

doubt seek the advice of your supplier.

PAC 4500AX / PAC 6500AX HEAT EXCHANGER

The heat exchanger must stand external to the area being cooled and, preferably, in the outside atmosphere. It can stand freely on a flat surface or may be hung, in the upright position, from a windowsill, balcony, etc. See Fig 1.

ET 4500AX

The exhaust tube(s) must carry air to an area external from that being cooled, preferably to the outside atmosphere

USE THE CHAINS PROVIDED TO SUPPORT THE HEAT EXCHANGER. IT WOULD BE HIGHLY DANGEROUS TO SUPPORT THE HEAT EXCHANGER BY MEANS OF THE FLEXIBLE LINES ALONE.

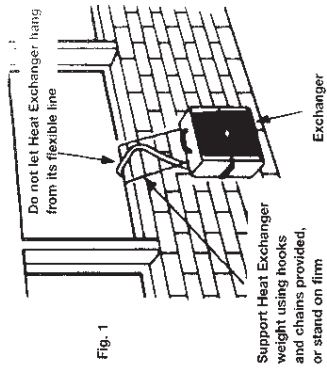


Fig. 1

CONDENSATE

PAC 4500AX / PAC 6500 AX

In operation, the room unit is constantly condensing water vapour out of the atmosphere (reducing relative humidity). This water has to be drained away. An automatic condensate pump is fitted inside all PAC 4500AX / PAC6500AX room units. The flexible hose outlet from the condensate pump runs to the outside, inside the flexible sheath and the condensate is deposited in the base of the heat exchanger. Considerable re-evaporation of this water takes place on the warm air stream passing through and around the heat exchanger, but please remember that there will also be a degree of dripping through the base of the heat exchanger.

HAVE GREAT REGARD FOR THIS CHARACTERISTIC WHEN POSITIONING THE EXTERNAL HEAT EXCHANGER.

The flexible water pipes should be routed so as to avoid any possibility of kinking or unnecessary restrictions to the flow of water inside. Also, remember that plastic and rubber becomes much more flexible when warm and, as a result, much more susceptible to distortion.

Condensate from the ET 4500AX is collected in an internal tank and emptied by the user. An optional pump kit may be fitted to pump liquid via a plastic tube to an external container or the ground. Care needs to be taken in the positioning of the tube.

5) MACHINE LINK-UP FOR PAC 4500AX /PAC 6500AX

Ensure the mains supply lead to the room is disconnected. A 5m (extendable to 30m) line set to

WARNING !

This unit MUST be transported and operated in the upright position at all times.

1) ELECTRICAL SUPPLY

As standard, this unit requires a 13 amp fused electrical supply rated at 230 Volts, ~1N 50Hz. The unit will operate from a standard 13A wall socket. The size of any extension cable that may be used is 2.5mm² minimum up to a maximum length of 10 metres. For longer lengths 4.0 mm² cable must be used. If the cable is on a "cable drum" then ensure that it is completely unwound; serious complications will occur otherwise. Note: most domestic proprietary extensions cables are 1.5mm². This is not sufficient.

2) SYSTEM DESCRIPTION

PAC 4500AX / PAC 6500AX The system comprises a room unit cooling section, an external heat exchanger and the two are interconnected by means of a flow and return water pipe and an electrical supply to the heat exchanger fan. The room unit is fitted with an automatic condensate disposal pump, which discharges the condensate via a small plastic pipe into the base of the external heat exchanger, and all interconnecting pipes and electricians are enclosed in a flexible plastic sheath. In addition, both ends of each pipe are fitted with "quick connect" couplings that open on coupling but reseal to become water tight on disconnect.

