCE. • Products covered by this manual may vary in appearance, assembly, inclusions, specifications, description and packaging.

Safety

Safety messages are designed to alert you to possible dangers or hazards that could cause death, injury or equipment or property damage if not understood or followed. Safety messages have the following symbols:

 You WILL be KILLED or SERIOUSLY INJURED if you do not follow instructions.	 You CAN be KILLED or SERIOUSLY INJURED if you do not follow instructions.	 You CAN be INJURED if you do not follow instructions or equipment damage may occur.
<p>It is vital that you read and understand this user manual before using the product, including safety warnings, and any assembly and operating instructions. Keep the manual for future reference.</p> <p>Safety precautions and recommendations detailed here must be fully understood and followed to reduce the risk of injury, fire, explosion, electrical hazard, and/or property damage.</p> <p>Safety information presented here is generic in nature – some advice may not be applicable to every product. The term "equipment" refers to the product, be it electrical mains powered, battery powered or combustion engine powered.</p> <ul style="list-style-type: none"> Before Use - If you are not familiar with the safe operation/handling of the equipment, or are in any way unsure of any aspect of suitability or correct use for your application, you should complete training conducted by a person or organization qualified in safe use and operation of this equipment, including fuel/electrical handling and safety. Do NOT operate the equipment in flammable or explosive environments, such as in the presence of flammable liquids, gases or dust. The equipment may create sparks or heat that may ignite flammable substances. Keep clear of moving parts. Equipment may be a potential source of electric shock or injury if misused. Do NOT operate the equipment if it is damaged, malfunctioning or is in an excessively worn state. Do NOT allow others to use the equipment unless they have read this manual and are adequately trained. Keep packaging away from children - risk of suffocation! Operators must use the equipment correctly. When using the equipment, consider conditions and pay due care to persons and property. <p>General Work Area Safety</p> <ul style="list-style-type: none"> Work areas should be clean and well lit. Do not operate the equipment if bystanders, animals etc are within operating range of the equipment or the general work area. If devices are provided for connecting dust extraction / collection facilities, ensure these are connected and used properly. Dust collection can reduce dust-related hazards. 	<p>General Personal Safety</p> <ul style="list-style-type: none"> Wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect from eye and ear injury, poisoning, burns, cutting and crush injuries. Protective equipment such as safety goggles, respirators, non-slip safety footwear, hard hat, hearing protection etc should be used for appropriate equipment / conditions. Other people nearby should also wear appropriate personal protective equipment. Do not wear loose clothing or jewellery, which can be caught in moving parts. Keep hair and clothing away from the equipment. Stay alert and use common sense when operating the equipment. Do not over-reach. Always maintain secure footing and balance. Do not use the equipment if tired or under the influence of drugs, alcohol or medication. This equipment is not intended for use by persons with reduced physical, sensory or mental capabilities. <p>General Fuel Safety</p> <ul style="list-style-type: none"> Petrol/fuel/gasoline is extremely flammable – keep clear of naked flames or other ignition sources. Do not spill fuel. If you spill fuel, wipe it off the equipment immediately – if fuel gets on your clothing, change clothing. Do NOT smoke near fuel or when refuelling. Always shut off the engine before refuelling. Do NOT refuel a hot engine. Open the fuel cap carefully to allow any pressure build-up in the tank to release slowly. Always refuel in well ventilated areas. Always check for fuel leakage. If fuel leakage is found, do not start or run the engine until all leaks are fixed. <p>General Carbon-Monoxide Safety</p> <ul style="list-style-type: none"> Using a combustion engine indoors CAN KILL IN MINUTES. Engine exhaust contains carbon-monoxide – a poison you cannot smell or see. Use combustion engines OUTSIDE only, and far away from windows, doors and vents. 	<p>General Equipment Use and Care</p> <ul style="list-style-type: none"> The equipment is designed for domestic use only. Handle the equipment safely and carefully. Before use, inspect the equipment for misalignment or binding of moving parts, loose components, damage or any other condition that may affect its operation. If damaged, have the equipment repaired by an authorised service centre or technician before use. Prevent unintentional starting of the equipment - ensure equipment and power switches are in the OFF position before connecting or moving equipment. Do not carry equipment with hands or fingers touching any controls. Remove any tools or other items that are not a part of the equipment from it before starting or switching on. Do not force the equipment. Use the correct equipment for your application. Equipment will perform better and be safer when used within its design and usage parameters. Use the equipment and accessories etc. in accordance with these instructions, considering working conditions and the work to be performed. Using the equipment for operations different from those intended could result in hazardous situations. Always keep equipment components (engines, hoses, handles, controls, frames, housings, guards etc) and accessories (cutting tools, nozzles, bits etc) properly maintained. Keep the equipment clean and, where applicable, properly lubricated. Store the equipment out of reach of children or untrained persons. To avoid burns or fire hazards, let the equipment cool completely before transporting or storing. Never place or store the equipment near flammable materials, combustible gases or liquids etc. The equipment is not weather-proof, and should not be stored in direct sunlight, at high ambient temperatures or locations that are damp or humid. Do not clean equipment with solvents, flammable liquids or harsh abrasives. For specific equipment safety use and care, see Equipment Safety.

