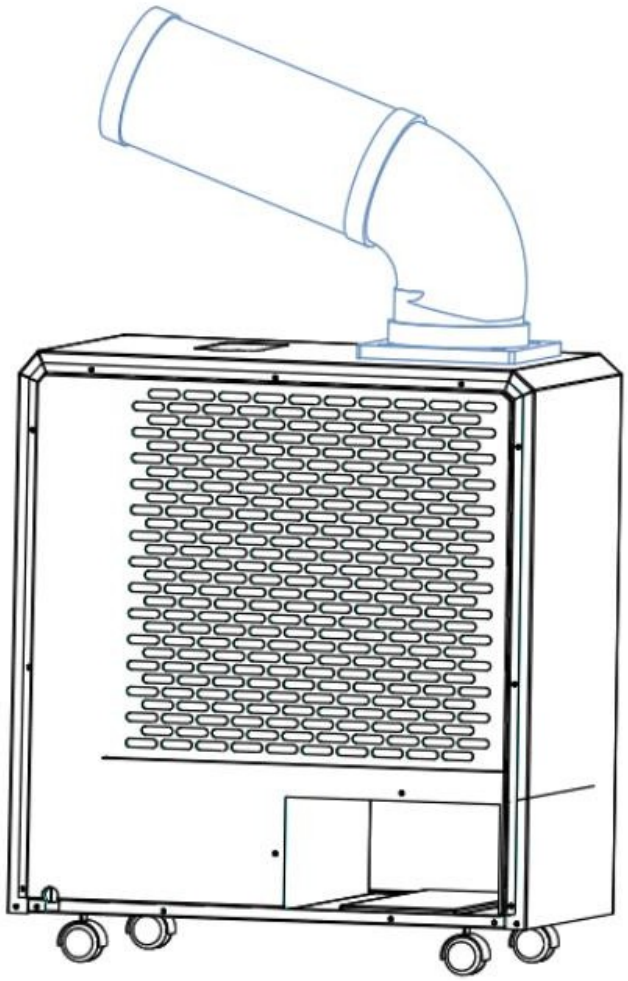
Pro-Tech TOOLS

Pro-Tech TOOLS 1550W Industrial Portable Air Conditioner



User manual

Translation of the original manual

1. Safety symbols and safety precautions

Meaning and identification of relevant symbols.

Please read the safety signs and safety instructions carefully before use.

The items listed in the following columns may, depending on the circumstances, lead to serious

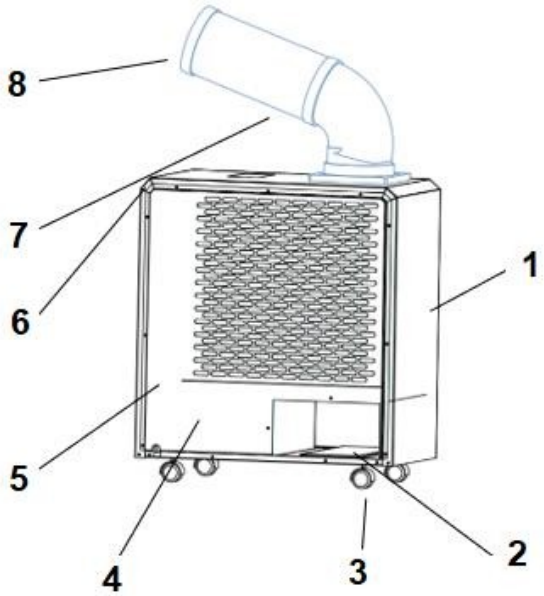
consequences. All entries are important. Read them carefully and follow them.

