

USER MANUAL

Portable Tent Air Conditioner

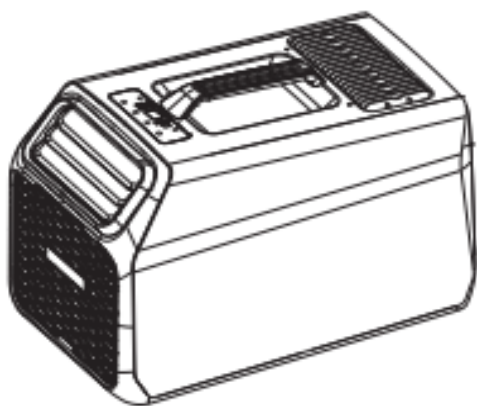


Table of Contents

PARTS ILLUSTRATION..... 01

PACKAGE CONTENTS..... 02

POWER SUPPLY..... 03

INSTALLATION GUIDE..... 04

FUNCTION OVERVIEW..... 06

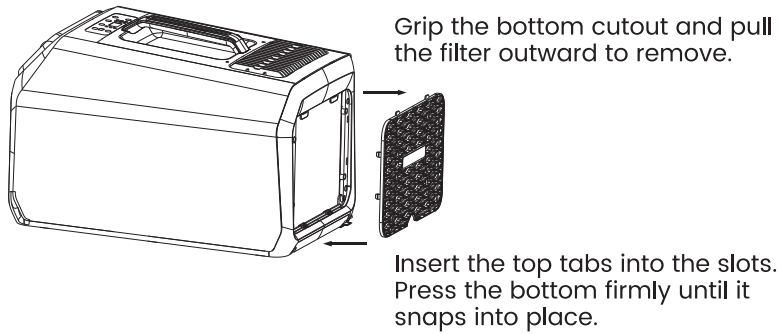
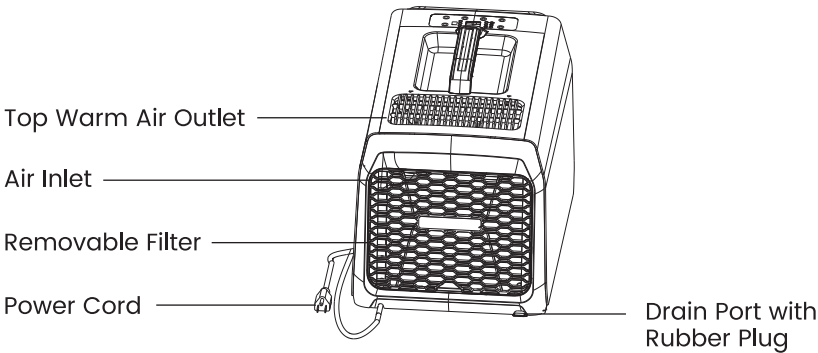
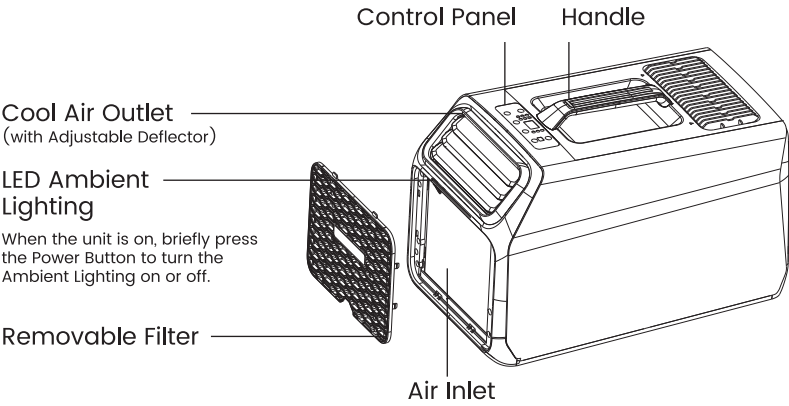
OPERATION INSTRUCTIONS..... 08