General Electrical Safety	General Electrical Safety	General Service Information
<ul style="list-style-type: none"> Inspect electrical equipment, extension cords, power bars, and electrical fittings for damage or wear before each use. Repair or replace damaged equipment immediately. Ensure all power sources conform to equipment voltage requirements and are disconnected before connecting or disconnecting equipment. When wiring electrically powered equipment, follow all electrical and safety codes. Wherever possible, use a residual current device (RCD). High voltage / high current power lines may be present. Use extreme caution to avoid contact or interference with power lines. Electrical shock can be fatal. 	<ul style="list-style-type: none"> Electrically grounded equipment must have an approved cord and plug and be connected to a grounded electrical outlet. Do NOT bypass the ON/OFF switch and operate equipment by connecting and disconnecting the electrical cord. Do NOT use equipment that has exposed wiring, damaged switches, covers or guards. Do NOT use electrical equipment in wet conditions or in damp locations. Do NOT use electrical cords to lift, move or carry equipment. Do NOT coil or knot electrical cords, and ensure electrical cords are not trip hazards. 	<ul style="list-style-type: none"> The equipment must be serviced or repaired at authorised service centres by qualified personnel only. Replacement parts must be original equipment manufacturer (OEM) to ensure equipment safety is maintained. Do NOT attempt any maintenance or repair work not described in this manual. After use, the equipment and components may still be hot – allow the equipment to cool and disconnect spark plugs and/or electrical power sources and/or batteries from it before making adjustments, changing accessories or performing repair or maintenance. Do NOT make adjustments while the equipment is running. Perform service related activities in suitable conditions, such as a workshop. Replace worn, damaged or missing warning/safety labels immediately.
Evaporative Cooler Safety	Evaporative Cooler Safety	Evaporative Cooler Safety
<ul style="list-style-type: none"> For household use only. Connect the appliance to a single-phase AC supply of the voltage specified on the rating label. Always turn the product to the OFF position and unplug it from the electrical outlet when not in use. Extreme caution is necessary when the appliance is used by or near children, invalids or elderly person. Do not run cord under carpeting and do not cover cord with throw rugs, runners or the like. Arrange cord away from traffic area and where it will not be tripped over. Do not operate the appliance with a damaged cord or plug, or after the unit malfunctions, has been dropped, or damaged in any manner. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person to avoid a hazard. After adding water, do not let machine tilt, collide, laid or move to any position that will make the water overflow. Do not overturn the machine. 	<ul style="list-style-type: none"> Use the appliance in a well-ventilated area. While using, distance of no less than 20cm should be kept away from wall or corner to ensure the air intakes or exhaust openings should not be blocked unexpectedly. The unit must not be located immediately below or besides a curtain or the likes. Do not insert or allow fingers or any other objects into grill to avoid a mechanical danger when in use. Do not block air intakes or exhaust openings in any manner. Adequate clean water should be put into the tank within the water level limits as shown by the water level indicator. Make sure that you DO NOT add water whilst the power is on. If you want to move the product whilst water is in the tank, unplug it and push it slowly and very lightly on the side of the unit to avoid water spillage. The best method would be to drain the unit using the valve at the bottom of the unit. Do not cover the air outlet, a clear space of at least 1 meter should be provided in front and back of the machine. 	<ul style="list-style-type: none"> Please keep the ice crystals box provided away from children, as it is a chemical based substance that is harmful if swallowed. Also make sure that the ice pack is not placed in direct sunshine. The ice crystal can be used over 5 years. When scrapping the appliance, follow the regulations concerning the disposal of ice crystals. Use the appliance on flat, dry floor only. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance. Don't let people with poor physical ability, slow response or mental disorder (include children) use the machine unless the person with sense of safety responsibility can assist them.

