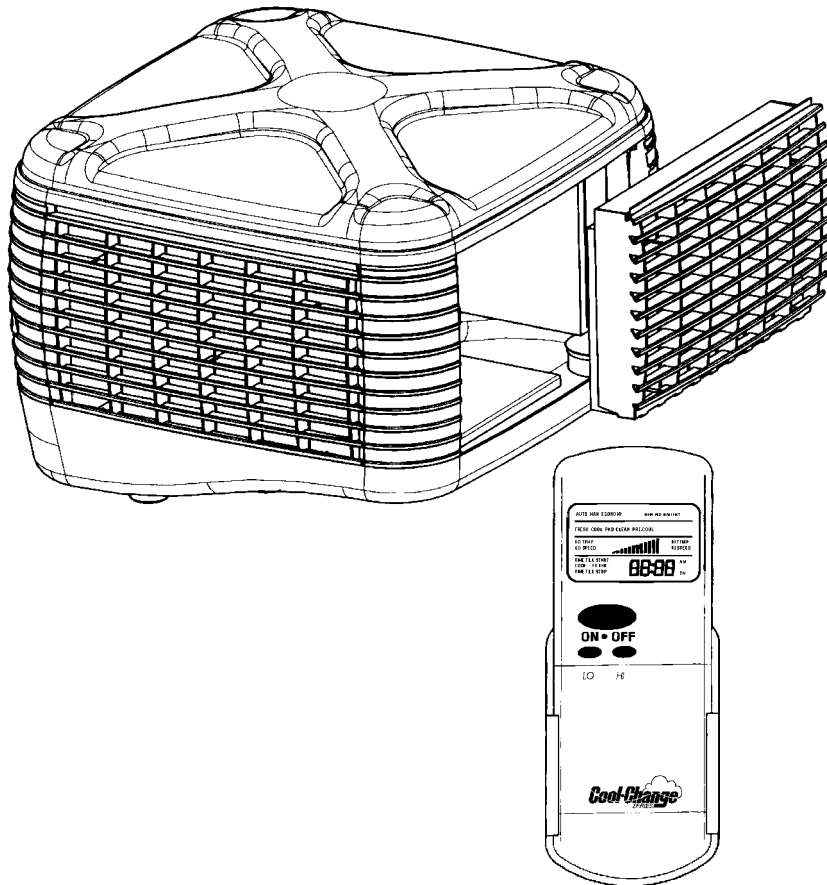


Cool-Change SERIES

Owner Manual



Owner's Manual

Table of Contents

| | |
|---|----|
| General Information | 3 |
| Key Operational Points | 4 |
| Opening Windows and Doors | 5 |
| Radio Frequency Remote Control | 6 |
| Battery replacement | 6 |
| Operation Modes | 8 |
| Control Functions | 9 |
| Turning the Unit ON | |
| Turning the) unit OFF | |
| Changing the Mode of Operation | |
| Changing Comfort Setting | |
| Fan Only Operation | |
| Cleaning the pads | |
| Setting the Timer | |
| Setting the Automatic Operating Periods | |
| Automatic Operation | |
| Overriding the Automatic Operation | |
| Power Supply Interruption | 11 |
| Configuring your Comfort Control | 11 |
| Unit Maintenance | 12 |
| Problem Solving | 14 |
| Warranty Statement | 15 |

Manufactured by  ABN 13 001 418 042

26 Nylex Avenue, Salisbury, SA 5108. Phone (08) 8307 5100 Fax: (08) 82830401
In the interest of continued improvement, Bonaire reserves the right to alter specifications without notice. E.&O.E.

Owner's Manual

CONGRATULATIONS ON YOUR

We're delighted you've chosen a Bonaire Fresh Air Conditioner to cool your home. It is an air conditioner we are very proud of. Designed and made in Australia by Climate Technologies, an 100% Australian owned company, it embodies the latest advances in fresh air conditioning technology in a stylish, compact cabinet. Your air conditioner includes the world's first radio frequency remote control allowing you to control your air conditioner without the need for special wiring. This allows you the flexibility to move the comfort controller from room to room to suit your needs. If you have more than one Bonaire Envirotech Series air conditioner it is possible to operate all air conditioners from the one comfort controller.