MAINTENANCE & CLEANING..... 10

GENERAL SAFETY INSTRUCTIONS..... 11

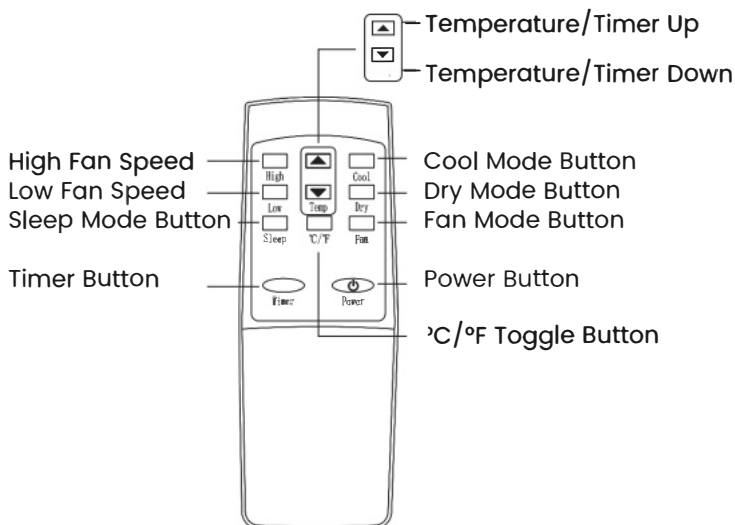
SPECIFICATIONS..... 21

PARTS ILLUSTRATION



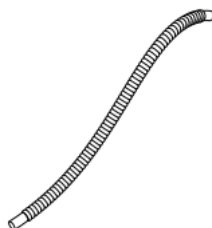
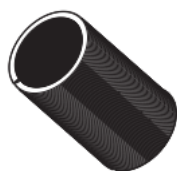
PARTS ILLUSTRATION

Remote Control



PACKAGE CONTENTS

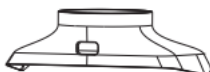
The package of this portable air conditioner contains the following items:



1 x Portable Tent Air Conditioner

2 x Extendable Exhaust Hoses
(larger hose for cool outlet and
smaller hose for warm air outlet)

1 x Drain Hose



1 x Top Duct Adapter
(for Warm Air Outlet)

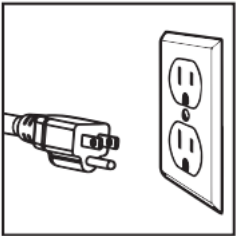
1 x Side Duct Adapter
(for Cool Air Outlet)

1 x Remote Control
(Powered by AAA batteries,
NOT included)

POWER SUPPLY

The power requirements of the portable air conditioner are 110V/220V AC . It' s equipped with a built-in power connector to plug directly into a standard 110V / 220V AC outlet.

	Standard Household Outlets: •Standard 110V / 220 V AC power •Three-prong outlet		Campsite Power Hookups: •Standard 110V / 220 V AC power •4A max. input current
	Portable Power Stations: •110V / 220 V AC output •Minimum 400W power (Surge 1600V)		Solar Power Kit with Generator & Power Station: •110V / 220 V AC output •Minimum 400W power (Surge 1600W)



Note: ONLY use the provided original AC power plug to connect the air conditioner to power. It is forbidden to extend the power cord on your own.

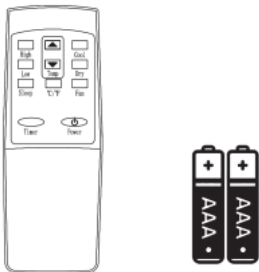
In the event of a damaged power plug, please contact the manufacturer for assistance.

Plug it into household grounded outlets if you have access to the power grid. If you are away from a wall outlet, the portable tent air conditioner can be powered by a portable power station, a solar panel charger, or a portable fuel generator for outdoor usage.

NOTE: The aforementioned power station, solar panel charger, and portable fuel generator are NOT included in this package.

Power Supply for Remote Control

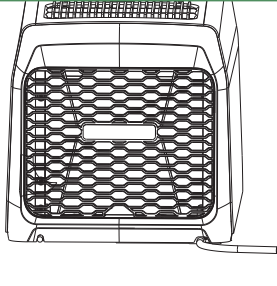
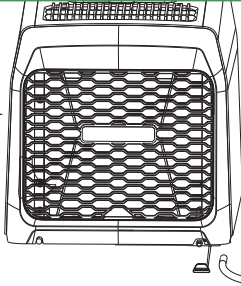
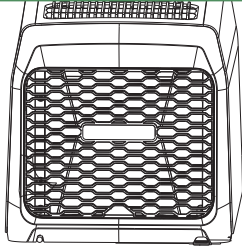
The remote control requires two AAA batteries (not included)



INSTALLATION GUIDE

Hose Connection

The portable air conditioner can operate without a drain hose. However, when the display shows the “FL” error or the “ ” indicator, follow the steps below to connect the included drain hose.



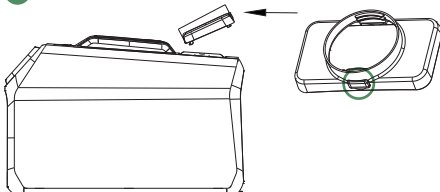
Step One: Locate the drain port on the AC unit.

Step Two: Remove the drain plug.

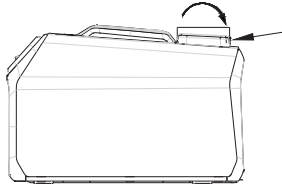
Step Three: Insert the drain hose into the drain port.

Quick Setup: Placed inside a Tent

1



- Locate the **top warm air outlet**.
- Press and hold the spring latch on the matching duct connector.



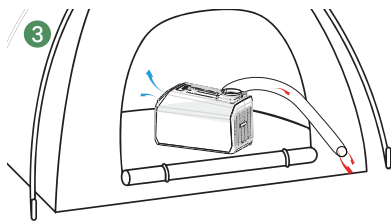
- While holding the latch, align the connector with the outlet and push it into place.
- Release the latch to lock the connector.