Safety Symbols

The product may have safety warning labels attached to it, explained below. Understand the symbols on your product and their meanings. If any stickers become unreadable, unattached etc, replace them.

 <p>Flammable Material Hazard Flammable liquids, gases or substances etc may present. Avoid ignition sources and open flames. Danger of fire.</p>	 <p>Read User Manual Read and fully understand product safety warnings, operation, procedures etc before using the product.</p>	 <p>Use Hand Protection Wear appropriate hand protection and take due care as the product or use of the product may present hand hazards.</p>	 <p>WARNING EXHAUST FUMES Carbon-Monoxide Hazard Do not use the product in confined areas or without adequate ventilation. Carbon-monoxide poisoning can be fatal.</p>
 <p>Electrocution / Electrical Shock Hazard High voltage or high current electricity may be present or required by the product. Take due care when handling electrical products, cables, plugs and leads. Electrical shock can be fatal.</p>	 <p>Toxic Fumes / Dust Hazard Using the product or by-products from use may produce fumes, smoke or particles that could be harmful if inhaled. Wear appropriate breathing protection and have adequate ventilation.</p>	 <p>Explosive Material Hazard Combustible liquids, gases or substances etc may be present. Avoid ignition sources and open flames. Danger of explosion.</p>	 <p>Cutting / Amputation Hazard The product may have blades, edges or mechanical devices that can cause severe cut injury to fingers, limbs etc. Take due care when handling and using the product.</p>
 <p>Crush Hazard The product may have blades, edges or mechanical devices that can cause severe crush injury to fingers, limbs etc. Take due care when handling and using the product.</p>	 <p>Single Operator Only The product must be operated by a single person only. More than one person operating the product may introduce additional hazards.</p>	 <p>Use Face Protection Wear appropriate full-face protection and take due care as the product or use of the product may present face and eye hazards.</p>	 <p>Use Foot Protection Wear appropriate foot protection and take due care as the product or use of the product may present foot hazards.</p>
 <p>Use Eye / Ear / Head Protection Wear appropriate eye and / or ear and / or head protection and take due care as the product or use of the product may present eye, hearing and head hazards.</p>	 <p>Running Hazard Do not run on or near the product as doing so may present a fall hazard.</p>	 <p>Diving Hazard Do not dive into the product as doing so may present a neck / head injury hazard.</p>	 <p>Adult Supervision Required Always supervise children and other users of a product to prevent drowning or injury.</p>
 <p>Skin Penetration / Puncture Hazard The product may produce pressure, emit liquids or objects that can cause severe injury to fingers, limbs, blood etc. Take due care when handling and using the product.</p>	 <p>Hot Surface Hazard Be aware that the product may produce high temperatures and hot surfaces that can cause burn injuries.</p>	 <p>Flying Debris Hazard Be aware that the product or use of the product may present hazards produced by flying debris. Wear appropriate clothing and protective devices.</p>	 <p>Moving Parts Hazard Be aware that the product contains or uses mechanical devices that move or rotate. Always wait for moving parts to stop fully before handling the product, adjusting, maintenance etc.</p>