	Never use air conditioning units in areas where volatile substances are used or stored (volatile liquids such as thinners, petrol, paraffin, liquefied gas, volatile dust and vapours, e.g. of magnesium, aluminium, lead, etc.). There is a risk of fire, explosion and burns.
	Do not modify or use the appliance in any way that could cause damage to the appliance, or even a fire or other hazards.
	With the exception of professional service personnel, no one else is permitted to dismantle or assemble the device, in order to prevent fire, electric shock, injury and other safety incidents. If repairs are required, please contact a service centre.
	Do not use the device in locations exposed to rain or snow, and do not use it with wet hands.
	Use a 220 V ~ 50 Hz power supply. If a power supply other than 220 V ~ 50 Hz is used, the device will be damaged and safety incidents may occur.
	Use a separate socket with a rated current of 16 A. Using the socket in conjunction with other appliances may lead to malfunctions.
	The electrical installation must be carried out by qualified professionals in accordance with the relevant standards for equipment and wiring; failure to do so may result in safety hazards.
	To prevent the appliance from becoming deformed, keep it away from heat sources.
	Ensure a safe and reliable earth connection and use a residual current device (RCD).
	Use the equipment within the specified temperature range of 16 ℃ to 45 ℃; otherwise, the equipment may malfunction.
	Do not move the air conditioner whilst it is in operation, and ensure the castor brake is locked in place.
	If any unusual phenomena occur during use (stopping of rotation, unusual noise, unusual vibrations, unusual odours), stop using the unit immediately.
	To prevent accidents and injuries, the air conditioner must not be used in the following locations: • Vibrating surfaces • Sloping floors • Stairs, emergency exits, entrances to homes, etc. • Places where unstable objects are piled up • Places with strong winds and humidity, places with dust and metal dust in the air
	When unplugging the power plug, hold the plug itself and pull it out, rather than pulling directly on the power cable. Otherwise, this may damage the plug, cause sparks, or lead to dangerous accidents.
	If you are not using the machine for a long period of time, unplug the power cable from the socket.
	To prevent electric shock, unplug the power cable from the socket during installation and maintenance.

	Wipe dust from the power plug regularly with a dry cleaning cloth. If there is dust or moisture on the plug, this may lead to poor contact or an electrical leak, which could cause safety accidents.
	Do not bend, pull, twist, pinch, modify or overload the power cable. Failure to do so may result in fire, electric shock or other accidents.
	Do not use the device as an air conditioner on boats, vehicles, etc. Doing so may result in safety incidents.
	Do not put your fingers or hands into the outlet.

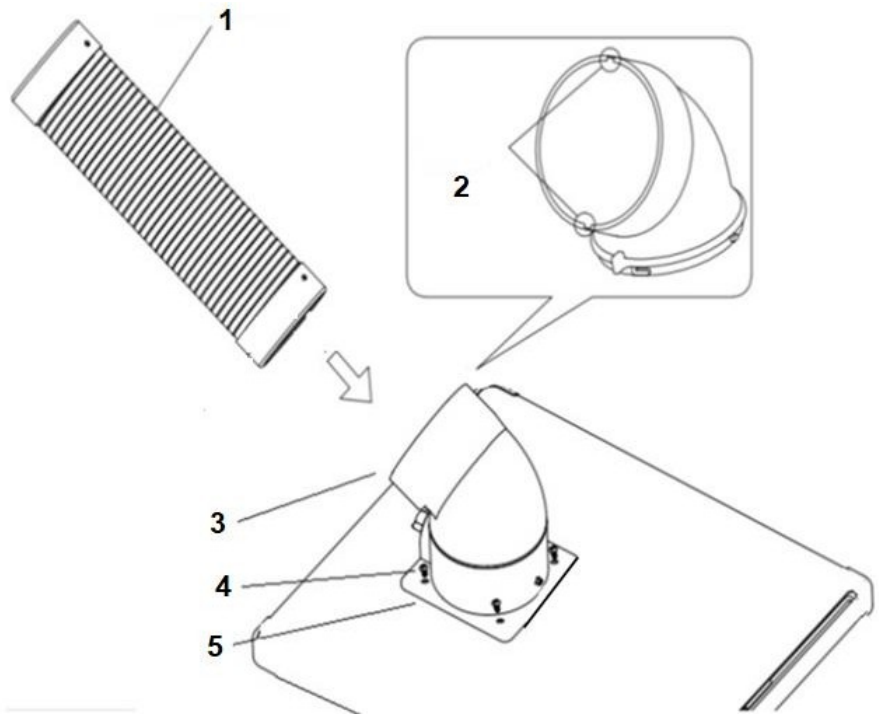
2. Technical specifications
Model: BC-20A
Power: 850 W
Cooling capacity: 1550 W
Voltage/frequency: 220–240 V/50 Hz Refrigerant:
R290
Refrigerant capacity: 450 g
Protection class: IPX0

3. Product design



1. Handle
2. Water tank
3. Wheels
4. Front tyre
5. Filter
6. Display
7. Cold air duct
8. Cold air intake

5. Installation method
1. How to install the elbow: remove the 4 screws from the top cover, align the elbow with the 4 holes in the top cover and twist it into place (Fig. 1)
2. How to install the cold air intake duct: align the convex part of one end of the cold air intake duct with the concave part of the elbow opening and push it in, then turn it to the left (Fig. 1).



