Instruction Manual

MANFC400 REV A 15/12/16

EVAPORATIVE AIR CONDITIONER
FC400

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INTRODUCTION

Thank you for purchasing our product. We trust it will give you long and trouble-free service.

The cooler is a high-tech product, showing simplicity and outstanding reliability.

Its working principle is that water evaporation uses up the surrounding heat and causes the temperature to cool down.

When water is continuously distributed onto the cooling pad surface, the air being drawn through the pad causes the water to evaporate, making the air cool and fresh. The circulating water moves down to the reservoir, where it is again pumped up through the cooling pads. If the hose option is being used (supplied as standard), a float valve keeps the reservoir full continuously. If filled manually, the reservoir tank ensures hours of uninterrupted operation. There is a digital level indicator to quickly check the amount of water remaining.

APPLICATIONS

This cooler is currently being used in many different industries and applications. It is ideally suited to garages, workshops, outdoor events, large shops, animal husbandry and recreational facilities.

Silvan Warranty

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

We warrant our goods to be free from defects in materials and workmanship for the warranty period of 12 months from the date the product is delivered to the consumer.

Silvan warrants its authorised Dealer, who in turn warrants the original purchaser (consumer) of each new Silvan product that it will repair or replace the product, or, pay the cost of repair or replacement, as determined by Silvan without charge for labour or any defective or malfunctioning parts in accordance with the warranty limitations below.

This Warranty is in addition to any other rights and remedies available to consumers under the law

This Warranty Covers

Only conditions resulting directly from defects in workmanship or material under normal use and service.

Warranty Exclusions

The Warranty does not cover:

- Conditions resulting from misuse, use of incompatible chemicals, exceeding machine specifications including overloading, impact damage, negligence, accidental damage or failure to perform recommended maintenance services as specified in the Owner/Operator Manual applicable to the product.
- Damage caused by continued use of a product after initial failure
- Any product which has been repaired by other than an authorised Silvan service outlet in a way which, in the sole and absolute judgment of Silvan, adversely affect its performance or reliability.
- The replacement of maintenance items such as diaphragms, batteries, V belts and ground engaging components, etc.

HOW TO CLAIM WARRANTY

Return the goods to the place of purchase at your cost and within the warranty period along with evidence of the purchase date. If the original supplier cannot be contacted, then contact Silvan as below and we can direct you on how to proceed with your warranty claim.

HOW YOUR CLAIM WILL BE MANAGED

The repair of a defective product qualifying under this warranty will be performed by any authorised Silvan service outlet within a reasonable time following the delivery of the product, at the cost of the owner, to the service outlet's place of business. The product will be repaired or replaced depending on the extent of the problem at the discretion of Silvan and the Silvan dealer.

Specifications

TECHNICAL SPECIFICATIONS:

MODEL	FC400
Max Airflow (M^3/H)	9000
Power supply/Frequency (V/HZ)	220-240/50
Power Consumption (W)	400
Fan Style	Axial
Water Consumption (L/H)	4-6
Water Tank Capacity (L)	70
Dimension (L*W*H) (mm)	860x530x1400
Weight (kg)	36
Effective Cooling Area (M^2)	35-55

TECHNICAL FEATURES:


New evaporative cooling pad, energy saving and environmentally friendly.

3 levels fan speed (low, medium & high).

Low noise.


Large capacity water tank for longer operating hours.


Swing function.


Large wheels and brake allow easy movement.

Time setting function.

Micro-computer program control, LCD panel.


More convenient with remote controller.

Safety Instructions

IMPORTANT REMINDERS:

Please read the manual carefully before operating the cooler.

A) Operating conditions:
1- Temperature: 18°C to 45°C; Water Temperature: < 45°C.
2- Power supply must not exceed the required voltage (+/-) 5%.
3- Air supply must be largely free of dust or extra cleaning is required.