ET 4500AX

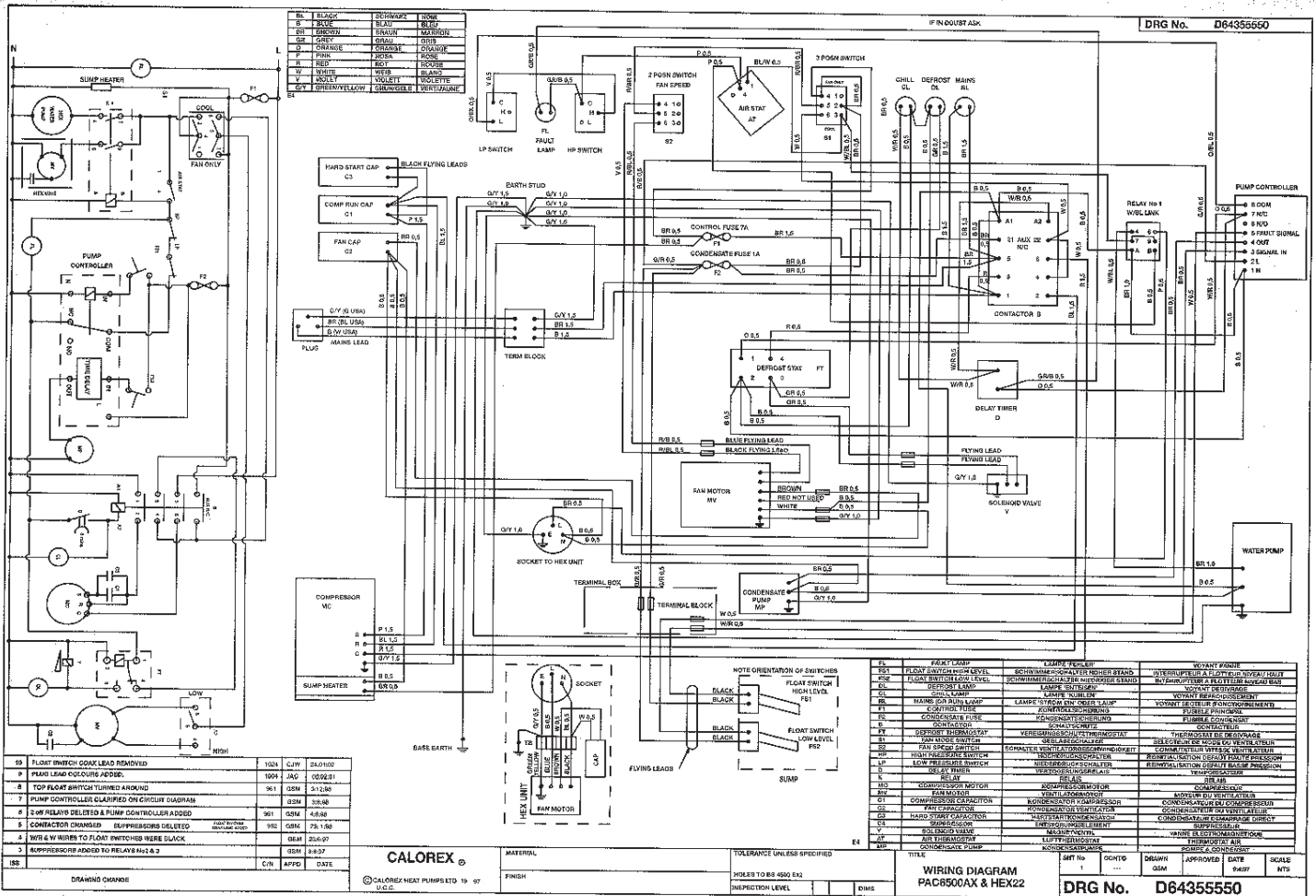
The system comprises, a room unit fitted with either a fixed or flexible ducting system as specified by the customer. Condensate is collected, either in the unit's internal tank and emptied by the user or pumped away using an optional condensate disposal unit.

3) AIR FLOW

The angled air outlets at the top of the room unit are fitted with air grilles that allow the angle of air outlet to be adjusted vertically and horizontally and, in conjunction with the fan speed control switch, the air velocity and direction can be carefully set up to obtain maximum coverage of the area being cooled without causing draughts. An alternative top panel with twin 7" ducts is available for machines with a convex console. Care should be taken to avoid outlet air being obstructed as this will cause the air to "eddy" around the unit resulting in recirculation and short/macrocycle cycling of the machine. Ideally, cold air should be directed to create a "blanket" all across the ceiling area allowing natural convection to drop the air over the whole area at very low velocity.

4) SITING

PAC 4500AX / PAC 6500AX / ET 4500AX ROOM UNIT Ideally, the room unit should be positioned equidistant along the shortest wall in the room blowing down the length of the room. If there is more than one unit in the same area then they would normally be positioned side by side, and equidistant along the long wall all pointing in the same direction. Sometimes it may be necessary to position units around the perimeter of an area but, in this case, great care should be taken to avoid one unit blowing cold air straight into another which will adversely affect the machine operation. Good and correct air flow is, perhaps, the single most important aspect of satisfactorily applying portable air conditioners. If in



Use the fan speed control switch to alter the air-flow, press the 'FAN SPEED' switch to either low (I), medium (II) or high (III) fan speed.

If chilled air is required, first press the red 'COOLING ON' switch & then turn the thermostat knob FULLY ANTI - CLOCKWISE.

NOTE: if the thermostat knob is turned clockwise, the operator is asking the machine NOT to commence cooling until the ambient temperature rises to that point. Fully clockwise the unit will not start to cool until the sensed room temperature reaches approximately 30°C, however we do not recommend operating the unit above 35°C.

Do not force the knob past the stop point, you will damage the switchgear.

The unit is fitted with a time-delay device, which will prevent the compressor from starting for approximately 4 minutes.

The unit will now be running, allow a minimum of 10 minutes for it to begin cooling.

If chilled air needs to be directed to a particular area, adjust the grill louvre blades on the front of the unit.

Once the desired room temperature has been reached, gradually turn the thermostat control knob clockwise until you hear a 'click'. The unit will now only emit chilled air when the room temperature rises beyond the 'set-point' you have selected via the thermostat knob.

If the red 'Fault' light illuminates, switch the unit OFF & isolate it from its power supply. Check the technical notes document to establish the reason & rectification of the fault.

EVERY HOUR, COOLING MAY SWITCH FOR A SHORT PERIOD (~ 1 MINUTE) TO DEFROST OF THE CONDENSOR. WARM/LUKEWARM AIR IS THEN BRIEFLY BLOWN OVER THE CONDENSOR.