Carbon-Monoxide Hazard Do not use the product in confined areas or without adequate ventilation. Carbon-monoxide poisoning can be fatal.	Pull Hazard Be aware that the product contains or uses mechanical devices that can pull in objects and can cause severe injury to fingers, limbs etc. Take due care when handling and using the product.	Slope / Fall Injury Hazard Be aware that using the product on sloping surfaces or in slippery conditions may present additional dangers from falls and contact with blades, moving parts, hot surfaces etc.	"Slam Dunk" Warning Do NOT attempt "slam dunk" manoeuvres as this may result in severe injury due to falling, product breakage or collapse etc.
Electrocution / Electrical Shock Hazard - Outdoor High voltage or high current electricity may be present or required by the product. Do NOT use in rain, damp or wet conditions. Electrical shock can be fatal.	Electrocution / Electrical Shock Hazard - Disconnect High voltage or high current electricity may be present or required by the product. Always disconnect the product from the electrical supply before handling the product, adjusting, maintenance etc.	Power Line Electrocution Hazard High voltage / high current power lines may be present. Use extreme caution to avoid contact or interference with power lines. Electrical shock can be fatal.	"Kick-Back" Hazard High level of "kick-back" hazard that can cause the machine to suddenly rotate towards operator. Kick-back injury can be fatal.
Winch Operator Position Hazard Do NOT stand between winch and load. Do NOT use winch to move people.	Winch Lift Hazard Do NOT LIFT load vertically. Use machine to PULL only.	Cable Hazard Ensure that load bearing cable is not kinked or knotted.	Winch Cable Hazard Ensure that there is a minimum number of cable coils on winching mechanism.
Winch Hook Hazard Carry hook to load – do NOT throw or run.	Flash / Blinding Hazard Wear appropriate eye protection for welding. Direct exposure to weld arcs may cause permanent eye injury.	Laser Hazard Laser may be in use – do NOT look directly at laser, or allow others to.	

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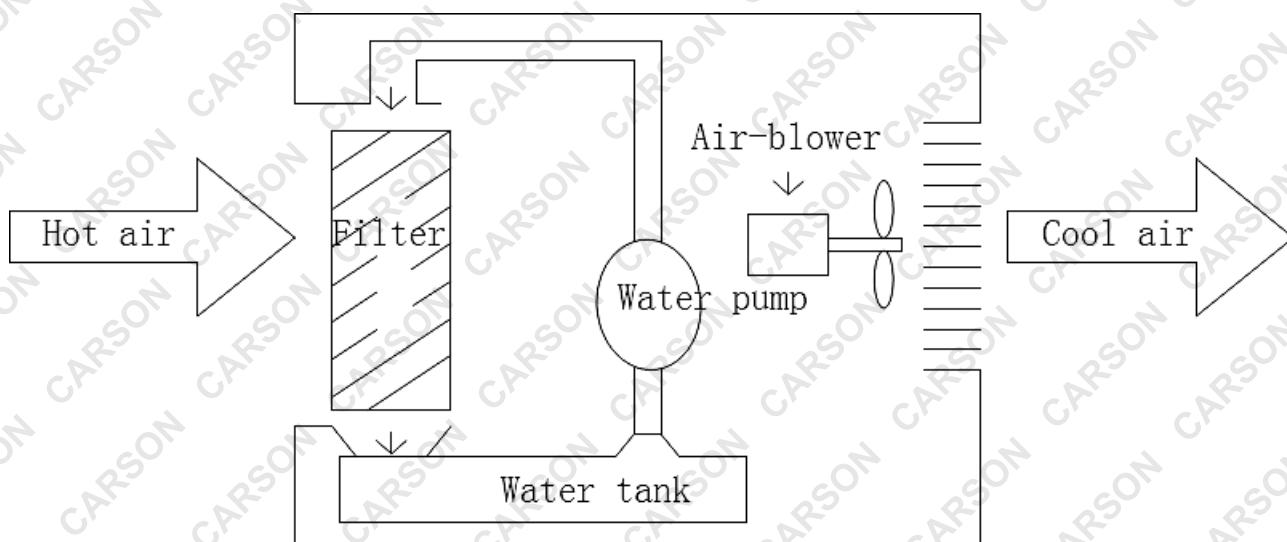
Introduction

Evaporative air cooler is a kind of modern energy-saving product which is developed through years of research and experiments. It has the following advantages:

- **Energy-saving:** Up to 80% or more while comparing with traditional air-conditioner.
- **Environment protection:** No discharge of hazardous substances and freon free during its operation.
- **Efficient:** Achieving the maximum cooling and purifying effect with minimum power consumption.

