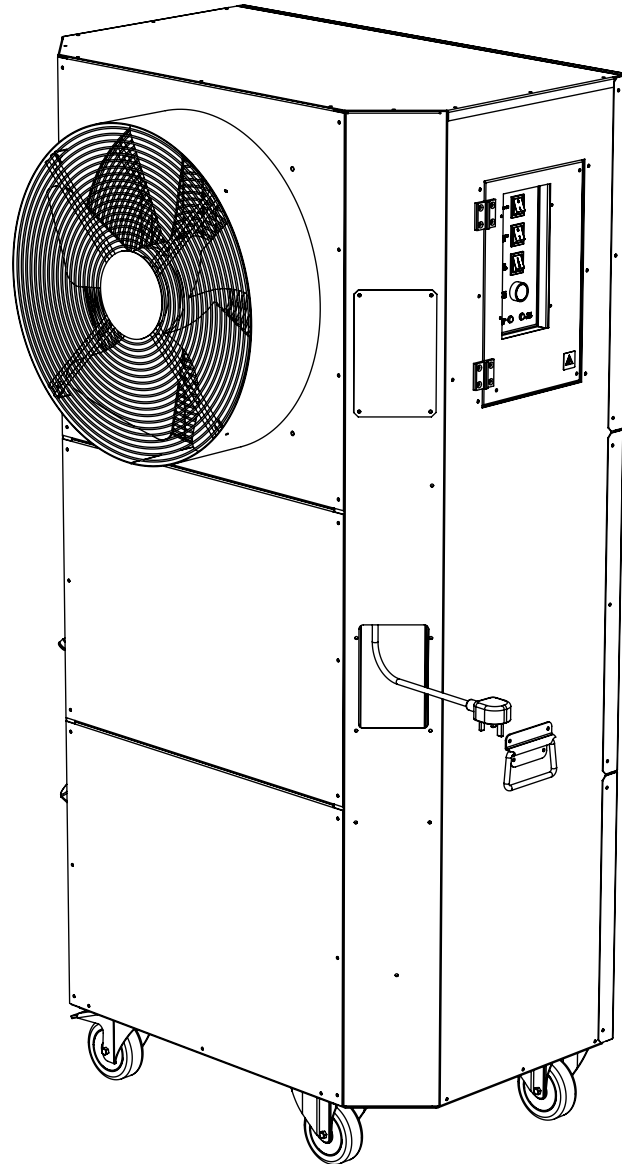


COMCOOL 52



**COMCOOL CC52-24
EVAPORATIVE COOLER.**

PRODUCT MANUAL

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WARNINGS

These instructions should be read by:

**The specifying engineer.
The installation engineer.
The user.
The service engineer.**



- **Failure to follow these instructions may result in risk of personal injury or damage to the equipment.**
- **Damage due to a failure to follow these instructions will invalidate the warranty.**
- **The appliance must be serviced by qualified engineers in compliance with local regulations.**
- **The appliance must be switched off and disconnected from the power supply before any work is carried out.**
- **There are no user controls inside the appliance casing.**
- **Do not place anything on top of the appliance.**
- **An air gap of at least 900mm should be allowed at the rear of the unit to ensure a clear airflow.**
- **Do not disconnect the appliance from the supply under load.**
- **For internal use only. Do not use out of doors.**
- **Extension cables should be correctly rated for the load, fully unwound and never run through water or over sharp edges.**
- **Always transport in an upright position.**
- **Site on a firm level surface and always apply the castor brakes.**
- **Do not transport with water tank full.**
- **Always inspect mains cables before connecting to the power supply.**









TECHNICAL SPECIFICATIONS. COMCOOL 52-24

| | |
|--------------------------|------------------------|
| Cooling capacity. | 20kW |
| Power supply. | 230v. 1P. 13A. 50Hz. |
| Maximum running current. | 2A |
| Airflow. | 5200 m ³ /h |
| Weight. (Dry). | 115 kg |
| Noise level at 3m. | *79 dB(A) . 77dB(A) |
| Tank capacity. | 90L |
| IP Rating. | IP20 |

* 79dB(A) at fast fan speed. 77 dB(A) at slow fan speed.