COMFORT

Comfort is a combination of four major factors; air temperature, air quality and cleanliness, air speed and humidity. Bonaire fresh air conditioning cools the air by a process of evaporation, which is controlled by the humidity in the air, therefore your Bonaire will cool the air differently every day of the year. Your Bonaire uses only 100% fresh outside air which is filtered, and when cooling is also washed. You will immediately appreciate the benefit of this constant flow of fresh air - with or without cooling. (our Bonaire installer will have placed the outlets in such a position that you will feel the air flow. These outlets are adjustable and you may wish to change or redirect the air to suit yourself. There may be a few days per year when the humidity is very high and the cooling effect of your Bonaire fresh air conditioner is reduced, on these days experiment with the cooling, you may find it more comfortable to turn the cooling off and leave the fan running.

INFORMATION

The information contained in the following pages has been prepared to ensure you enjoy trouble free operation of your Bonaire Fresh Air Conditioner.

For additional sales assistance call your nearest Bonaire Branch on

131257

'Due to Bonaire's policy of continuous product improvement, design and technical specifications are subject to change without notice.'
E.&O.E.

KEY OPERATIONAL POINTS

Normally during the first 10 days of operation resins are washed from new filter material. A slight odour may be present during this period. Performance of your Bonaire Air-conditioner will improve during this process.

1. **BUILDING VENTILATION:** Always ensure that adequate windows and doors are open (to allow hot stale air to be expelled from the building). See page (4).

2. **TURNING THE UNIT ON:** Press the ON/OFF button. Your air conditioner will operate on your previous settings. If your previous setting was cooling there may be a three minute pre-cool delay.

3. **COOLING:** Press the "COOL`" button to switch on or off the cooling.

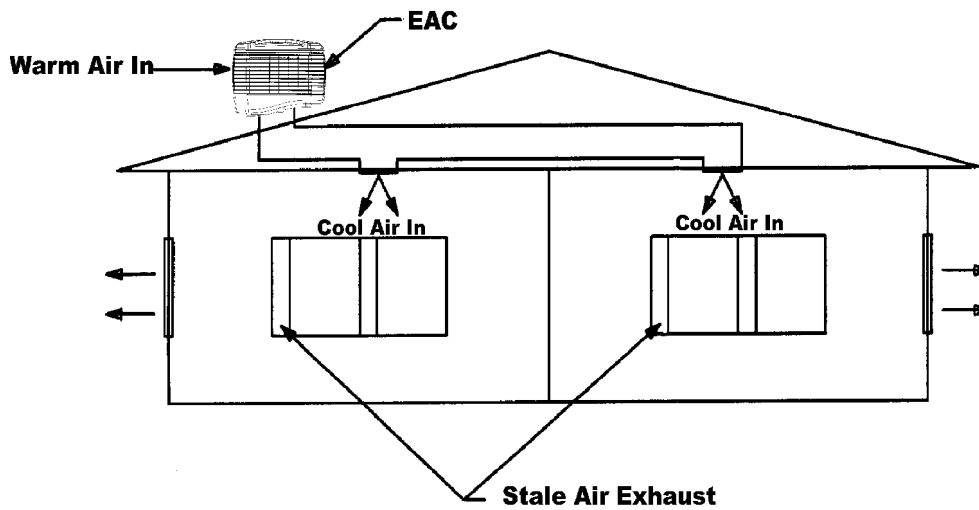
4. **BOOST ON/OFF:** Press the "BOOST" button to go to high fan immediately. Press again and the fan will return to the original setting.

5. **TURNING THE UNIT OFF:** Press the "ON/OFF" button.

6. **COMFORT CONTROLLER LOCATION:** Due to the construction of some buildings there may be some locations within the building where the comfort controller operation is not effective.