Evaporative air cooler is developed as a new generation of products combining of climatic conditions, which is using a new generation of blades with high speed and large air volume.

Its working principle is a "direct evaporative" humidification and cooling technology. Not only have cooling become functional, but it can also achieve a cooling effect on air humidification. A continuously circulating pump draws water from the water tank, and then distributes the water to the wet curtain. When hot air enters into the wet curtain, which is a cell-type filter layer made of special material, it exchanges energy with water. A satisfactory effect of cooling can then be obtained. Cool, clean air is blown indoors under a precise pressure point rendered by the air blower while the hot air goes out of the room through open vents or windows. This cycle achieves the goal of lowering the temperature in the room.



Parts Identification



No.	Name
1	Water/ small ice cube inlet
2	Control panel
3	Water supply inlet
4	Water level indicator
5	Casters

Set-Up

1. Open the carton and take out the unit.
2. When adding water, open the water inlet on the top cover, pour water into the water tank, then observe the water level indicator with the floating ball inside and pay attention to the following:
 - Avoid getting water into the motor and its surrounding area to avoid damaging the electrical components.
 - Water must be below the 'H' level, otherwise it will overflow.
 - Use fresh, clean water.
3. Press and hold the power button for a few seconds to turn ON/OFF the unit, then you can select the settings for speed, swing and cooling.



- In high humidity season, it is better to choose wind mode as there is humidifying effect in cool mode.
- After adding water, do not let the unit tilt, collide, lie down or move to any position that can spill water. Do not overturn the unit.
- Do not cover the air outlet; a clear, open space of at least 1 metre should be provided at the front and back of the unit.
- Ensure to always unplug the unit before cleaning or maintaining it.
- Clean the outer casing with a clean, damp cloth. Don't splash it directly with water.
- If the unit is spilling water, pull out the power plug immediately. You should only turn the unit ON again only after it thoroughly dries out, otherwise, it may short-circuit and malfunction.
- Do not position the air outlet close to walls or window curtains because the air current will be blocked.
- If the unit is not in use, pull out the power plug.
- Do not let people with poor physical ability, slow responsiveness, mental disorders and/or children use the unit unless said person has a sense of safety/responsibility and someone can assist them in operating the unit.

Operation

Due to the remarkable advantages of evaporative air cooler in cooling, humidification, cleanliness, energy-saving and ventilation, it is used primarily in locations where ventilation and cooling are needed. This product is mainly used in the following places:

- Electronics, electroplating, footwear, printing, plastics, clothing, packaging, the food processing industry.
- Textiles, machinery, ceramics, chemical industry, metallurgy, glass, metal, leather and other manufacturing industries.
- Hospital, clinic, schools, waiting rooms, cafes, shopping malls, supermarkets, laundry rooms.
- Offices, home, kitchens, market, large entertainment centres, underground parking lots, stations and other public places.
- Greenhouses, flower farms, poultry, livestock, and other types of farms.
- Existing chiller for air conditionings and as an auxiliary equipment used in blowers.
- Places of high humidity required for indoor use.

Control Panel Operation



After plugging the unit into a 220V-240V/50Hz power outlet, it will be in stand-by mode with a buzzer ringing.

Speed Settings



Connect the unit to the power supply and turn the SPEED knob. The fan will start. You can change the speed with the following choices; 1 (Low), 2 (Medium) and 3 (High). Turn the SPEED to "0" to turn the unit OFF.

Cool Settings



Turn the COOL knob to "ON" to start the cooling process, it will be on Fan Mode only after you have turn it to OFF.

Swing Settings



- **Vertical Louvers**

Turn the SWING knob to ON. The vertical louvers will automatically begin to move from right to left.