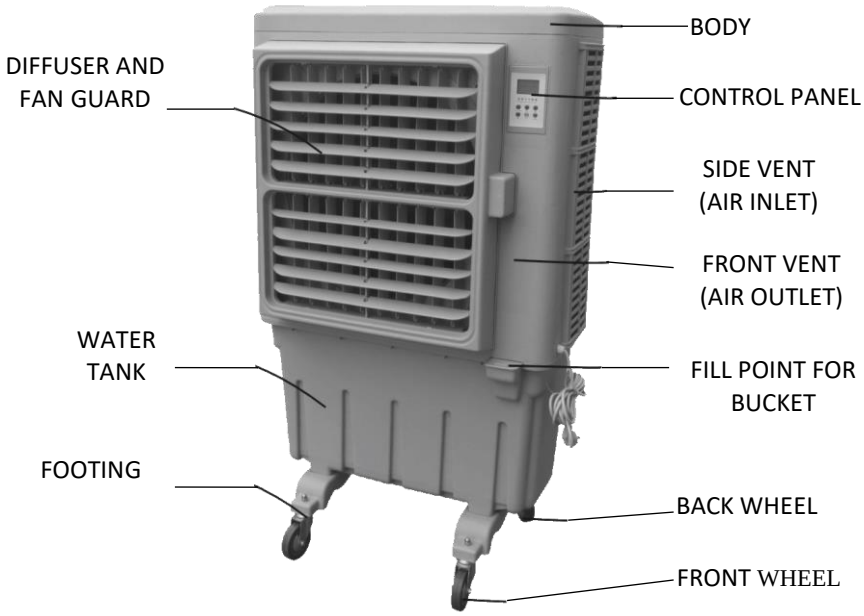
B) Protect the power cable from vehicles or foot traffic. Connection to incorrect electric voltage, or faulty installation, will cause danger of electric shock.

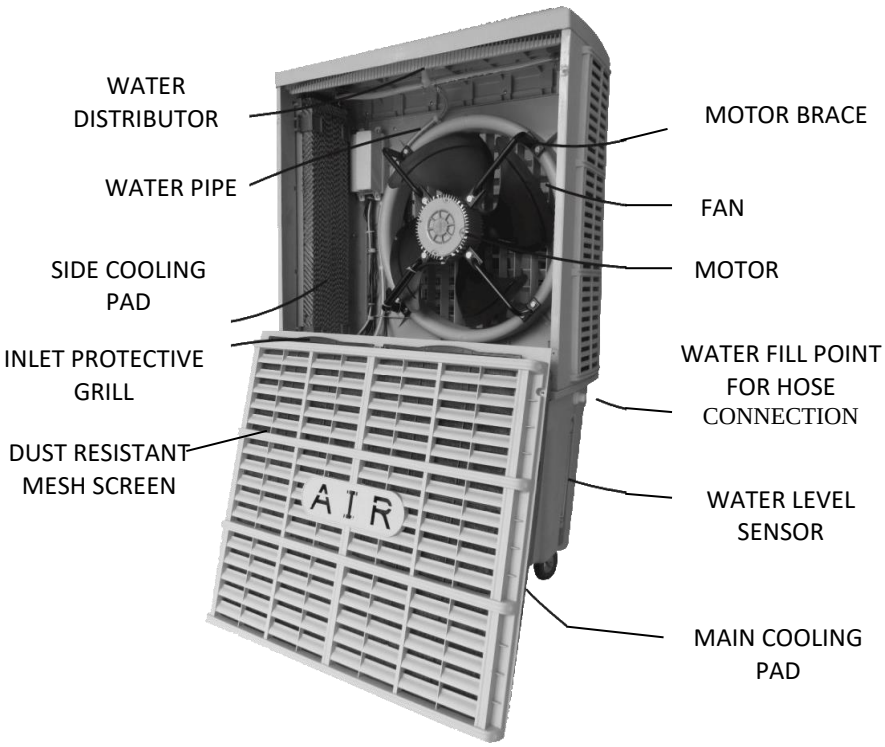
C) If the product malfunctions at start-up, please disconnect from electric power immediately and refer to dealer for service.

D) Other tips for cooler use:
1- Keep doors and windows open to allow fresh air to enter, and treated air to exit, when cooler is operating.
2- Flashing red light on the control panel means water level in reservoir is low.
3- Rinse the reservoir with fresh water and clean prior to use after a period where the cooler has not been in operation.
4- Take care when moving the cooler, especially when it is full of water. Pushing too hard will cause the cooler to overbalance and tip over, which may cause injury and will damage the cooler.
5- Only use cooler on level ground.
6- To prevent build-up of algae and other biological organisms in the reservoir, regularly add chlorine/bromine tablets as per tablet manufacturer recommendation for evaporative cooler reservoirs.
7- New cooling pads can expel mild odour and may require several hours of operation and water exchanged for fresh water.
8- Dust and dirt can stick to the paper cooling pads. It is recommended to periodically remove dry cooling pads and gently rinse thoroughly to clean. Allow to dry before re-fitting. As Cooling pads become older it is recommended to replace to improve efficiency.