Owner's Manual

OPENING WINDOWS AND DOORS

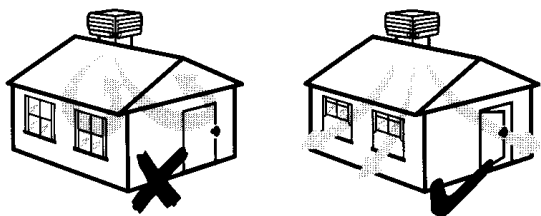


The principal of your unit is to introduce fresh air, which is washed through the filter pads to provide cool fresh air. The air is exhausted taking with it any heat loadings on the home.

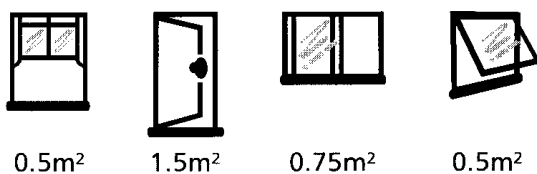
Exhaust

It is essential for successful operation of evaporative air-conditioning that there be sufficient exhaust openings in the area to be ventilated. Open doors and windows will usually provide this.

The minimum exhaust opening should be as per the table guide set out below. It is recommended that ceiling vents or exhaust fans be used where there is any doubt about there being sufficient exhaust area available. Ceiling exhaust fans or ceiling vents should have a capacity equivalent to that of the air conditioner.



Vent Area for Doors and Windows



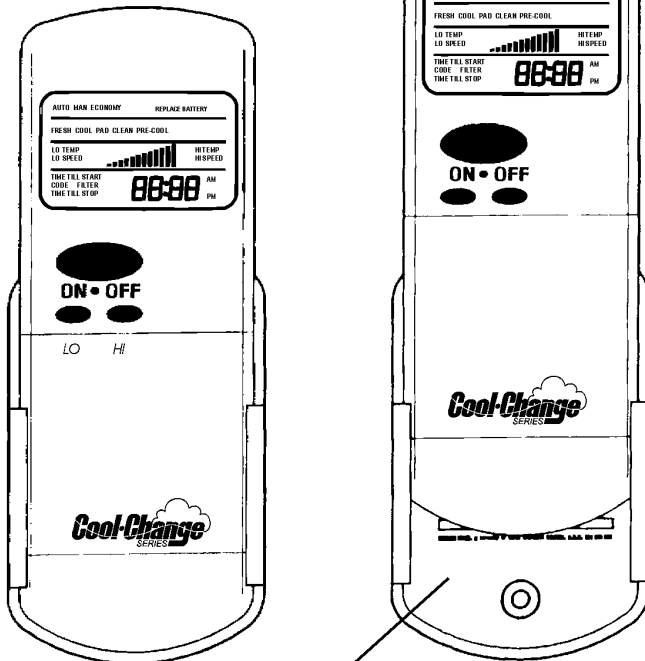
| MODEL | MINIMUM EXHAUST AREA |
|--------|----------------------|
| VSS 50 | 0.85 m ² |
| VSS 60 | 1.19 m ² |
| VSM 65 | 1.48 m ² |
| VSL 75 | 2.02 m ² |

Owner's Manual

RADIO FREQUENCY REMOTE CONTROL

HANDHELD COMFORT CONTROLLER

- Designed for simple operations so that making life comfortable is easy.
- The handheld comfort controller may be operated from a convenient location within the building.
- The handheld comfort controller may be wall mounted in a suitable position of your choice.

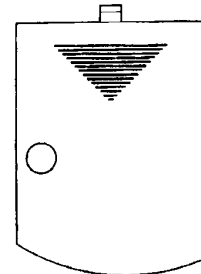
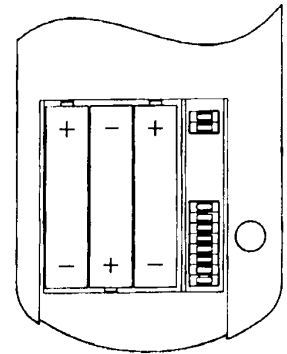


WALL MOUNT BRACKET

BATTERY REPLACEMENT

If 'REPLACE BATTERY' appears and flashes in the display, replace the comfort controller batteries.