1. Cold air duct
2. Recess
3. Elbow
4. Screw
5. Elbow with sleeve

(Fig. 1)

3. Replacing the power cable

Warning: If the power cable is damaged, to avoid danger, it must be replaced by the manufacturer, its service department, or specialists from similar departments.

Ensure that heat is dissipated smoothly.

Do not throw any foreign objects into the exhaust air. The external outlet for the exhaust heat must be fitted with a device to prevent rainwater from flowing back.

6. Operation



There are a total of 6 buttons on the control panel: the on/off button, the ventilation button, the temperature decrease (time) button, the temperature increase (time) button, the fan speed button and the timer button. Each press is considered a valid operation

1. On/Off button: used to set whether the air conditioner is running or switched off.

Pressing this button when the air conditioning is off will switch it on and start it running. Pressing this button whilst the air conditioning is running will switch it to standby mode, displaying two standby indicators.

2. FAN button:

Pressing the fan button does not switch on the compressor; the fan speed can be adjusted and the timer function can be used

3. Up and down buttons: these are used to set the room temperature and the timer.

When setting the temperature, press the increase (decrease) button each time you wish to increase (decrease) the set temperature by 1 ℃. When the LED is displaying the ambient temperature, press this button once to switch to the set temperature display (flashing). Then press the increase (decrease) button each time to set an increase (decrease) of 1 ℃; after 3 seconds, the LED will return to displaying the ambient temperature

In time setting mode, each press of the time increase (decrease) button increases (decreases) the time by 1 hour, and the time is set in a 0–24-hour cycle. After 3 seconds of the set time running, the device automatically switches to timer mode; if the current setting is 0 hours, timer mode automatically ends 3 seconds after the set time has elapsed.

4. Speed button:

Press this button once to switch to high gear, press it again to switch to low gear; toggle between them, and the illuminated light will indicate the wind speed

5. Timer function: (The timer duration is 24 hours)

(1) When switched on, press the timer button to select the timer function to set the timed switch-off. Press the increase (decrease) button to set the timed switch-off time; press the button again before the set time to cancel the scheduled switch-off. If the user manually switches off the device during the scheduled switch-off period, the scheduled switch-off will be cancelled.

(2) Press the timer button to select the sleep timer function, which is used to set the start time. Press the increase (decrease) button to set the start time; if you wish to cancel the scheduled start, press the button again before setting the scheduled time. If the user switches the appliance on manually during the scheduled start time, the scheduled start will be cancelled;
(3) When the timer is switched on or off, the timer indicator light illuminates and normally remains lit for 3 seconds after the timer setting is complete;

Timed shutdown: when the set time has elapsed, the entire unit will stop. After the internal fan has run for 10 seconds, the entire unit will stop without any display;
Once you have completed the above settings for the timer on/off function, press this button to display the remaining time at that moment. After 3 seconds, the ambient temperature display will return. How the remaining time is displayed when it is less than 1 hour: for example, 0.4 is displayed for less than 50 minutes, and 0.0 is displayed for less than 10 minutes.

Defrosting conditions in cooling mode:
When operating in cooling conditions without defrosting based on ambient temperature, the compressor runs for a total of 20 minutes. If the coil temperature reaches 1 degree and is continuously detected for 10 seconds, or remains at 1 degree, the defrosting conditions are met. When During defrosting, the defrost indicator light will come on and the compressor will not operate. The fan speed is set to high. After 5 minutes of operation at high speed, the compressor will start and run according to the current settings. If a temperature fault occurs in the coil, the machine will run for a total of 20 minutes and defrost once.