EQUIPMENT CARE

Never use an air conditioner except for its intended purpose.

Keep the equipment clean & especially the coil faces. Blow out the coils with compressed air.

Where fitted, regularly check the water drain tank (every 3-4 hours). On the control panel is a red light marked 'PLEASE EMPTY TANK WHEN LIT', which will illuminate when the tank is full.

The unit will also turn itself off, however please note: switch the 'FANS ON' & 'COOLING ON' switches to OFF (non-illuminated) by depressing them in turn.

Before removing the tank, leave the unit for at least 5 minutes to allow any accumulated moisture to drain down into the tank. Removing the tank without doing this first, WILL cause water to drain into the machines' base, where it will leak out onto the floor, appearing as though the machine has a fault.

MCWS250, ISSUE 1, MARCH 2008

-Page 4 of 4 -

Following this simple instruction will prevent carpet/general flooring water staining.

To empty, go to the rear of the unit, carefully grasp the front edge of the tank, lift it over the lip & slide it gently toward you, grabbing the short stubby handle as the tank starts to emerge from its recess. With one hand under the front of the tank & the other holding the handle, carefully lift the tank out completely, empty then replace.

Ensure the tank is fitted with the sticker 'THIS WAY OUT' pointing outwards from the machine.

The unit can then be switched on via the 'FANS ON' & 'COOLING ON' switches.

Fitting the tank incorrectly will cause the water to NOT be collected & therefore the unit will appear to be leaking. If you are unsure, contact your supplier & quote the serial number of the unit.

Never remove the tank with the machine operating!

Always check the tank is empty, prior to switching on the unit.

STORAGE

Switch the unit OFF and unplug from its power supply, then empty the water tank.

GENERAL SAFETY

Never place anything on top of the indoor or outdoor units and never obstruct their air vents.

Leave a 300 mm gap all round the unit to let the air circulate.

Always switch OFF and unplug the equipment when not in use.

Always transport, store and operate this equipment in an upright position. **DO NOT LAY UNITS DOWN!**

ELECTRICAL SAFETY

This air conditioner plugs into a standard 230V 13 amp power supply. The plug is fitted with a standard 13 amp fuse.

Extension leads should be correctly rated for the inductive load, fully unwound, loosely coiled and never run through water or over sharp edges.

To reduce the risk of electric shock, use a suitable RCD (residual current device).

Never pull the equipment by its flex or umbilical.

Ensure both the machine and power sockets are switched OFF, before plugging into the power supply.

SET UP & OPERATION

The unit works properly up to 35°C. The fans will, continually operate for venting use.

If the temperature in the room is above 35°C, then open all the doors/windows and operate the fan only, to circulate the air to reduce the temperature.

When setting up or restarting, allow the unit to stand/settle for 15 minutes before switching on.

Set the unit up on a firm, level surface and do not site the unit close to any surface sensitive to heat, cold or moisture.

Apply the swivel castor brakes (where fitted).

The outdoor unit can be situated up to a maximum of 35m away from the indoor unit, dependant on the number of additional 5m lengths of umbilical attached to the standard 5m length supplied. Do not exceed 35m overall.

However, do not exceed the maximum rise (or fall) of 4.6m.

The umbilical assembly contains 4 main connections, a power supply lead, a condensation tube & 2 water pipes.

The connection is the same for both the indoor & outdoor units, except that the connectors are male/female & set in such a way that the umbilical assembly can only be used in one direction. Observation of the following point regarding the electrical lead will make the above issue clearer.

The electrical lead has a male fitting on one end & a female fitting on the other. The male should be attached to the indoor unit & the female fitting to the outdoor unit. Never operate the unit if the umbilical hose(s) is severely kinked or punctured.

The water pipes are fitted with a simple quick-release coupling. To attach the water pipes, pull back the couplings outer sleeve, push the male into the female fitting, and then let the sleeve snap back into place.

To disconnect the water pipes, simply reverse the fitting instruction. It is possible for a few drops of water to escape when completing this procedure.

Site the outdoor unit in a convenient position outside of the room to be cooled. Please note the following, if the unit has been ordered with the optional automatic condensate pump. The removed moisture will be ejected via the clear tubing within the umbilical (so it will need to be connected at both indoor & outdoor units via the push-fit connections) out to the outdoor unit where it will appear to 'leak' out from below. Careful siting with this configuration is important to avoid floor-covering damage for example.

The outdoor unit must be kept upright with the fan motor assembly facing towards the building, this way the hot air is directed away from the building.

With the indoor unit switched OFF & isolated from its power supply, make all the connections from the umbilical assembly.

All that remains is to plug the indoor unit into its power supply & switch the supply ON.

NOTE – FOR MODELS FITTED WITH INTEGRAL CONDENSATE COLLECTION CONTAINER.

Ensure the water drain tank is correctly fitted and is empty, then plug the unit into its power supply and switch the supply ON.

Ensuring the red 'POWER ON' light is on; press the red 'FANS ON' switch to start the fans.

The outdoor units' fan will start to operate ONLY when cooling is selected.