- Use only 3 good quality **alkaline** AAA batteries.
- Do **NOT** use re-chargable batteries.
- Do **NOT** mix old and new batteries.



LOCATION OF CONTROLS

Access to your Controls To access AUTO, MAN, ECONOMY, FRESH, COOL, PAD CLEAN or TIMER functions the control door has to be opened. To open lift the right side of the door.

Owner's Manual

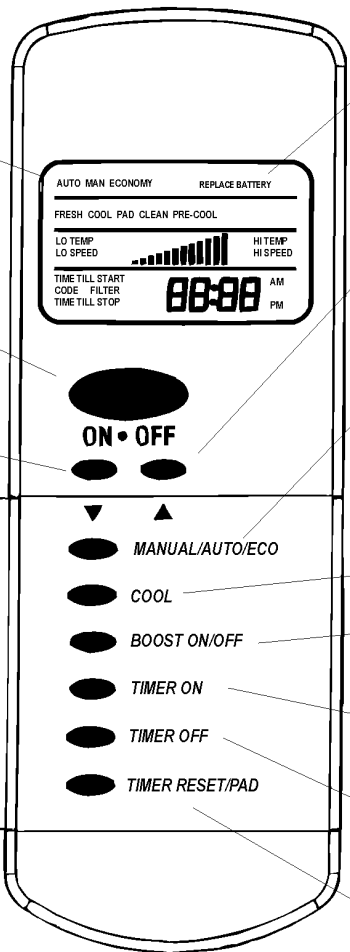
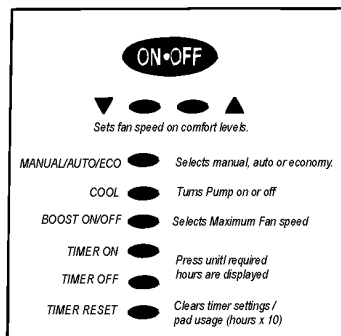
RADIO FREQUENCY REMOTE CONTROL

DISPLAY

- Your comfort controller display will normally show 'STOP' when the unit is switched off.
- Pressing the "ON/OFF" button will indicate your current setting (air conditioner is switched on)
- If any button is pressed the display will indicate your changed setting and will flash the lines.

ON/OFF BUTTON
Starts and stops the Airconditioner

DOWN BUTTON
Press to increase fan speed or thermostat temperature



REPLACE BATTERY
When 'REPLACE BATTERY' appears and flashes, replace the comfort control batteries.

UP BUTTON
Press to increase fan speed or thermostat temperature

MANUAL/ AUTO/ECO BUTTON
Press to select manual, automatic or economy operation (AUTO and ECO are thermostat modes).

COOL BUTTON
Press to operate cooling (pump).

BOOST ON/OFF
Only operates in MANUAL mode. Press to make fan operate on high speed, press again to return to previous fan setting.

TIMER ON BUTTON
Press to set time delay for air conditioner to turn ON.

TIMER OFF BUTTON
Press to set time delay for air conditioner to turn OFF

TIMER RESET BUTTON
Clears all previous time settings

Owner's Manual

OPERATION MODE - MANUAL, AUTO & ECONOMY

Your air conditioner can be operated in three different modes either manual, automatic or economy.

MANUAL MODE

In this mode, you can control the fan and pump settings manually. To select the manual operation press the "MANUAL/AUTO/ECO" button until 'MANUAL' is shown in the display. In manual mode, you can select your desired comfort level by controlling fan speed (12 graduated bars-from LO SPEED to HI SPEED) and pump (FRESH or COOL). To select fan speed press and hold the UP or DOWN button until your desired fan speed is reached. To turn on the pump, press the "COOL" button until "COOL" is shown in the display. To turn off the pump (fan only), press the "COOL" button until "FRESH" is indicated.