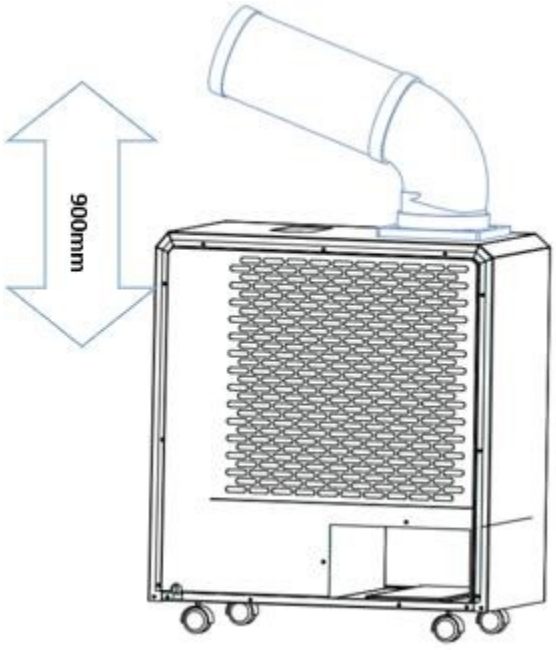
Overfill protection:
Upon detection of water overflow, the water overflow protection mode is activated for 3 seconds; 'FU' appears on the display and the buzzer sounds 10 times. If the compressor is running, it will switch off and the fan will switch off with a 10-second delay
Note: When the overload protection device is activated, the machine blows only natural air and does not cool. If the thermal overload protection is triggered frequently, check and rectify the cause before using the machine.

Adjustment range and operation of the air outlet direction
The cold air duct can be rotated left and right within a range of 360 degrees (with the warm air duct installed). The cold air duct can be moved up and down within a range of 150 degrees.
NOTE: Before use, adjust the air outlet direction of the cold air duct and the warm air duct. When adjusting the air outlet angle of the cold air duct, hold the bent pipe during adjustment and do not hold the cold air duct directly.
Do not move the appliance when it is filled with water. Drain any accumulated water before moving the appliance.

7. Requirements for the location where the appliance is used
Users are specifically advised:
When using the appliance, the filter grille and cooling air duct must be positioned at least 30 cm away from walls or other obstacles, and the heat exhaust duct must be positioned at least 90 cm away from the roof or obstacles.

- The machine should be placed on a level surface. It must not be used on slopes, uneven floors, at house entrances and exits, etc., to prevent safety accidents.
- It is prohibited to use it in the rain, snow or other damp locations to prevent safety accidents.

Note: Do not place any obstacles in front of the filter grille, the cold air outlet, or the hot air outlet. Do not direct the hot air discharged from the hot air outlet towards objects with low heat resistance.



8. Maintenance and inspection

- Clean the filter screen regularly. For example, dust and dirt accumulated on the filter screen will affect the air intake volume, which may cause frost to form on the heat exchanger and lead to machine failure.
- To clean the filter, use a vacuum cleaner to remove dust from the filter, then wash it with water and only use it once it is completely dry.

Note: When cleaning the surface of the appliance, do not use thinners, essential oils or other substances that may damage the surface.

- Check that the power cable is not damaged. If it is damaged, replace it immediately.
- Check that the screws are not loose and tighten them if necessary.
- Before storing the machine for an extended period, empty any accumulated water from the water tank and only store the machine once it has dried out.
- Do not store the machine in a horizontal position or upside down.
- Keep the machine out of the reach of children. Staff should avoid placing the machine in areas with high temperatures, exposed to rain or direct sunlight.

Note: When carrying out maintenance or inspections, remember to unplug the power cable from the socket before replacing any parts. Remember to unplug the power cable when storing the device.

9. Causes of faults and measures

1. If the air cooler malfunctions, switch off the power immediately, unplug the power cable from the socket and check the following items:

Fault symptom	Cause analysis	Remedy
Not working	Check that the power cable is not loose or has come out	Plug the power connector firmly into the socket
	Check that the air circulation is switched on	Turn the switch on
	The circuit board is loose or damaged	Ask a qualified technician to replace or repair it
Not cooling	Dirty and clogged heat exchanger surface	Clean the heat exchanger surface to ensure ventilation and heat dissipation
	Faulty hot air extractor	Repair and replace the extractor fan
	The outdoor environment is too warm	Select a suitable location for use
	Damaged compressor capacity	Replace the compressor condenser
	The cooling system piping is blocked	Replace the piping system
	The input voltage is too high or too low	Please select the correct voltage
	Compressor overload and overheating protection	Restart after cooling down
	Compressor and motor fault	Ask qualified personnel to repair and replace the compressor and motor
Water leak	The drain pipe opening is blocked	Clean the drain pipe
	Damaged compressor foam seal	Ask a professional to replace the foam
	The filter screen is heavily soiled with dust and dirt	Clean the filter screen
	The machine is tilted	Level the machine