



INSTALLATION & OPERATION MANUAL

CTA500 Evaporative Cooler

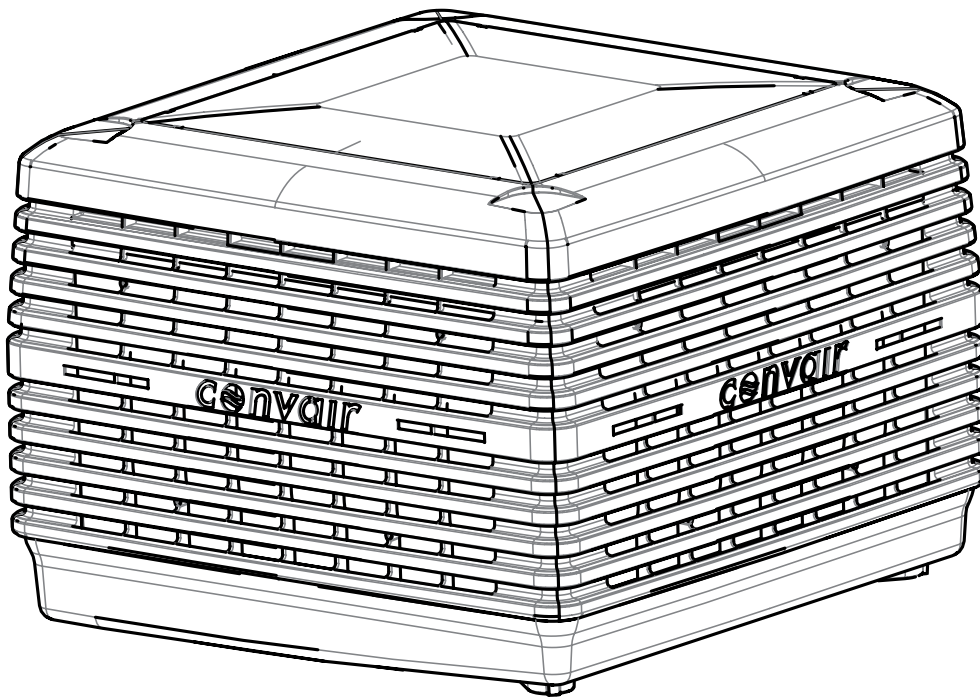


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WARNING! Failure to install and commission the product in compliance with these instructions, or failure to do the job properly and competently, may void the customer's warranty. Further, it could expose the Installer and/or the Retailer to serious liability.

SAFETY

Employer and Employee Responsibilities

The installation and maintenance of evaporative coolers at height has the potential to create Occupational Health and Safety issues for those involved. Installers are advised to ensure they are familiar with the relevant State and Federal legislation, such as Acts, Regulations and approved Codes of Practice, which offer practical guidance on these health and safety issues. Compliance with these regulations will require appropriate work practices, equipment, training and qualifications of workers.

Seeley International provides the following information as a guide to contractors and employees to assist in minimising risk whilst working at height.

WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO OTHER PERSONS, OBSERVE THE FOLLOWING:

1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
2. Before servicing or cleaning the unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag to the service panel.
3. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
4. When cutting or drilling into walls or ceilings, do not damage electrical wiring and other hidden utilities.
5. Ducted fans must always be vented to the outdoors.
6. Do not use this fan with any solid-state speed control device.

Installer and Maintenance Contractors – Risk Assessment

A risk assessment of all hazardous tasks is required under legislation. A risk assessment is an essential element that should be conducted before the commencement of work, to identify and eliminate the risk of falls or to minimise these risks by implementing control measures. There is no need for this to be a complicated process, it is just a matter of looking at the job to be done and considering what action(s) are necessary so the person doing the job does not injure themselves.

This should be considered in terms of:

- What are the chances of an incident happening?
- What could the possible consequence be?
- What can you do to reduce, or better still, completely eliminate the risk?

Some points to consider:

- What is the best and safest access to the roof and working areas?
- If a worker is alone, who knows they are there and if they get into difficulty, how can they summon help? (Call someone on the ground? Mobile phone? etc.).
- What condition is the roof in? Should the trusses, underside or surface be checked?
- Does the worker have appropriate foot wear? (Flat sole jogger type is advisable).
- Are all power cables / extension leads safe and appropriately rated?
- Are all ladders, tools and equipment in a suitable and good condition?
- Where ladders are to be used, is there a firm, stable base for them to stand on? Can they be tied or secured in some way at the top? Is the top of the ladder clear of electricity supply cables?

- Is there a roof anchor to attach a harness and lanyard to? If so, instruction should be issued for the use of an approved harness or only suitably trained people used.
- Are all tools and materials being used, prevented from slipping and falling onto a person at ground level? Is the area below the work area suitably protected to prevent persons walking in this area?
- Does the work schedule take into account weather conditions, allowing for work to be suspended in high winds, thunder storms/ lightning or other types of weather giving wet, slippery surfaces?
- Is there an on-going safety check system of harnesses, ropes, ladders and access/lifting equipment and where they exist on roofs, anchor points before the commencement of work?
- Is there a system which prevents employees from working on roofs if they are unwell or under the influence of drugs or alcohol?
- Are there any special conditions to consider? (Eg: excessive roof pitch, limited ground area, fragile roof, electrical power lines, etc)

Other Important Requirements

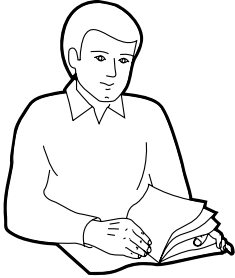
- Never force parts to fit because all parts are designed to fit together easily without undue force.
- Never drill holes in the tank of the cooler.
- Check the proposed cooler location, to ensure that it is structurally capable of supporting the weight of the cooler, or provide an adequate alternate load bearing structure.
- Ensure the installation complies with all local and national regulations with regards to electrical, plumbing and bushfire construction requirements.

QUICK GUIDE

Step 1

SAFETY

Read & understand the safety section.

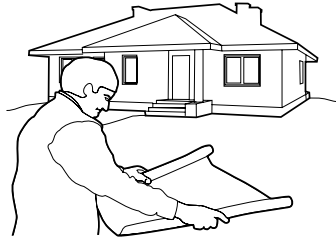


Page 1

Step 2

COOLER LOCATION

Check cooler location. Consider regulations. Discuss with customer.

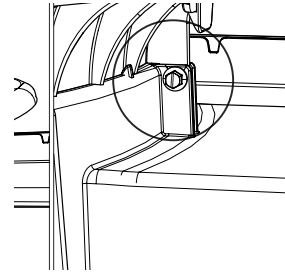


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Step 3

REMOVE VENTURI

Press the clip or remove the screws on both sides of the venturi to release.

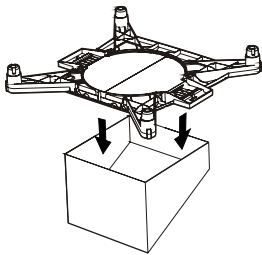


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Step 7

SECURE Roof jack & TRANSITION

Use the TEK screws provided. Break the transport clips for the weatherdamper.

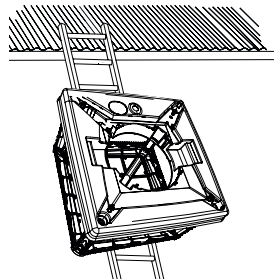


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Step 8

CONVEY COOLER TO ROOF

Always use 2 persons to position the cooler when handling manually.

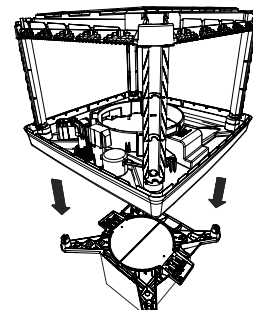


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Step 10

MOUNT THE COOLER

Lower the cooler onto the transition.

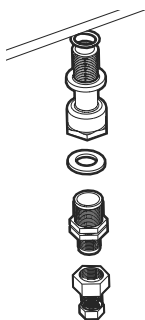


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Step 14

CONNECT MAINS WATER

Use the supplied fittings.

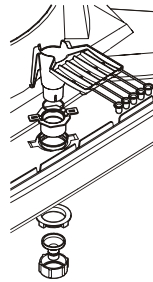


Page 9

Step 16

INSTALL BLEED FUNNEL

Never drain waste water directly onto the roof. Be sure to use supplied 'O' Rings and fittings.

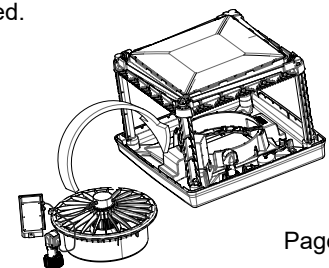


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Step 17

INSTALL VENTURI / FAN

Ensure the venturi is fully located into the tank and the motor lead is not caught or pinched.



Page 10

Step 21

COMMISSIONING THE COOLER

Switch the mains power on and test run the cooler.

Page 11

Step 22

FINAL CHECK

Complete the commissioning checklist at the end of this document.

Page 12

Step 23

CLEAN UP

Clean up the site!



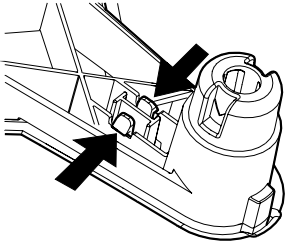
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QUICK GUIDE cont.