2



Align the matching exhaust hose with the duct connector, then rotate it counter-clockwise until it is securely attached.

INSTALLATION GUIDE

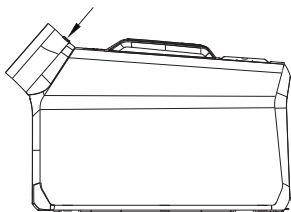
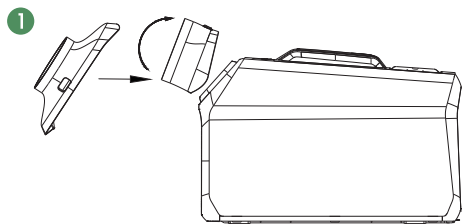


- Place the AC unit inside a tent.
- Extend the exhaust hose and direct it outside the tent through a suitable opening or flap.

Quick Setup: Placed outside a Tent

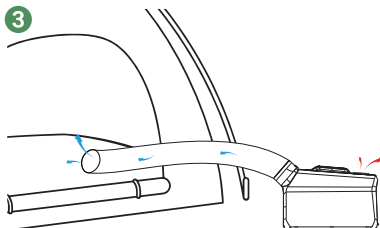
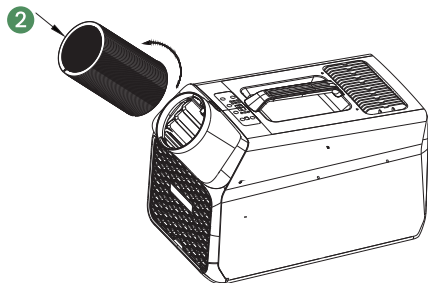
Tips: Lift the air outlet flap (deflector) before attaching the duct adapter.

- Locate the side cool air outlet.
- Press and hold the spring latch on the matching duct connector.



- While holding the latch, align the connector with the outlet and push it into place.
- Release the latch to lock the connector.

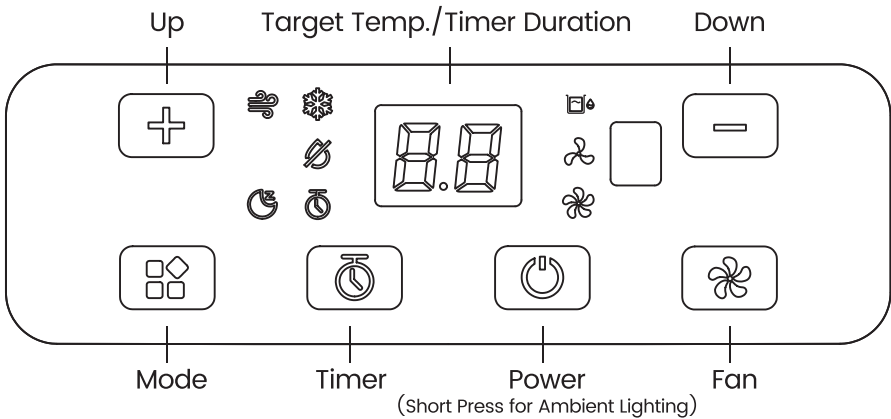
Align the matching exhaust hose with the duct connector, then rotate it counterclockwise until it is securely



- Place the AC unit outside a tent.
- Extend the exhaust hose and direct it into the tent through a suitable opening or flap.

FUNCTION OVERVIEW

Control Panel Illustration



Note:

Press and hold the [Power] button for 3 seconds to turn on the AC unit.

Indicator Explanation

Symbol	Meaning	Symbol	Meaning
	Cool Mode		Dry Mode
	Sleep Mode		Fan Mode
	Low Fan Speed		High Fan Speed
	Full Water Signal (Connect the drain hose immediately.)		
	Timer Symbol	Illuminated: A timer has been set. Flicker: Timer setting needs to be confirmed.	

Features

Celsius to Fahrenheit Conversion

Default temperature unit: Celsius. Press and hold the [+/-] and [=] buttons simultaneously, then release to switch to Fahrenheit.

FUNCTION OVERVIEW

Anti-Freeze Protection

To prevent freezing, this portable air conditioner detects when the evaporator coil temperature is too low and adjusts compressor operation or fan speed to prevent ice buildup.

Power-off Memory Function

In the event of a power failure or if the unit is turned off during operation, it will retain the current settings and resume when powered on again, except for the timer and the Sleep Mode setting, which must be reset.

Note: If the AC unit is manually turned off to standby mode or switched off by a timer before power is disconnected, it will remain in standby mode when power is restored.

3-Minute Delay Compressor Protection

In the event of frequent power cycling, a 3-minute protection mechanism is activated, imposing a delay before the compressor restarts. If the unit is already in standby mode before power is turned off, the 3-minute compressor protection will not be triggered.