AUTO MODE


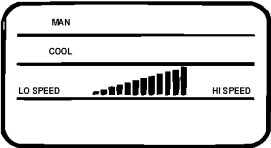
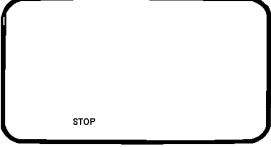

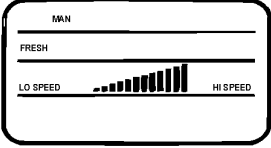

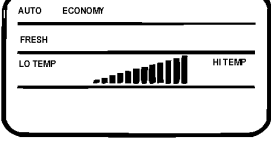




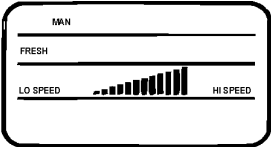
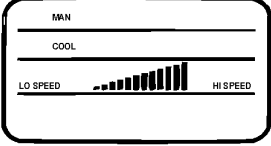
In this mode, the air conditioner automatically controls the fan and pump settings. All you need to set is your desired comfort level. To select the automatic operation press the "MANUAL/AUTO/ECO" button until "AUTO" is shown in the display. In auto mode you can select your desired comfort level. (12 graduated bars - from LO TEMP to Hi TEMP). To adjust the desired comfort level press and hold the UP or DOWN button until your desired comfort level is reached.

ECONOMY MODE


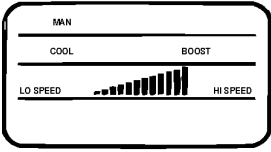


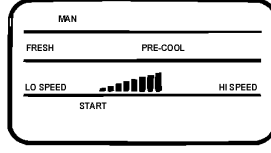
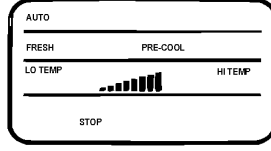

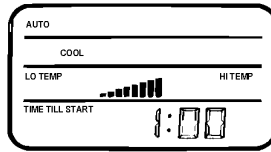

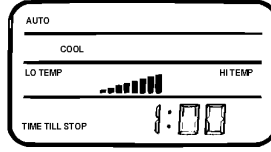


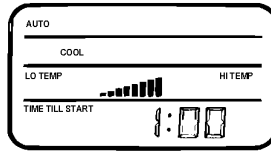
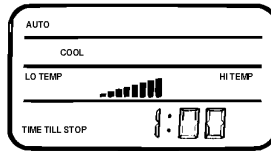
As per Auto mode but uses less power. To select the automatic economy operation press the "MANUAL/AUTO/ECO" button until "AUTO" and "ECONOMY" are shown in the display. In economy mode, you can select your desired comfort level by pressing the UP or DOWN button.

NOTE: There may be a short delay before the fan and the pump start in AUTO or ECONOMY mode.

Owner's Manual

| FUNCTION | BUTTON PRESSED | DISPLAY |
|--|---|--|
| <p>Turning the Unit ON</p> <p>Press the ON/OFF button. Your air conditioner will operate on your previous settings. If your previous setting was cooling there may be a three minute pre-cool delay.</p> <p>Turning the Unit OFF</p> <p>Press the ON/OFF button</p> |  ON OFF |   |
| <p>Changing the Mode of Operation</p> <p>To control the fan speed and pump manually, press the MANUAL/AUTO/ECO button until MAN is shown in the display.</p> <p>To control the fan speed and pump automatically press the MANUAL/AUTO/ECO button until AUTO is shown in the display</p> <p>Economy mode will automatically control the fan speed and pump whilst minimising power consumption. To select economy mode, press MANUAL/AUTO/ECO button until AUTO and ECONOMY are shown in the display.</p> |  MANUAL/ AUTO/ ECO |    |
| <p>Changing the Fan Speed - Manual Mode:</p> <p>To adjust the fan speed press the Δ or ∇ button until your desired fan speed is shown in the display</p> <p>To cool the building quickly press the Δ button until the highest bar is indicated.</p> <p>Changing the Comfort Setting - Auto/Economy Mode</p> <p>To adjust your comfort setting, press the Δ or ∇ until your desired comfort level is reached. When FRESH is indicated in the display, only the fan is turned on. When COOL is indicated in the display both pump and fan are turned on.</p> |  |   |
| <p>Fan Only Operation - Manual Mode</p> <p>To operate the air conditioner fan without cooling, press the COOL button until FRESH is shown in the display.</p> <p>When conditions produced inside the building are too cold, the unit may operate bist on FRESH. Filtered fresh air is supplied to the building to give the desired comfort level.</p> <p>COOL</p> <p>Press the COOL button to switch on the cooling</p> |  COOL |   |