Step 4

REMOVE TRANSITION

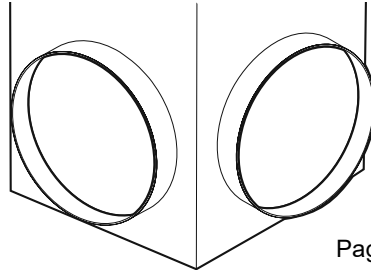
Press the clips inwards to release the transition from the tank.



Page 5

Step 5

PREPARE THE ROOF JACK

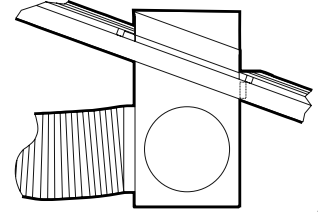


Page 6

Step 6

MOUNT ROOF JACK

Position, level and secure the roof jack. Flash the roof jack to prevent water ingress into the roof cavity.

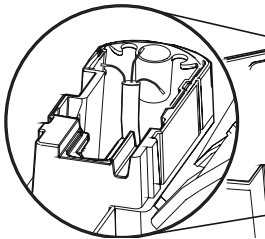


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Step 11

CABLE INSTALLATION

Run the power and control cable up through the tank/transition into the cooler.

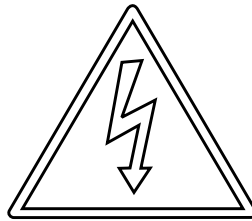


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Step 12

LOCAL REGULATIONS

Read and adhere to local electrical and plumbing rules and regulations.

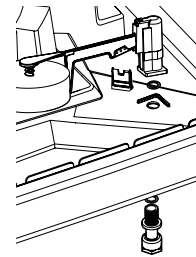


Page 10

Step 13

INSTALL FLOAT VALVE

Assemble the float valve to the cooler. Ensure all washers and o-rings are in place. No thread tape is required.

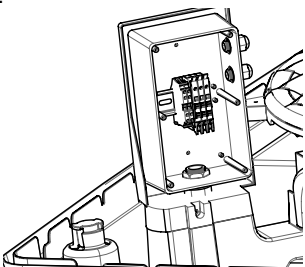


Page 9

Step 18

ELECTRICAL CONNECTIONS

Connect mains cable into the junction box.



Page 10

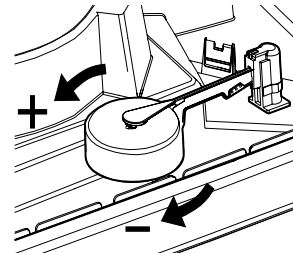
Step 19

MOUNT AND CONNECT THE CONTROLLER

Step 20

SET THE WATER LEVEL

Turn on the mains water and adjust the float to allow water to fill to the required level.

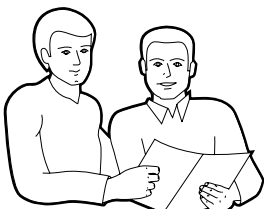


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Step 24

CUSTOMER HANDOVER

Show the customer how to operate the cooler. Give them both the controller and cooler owner's manual. Explain maintenance requirements.



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COOLER LOCATION

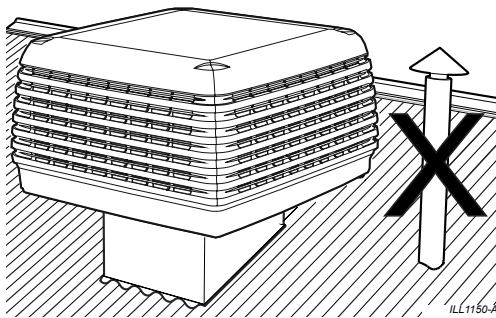
Check proposed cooler location to ensure it is structurally capable of supporting the weight of the cooler. If the roof is structurally inadequate, provide an alternate load bearing structure.

The ideal location for the cooler is in a central position on the roof (away from sleeping areas and where people spend most of their time) so that the duct runs are of approximately the same length. Carefully consider neighbouring residences and noise levels when locating the cooler, if necessary talk to the customer and the neighbour before carrying out the installation.

Always locate the cooler where it will receive adequate fresh air and not in a recess where it may be starved for air or where the air is polluted.

Ensure location is a minimum of:

- 10' (3m') from a solid fuel heater flue,
- 5' (1.5m) from a gas flue,
- 3.5' (1m) away from adjacent solar panels or similar roof mounted fixtures,
- 17' (5m) from a sewer vent, and
- 2' (600mm) from a wall.



- The cooler must be mounted at least 10' (3m), preferably 17' (5m) away from any TV antenna or antenna cables. Make sure the cooler is not between the antenna and the transmission tower that is providing the television signal to the home.

Allow adequate access to and around the cooler for maintenance. Provision must be made for access to electricity, water supplies and drains.

Note! Do you need to discuss the installation of items like safety anchor points with the customer?

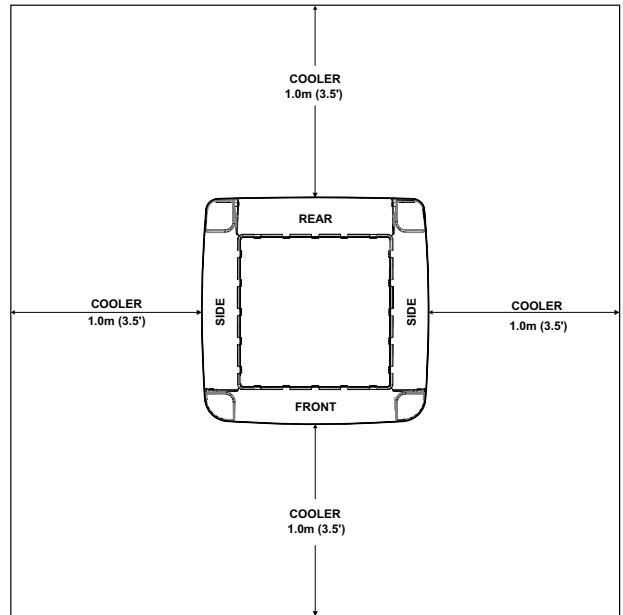
ACCESS FOR SERVICING AND MAINTENANCE

The cooler should be installed in a position that allows adequate access for installation, and future maintenance and servicing activities. This should comply with installation guidelines and any local, State and National regulations.

Consider the following for installation location:-

- Which has clear access to and around the cooler
- Which is clear of fixtures in line with below clearances
- Which is clear of fall edges (> 10' (3m) away)
- Which is structurally capable of supporting the weight of the cooler and service technicians

Required clearances around the cooler for future maintenance and servicing are shown adjacent.



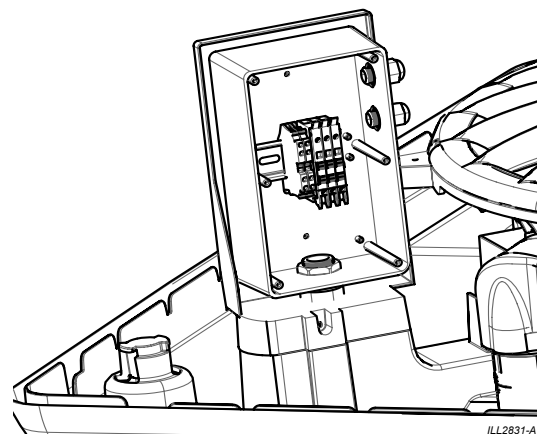
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Extra service or warranty charges may apply for the cost of any equipment or additional labour involved in accessing the cooler if these guidelines are not met.

REMOVING THE VENTURI

Before removing the venturi, the electrical enclosure should be removed.

Disconnect the electrical enclosure from the tank by removing the screw as indicated. The pump and motor will already be connected to the electrical enclosure and should be removed together. Do not remove the connections for the pump and motor.

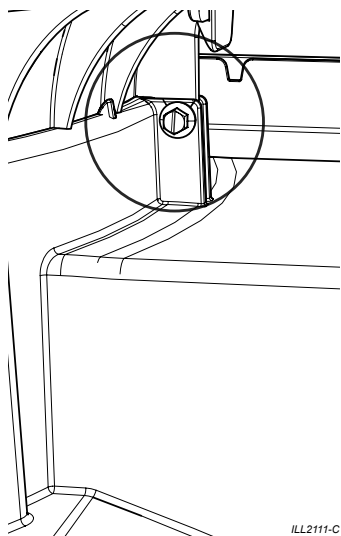


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Note! Place the electrical enclosure, pump, motor and the screw safely to one side for later use. Do not re-fit the electrical enclosure, as the mains power, speed control, motor and pump cables will require connection to terminals inside of the box when the venturi is refitted into the cooler.

REMOVING THE VENTURI - cont.

Remove the 2 screws securing the venturi to the tank.