Standards applied:

BE EN 12100. 2010.
 BS EN 60335-1. 2012.
 BS EN 60335-2. 2009.
 BS EN 61000.

| MACHINE AND INSTRUCTION ICONS | |
|---|--|
|  | Important information. |
|  | Fan on/off switch. |
|  | Cooling on/off switch. |
|  | Tank drain switch. |
|  | Warning lamp. Mains power connected. |
|  | Warning lamp. Water tank empty. |
|  | Fan speed switch. |
|  | Risk of electric shock. Isolate from power supply before removing cover. |

Set up and operation:

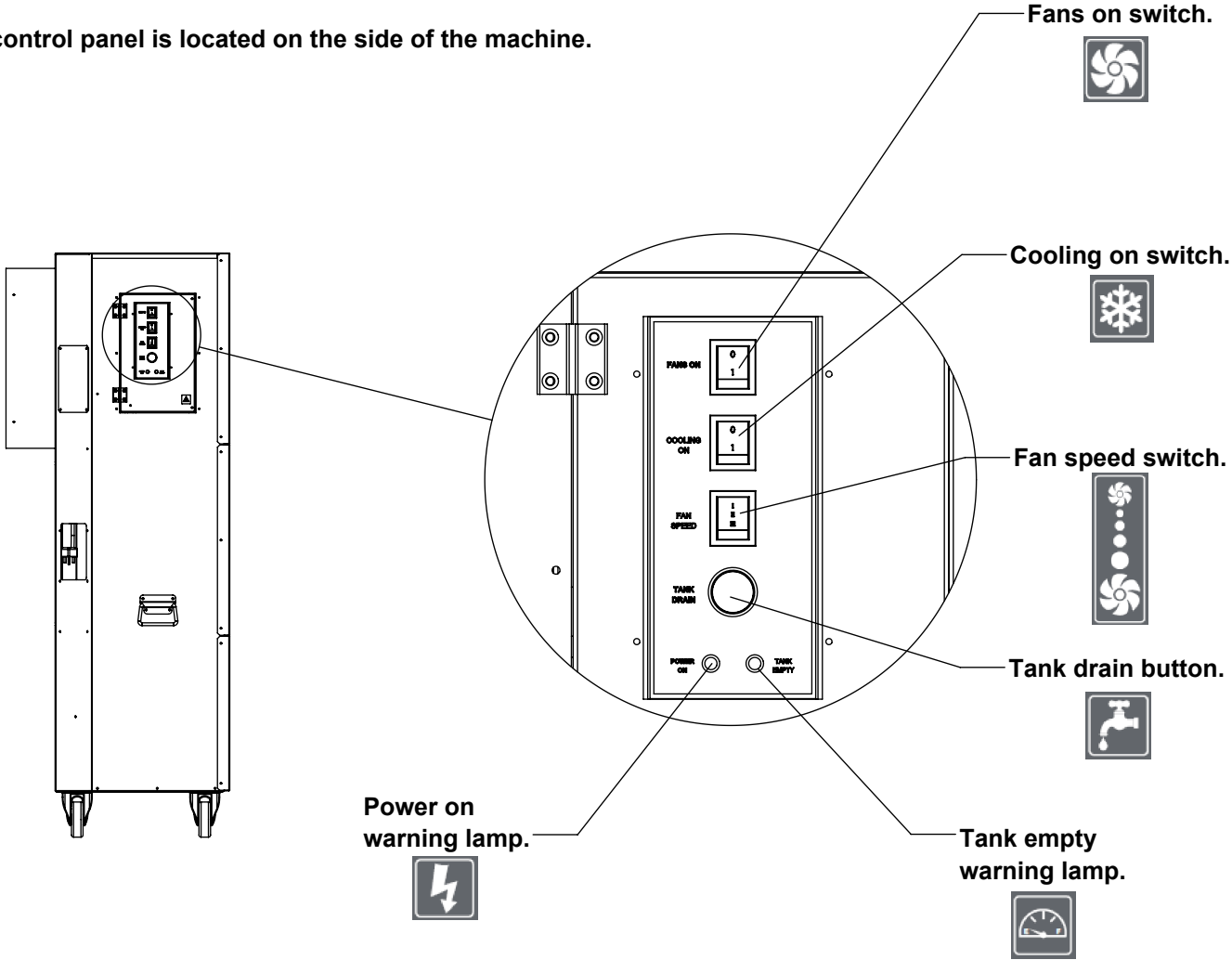
- **The unit must be sited on a firm level surface and the castor brakes applied.**
- **The unit should be situated with the rear of the machine clear of obstructions. A minimum clearance of 900mm is recommended.**
- **The CC52 requires an uninterrupted supply of fresh unprocessed air to operate correctly and should be sited in a well ventilated area.**
- **The CC52 requires a constant supply of clean water for correct operation. This can be from mains water supplied to the unit through a standard garden Hozelock connector fitted to the machine or by manually filling the internal water tank.**
- **Where using a mains water supply ensure leak free connections with a maximum system pressure of 3bar (43 PSI). Higher water pressures may damage components and will invalidate the warranty. The integral water tank is fitted with a float valve which will automatically stop the flow of water once the tank is full.**
- **To manually fill the water tank remove the filler cap and fill the tank with a hose or vessel with a thin spout. Once water is visible in the tank connector the tank is full. Note! when running the CC52 from a manually filled tank the 'Tank Empty' lamp will illuminate when the machine requires re-filling. The water pump will automatically switch off when the tank is empty.**
- **Connect the machine to a suitable power supply. The 'Power On' lamp will illuminate.**
- **Should an extension lead be required ensure it is correctly rated. Incorrectly rated cables may cause excessive voltage drop and damage the fan and pump motors. This will invalidate the warranty.**
- **Turn the 'Fans On' switch to 'I'.**
- **Set the 'Fan speed' switch to the desired airflow; I, II or III. Slow, medium or fast.**
- **Turn the 'Cooling on' switch to 'I'. This will operate the water pump and a steady stream of water will flow over the cooling pads. Note! cooling will not operate without the fan running. Small dry streaks at intervals along the cooling pad is normal and will vary depending upon ambient conditions.**
- **It should be noted that new cooling pads may emit an odor when first used, this is normal and will fade with use.**