Owner's Manual

| FUNCTION | BUTTON PRESSED | DISPLAY |
|---|---|--|
| <p>BOOST Function</p> <p>Press the BOOST ON/OFF button to reach the highest speed immediately.</p> <p>To cancel press the BOOST ON/OFF button and the unit will return to its original function setting.</p> |  BOOST ON/OFF |  |
| <p>PRE-COOL START</p> <p>To enable the PRE-COOL START feature:</p> <ol style="list-style-type: none"> 1. Turn on the comfort controller 2. Simultaneously hold down the COOL and BOOST buttons for 5 seconds. 3. The words PRE-COOL and START will flash when you have enabled PRE-COOL START. <p>To disable the PRE-COOL START feature:</p> <ol style="list-style-type: none"> 1. Turn on the comfort controller 2. Simultaneously hold down the COOL and BOOST buttons for 5 seconds. 3. The words PRE-COOL and STOP will flash when you have disabled PRE-COOL START. |  COOL  BOOST ON/OFF |   |
| <p>Setting the Timer to Turn your air conditioner ON</p> <p>To set your air conditioner to turn on automatically:</p> <ol style="list-style-type: none"> 1. Run the air conditioner with settings required for operation when starting. 2. Press the TIMER ON button. The words TIME TILL START and the numbers 1:00 (indicating 1 hour) will be displayed. 3. To increase the length of time press the TIMER ON button until the desired timer interval is displayed (maximum of 12 hours). 4. The air conditioner will turn off after a short delay and start the count down till starting. <p>NOTE: If you wish to clear your timer setting press the TIMER RESET button</p> |  TIMER ON |  |
| <p>Setting the Timer to Turn your air conditioner OFF</p> <p>To set your air conditioner to turn off automatically:</p> <ol style="list-style-type: none"> 1. Run the air conditioner with settings required for operation when starting. 2. Press the TIMER OFF button. The words TIME TILL STOP and the numbers 1:00 (indicating 1 hour) will be displayed. 3. To increase the length of time press the TIMER OFF button until the desired timer interval is displayed (maximum of 12 hours). <p>NOTE: If you wish to clear your timer setting press the TIMER RESET button</p> |  TIMER OFF |  |
| <p>Setting the Timer to Turn your air conditioner ON then OFF</p> <p>To set your air conditioner to turn on then off automatically:</p> <ol style="list-style-type: none"> 1. Follow the above instructions Setting the Timer to turn your unit ON. 2. To now set the period that the air conditioner will run press the TIMER OFF button. The words TIME TILL STOP and the numbers 1:00 (indicating 1 hour) will be displayed. 3. To increase the length of time press the TIMER OFF button until the desired timer interval is displayed (maximum of 12 hours). <p>Your air conditioner has now been set to automatically turn on an then off.</p> |  TIMER ON  TIMER OFF |   |

Owner's Manual

Power Supply Interruption

- The unit will not operate if power supply is interrupted (due to supply failure). In such a case it is possible that the display will still indicate the air conditioner is operating.
- When power is restored the air conditioner will be in the OFF mode.
- To regain full control of your air conditioner press any button on the hand held Comfort Controller. Your air conditioner will commence operation on the settings indicated on the display

CONFIGURING YOUR COMFORT CONTROL

The "pre-cool start" feature has to be configured before you operate your air conditioner. This feature may never need to be altered if you are happy with the factory settings.