- **Horizontal Louvers**

Manually adjust the horizontal louvers to change the airflow from up to down.

Usage Conditions

- Ambient temperature: 10 – 45°C.
- Environment's Relative Humidity: ≤ 95%
- Atmospheric pressure: 86 – 106kpa
- 0°C < Water supply temperature < 45°C
- Water supply pressure: 0.15 – 0.6mpa
- Voltage deviation does not exceed the rated voltage of ± 10%
- Environmental air quality should meet ambient air quality standard GB3095-1996.
- No corrosive gases should be present.

Maintenance

Turn the power to OFF first before performing any maintenance or repairs on the unit to prevent electrical accidents. To ensure that the cooling effect of the unit is maintained, the unit's body should be cleaned with water every day or every week. The interior of the unit should also be cleaned regularly. The proper cleaning interval is once a month, but the actual cleaning time will vary depending on the exterior environment.

Cleaning the Interior

1. Pull out the water drain plug and clear away any signs of dirt deposits in the chassis with water.
2. Remove the air inlet shutter together with the evaporating heat exchanger. Wash them thoroughly with water, then re-install them back.



- While cleaning the unit, use only a low water pressure. When cleaning the wet curtain, do not use acidic or alkaline based detergents.
- It is recommended that the user and equipment supplier agree to a maintenance and repair schedule to carry out regular maintenance on the unit and to ensure that it will always be in good condition.

Troubleshooting

Troubles	Common Causes	Solutions
Unable to start the fan.	Power failure.	Check power supply.
	Switch burned.	Change the switch.
No air flow.	Motor starter's capacitor is damaged.	Change the capacitor
	Motor is damaged.	Change the motor
	There is an obstruction in the wet curtain or air filter.	Clean out the wet curtain and/or air filter.
Unit is not emitting cool air.	Lack of or no water in the water tank.	Add water.
	Water pump is damaged.	Change the water pump.
	Wet curtain is dirty.	Clean wet curtain.
Unpleasant odour	Water or honeycomb cooling pad is dirty.	Change the water and clean the honeycomb cooling pad.

Specifications

Model	CV550
Voltage	240V
Power Source	Electric
Water Tank Capacity	55L
Max. Airflow	3000m ³ /h
Wattage	220W
Fan	Axial
Functions	Cooler, Fan, Purifier, Humidifier
Power Supply	240V/50Hz
Usage	Indoor/Outdoor
Room size	15-30m ²
Noise Level	≤55dB
Speed	3
Water consumption	2-3L/h
Power Plug	Australian Standard



Some experts believe that the incorrect or prolonged use of almost any product may cause serious injury or death. To help reduce your risk of serious injury or death, refer to the information below. For more information, see www.datastreamserver.com/safety

- Consult all documentation, packaging and product labelling before use. Note that some products feature documentation available online. It is recommended to print and retain the documentation.
- Before each use, check the product for loose/broken/damaged/missing parts, wear or leaks (if applicable). Never use a product with loose/broken/damaged/missing parts, wear or leaks.
- Products must be inspected and serviced (if applicable) by a qualified technician every 6 months. This is based on average residential use by persons of average size and strength, and on a property of average metropolitan size. Use beyond these recommendations may require more frequent inspections/servicing.
- Ensure that all users of the product have completed a suitable industry recognised training course before being allowed access to the product.
- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or description of application. Be sure to attain third-party approval from a qualified specialist for your application before use, regardless of any assurances from the retailer or its representatives.
- This product is not intended for use where fail-safe operation is required. As with any product (for example, automobile, computer, toaster), there is the possibility of technical issues that may require the repair or replacement of parts, or the product itself. If the possibility of such failure and the associated time it may take to rectify could in any way inconvenience the user, business or employee, or financially affect the user, business or employee, then the product is not suitable for your requirements. This product is not intended for use where incorrect operation or a failure of any kind, including but not limited to, a condition requiring product return, replacement, parts replacement or service by a technician may cause financial loss, loss of employee time or an inconvenience requiring compensation.
- If this product has been purchased in error when considering the information presented here, contact the retailer directly for details of their returns policy, if required.