Emptying the water tank:

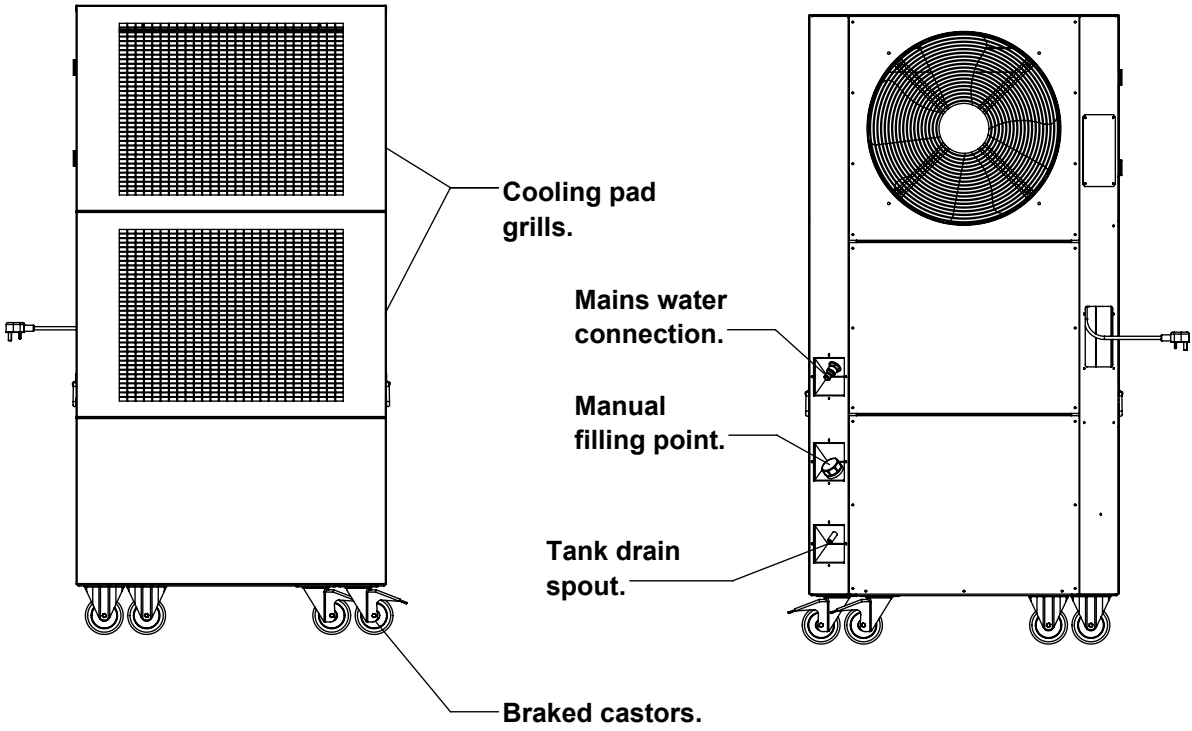
- **Fit a standard garden hose to the pipe stub labelled 'Tank Drain' and run to a suitable drain.**
- **Press and hold the 'Tank Drain' button on the control panel. This button is non-latching and must be held down until the water flow ceases. A non-latching button is fitted to minimise dry running of the pump. It should be noted that a residue of water will remain in the tank and the unit should remain upright during storage or transportation. This process must be carried out when the fan and cooling are switched on.**