PRE-COOL STARTS

Your Comfort Controller is supplied with "pre-cool start" disabled. The "pre-cool start" features ensures the filter pads are wet prior to starting the fan. This means that after starting your air conditioner there may be a delay of up to 3 minutes before the fan starts. During a "pre-cool start" cycle the word "PRE-COOL" flash.

- In manual or economy mode operation, if you have recently run your air conditioner on cooling or you start your air conditioner on "FRESH" there will not be a "pre-cool start" cycle.
- In automatic mode operation, if you start your air conditioner on "COOL" or "FRESH", there will be a "pre-cool start" cycle.

To enable the "PRE-COOL START feature:

1. Turn on the comfort controller
2. Simultaneously hold down the COOL and PAD CLEAN buttons for 5 seconds
3. The words "PRE-COOL" and START will flash when you have enabled "PRE-COOL START".

To disable the "PRE-COOL START feature:

turn on the comfort controller simultaneously hold down the COOL and PAD CLEAN buttons for 5 seconds The words "PRE-COOL" and "STOP" will flash when you have disabled "PRE-COOL START

Owner's Manual

UNIT MAINTENANCE

Warning: Before commencing any maintenance work on your unit, isolate the power at the supply (Fuse Box).

Note: It is essential that your evaporative air conditioner is maintained in accordance with this manual. Failure to do so will effect the life of the product and reduce the level of efficiency.

Filter Pads

Visually check CELDEK pads for damage or blockage. Hose down pads from both sides to remove any build up of salts, dust and pollen. In dusty areas more regular cleaning is recommended. Check the water distributor, making sure it is clear and free from blockage. Failure to do so may lead to uneven water distribution and therefore less efficient operation.

Water Tank

It is important to keep the water tank clean and free from sediment and algae growth. To clean the tank, use a soft brush or similar. Wipe all surfaces in the tank while it is full of water (DO NOT FORGET THE PUMP STRAINER). Turn off the water inlet to the unit (an Isolation Valve should be fitted to the water inlet before the Float Valve). Drain the tank by removing the 40mm standpipe. It may be necessary to repeat this procedure if the tank is very dirty.

SAFETY: Wet roofs are dangerous – Take Care When Draining Tank.

Water Level / Float Valve

The water level should be set at nominal 65-70mm from the top of the overflow before filter pads are saturated. After run off from operating filters the level from the top of the overflow fitting should be 25 – 30mm. The float valve is a mechanical type and is factory set. If it requires adjustment keep bends tight. If the valve is leaking the seal may require cleaning or replacing. Remove the split pin and then float arm. Remove piston and clean or turn seal. Flush system and replace piston, float arm and split pin.

Note: Water supply line to float valve must be flushed before connecting.

Note: Some discharge from the overflow may be experienced after shut down due to water draining back from the Celdek pads. This is normal.

Owner's Manual

Motor and Fan

Check that the fan spins freely and that there is no build up on the blades.

Electrical

No general maintenance is required to the electrical system.

A Qualified Electrician should only carry out electrical connections and maintenance.

Bleed Off

The bleed rate should be checked to ensure it is adequate and that there is no build up of mineral deposits in or on your air conditioner. White deposits indicate high mineral content and the Bleed Rate should be increased. If it is at maximum and the deposits are still forming, then more regular maintenance is required.

Pump

Check the pump spins freely and that the strainer is clean.

Water Distribution

Check the water distribution system for blockage. Check the delivery tube for kinks or holes. Check that the clamps are secure and in place.