Error Code Explanation

Error Code	Possible Cause	Recommended Actions
E0 Communication Error:	Loose connection between the display circuit board and driver board.	Contact the manufacturer or a professional technician for assistance.
E1 Coil Temperature Sensor Error	Loose sensor connection	Contact qualified maintenance personnel for inspection and repair.
	Damaged sensor	Contact qualified service personnel for repair.
E2 Space Temperature Sensor Error	Loose sensor connection	Contact qualified maintenance personnel for inspection and repair.
	Damaged sensor	Contact qualified service personnel for repair.
FL Full Tank	Full water collection tray.	Connect a drain hose to the portable AC unit and manually drain the water.

OPERATION INSTRUCTIONS

Power On/Off

After plugging in the unit, press and hold the Power button to turn the AC unit on or off.

When the unit is on, short-press the Power button to turn the LED ambient lighting on or off.

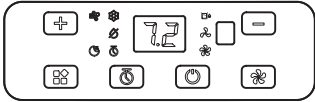
Mode Selection

Press the  button to cycle through the three modes: Cool, Dry, and Fan modes. To enter Sleep Mode, ensure the unit is set to **Cool Mode**, then press and hold the **Timer** and **Down** buttons simultaneously.

Mode	Cool	Dry	Fan	Sleep
Symbol				
Application Scenario	Cool down your space in summer	Dehumidify your space on humid days	Works as a fan to dry your clothes	Enjoy a cool night's sleep efficiently
Temperature	16-30°C/61-86°F Adjustable	Not Adjustable	Not Adjustable	16-30°C/61-86°F Adjustable
Fan Speed	High, Low Defaults to High	Not Adjustable Defaults to Low	High, Low Defaults to High	Not Adjustable Defaults to Low
Timer	Applicable	Applicable	Applicable	Applicable

Temperature Setting

In Cool and Sleep modes, the target temperature can be set between 16°C (61°F) and 30°C (86°F). Press the  or  button to adjust the temperature in 1°C (1°F) increments.



The diagram shows a control panel with a central digital display showing '72'. To the left of the display are buttons for temperature adjustment: an up arrow, a fan icon, a snowflake icon, a water drop icon, and a down arrow. To the right of the display are buttons for mode selection: a fan icon, a snowflake icon, a water drop icon, and a moon/star icon. Below the display are four buttons: a fan icon, a snowflake icon, a water drop icon, and a moon/star icon.

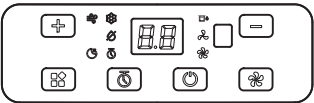
The air conditioner supports Celsius (°C) to Fahrenheit (°F) conversion. To switch between units, press and hold the  and  buttons on the unit simultaneously, then release them.

Note: Temperature adjustment is not available in Fan and Dry Modes. The display will show space temperature instead of target temperature setting.

OPERATION INSTRUCTIONS

Fan Speed Adjustment

The fan speed can be adjusted between High and Low in Cool and Fan Modes. Press the [🌀] button to select the desired airflow speed. Each speed level is indicated by its corresponding symbol on the display.



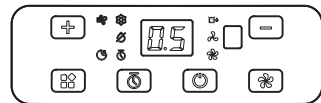
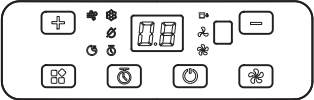
Timer Setting

The 24-hour timer function allows you to run the air conditioner for your desired period of time, making operation more convenient.

Programmed Start-up: While the AC is in standby mode, it can be programmed to commence operation at specified times.

Programmed Shut-down: During AC operation in any mode, it can be scheduled to automatically turn off and enter standby mode when the timer reaches its endpoint.

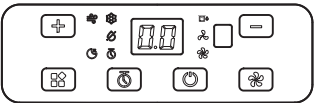
Press the [🕒] button, and the timer length will flash on the display (After 5s of inactivity, the timer setting will auto exit).



Adjust the timer from 1 to 24 hours using the [⏏] or [⏏] buttons. The setting increases in 0.5-hour increments up to 1 hour, then in 1-hour increments thereafter. The selected number will flash five times before auto exiting the timer setting.

To cancel the timer, press the Timer button twice consecutively. The Timer icon will turn off.

When the timer ends, the unit will automatically stop operating and enter standby mode.



MAINTENANCE & CLEANING

It's advisable to clean the air conditioner surface and its filter regularly to keep it in good condition and ensure efficient operation. However, remember to unplug the portable air conditioner before cleaning it.

Exterior Cleaning

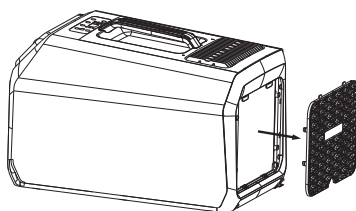
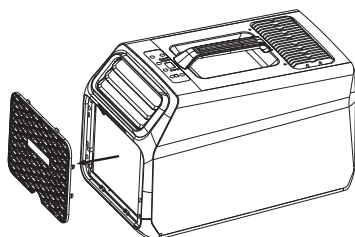
Use a soft, damp cloth to wipe clean the dust buildup on the surface of the AC unit. Neutral detergents are acceptable for cleaning, but avoid abrasive cleaners or harsh chemicals as they may damage the finish.