COMCOOL 52-24 CONTROLS.

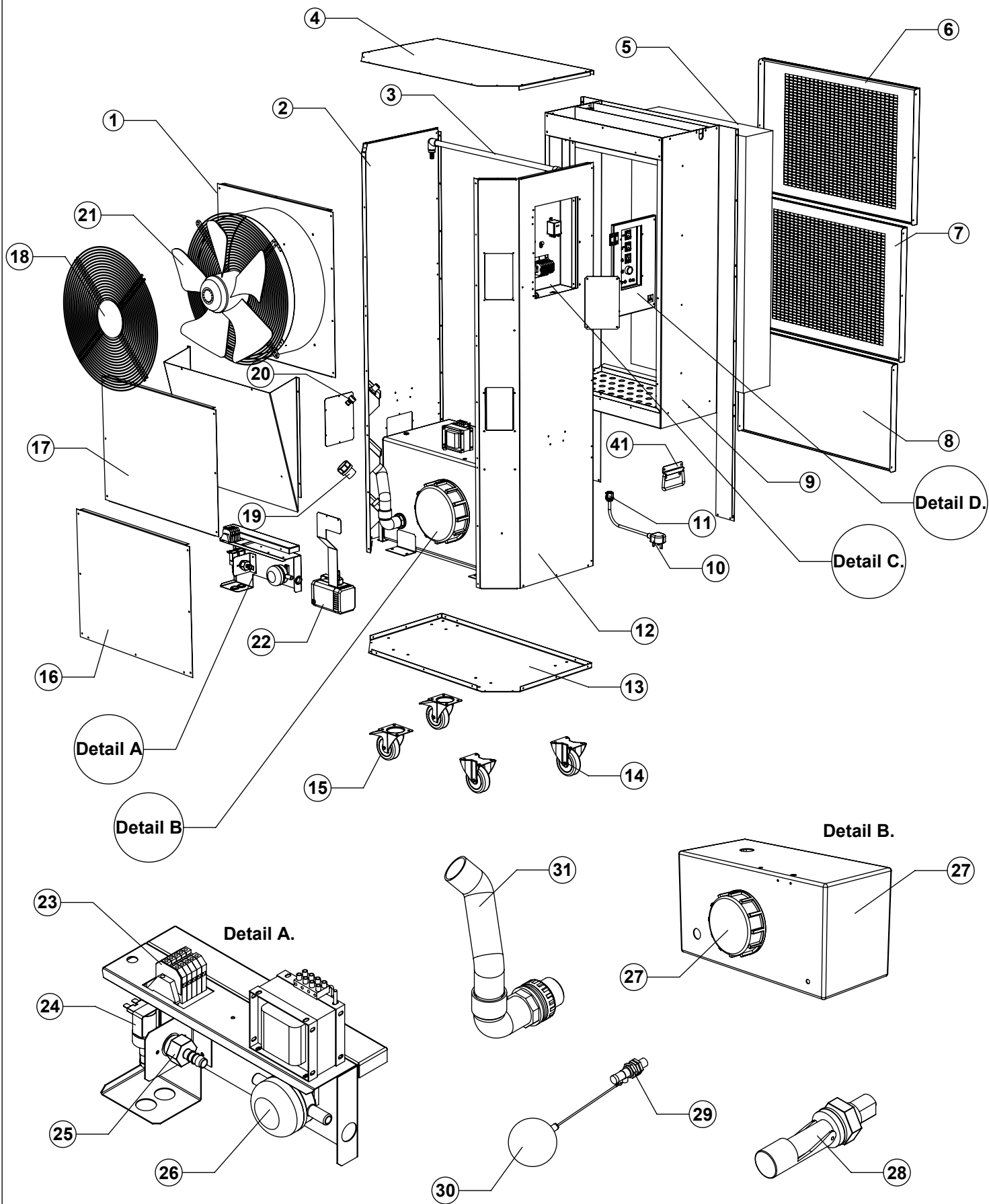
The control panel is located on the side of the machine.