Owner's Manual

PROBLEM SOLVING

| PROBLEM | PROBABLE CAUSE | REMEDY |
|--|--|---|
| Unit fails to start | <ul style="list-style-type: none"> a Black – out b Tripped Circuit Breaker c Blown Fuse d Electrical Fault | <ul style="list-style-type: none"> a Wait b Reset c Replace d Call Bonaire Service Agent |
| Pump fails to start | <ul style="list-style-type: none"> a Pump Seized b Pump Burnt Out | <ul style="list-style-type: none"> a Isolate power and then take off top of pump and try to free it. Some lubricant may help. b Call Bonaire Service Agent |
| Water leaking from overflow | <ul style="list-style-type: none"> a Float Valve Leaking b Drain from Celdek Pads | <ul style="list-style-type: none"> a Check adjustment or replace seal b Normal Operation |
| Water Droplets in air stream | <ul style="list-style-type: none"> a Loose Delivery Tube b Break in tubing c Pump Delivers Excessive Water to Pads | <ul style="list-style-type: none"> a Check and tighten b Replace as necessary c Adjust the Dialflo to reduce the flow |
| Excessive humidity | <ul style="list-style-type: none"> a Inadequate Exhaust b Outside humidity high | <ul style="list-style-type: none"> a Provide more open area to exhaust stale air b Turn pump off. |
| Inadequate Cooling | <ul style="list-style-type: none"> a Dirty Filters b Dry Filters c Dialflo not set correctly | <ul style="list-style-type: none"> a Clean b Check water delivery system. Adjust if necessary. c Adjust dialflo so that the pads have even saturation. |
| Unpleasant Odour | <ul style="list-style-type: none"> a Unit located near odour source | <ul style="list-style-type: none"> a Remove source |
| Rapid formation of white deposits on pads | High Mineral Content | Bleed off should be set at maximum. More regular maintenance may be required. |

THIS TROUBLE SHOOTING GUIDE IS A REFERENCE ONLY.
FOR SERVICE OR WARRANTY REQUIREMENTS PLEASE RING

131052

OR
YOUR NEAREST BONAIRE SERVICE PROVIDER

Owner's Manual

WARRANTY STATEMENT

Subject to the following conditions we provide, from the date of purchase, the following warranty:

Any part found to be defective in workmanship or material within the period of warranty will be replaced free of charge.

The structural warranty covers any structural components within the unit, which fail to perform their intended function due to faulty manufacture or deterioration within the warranty period.

CONDITIONS AND EXCLUSIONS

- Travelling time and mileage are included within the metropolitan areas of capital cities (those areas not on STD phone numbers) or within 25km of the retailer's premises in other cases. Customers in areas other than the above are responsible for any travelling time and mileage required to carry out warranty repairs.
- The product must have been installed in the manner prescribed by local statutory regulations and to the manufacturer's specifications by a qualified person.
- Service within the terms of this warranty will be recognised where we are satisfied that the appliance or part was supplied within the relevant time limits. Documents of purchase and Dealer/Installer information will assist in this process.
- A charge will be made for work or a service call where there is nothing wrong with the appliance or where the defective operation of the appliance is due to failure of electricity or water supply, or where defects are caused by neglect, incorrect application, abuse or by accidental damage of the appliance, or by an unauthorised person attempting to repair the appliance.
- No responsibility will be accepted for any loss or damage, direct or indirect, arising from the incorrect installation or operation of the unit. This does not preclude you from your statutory rights as a customer.

NOTE: In addition to this warrant, the Trade Practices Act and similar laws in each state provide the owner, under certain circumstances, with minimum statutory rights in relation to the product.

This warranty must be read subject to that legislation and nothing in this warranty has the effect of excluding, restricting or modifying those rights.

WARRANTY ON REPLACEMENTS PARTS.

Parts replaced under warranty are warranted for the balance of the original warranty period.

PERIODS OF WARRANTY – YEARS

| Unit Components | RESIDENTIAL | | COMMERCIAL | |
|----------------------|-------------|--------|------------|--------|
| | Parts | Labour | Parts | Labour |
| Cabinet Structure | 10 | 3 | 2 | 2 |
| Cabinet Corrosion | 25 | 3 | 2 | 2 |
| All Electrical | 3 | 3 | 1 | 1 |
| All other components | 3 | 3 | 1 | 1 |

Owner's Manual