Parts

KEY COMPONENTS MODEL FC400:





Operation

Before attempting to operate or install this unit carefully read and take note of the following safety warnings.

Failure to comply with these warnings may result in serious injury or death.

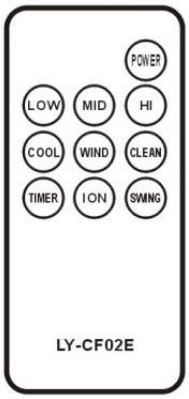
1. All electrical repairs must only be carried out by a suitably qualified electrician, after all power is disconnected.
2. This cooler is not intended for use by children or persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge.
3. Children should be supervised to ensure that they do not play with the appliance.

KEYPAD INSTRUCTION	COMMENT
ON/OFF	This turns the cooler on or off.
COOL	This activates the cooling function. Note that there is a delay of 1 minute while the cooling pads are wetted before cooling can begin. If cooling is not active unit can operate as fan
WIND SPEED	Pressing SPEED will select low, medium, or high fan speed.
SWING	This activates/deactivates swing function.
TIMER Delayed start	The timer setting can be used to start the cooler after a certain number of hours delay. When only the green POWER light is on, press TIMER until the number of hours delay (1-24) is shown. When screen 00 indicated timer is cancelled.
TIMER Automatic stop	When the cooler is already going, press timer to set the number of hours (1-24) until the machine will automatically switch off. When screen 00 indicated timer is cancelled.
WATER SUPPLY	Use only clean, fresh water. Pour water into the water inlet on the right-hand side of the unit (Do not overfill beyond max capacity). Alternatively, attach a hose to the water inlet on the left side for automatic filling. Note a pressure reducing valve is recommended for high pressure water supplies.

Operation

CONTROL PANEL:

REMOTE CONTROL:



Maintenance

FOR BEST RESULTS AND LONG-TERM OPERATION REGULAR MAINTENANCE IS ESSENTIAL.

To ensure the cooler delivers fresh and clean air, regularly change the water when dirty, and clean both the dust filter and the cooling pad.

1) To access the filter pads, disconnect the INLET PROTECTIVE GRILL at the back of the cooler by unscrewing the screws on the grill. Lift the grill and lift out. Remove main cooling pad from grill. To replace the pad, slide back into grill and replace. Side cooling pads can be accessed when the rear grill has been removed.

2) Clean the pad from the inner-side to out-side of pad (inner side is towards motor). Never use any liquid detergent. Never use pressurized water, as it may cause damage to the pad.

3) Unscrew the drainage lid to let dirty water flow out, then clean the water tank thoroughly with a soft cloth. Wash off dirt on the water sensor, water pump and the float valve. Rinse thoroughly.

4) Use mild soap and soft clean cloth when cleaning the cooler casing. Do not use any caustic chemical detergent that may cause damage to the surface of the cooler.

5) To prevent build-up of algae and biological organisms in the reservoir, regularly add chlorine/bromine tablets as per tablet manufacturer recommendation for evaporative cooler reservoirs.

Troubleshoot

MALFUNCTION	REASON	SOLUTION
- LCD screen stays dark	- No power - Fuse is blown - Main control board failure	- Check unit is plugged in - Check power point is live by plugging in another appliance. - There is a fuse on the control board. Check fuse (electrician) -Change control board (electrician)
- Display is normal but no air flow or the air speed is too low	- The fan is jammed - Cooling pad or dust filter is blocked - Fan is distorted - Main control board failure	- Check to ensure there is nothing preventing free rotation of the fan - Clean the cooling pad - Change the fan - Change the main control board (electrician)
- Motor does not respond to control panel	- Main control board failure	- Change the main control board (electrician)
- Water leaking from drain valve	- Drain valve is loose - Dirt in valve	- Tighten drain valve nut - Clean drain valve
- Air diffuser / swing function not working	- Swing motor is burnt out - Crank shaft broken or disconnected	-Change swing motor -Reconnect or change crankshaft
- Water drops splash out of the air diffuser	- Water pipe has come loose	-Check water pipe to top of filter pad and reattach or tighten as necessary

NOTE: This troubleshooting is for reference purposes only. Any electrical work must be carried out by a qualified electrician.

Service & Maintenance Log

Date	Hours Of Use	Notes (E.G. Parts Cleaned, Chlorine/Bromine Tablets Used And How Many)