CC50 Front & rear views:

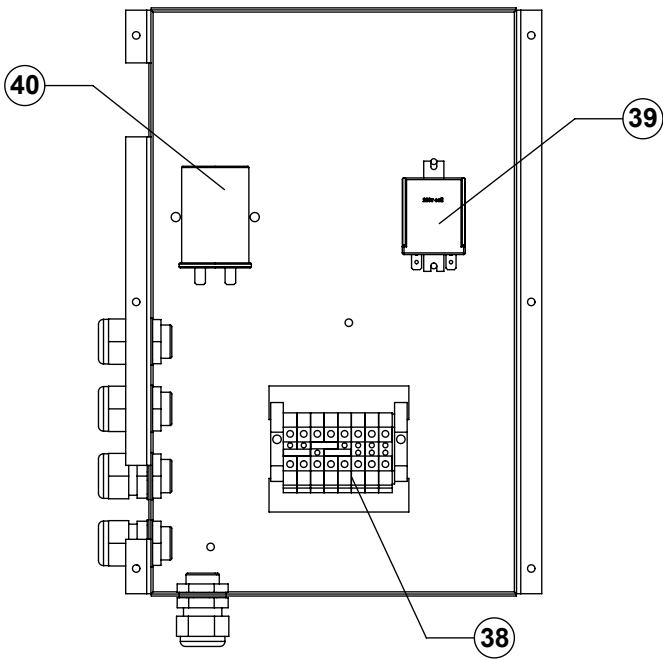


EXPLODED DRAWINGS:

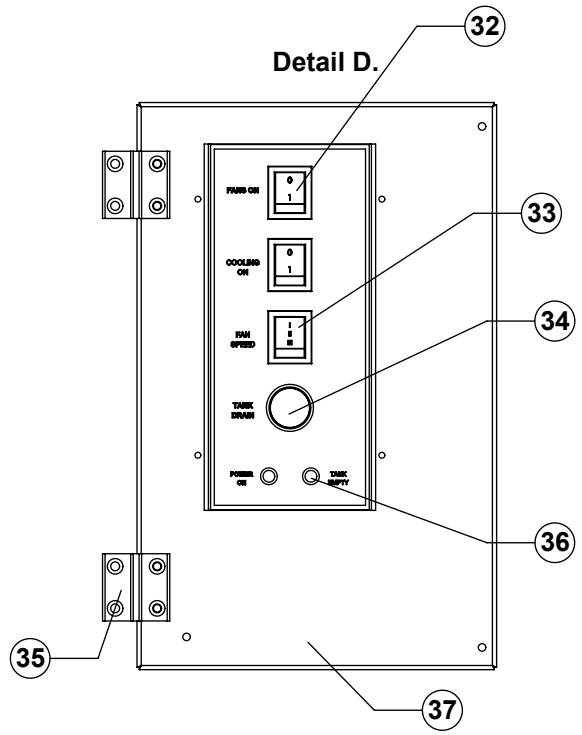


EXPLODED DRAWINGS:

Detail C.



Detail D.