Pay special attention to the air inlets and outlets to remove any dust or debris buildup that could obstruct airflow.

Filter Cleaning

Filters in both sides of the air inlets can be removed for easy cleaning.

1. Place the AC unit on a table for easy handling without tilting the device.
2. Grip the bottom cutout and pull the filter outward to remove.
3. Soak the filter in warm water (around 40°C) mixed with a neutral detergent.
4. Brush off dust and debris from the filter and rinse it thoroughly.
5. Allow the filter to air dry completely after wiping it with a clean cloth. Avoid drying it under direct sunlight to prevent deformation.
6. Once dry, insert the top tabs into the slots. Press the bottom firmly until it snaps into place.



GENERAL SAFETY INSTRUCTIONS

Placement and Setup	Device Operation	User Safety	Servicing and Repair	Cleaning & Storage	Disposal & Recycling
The portable tent air conditioner is designed for small to mid-sized confined spaces, including small rooms, RVs, camping tents, fishing tents, emergencies, and tented weddings. Usage outside of these contexts is not recommended. Set it on solid and even ground to prevent vibration and movement during operation. Use only the parts and accessories included in the package for installation. Do not connect the power cord to an extension cable. Verify that the air conditioner's voltage matches your electrical supply and plug it into grounded outlets. You can also power the air conditioner using a portable power station, a solar panel charger, or a portable fuel generator (Minimal Power: 400W). Avoid installing the air conditioner in a humid environment to prevent circuit shortages.					
Placement and Setup	Device Operation	User Safety	Servicing and Repair	Cleaning & Storage	Disposal & Recycling
Keep doors and windows closed for optimal temperature control efficiency. Avoid sitting, standing, spraying water, or placing heavy objects on the device. Keep it away from heat-generating devices, including stoves, electric kettles, etc. Ensure the the air inlets/outlets of the air conditioner are kept clear of objects. Do not cover them with clothes or other items for drying purposes. No pesticide sprays or flammable liquids and gases are allowed near the device.					
Placement and Setup	Device Operation	User Safety	Servicing and Repair	Cleaning & Storage	Disposal & Recycling
Be sure to unplug the air conditioner during outdoor camping in thunderstorms. Put the power cable away to prevent tripping hazards. Do not insert fingers, rods, or other thin objects into the air inlet and outlet, as doing so may pose a risk of product damage and personal injury. Children aged 8 and above, as well as individuals with reduced physical, sensory, or mental capabilities, should only operate the device under supervision. Children under the age of 8 should not tamper with the portable air conditioner. This portable air conditioner is not waterproof. To prevent the risk of electrical shock, do not use the unit in rainy conditions or place it on wet surfaces.					

GENERAL SAFETY INSTRUCTIONS

Placement and Setup	Device Operation	User Safety	Servicing and Repair	Cleaning & Storage	Disposal & Recycling
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Immediately stop and unplug the device at any indication of malfunction or damage.

For damaged cords, contact the manufacturer or certified technicians for replacement. Servicing or dismantling of the device without certification may pose safety hazards.

It is strictly prohibited to dismantle and modify the device without professional certification. Such actions may lead to safety hazards and void the warranty.

Placement and Setup	Device Operation	User Safety	Servicing and Repair	Cleaning & Storage	Disposal & Recycling
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Be sure to unplug the air conditioner first before cleaning, packing, or servicing the device.

Use soft, damp cloth and neutral detergent to clean the air conditioner. Alcohol, gasoline, benzene, and other chemical solvents are strictly prohibited for cleaning purposes.

If the air conditioner is not going to be used for an extended period, please remember to unplug it and store it properly in a well-ventilated place.

Placement and Setup	Device Operation	User Safety	Servicing and Repair	Cleaning & Storage	Disposal & Recycling
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The air conditioner contains flammable refrigerant R290. Please dispose of the device properly in accordance with local regulations regarding the safe disposal of refrigeration and air-conditioning equipment.

If the air conditioner is beyond repair, please separate it from other solid waste and reach out to the local recycling center to safely reclaim and recycle refrigerants to prevent environmental damage.

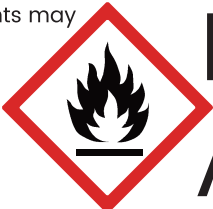
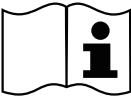
WARNING

DANGER—Risk of Fire or Explosion. Flammable Refrigerant Used. To Be Repaired Only By Trained Service Personnel. Do Not Puncture Refrigerant Tubing.

CAUTION—Risk of Fire or Explosion. Dispose of Properly In Accordance With Federal Or Local Regulations. Flammable Refrigerant Used.