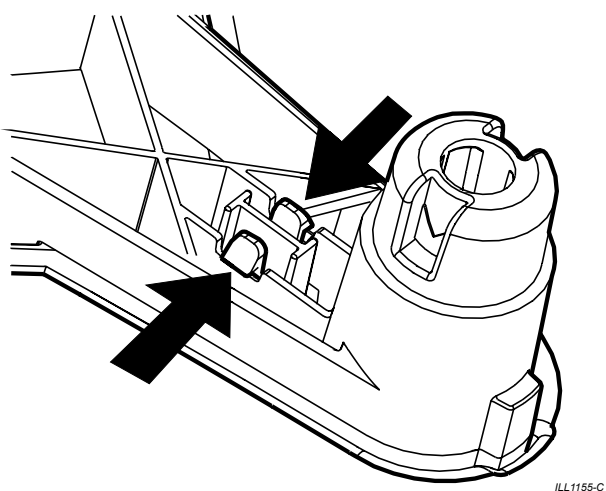
Lift the venturi and fan assembly out of the cooler, taking care of the motor lead.

The venturi fan assembly, pump and electrical enclosure can be placed on to the ground until the rest of the cooler has been installed on the roof jack.

REMOVING THE TRANSITION

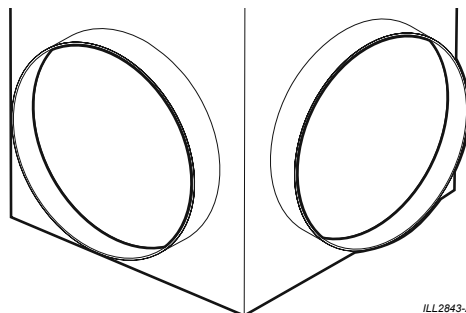
Turn the cooler onto its side to remove the transition. There are clips in each of the four corners that will disengage once the transition is given a firm pull.

If any of the corners are difficult to remove, do not use excessive force. Gently squeeze the clips together and remove the transition one corner at a time



NEW INSTALLATIONS

For new installations the roof jack will be required to support the entire weight of the unit. It is recommended that the roof jack is designed to be 550 x 550mm (21.7 x 21.7") and made from 24G steel. The duct must have a raw edge or safe edge at the top. Do not fold in a flange as this may interfere with the transition.



MOUNTING THE ROOF JACK

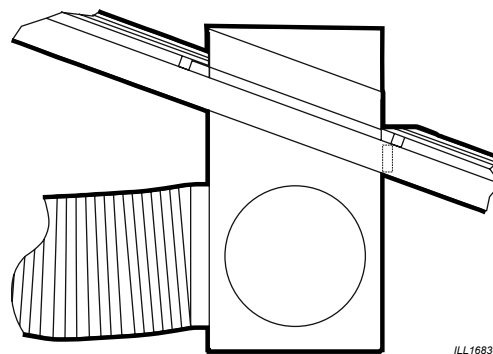
Install the roof jack and securely fix it to the roof structure on 3 sides. This may require the addition of extra structural timber.

Important! The roof jack must never sit directly on ceiling joists or beams, as this may cause noise or vibration issues, and possible ceiling damage.

Ensure the top of the roof jack is level and square in all directions (use a spirit level). This helps with levelling the cooler.

The installer must ensure the roof jack is suitable, and is secured adequately for wind conditions at the site. Additional restraints may be required if the cooler is more than 200mm (8") higher than the roof timbers, or design wind velocity at the site exceeds 43m/s (141fps).

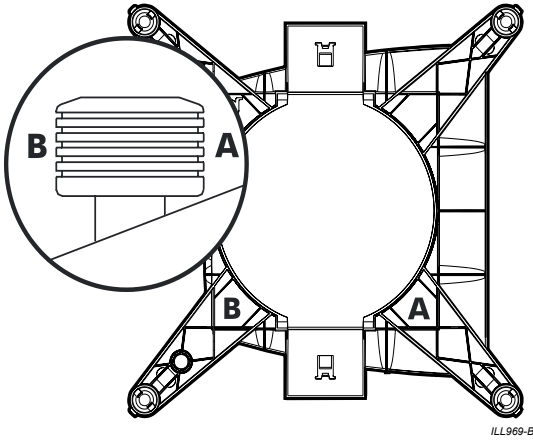
In exposed or very high wind areas use 16 screws, minimum shank diameter 5.2mm (7/32"), to secure the roof jack. In areas subject to hurricanes/windstorms or where the cooler is located more than 8m (26') above the ground seek advice from a structural engineer.



The roof jack may now be flashed to the roof. Make sure there is no chance of water entering the roof space.

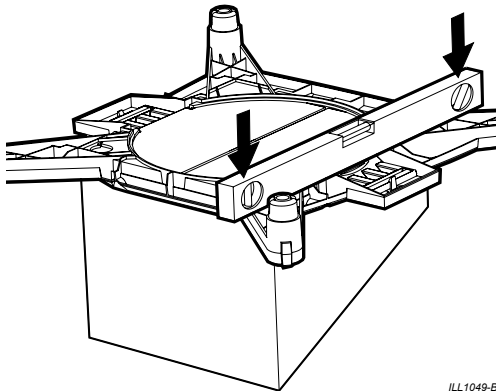
SECURING THE ROOF JACK AND TRANSITION - NEW INSTALLATIONS

Fit the transition onto the roof jack as shown. Ensure that it is orientated correctly, as shown by the engraved detail on the transition.



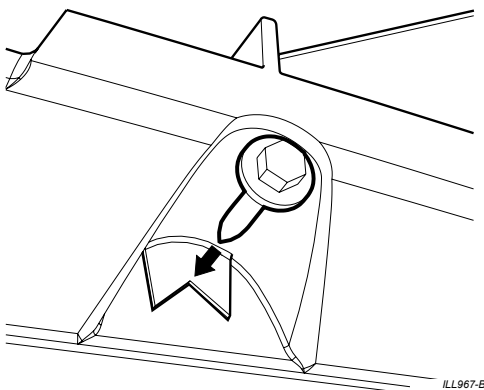
ILL969-B

Check the level of the transition on the roof jack, with a spirit level placed across the flats in both directions.



ILL1049-B

Once level, begin securing the transition to the roof jack using the screws provided. There are eight 'V' notch locations for screws.



ILL967-B

Only use the screws provided.

All eight (8) screws must be used. Check the level periodically before driving in all the screws.

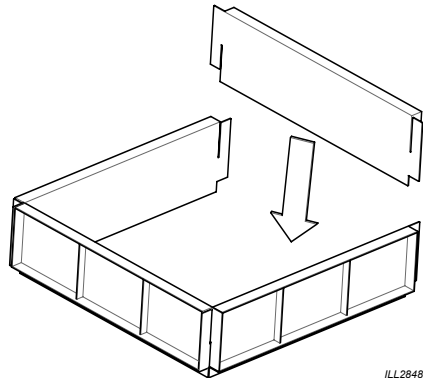
Ensure the duct insulation is firmly held against the duct connector flange on the roof jack

EXISTING/REPLACEMENT INSTALLATIONS

The CTA500 is designed for a roof jack which is 21.7" x 21.7" (550mm x 550mm) and made from 24G steel which will be able to support the entire weight of the unit. On existing/replacement installations ensure a suitable roof jack is used. On an installation with a smaller roof jacks a 19 3/4" x 19 3/4" (500mm x 500mm) duct adaptor is supplied with the cooler which can be used.

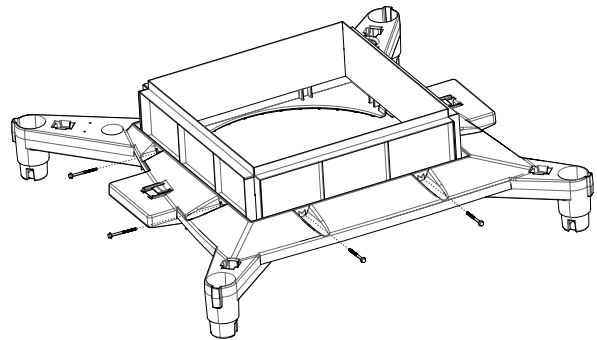
Note: A 17 3/4" x 17 3/4" (450 x 450mm) duct adaptor is also available but not supplied with the cooler. Please contact your nearest Seeley supplier for more details.

Assemble the duct adaptor as shown using the interlocking slots ensuring the flat surfaces are on the inside of the adaptor.



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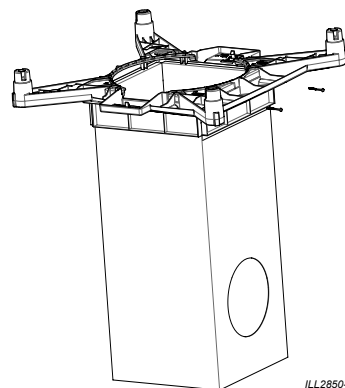
Place the adaptor in the transition and screw in place using the screws provided. Ensure the screws go through both the transition at the eight 'V' notch locations and adaptor.



TRANSITION SHOWN UPSIDE DOWN

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Place the adaptor and transition onto the duct/roof jack and using the screws supplied, secure the adaptor in place along the top edge.



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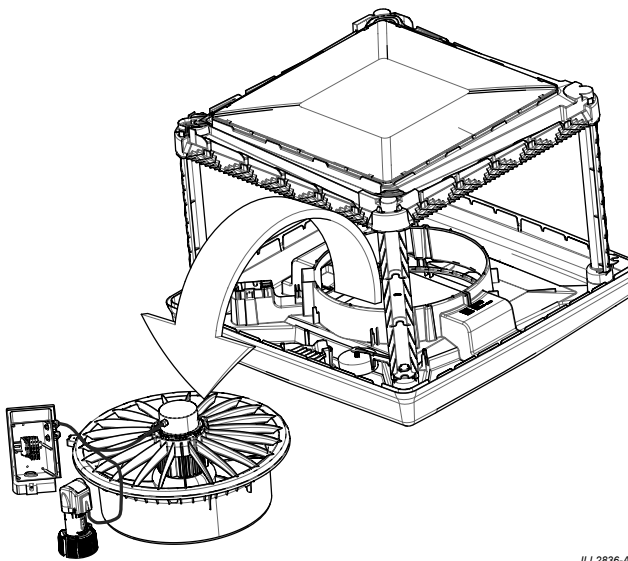
Note: In locations in high winds or where leg supports are required, Seeley International provides a kit. Contact your nearest Seeley supplier for more details.

CONVEYING THE COOLER TO THE ROOF

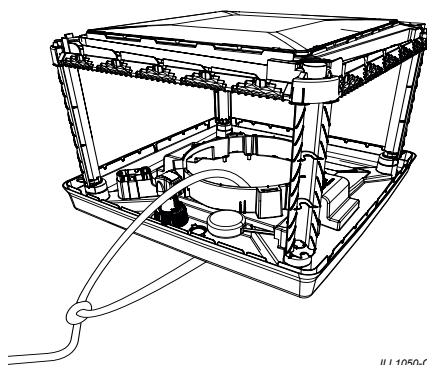
Caution! Do not take risks when raising the cooler to the roof for installation. Use safety equipment, appropriate procedures and always have assistance.

It is recommended that at least 2 people move the cooler into position and that the transition, pad frames, electrical enclosure/pump/venturi assembly and any unsecured objects are removed beforehand.

NOTE: The pump and fan motor are pre-wired to the electrical enclosure. Unscrew the pump and electrical enclosure mounting screws and remove them at the same time as removing the venturi/motor/fan assembly.



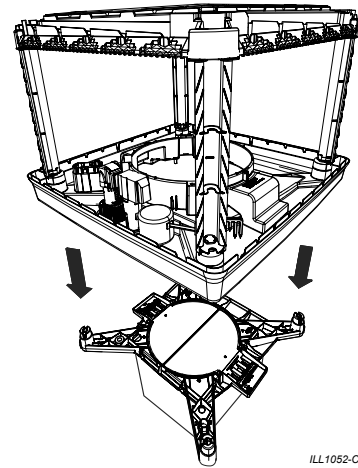
Carefully convey the cooler to the roof, avoiding scratching the unit and observing any WHS (Safety) requirements. If you use a rope or sling, attach through the central tank hole. Do not use pillars. Do not drop the cooler. Always handle the cooler with care.



If you intend to pull the cooler onto the roof using a ladder as a slide, then guide the cooler on the underside of the tank.

MOUNTING THE COOLER

Once the cooler is on the roof, carefully lift the assembly onto the transition and into place. The assembly will only fit onto the transition in one orientation. Refer to the engraved details moulded into the transition.



Ensure that the clips in all four corners engage correctly. Do not use any screws to fix the cooler to the transition.

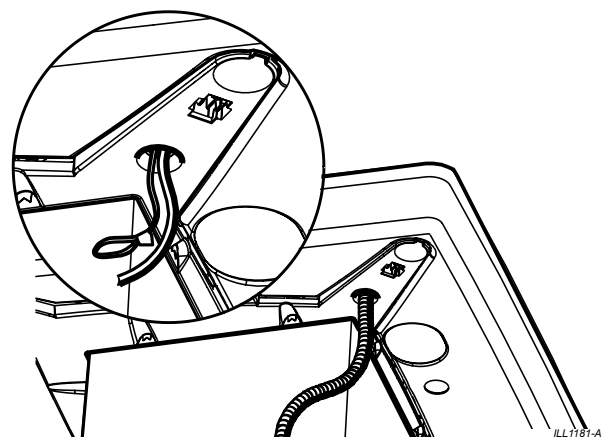
Important! Do not place the venturi assembly into the cooler at this stage.

CABLE INSTALLATION

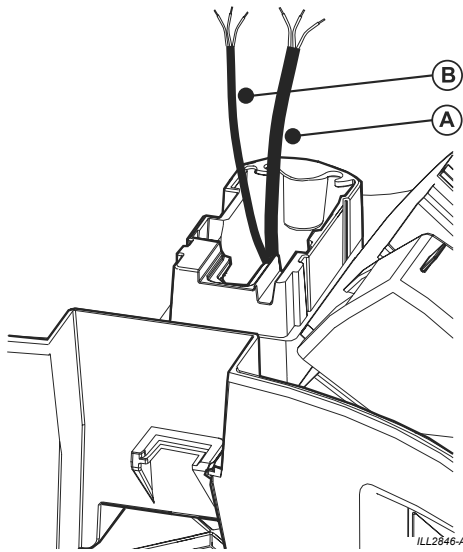
Your new unit does not include any power or control cables. Mains power and control cables are supplied by the installer or reused from the existing installation.

WARNING! Do not let cables, cable ends, or the electrical enclosure get wet.

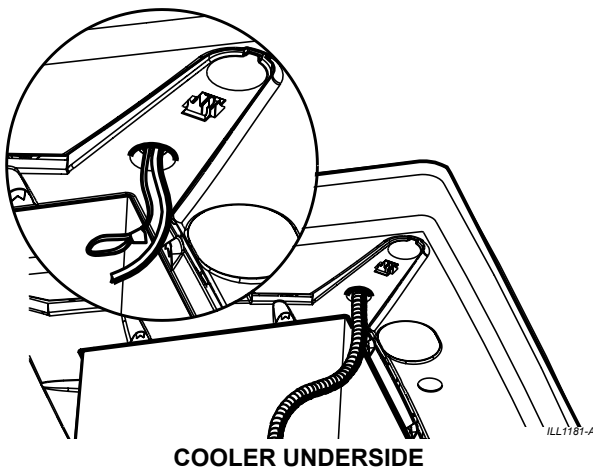
Pass the conduit/cables through the hole in the bottom of the transition and through the gap where the electrical enclosure was located. Ensure there is a sufficient amount of slack cable inside the unit to be connected to the inside of the electrical enclosure.



CABLE INSTALLATION - cont.



Ensure the cables are passed through the electrical enclosure mounting area in the tank. (Installer supplied or re-used from old installation) The cables exit the tank via moulded holes in the transition as shown below.



WATER REQUIREMENTS

Installation of the cooler water supply must conform to local plumbing rules, regulations and standards.

The following specifications for the cooler water supply are required:

Water Connection	½" BSP
Min Water Pressure	15psi (100kPa)
Max Water Pressure	115psi (800kPa)
Min Water Flow	2.1 gallons/min (8 liters/min)
Max Water Temperature	104°F (40°C)

Important! If the water pressure exceeds maximum specification then a pressure reducing valve is required and must be supplied and fitted by the installer.

A permanent water supply is required to be connected to the cooler. The water connection point is located on the underside of the cooler.

You must install a manual quarter turn ball type shut off valve (do not use a stop cock) in the water supply line adjacent to the cooler, subject to local plumbing regulations. This allows the water supply to be isolated whenever work needs to be done on the cooler.

The water connection is a 1/2" compression fitting or a 1/4" compression fitting. This can fit directly onto the water pipe or be screwed directly onto the manual water shut-off valve.

Always ensure that the water pipe connection does not place sideways strain onto the float valve.

Important! In areas subject to freezing, the water supply line to the cooler requires a drain down facility at the lowest point in the water supply pipe.

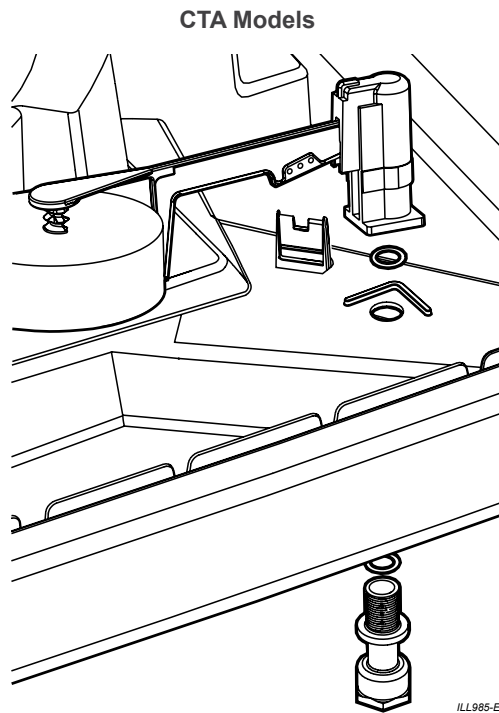
Important! Flush the water pipe to remove any swarf before final fitting. Swarf can lodge in the float valve, preventing it from functioning correctly.

INSTALLING THE FLOAT VALVE

Assemble the float valve to the cooler as shown.

Ensure all washers and (O-rings are in place. No thread tape is required. Do not over-tighten the plastic fittings.

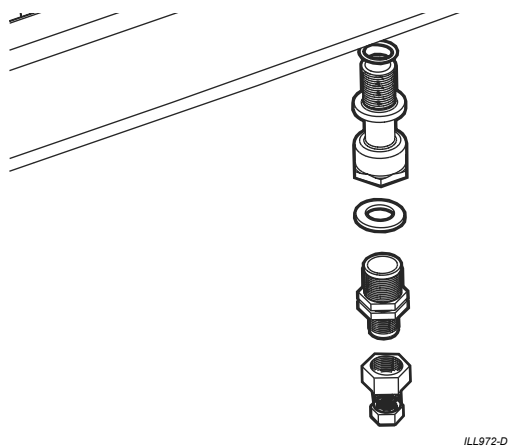
Make sure the float is centrally positioned and up and down movement is unrestricted.



MAINS WATER CONNECTION

Connect the main water supply to the water inlet point under the cooler using the 1/2" Nut and olive fitting or 1/2" - 1/4" brass compression adaptor fitting as required.

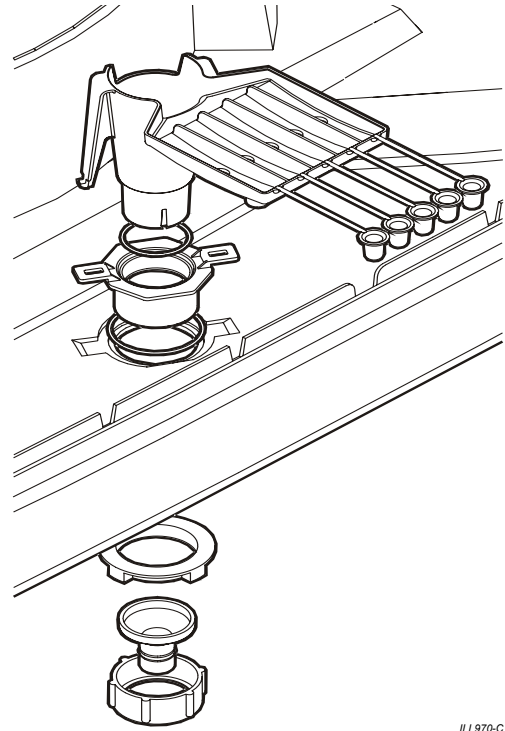
Always install a shut-off valve (do not use a non-return type valve) close by the air cooler.



BLEED FUNNEL

The bleed funnel reduces the accumulation of salts and minerals in the cooler. It also acts as an overflow and a drain.

Assemble the bleed funnel as shown.



Make sure the bleed funnel is correctly oriented and that the O-rings are fitted before placing it into the hole. Screw the nut up tightly by hand underneath the cooler.

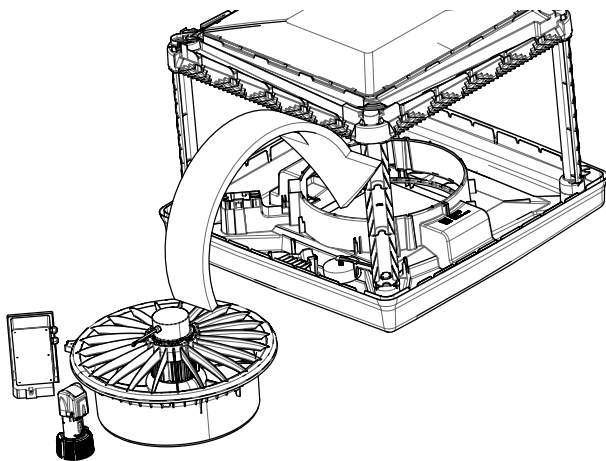
Make sure that you use the correct drain adaptor. Drain-water from the bleed funnel must be carried away to a suitable discharge point on the building or property in accordance with local regulations. Do not drain directly onto the roof surface.

The bleed rate required will vary according to water quality, but should initially be set to the minimum rate as set out in the table.

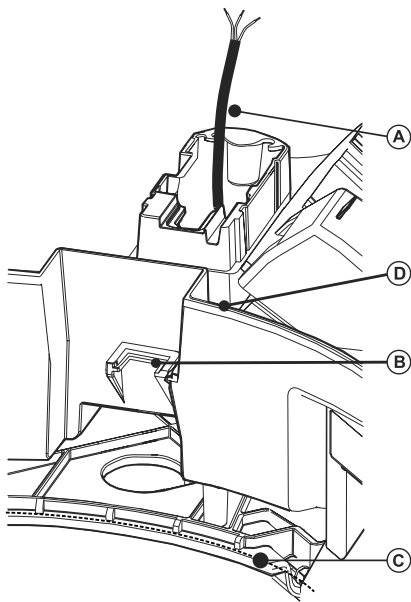
Push the remaining plugs into the blind holes provided. In poor quality water areas where the salt and mineral contents are high, adjust the bleed rate by inserting one or more extra plugs than specified in the table.

Note! In some locations due to regulatory requirements, the use of bleed funnels are not allowed. In these locations ensure the plugs are not inserted or are removed from the bleed funnel entirely.

INSTALLING THE VENTURI / FAN ASSEMBLY

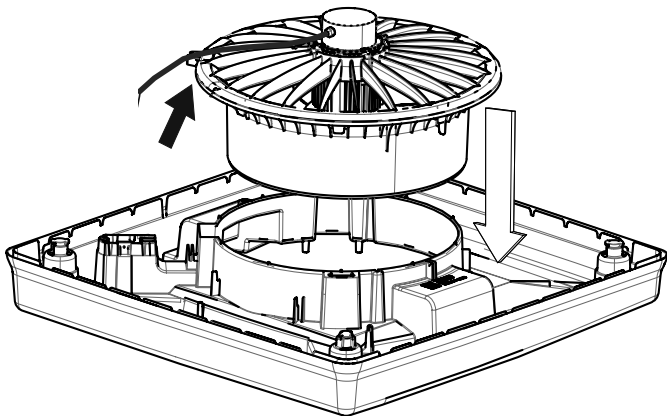


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Ensure the venturi is sitting flat in the tank by checking all the venturi ribs are in contact with (D). Relocate the tabs on the venturi back into the slots in the tank, as it was fitted during transport. The venturi securing screws (x2) do not need to be re-fitted.



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ELECTRICAL CONNECTION

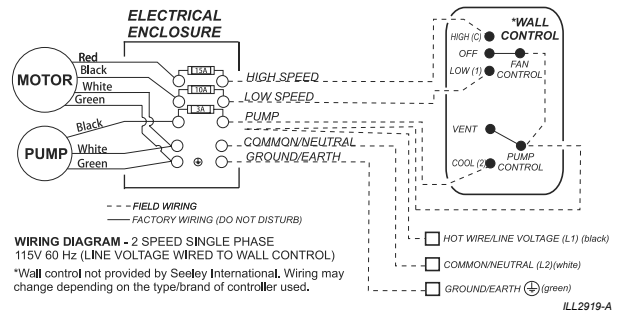
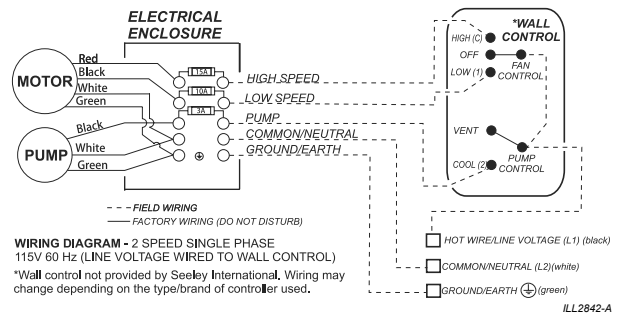
Installation of the cooler must conform to local electrical rules, regulations and standards.

Important! It is a requirement of Seeley International that all coolers be connected to a dedicated circuit to the distribution board, with a separate circuit breaker and incorporate a separate isolation switch in accordance with the local wiring rules.

The following specifications for the cooler electrical supply are required: **115V/60Hz Single Phase**.

It is up to the installer to provide a controller and mains power should be wired through the controller.

A system wiring diagram is provided below



The electrical enclosure contains three separate 3AG/3AB slow blow fuses for over current protection on each of the active lines for High/Low Speed and the Pump which are contained within the DIN rail setup. The fuse ratings are as follows:

High Speed - 15A

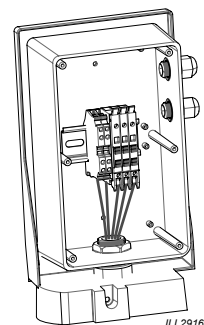
Low Speed - 10A

Pump - 3A

DIN Rail Setup:

The cooler utilizes a DIN rail for the electrical connection. The motor and pump will be installed on the DIN rail from the factory and will not need to be touched. When connecting the controller/mains power to the unit, pass the cable through the cable gland at the bottom of the enclosure. The ends of the cable should be stripped back. Insert the cable into its corresponding position on the DIN rail and secure it in place by tightening the screw.

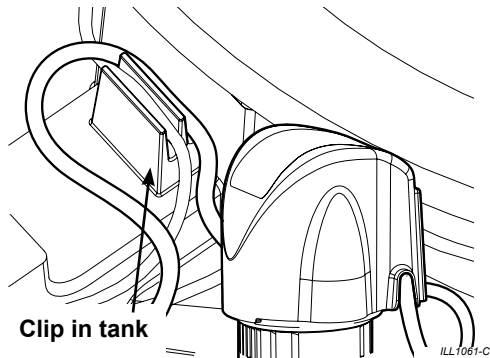
When complete, replace the cover on the enclosure.



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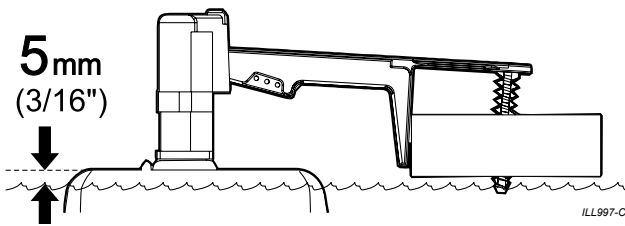
WATER PUMP

Route any of the excess pump cord through the clip as shown.

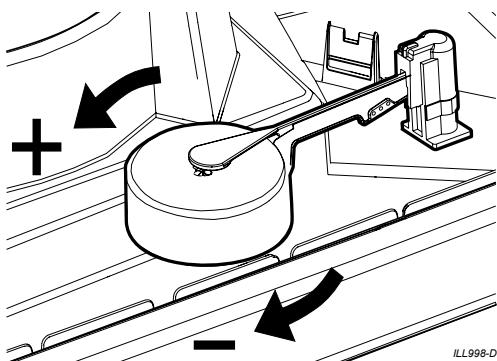


SETTING THE WATER LEVEL

Allow the tank (reservoir) to fill with water. The float valve will eventually stop the water from entering the cooler. Wait for this to happen and check the water level.



If the level is too high rotate the float clockwise. Drain some water from the tank and allow it to refill to the new set point. If too low rotate the float in a counter-clockwise direction. The correct water level is approximately 5mm below the surface of the tank the float valve is mounted on. It is advisable to check the water level again after the float valve washer has "bedded in".



Once the water level is set correctly, isolate the electrical enclosure.

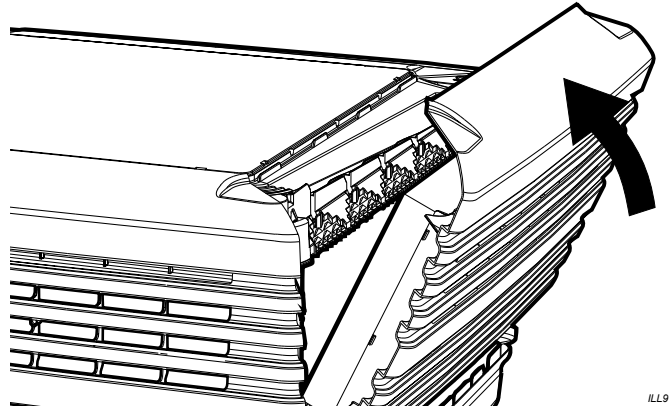
Important! Do not connect the power until the water level is set.

WARNING! Do not run the pump while the pad frames are off and the fan is on.

COMMISSIONING THE COOLER

REFITTING THE PAD FRAMES

Refit the pad frames by locating the bottom edge in the tank groove, then push the top into the lid.



COMMISSIONING COMPLETION CHECKLIST

COOLER

- SECURE - The cooler is secure and level on the roof jack using all fixings supplied.
- SEALED - The roof jack and all penetrations are correctly flashed and sealed.

PLUMBING

- FLUSHED - The water pipes were flushed of any foreign materials before connection to the cooler was made.
- NO EXTERNAL LEAKS - The water is connected with no leaks at fittings.
- NO INTERNAL LEAKS - Check the internal water hose is securely fitted to water distribution spreader on the lid and to the pump.
- SECURE - Water pipes are correctly saddled as per plumbing regulations.
- OWNER INSTRUCTIONS - The owner has been instructed on how to isolate the water to the system in case of emergency.

Bleed Funnel

- INSTALLED - The drain valve is installed correctly, as detailed in this installation manual.
- DISCHARGE - The drain water does not discharge onto the roof surface.
- WATER LEVEL - Water level has been set correctly, as detailed in this installation manual.
- TESTED - Drain the tank manually. Check the drain fittings and pipes, making sure there are no leaks.

POWER

- REGULATIONS - The power supply adheres to all local and national regulations and is wired back to the distribution board on its own separate circuit.
- CHECK CABLES - Cables have been correctly connected to the control boxes:
 - Power supply
 - Motor cable(s)
 - Pump cable
- OWNER INSTRUCTIONS - The owner has been instructed how to electrically isolate the unit at the meter box in case of an emergency.

DUCTWORK

- NO LEAKS - All ducts are hung correctly and there are no air leaks..
- QUIET - Check that the cooler runs quietly and with an even distribution of air to all outlets.
- AIR BALANCE – The air balance for all outlets has been adjusted to the customer's satisfaction.

FLUSHING CHILLCEL PADS

- PADS FLUSHED - To prevent initial start-up odours from the cooling pads, it is a requirement to flush water through them and drain the tank. Operate in PUMP or COOL mode on low speed for 5 minutes, then drain the tank. Repeat several times if necessary.

FINAL TEST

- Once you are satisfied that the cooler is installed and commissioned correctly, run the cooler and ensure that everything is working as it should.

CUSTOMER HANDOVER

- Principles of Ducted Evaporative Cooling explained.
- How far the windows need to be opened.
- How to turn the cooler on.
- How to operate the controller.
- How to drain the cooler.
- How to turn the power and water off.
- Maintenance requirements.
- The customer has been given the Owner's Manuals & Warranty Card.

CLEAN-UP

- All the installation rubbish has been removed and, if applicable, any property damage repaired. The customer should not be able to tell you were there, besides placement of the new equipment.

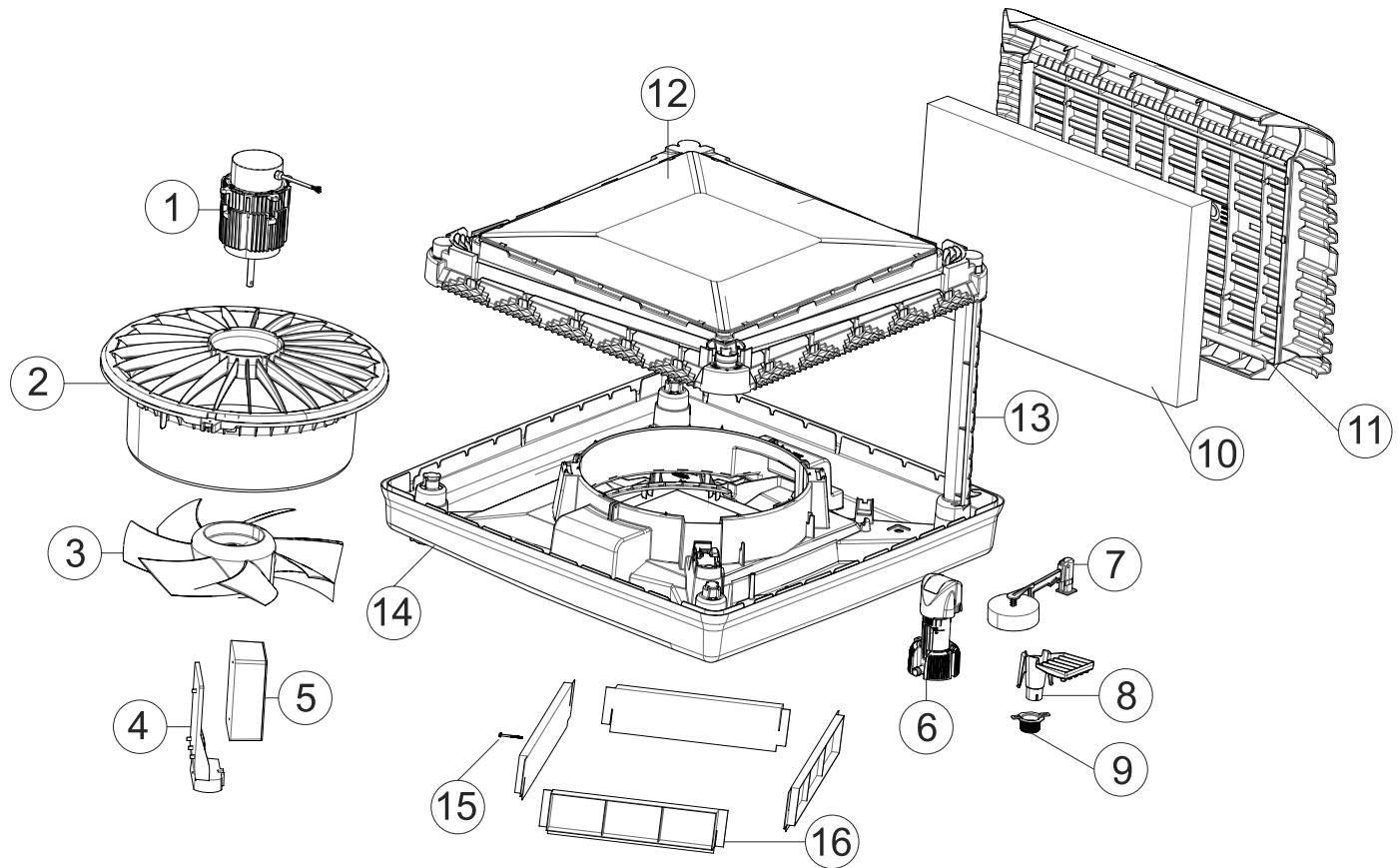
FINAL CHECK

- With all side panels in place and the unit running for a short period in cooling mode, ensure all pads have even water saturation and there are no visible water leaks

TROUBLE SHOOTING

Symptom	Cause	Action
Inadequate cooling	Under-sized cooler.	Replace with larger cooler.
	Under-sized ducts.	Carry out cooling load design to determine correct size unit, ducting and outlets required.
	Clogged or dirty cooling pads.	Clean or replace pads.
	Dry pads or lack of water while cooler is operating.	Check water distribution system for possible obstruction in hoses. Check pump.
	Insufficient air discharge openings or inadequate exhaust from building, causing high humidity and discomfort.	Make sure there is adequate provision for exhausting stale air from building (open windows and doors).
	Excessive ambient humidity (see also item above regarding inadequate exhaust).	On days during summer when ambient humidity is high the cooler will not reduce the temperature as much as on drier days. There is no remedy except to shut off the pump.
Noisy cooler	Fan out of balance due to dirt, etc.	Clean the fan.
	Too much back pressure. Tight duct bends. Grilles too small.	Re-evaluate design; improve duct layout; change grille sizes.
Pump fails to operate	Fuse blown	Check pump for faults. Replace fuse.
	Pump motor failure.	Replace pump.
Fan fails to start	Motor fuse blown	Check cause of overload. Replace fuse
	Fan motor burned out.	Replace motor.
	Low system voltage.	Consult with power supply authority.
Pump runs but no water circulation or Pump runs but pads lack water	Insufficient water in tank.	Adjust float level.
	Water blocked.	Check and clean out blockage.
	Pump strainer blocked.	Clean pump strainer.
	Insufficient water supply pressure.	Check and confirm water supply pressure
Continuous overflow of water	Float valve adjustment not correct.	Adjust float valve.
	Heavy pad deposits.	Clean or replace pads.
Water entering cooler outlet	Loose water hose connections.	Tighten connections.
	Water hose broken.	Replace cracked or broken hoses.
	Cover not fitted on float valve.	Replace float valve.
	Pads not fitted correctly into pad frames.	Install pad frame correctly.
	Incorrect or damaged pads.	Replace with new Chillcel pads.
Unpleasant odour	New cooler pads.	Fill tank, run pump for a short period to wash pads, drain tank, refill and repeat several times if odour persists. Odour will dissipate after a number of hours of operation.
	Cooler located near source of unpleasant odour.	Remove source of odour or relocate cooler.
	Algae in tank water.	Drain pan, clean thoroughly with strong cleansing agent, refill, change pads.
	Pads remain wet after shut down.	Run fan on "vent/fan" for 10 minutes after cooling cycle to dry pads out.
	Heavy pad deposits.	Clean or replace pads.

EXPLODED VIEW



ILL2840-A

Part ID	Description	QTY
1	Motor	1
2	Venturi	1
3	Fan	1
4	Mount for Electrical enclosure	1
5	Electrical enclosure	1
6	Pump	1
7	Float Valve	1
8	Bleed Funnel	1
9	Bush for Bleed Funnel	1
10	Chillcel Pad	4
11	Pad Frame	4
12	Lid	1
13	Corner Pillar	4
14	Tank	1
15	Installation Screws	16
16	Duct Adaptor	1 set

USER SAFETY

IMPORTANT SAFETY INSTRUCTIONS

READ AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- a) Use this unit only in a manner intended by the manufacturer. If you have questions, contact the manufacturer.
- b) Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.

IMPORTANT NOTES!

In areas where temperatures can cause water supply pipes to freeze, a drain down facility should be provided during the installation. This drain down facility must be activated prior to freezing conditions, to avoid possible damage to the cooler components.

New hose sets supplied with the appliance are to be used.

Old hose sets (from previous installations) should not be re-used.

As with any product that has moving parts or is subject to wear and tear, it is **VERY IMPORTANT** that you maintain the product and have it regularly serviced. It is a condition of warranty cover for your product that you comply with all of the maintenance and service requirements set out in the Owner's Manual. Compliance with these requirements will prolong the life of your product. Further, it is also a condition of warranty cover that each item in the Maintenance Schedule in the Owner's Manual is performed with the frequency indicated, by a qualified, licensed technician, and that the Maintenance Schedule is properly filled out (i.e. names, signature, date, and action taken) when the item is completed.

ANY FAILURE TO CARRY OUT THE REQUIRED MAINTENANCE AND SERVICING REQUIREMENTS, AND ANY FAILURE TO PROPERLY FILL OUT THE MAINTENANCE SCHEDULE, WILL VOID YOUR WARRANTY.

OPERATING YOUR COOLER

At Seeley International, we manufacture evaporative coolers from the highest quality materials, and we have designed the product to provide many years of economical, trouble-free cooling.

To provide efficient cooling or ventilation the building must have sufficient exhaust openings to the outside of the building.

To assist air flow, open windows and doors that are farthest from the outlet vent in each room. In these rooms, provide an exhaust opening 2 times the vent size of the room.

Where the design of the building prevents adequate exhaust, consideration should be given to the provision of mechanical extractions, such as an exhaust fan.

Your installer will provide the control switch for the cooler and explain how to use it.

CONTINUOUS BLEED SYSTEM

During operation, the bleed system will drain small amounts of water. This ensures fresh water is continually added to dilute salt accumulation in the water caused through evaporation. This helps keep the air cooler in good condition and ensure optimum performance. The bleed rate will depend on local operating conditions and will be set by the installer.

HEALTH REGULATIONS

In some regions, regulations require that evaporative air coolers be serviced at specific intervals.

MAINTENANCE

WARNING! As your cooler is mounted on the roof, we suggest that any maintenance or checks be carried out by an authorised Seeley International dealer or service agent. Climbing onto the roof can be hazardous and could result in injury to you and damage to your property.

For gaining access to the cooler, refer to the Removing Pad Frame section.

MAINTENANCE SCHEDULE SERVICING

Maintenance Schedule servicing is essential to ensure the cooler operates efficiently for many years. It must be carried out by a qualified, licensed service technician.

MAINTENANCE

The following pages outline the suitable maintenance requirements to ensure that your cooler continues to operate efficiently.

We require that the following components and the operation thereof, be checked/serviced after the first year, then every 2 years for residential purposes, or every year for commercial purposes, as Maintenance Schedule servicing. Refer to the Maintenance Schedule section.

Maintenance Schedule servicing should be performed before the summer season. It is important to note that all evaporative coolers have components that may need periodic replacement (eg. filter pads, hoses, O-rings etc).

Note! Failure to carry out the Maintenance Schedule services will void your warranty cover.

Note! Maintenance Schedule servicing may be required more frequently in adverse environmental situations or where the appliance is installed in non-domestic applications. Please consult with the installer or service personnel to determine if more frequent servicing is required.

Access for Servicing and Maintenance

Working at heights requires additional safety precautions. Required clearances around the cooler for maintenance and servicing are shown below.

MAINTENANCE

High Duty Cycle Operation Maintenance

Only applicable for coolers operating more than 12 hours per day continuously throughout the year.

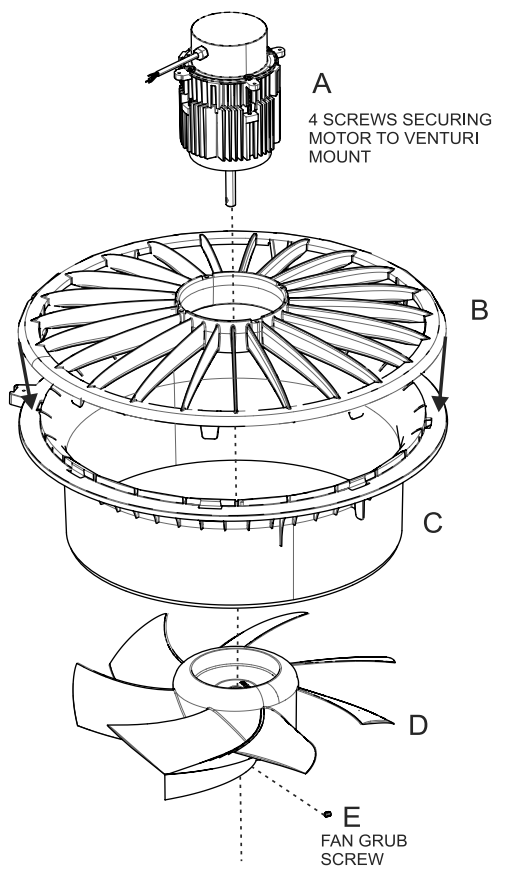
The following maintenance program is required in addition to the servicing required by the Maintenance Schedule:

6 monthly maintenance:

- Inspect the cooler, check the pump, and fan motor.
- Check the pads and replace as required.
- Check and clean the tank and the pump filter.

12 monthly maintenance:

- Replace plastic fan and check motor shaft for wear.
- Water distribution channels.
- Pump.
- Fan motor operation.
- Float valve.

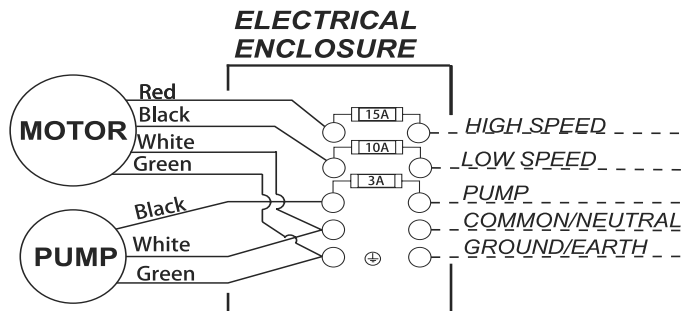


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- A = Motor
- B = Motor to Venturi Mount
- C = Venturi
- D = Superstealth Fan
- E = Grub Screw (secures motor shaft to fan metal insert)

Replacing the Fuse in the Electrical Enclosure

3 fuses are located inside the electrical enclosure as shown.

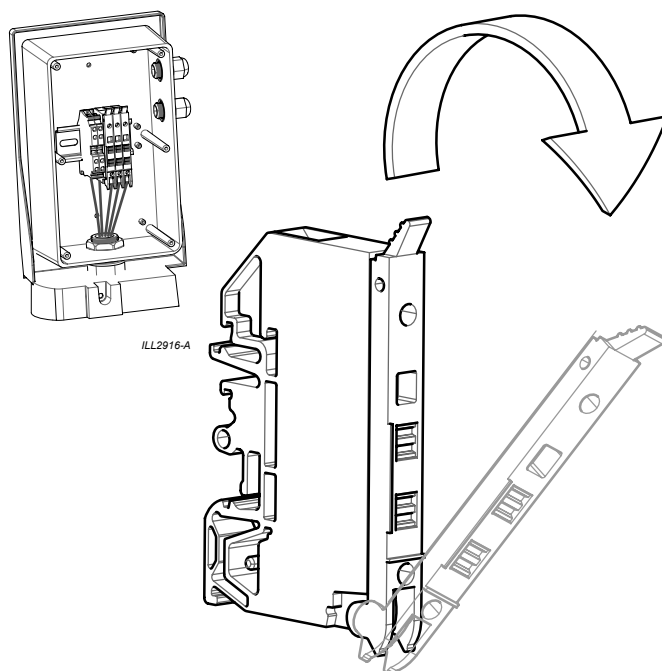


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Before replacing the fuse, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally.

When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag to the service panel.

- Remove the cover of the control enclosure by removing the 6 screws located on the side of the enclosure.
- Open the fuse holder by grasping the tab at the top and pulling down.
- Remove fuse carefully by pushing it sideways.
- **Risk of fire.** Replace fuse only with 3/10/15 Amp, 250 Volt fuse 3AG/3AB slow blow fuses. See wiring diagram for correct fuse location and rating.
- Close the fuse holder and re-attach the cover to the control enclosure by securing the 6 screws on the side of the enclosure.



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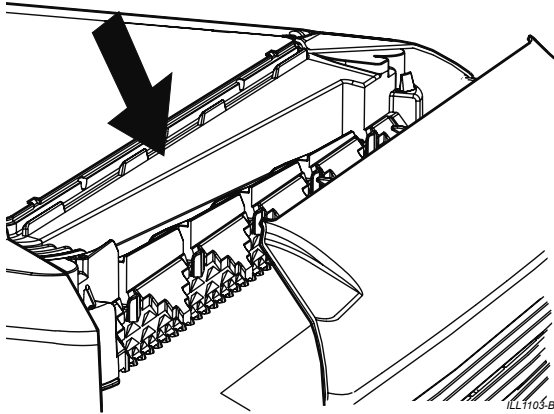
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SEASONAL MAINTENANCE

Water Distribution Channels

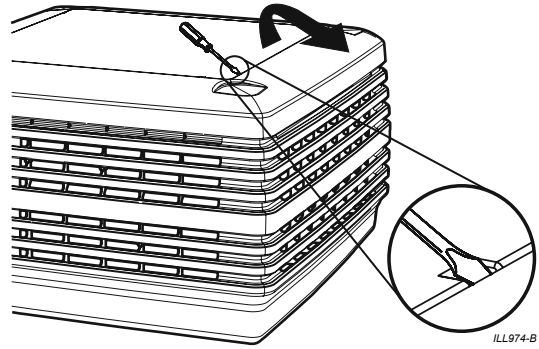
The spreader section of the water distribution system will need occasional maintenance and cleaning, depending on the frequency of use, water quality and associated calcification or solids build-up.

To access the water spreaders, remove the pad frames from the cooler to expose them.

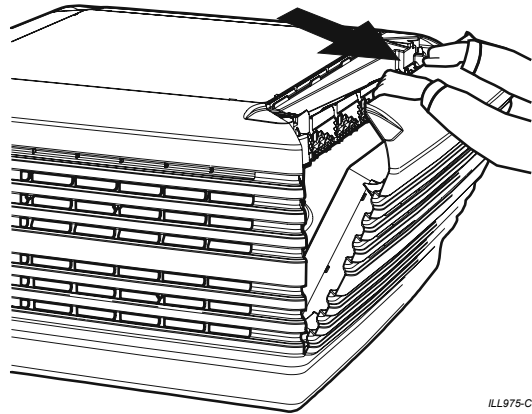


REMOVING PAD FRAMES

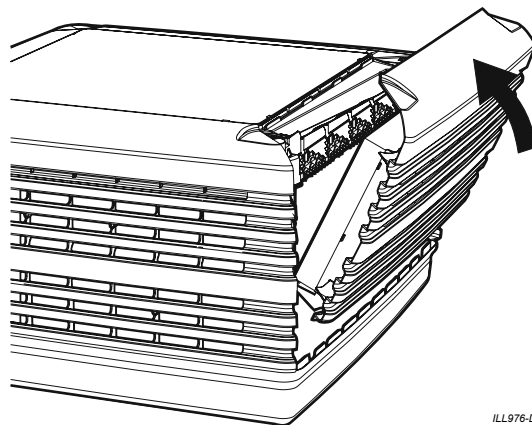
Insert a flat screw driver tip into the slot as shown and lever until disengagement occurs.



Take hold of the pad frame and pull it towards you until the internal side clips disengage.



Pivot the pad frame outwards and lift up. Take care not to damage the pad.



SEASONAL MAINTENANCE

.Seasonal Maintenance services must be performed before and after the summer season.

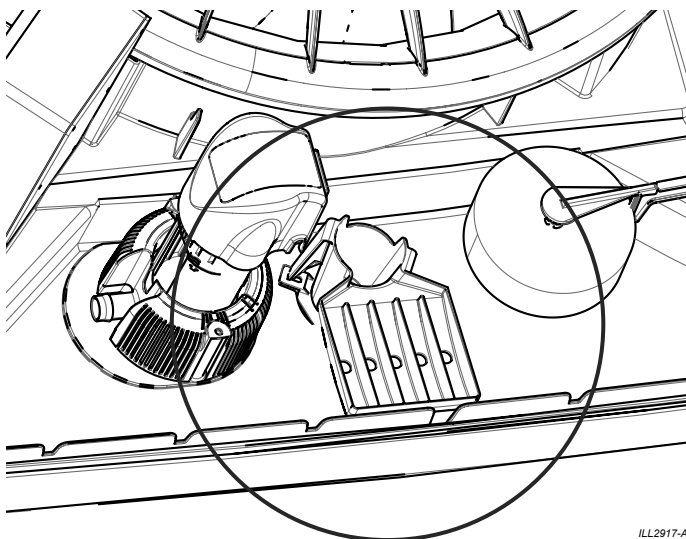
Pre-Season

1. Remove the pad frames.
2. Ensure the power is off/disconnect
3. Gently wash the pad frames to remove any dust build up during the winter. Note! Do not wash the pads with high pressure water spray. If pads are salted-up, replace them.
4. Check for water leaks. Check operation of float valve.
5. Turn on the water supply to the cooler.
6. Reconnect power
7. Refit the pad frames.
8. Run the cooler.

WARNING! Ensure pad frames are fitted when operating the cooler.

End of Season

1. Turn off the water supply to the cooler.
2. Remove the pad frames
3. Turn off/disconnect the power.
4. Check and clean the water distributing spreader tray channels under the lid.
5. Drain the tank.
6. Thoroughly clean the tank and pump filter
7. . If a bleed funnel is fitted, remove it from the tank as shown below. Depress the side clips to release the bleed funnel from the drain bush. Keep the O-Ring in a safe place for later use.



8. Refit the pad frames.

MAINTENANCE SCHEDULE

Service Item	Check/Adjust					Clean					Replace				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Water Distribution System															
Chillcel Pads (replace as required)															
Pad Retaining Washers/Pins															
Tank/Water Reservoir															
Pump Filter															
System Washers, Seals and O-Rings (replace as required)															
Bleed Funnel operation															
Component Function															
Pump operation															
Motor Operation															
General Operation															
Water Level Set Point															
Water Fill Time															
Water Time															
Water Distribution across Pads															
Airflow through system/Outlets															
General Product condition (includes correct fitting of all components and items - replace as required)															

Service No.	Service Date	Service Technician	Service Company
No.1
No.2
No.3
No.4
No.5



Service - All regions: Please contact your local distributor.

seeleyinternational.com

MANUFACTURED BY: SEELEY INTERNATIONAL PTY LTD
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It is the policy of Seeley International to introduce continuous product improvement.
Accordingly, specifications are subject to change without notice.
Please consult with your dealer to confirm the specifications of the model selected.

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