Spare parts:

| DRAWING# | DESCRIPTION | PART NUMBER |
|----------|--|-------------|
| 1 | FRONT TOP PANEL | BW0201234 |
| 2 | LEFT SIDE PANEL | BW010415 |
| 3 | PVC DRIPPER RAIL ASSEMBLY | ME0401120 |
| 4 | TOP PANEL | BW0201236 |
| 5 | COOLING PAD | ME040184 |
| 6 | REAR TOP PANEL | BW0201237 |
| 7 | REAR MIDDLE PANEL | BW0201238 |
| 8 | REAR BOTTOM PANEL | BW0201239 |
| 9 | GALVANISED METALWORK SET | BW0201295 |
| 10 | 1.25MM X 5M 13A MAINS CABLE C/W PLUG | EL020126 |
| 11 | M20 CABLE GLAND C/W LOCKNUT | ME040201 |
| 12 | RIGHT SIDE PANEL | BW010320 |
| 13 | BASE PANEL | BW0201242 |
| 14 | 100MM FIXED CASTOR | ME010211 |
| 15 | 100MM SWIVEL CASTOR C/W BRAKE | ME010212 |
| 16 | FRONT BOTTOM PANEL | BW0201243 |
| 17 | FRONT MIDDLE PANEL | BW0201244 |
| 18 | OUTLET GRILL | BW010517 |
| 19 | WHITE ACCESS PLUG | ME040170 |
| 20 | BRASS ½ " HOSE CONNECTOR | ME0401115 |
| 21 | 500MM AXIAL FAN ASSEMBLY | FA010112 |
| 22 | SUBMERSIBLE PUMP | ME0401116 |
| 23 | 6mm TERMINAL ASSEMBLY. 5 WAY. | EL020442 |
| 24 | 2 WAY DIVERTER VALVE 90° 13MM OULET | ME040164 |
| 25 | HOSE TAIL SWIVEL STRAIGHT 3/4" X 12MM | ME040183 |
| 26 | INLINE FILTER/STRAINER 1/2" | ME040165 |
| 27 | PLASTIC WATER TANK. 8 " CAP | ME0401117 |
| 28 | FLOAT SWITCH | EL030143 |
| 29 | FLOAT VALVE | ME040167 |
| 30 | PLASTIC BALL FLOAT | ME040168 |
| 31 | TANK CONNECTOR WITH FLEXIBLE ELBOW | ME0401163 |
| 32 | I/O ROCKER SWITCH | EL030135 |
| 33 | 3 POSITION ROCKER SWITCH | EL030134 |
| 34 | TANK PURGE SWITCH ASSEMBLY | EL030137 |
| 35 | PLASTIC HINGE | ME040332 |
| 36 | 9mm INDICATOR LIGHT | EL030709 |
| 37 | ELECTRICS COVER PANEL | BW0201246 |
| 38 | 6mm TERMINAL ASSEMBLY. 8 WAY. | EL020443 |
| 39 | 16A RELAY 62.82 | EL030211 |
| 40 | CAPACITOR P2 10uF | EL030312 |
| 41 | TRUNK HANDLE | ME040316 |
| 42 | BRAIDED FLEXIBLE HOSE ½ ". (Not shown) | ME0401119 |
| 43 | TERMINAL LINK. (Not shown). | EL020426 |

Maintenance and fault finding:

Always isolate the machine from the power supply before carrying out any maintenance. Never connect the machine to the power supply with panels missing.



Fan motors and switch gear are not customer serviceable components.

General maintenance should include regular inspection of:

- 1: Mains cable. Check for signs of damage to the insulation. Replace if necessary.
- 2: Air intake & outlet grills: ensure grills are free from accumulated debris. Blow out with compressed air if required.
- 3: Fixings: Check all fixings are present and secure.

Maintenance carried out by a competent person:

- 1: Internal cables should be inspected for signs of heat damage and replaced when necessary.
- 2: All cable connections should be regularly checked and tightened.