WARNING – Risk Of Fire Or Explosion. The Appliance Shall Be Installed, Operated, and Stored in a Room with a Floor Area Larger Than 5 m² (54 Ft²).

Do not piece or burn. Be aware that refrigerants may not contain an odour.



R290
A3

GENERAL SAFETY INSTRUCTIONS

Transportation, marking and storage for units that employ flammable refrigerants

1. General

The following information is provided for units that employ FLAMMABLE REFRIGERANTS.

2. Transport of equipment containing flammable refrigerants

Attention is drawn to the fact that additional transportation regulations may exist with respect to equipment containing flammable gas. The maximum number of pieces of equipment or the configuration of the equipment permitted to be transported together will be determined by the applicable transport regulations.

3. Marking of equipment using signs

Signs for similar appliances used in a work area are generally addressed by local regulations and give the minimum requirements for the provision of safety and/or health signs for a work location. All required signs are to be maintained and employers should ensure that employees receive suitable and sufficient instruction and training on the meaning of appropriate safety signs and the actions that need to be taken in connection with these signs.

The effectiveness of signs should not be diminished by too many signs being placed together. Any pictograms used should be as simple as possible and contain only essential details.

4. Disposal of equipment using flammable refrigerants

See national regulations.

5. Storage of equipment/appliances

The storage of the appliance should be in accordance with the applicable regulations or instructions, whichever is more stringent.

6. Storage of packed (unsold) equipment

Storage package protection should be constructed in such a way that mechanical damage to the equipment inside the package will not cause a leak of the REFRIGERANT CHARGE. The maximum number of pieces of equipment permitted to be stored together will be determined by local regulations.

Requirements for operation, service and installation manuals of appliances using flammable refrigerants

Qualification of workers

The manual shall contain specific information about the required qualification of the working personnel for maintenance, service and repair operations. Every working procedure that affects safety means shall only be carried out by competent persons.

Examples for such working procedures are:

- breaking into the refrigerating circuit;
- opening of sealed components;

Competence of service personnel

1. General

Information of procedures additional to usual information for refrigerating appliance installation, repair, maintenance and decommission procedures is required when an appliance with FLAMMABLE REFRIGERANT is affected.

The training of these procedures is carried out by national training organisations or manufacturers that are accredited to teach the relevant national competency standards that may be set in legislation.

The achieved competence should be documented by a certificate.

GENERAL SAFETY INSTRUCTIONS

2. Information and training

- 2.1) The training should include the substance of the following.
- 2.2) Information about the explosion potential of FLAMMABLE REFRIGERANTS to show that flammables may be dangerous when handled without care.
- 2.3) Information about POTENTIAL IGNITION SOURCES, especially those that are not obvious, such as lighters, light switches, vacuum cleaners, electric heaters.
- 2.4) Information about the different safety concepts:
 - Unventilated-Safety of the appliance does not depend on ventilation of the housing.
 - Switching off the appliance or opening of the housing has no significant effect on the safety.
 - Nevertheless, it is possible that leaking refrigerant may accumulate inside the enclosure and flammable atmosphere will be released when the enclosure is opened.
 - Ventilated enclosure-Safety of the appliance depends on ventilation of the housing.
 - Switching off the appliance or opening of the enclosure has a significant effect on the safety.
 - Care should be taken to ensure sufficient ventilation before.
 - Ventilated room -Safety of the appliance depends on the ventilation of the room.
 - Switching off the appliance or opening of the housing has no significant effect on the safety.
 - The ventilation of the room shall not be switched off during repair procedures.
- 2.5) Information about refrigerant detectors:
 - Principle of function, including influences on the operation.
 - Procedures, how to repair, check or replace a refrigerant detector or parts of it in a safe way.
 - Procedures, how to disable a refrigerant detector in case of repair work on the refrigerant carrying parts.
- 2.6) Information about the concept of sealed components and sealed enclosures according to IEC60079-15:2010.
- 2.7) Information about the correct working procedures:
 - a) Commissioning
 - Ensure that the floor area is sufficient for the REFRIGERANT CHARGE or that the ventilation duct is assembled in a correct manner.
 - Connect the pipes and carry out a leak test before charging with refrigerant.
 - Check safety equipment before putting into service.
 - b) Maintenance
 - Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with FLAMMABLE REFRIGERANTS.
 - Ensure sufficient ventilation at the repair place.
 - Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
 - Discharge capacitors in a way that won't cause any spark. The standard procedure to short circuit the capacitor terminals usually creates sparks.
 - Reassemble sealed enclosures accurately. If seals are worn, replace them.
 - Check safety equipment before putting into service.
 - c) Repair
 - Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with FLAMMABLE REFRIGERANTS.
 - Ensure sufficient ventilation at the repair place.
 - Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.

GENERAL SAFETY INSTRUCTIONS

- Discharge capacitors in a way that won't cause any spark.
- When brazing is required, the following procedures shall be carried out in the right order:
Remove the refrigerant. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building.

--Evacuate the refrigerant circuit.

--Purge the refrigerant circuit with nitrogen for 5 min (not required for A2L REFRIGERANTS).

--Evacuate again (not required for A2L REFRIGERANTS).

--Remove parts to be replaced by cutting, not by flame.

--Purge the braze point with nitrogen during the brazing procedure.

--Carry out a leak test before charging with refrigerant.

- Reassemble sealed enclosures accurately. If seals are worn, replace them.

- Check safety equipment before putting into service.

d) Disposal

- Ensure sufficient ventilation at the working place.

- Remove the refrigerant. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building.

- When flammable refrigerants are used,

--evacuate the refrigerant circuit.

--purge the refrigerant circuit with oxygen free nitrogen.

--evacuate again. (not required for A2L refrigerants);

--cut out the compressor and drain the oil.

Information on servicing

1. General

The manual shall contain specific information for service personnel according.

2. Checks to the area

Prior to beginning work on systems containing FLAMMABLE REFRIGERANTS, safety checks are necessary to ensure that the risk of ignition is minimised.

For repair to the REFRIGERATING SYSTEM

3. Work procedure

Work shall be undertaken under a controlled procedure so as to minimise the risk of a flammable gas or vapour being present while the work is being performed.

4. General work area

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided.

5. Checking for presence of refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially toxic or flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with all applicable refrigerants, i. e. non-sparking, adequately sealed or intrinsically safe.

GENERAL SAFETY INSTRUCTIONS

6. Presence of fire extinguisher

If any hot work is to be conducted on the refrigerating equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO₂ fire extinguisher adjacent to the charging area.

a) Commissioning

- Ensure that the floor area is sufficient for the REFRIGERANT CHARGE or that the ventilation duct is assembled in a correct manner.
- Connect the pipes and carry out a leak test before charging with refrigerant.
- Check safety equipment before putting into service.

b) Maintenance

- Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with FLAMMABLE REFRIGERANTS.
- Ensure sufficient ventilation at the repair place.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
- Discharge capacitors in a way that won't cause any spark. The standard procedure to short circuit the capacitor terminals usually creates sparks.
- Reassemble sealed enclosures accurately. If seals are worn, replace them.
- Check safety equipment before putting into service.

c) Repair

- Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with FLAMMABLE REFRIGERANTS.
- Ensure sufficient ventilation at the repair place.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
- Discharge capacitors in a way that won't cause any spark.
- When brazing is required, the following procedures shall be carried out in the following order:
 - Safely remove the refrigerant following local and national regulations. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building;

d) Decommissioning

- If the safety is affected when the equipment is putted out of service, the REFRIGERANT CHARGE shall be removed before decommissioning.
- Ensure sufficient ventilation at the equipment location.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
- Discharge capacitors in a way that won't cause any spark.
- Remove the refrigerant. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building.
- When FLAMMABLE REFRIGERANTS except A2L REFRIGERANTS are used,
 - Evacuate the refrigerant circuit.

GENERAL SAFETY INSTRUCTIONS

7. No ignition sources

No person carrying out work in relation to a REFRIGERATING SYSTEM which involves exposing any pipe work shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. "No Smoking" signs shall be displayed.

8. Ventilated area

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

9. Checks to the refrigerating equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer's technical department for assistance. The following checks shall be applied to installations using.

FLAMMABLE REFRIGERANTS:

- the actual REFRIGERANT CHARGE is in accordance with the room size within which the refrigerant containing parts are installed;
- the ventilation machinery and outlets are operating adequately and are not obstructed;
- if an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;
- marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
- refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

10. Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

Initial safety checks shall include:

- that capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
- that no live electrical components and wiring are exposed while charging, recovering or purging the system;
- that there is continuity of earth bonding.

GENERAL SAFETY INSTRUCTIONS

11. Repairs to sealed components

1) During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.

2) Sealed electrical components shall be replaced.

12. Repair to intrinsically safe components

Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use. Intrinsically safe components must be replaced.

Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

13. Cabling

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

14. Detection of flammable refrigerants

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used. The following leak detection methods are deemed acceptable for all refrigerant systems. Electronic leak detectors may be used to detect refrigerant leaks but, in the case of FLAMMABLE REFRIGERANTS, the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.)

Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.

Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25 % maximum) is confirmed.

Leak detection fluids are also suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.

If a leak is suspected, all naked flames shall be removed/extinguished.

If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Removal of refrigerant shall be according to Removal and evacuation.

15. Removal and evacuation

When breaking into the refrigerant circuit to make repairs -or for any other purpose- conventional procedures shall be used. However, for flammable refrigerants it is important that best practice be followed, since flammability is a consideration.

GENERAL SAFETY INSTRUCTIONS

The following procedure shall be adhered to:

- safely remove refrigerant following local and national regulations;
- purge the circuit with inert gas(optional for A2L);
- evacuate(optional for A2L);
- continuously flush or purge with inert gas when using flame to open circuit ; and
- open the circuit.

The refrigerant charge shall be recovered into the correct recovery cylinders if venting is not allowed by local and national codes. For appliances containing flammable refrigerants, the system shall be purged with oxygen-free nitrogen to render the appliance safe for flammable refrigerants. This process might need to be repeated several times. Compressed air or oxygen shall not be used for purging refrigerant systems. For appliances containing flammable refrigerants, refrigerants purging shall be achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum (optional for A2L). This process shall be repeated until no refrigerant is within the system (optional for A2L). When the final oxygen-free nitrogen charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.

The outlet for the vacuum pump shall not be close to any potential ignition sources, and ventilation shall be available.

16. Charging procedures

In addition to conventional charging procedures, the following requirements shall be followed.

- Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them.
- Cylinders shall be kept in an appropriate position according to the instructions.
- Ensure that the REFRIGERATING SYSTEM is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to overfill the REFRIGERATING SYSTEM. Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

17. Decommissioning

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant.

It is essential that electrical power is available before the task is commenced.

- a) Become familiar with the equipment and its operation.
- b) Isolate system electrically.
- c) Before attempting the procedure, ensure that:

GENERAL SAFETY INSTRUCTIONS

- Mechanical handling equipment is available, if required, for handling refrigerant cylinders;
- All personal protective equipment is available and being used correctly;
- The recovery process is supervised at all times by a competent person;
- Recovery equipment and cylinders conform to the appropriate standards.

d) Pump down refrigerant system, if possible.

e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.

f) Make sure that cylinder is situated on the scales before recovery takes place.

g) Start the recovery machine and operate in accordance with instructions.

h) Do not overfill cylinders (no more than 80 % volume liquid charge).

i) Do not exceed the maximum working pressure of the cylinder, even temporarily.

j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.

k) Recovered refrigerant shall not be charged into another REFRIGERATING SYSTEM unless it has been cleaned and checked.

18. Labelling

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. For appliances containing FLAMMABLE REFRIGERANTS, ensure that there are labels on the equipment stating the equipment contains FLAMMABLE REFRIGERANT.

19. Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely. When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i. e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of the flammable refrigerant. If in doubt, the manufacturer should be consulted. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition.

The recovered refrigerant shall be processed according to local legislation in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.

If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant.

The compressor body shall not be heated by an open flame or other ignition sources to accelerate this process. When oil is drained from a system, it shall be carried out safely.

SPECIFICATIONS

MODEL	Space Cool - C06/C11/C14/C18
POWER SUPPLY	110V/220V
COOLING CAPACITY	2500BTU/3500BTU/5000BTU/6000BTU
RATED POWER INPUT	380W/460W/550W/580W
RATED CURRENT	3.8A/5.5A/6.1A/6.6A
LOW-SIDE PRESSURE	280 psig
HIGH-SIDE PRESSURE	360 psig
FRONT MOTOR FLA	1.5A
REAR MOTOR FLA	2.0A
COMPRESSOR RLA/LRA	3.2A/10.0A; 4.6A/15.0A; 4.6A/15.0A; 5.0A/16.0A
REFRIGERANT/CHARGE	R290; 1.980z/2.120z/2.540z/2.800z

Note:

1. Recommended working temperature for the air conditioner: 41°F to 104°F. The device may experience malfunctions outside this range.

SPECIFICATIONS

Name and Content of Harmful Substances in the Product						
Part name	Hazardous Materials					
	lead (Pb)	merc ury (Hg)	cadm ium (Cd)	Hexavalent chromium (Cr (VI))	PBB (PBB)	Polybromodip henyl ether (PBDE)
Compressor and Accessories	X	O	X	O	O	O
Heat Exchanger	O	O	O	O	O	O
Pipe Parts and Valves	X	O	O	O	O	O
Refrigerant	O	O	O	O	O	O
Any Power -generating or Power-driven Machine	X	O	O	O	O	O
Control Box and Electrical Components	X	O	X	O	O	O
Power supply Cord and Connecting Line	O	O	O	O	O	O
Sws, gasers and Other Fasteners	O	O	O	O	O	O
Rubber Parts	O	O	O	O	O	O
Other Metal Parts	O	O	O	O	O	O
Other Plastic Parts	O	O	O	O	O	O
Printed Parts	O	O	O	O	O	O

This table is made according to the provisions of SJ/T 11364

Hazardous Substance Indicator Explanation

- The symbol "O" indicates that the content of the hazardous substance in all homogeneous materials of the component is within the limit requirements specified in IEC 62321.
- The symbol "X" indicates that at least one homogeneous material within the component contains a hazardous substance exceeding the limit requirements specified in IEC 62321. However, due to current technical limitations, eliminating these substances entirely from certain parts is extremely difficult. The traces present are minimal and negligible, ensuring the product remains safe for its intended use.