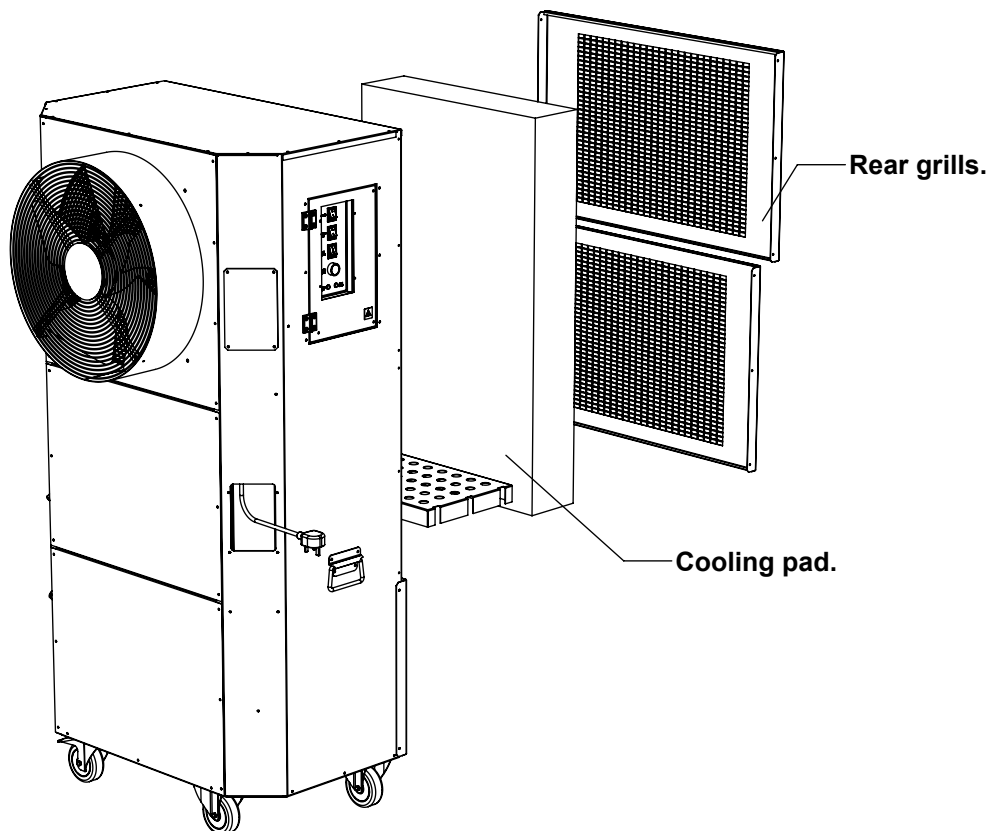
Fault finding:

| FAULT | POSSIBLE CAUSE | SOLUTION |
|--------------------------|--------------------------------------|---|
| NO COOLING/ WATER FLOW. | FANS AND OR COOLING NOT SWITCHED ON. | CHECK ALL SWITCHES ARE ON. |
| | WATER TANK EMPTY | CHECK WATER TANK LEVEL. CHECK TANK EMPTY LAMP. |
| | POWER SUPPLY INTERRUPTED. | CHECK POWER SUPPLY. CHECK 'POWER ON' LAMP |
| | PUMP FILTER BLOCKED | CHECK FILTER AND CLEAN |
| | FAULTY ROCKER SWITCH. | CHECK SWITCHES AND REPLACE IF NECESSARY. |
| | FAULTY RELAY. | CHECK RELAY AND REPLACE IF NECESSARY. |
| | FAULTY PUMP | CHECK PUMP AND REPLACE IF NECESSARY. |
| FAN MOTOR NOT RUNNING. | POWER SUPPLY INTERRUPTED. | CHECK POWER SUPPLY. CHECK 'POWER ON' LAMP |
| | FAULTY ROCKER SWITCH. | CHECK SWITCHES AND REPLACE IF NECESSARY. |
| POOR COOLING PERFORMANCE | WATER TANK EMPTY | CHECK WATER TANK LEVEL. CHECK TANK EMPTY LAMP. |
| | COOLING PADS DIRTY | CHECK COOLING PADS AND CLEAN. |
| | WATER DISTRIBUTOR TUBE BLOCKED. | CHECK TUBE AND CLEAN. |
| | PUMP FILTER BLOCKED | CHECK FILTER AND CLEAN |
| WATER LEAK | COOLING PADS DIRTY | CHECK COOLING PADS AND CLEAN. |
| | WATER DISTRIBUTION TRAY BLOCKED | CHECK TRAY AND CLEAN |
| | FLOAT VALVE FAULTY | CHECK FLOAT VALVE AND REPLACE IF NECESSARY. |

Maintenance and fault finding cont'd:

Removal and cleaning of the cooling pad:

- For efficient operation of the CC52 it is important to regularly clean the cooling pad to prevent the build up of air borne particles on the pad.
- For cleaning and maintenance the cooling pad should be dried by running the fan only before removal from the machine.
- Remove the two cooling pad grills using a No2 pozi driver.
- Carefully remove the 150mm cooling pad.
- Cooling pads should be cleaned with a soft brush or compressed air.
- Ensure all grills are secured before operation.
- Please note! sterilizing fluid should be added to the machine through the manual filling point. Please follow the instructions on the particular product for the required concentration.

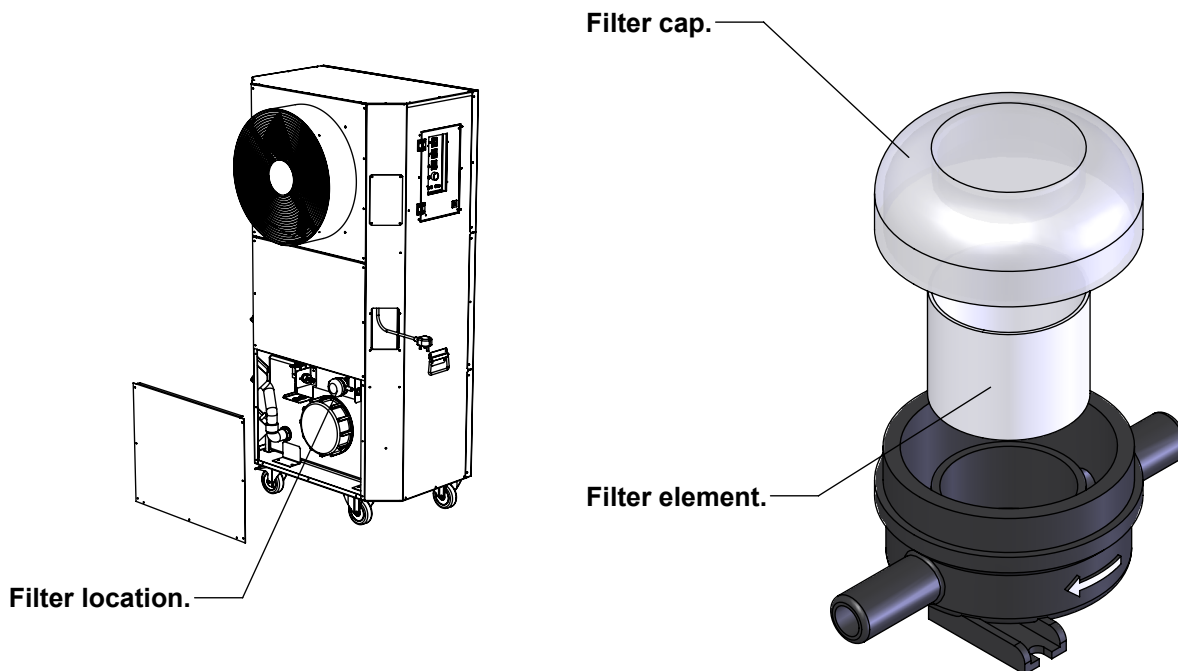


Maintenance and fault finding cont'd:

Cleaning the water filter:

Regular cleaning of the water filter is necessary to maintain machine performance. A dirty filter will restrict the flow of water over the cooling pad.

- Remove the front bottom panel using a No2 pozi screw driver.
- Unscrew the clear plastic filter cap.
- Remove the filter elements and wash in warm soapy water.
- Replace the filter element, cap and panel.



Odour and bacteria control:

We recommend Milton sterilising fluid or tablets to control odour and bacteria. Please follow the manufacturers instructions.

Add the sterilising fluid through the tank filler cap to the recommended ratio.

Wiring diagram:

