VES Classic
Owners Manual
Quick Start Guide

1. Turn the unit on by utilizing the 4 position knob on the left side of evaporator. Options for this are:
   - 0 - unit off
   - 1 - unit on, low fan speed
   - 2 - unit on, medium fan speed
   - 3 - unit on, high fan speed

2. The right side knob marked “high/low” controls the temperature in the evaporator coil- not the room temperature. We suggest keeping this on the lowest setting to keep the compressor from excessive cycling on and off.

Tips and Tricks

Here are a couple tips and tricks that will help you get more out of your CNC unit:

- Use the vehicle's A/C to help cool the area down. The a/c unit on your van or vehicle is a lot larger in capacity than your CNC unit. By pre-cooling the area, the CNC unit has an easier time maintaining the desired comfort level.
- If the unit cools down the area but the thermostat turns the unit back on immediately after shutoff or never shuts it off: The air conditioner is operating correctly. It is possible that the insulation in the area being cooled is not enough to maintain the temperature in the area.
- Our A/C units will take a long time to cool a hot area that has been sitting in the sun. To help the CNC unit cool down the area to be cooled, start the engine and run the factory A/C until desired temperature is reached. If the area to be cooled is pre-cooled, then it will maintain a comfortable temperature depending on solar load & ambient temperature.
- To prevent the unit from icing in high temperature and high humid environments, do not run the unit at low blower speeds. Increase blower speeds and set thermostats at reasonable, attainable temperatures. Freezing evaporators can be a sign of too much ducting, not enough vents, or low refrigerant freon charge.
- Divide the front driving area, rear doors, and/or the sleeping area with a heavy curtain. This, along with insulated window shades, helps to keep the heat out of the area that is desired to be cooled. Remember, even though the mid section of a vehicle may be well insulated, usually the driving area is not.
- Mount the thermostat mid-height in the vehicle and near the return air so you get more of an accurate reading (like in your home). Also avoid mounting the thermostat to an outside wall. It will get a false reading from a warm wall.
- Park in the shade as much as possible. This will make a big difference on how easy it is to cool the area.
- When possible, park the vehicle facing east or west, this will decrease the surface area that is heated by the sun.
- Make sure your batteries are full. The higher the voltage, the more the unit cools (i.e., 12.8 VDC vs.13.8 VDC).
- Insulating the vehicle is very important. Invest in a thermal imaging camera for your smartphone. These cameras are fairly inexpensive and can help you see where your vehicle needs better insulation.
- Current consumptions are nominal. The units can draw more in hot climates or when installed improperly, and they can draw less in cooler climates.
- If unit shows sign of malfunction, please stop using the product immediately and call Cruise N Comfort USA right away at (855)899-1442.

Maintenance

- Check ***outside*** condenser fans for proper air flow (air should be felt flowing from a safe distance). Caution: do not stick anything into the fans- serious injury or death could result. Always wear eye protection when working around or servicing condenser fans with above methods.

- ***Outside*** Condenser fins can be cleaned with a pressure washer, hose, or compressed air. Always wear eye protection when cleaning condenser with above methods.

- Check around ***inside*** unit for condensation and check drain tray tubes to make sure they are clear and able to evacuate condensation.

Troubleshooting

- Unit is not blowing cold air

Solution:

- Check operation of outside fans, inside blower, and compressor. When initially turned on, the outside condenser fans and inside evaporator blower will turn on. The compressor will turn on in approximately 30 seconds. To better hear the compressor, turn the evaporator blower to low speed before starting system.

- If you hear all 3 of the above operating, then the system could be low on refrigerant. Have the system evacuated, checked for leaks, and recharged with appropriate refrigerant based on the installation manual requirements. Do not add any leak sealants or unapproved leak dyes. Call Cruise N Comfort USA Tech Support for appropriate leak dye. Leaks in hoses or hose connections can be seen while unit is running by spraying a soapy water solution onto fitting and checking for bubbles. Leaks may also be evident by inspecting condenser and hose connections and looking for oil residue.

- If the evaporator fan turns on but there is no flow, the evaporator could have iced up due to low air flow in high humidity conditions and/or is low on refrigerant. Turn unit off for an extended period of time and turn the left side knob to a higher blower setting. Turning the right side knob a bit higher than the lower setting will help as well. Return to normal operation after unit has thawed.

- You may also determine if the unit is low on refrigerant by looking for bubbles or liquid in the sight glass on the receiver dryer. The receiver dryer is a black cylinder with a round sight glass. On the VES systems it is inline in between the condenser and the #6 evaporator hose. During operation, bubbles should not be evident after 15 minutes of operation. If the unit has bubbles, have the system evacuated, checked for leaks, and recharge with appropriate refrigerant based on the installation manual requirements.

- If outside condenser fans are not turning, turn off unit immediately and check fuses to make sure they are not blown and check breakers for fault. If this is the case, check the power wire going to fans for a short and check to see if fans are faulty. Call Cruise N Comfort USA for replacements.

* ***Do Not send Cruise N Comfort units back for repairs before first obtaining an RMA number via email. Please email support@cruisencomfortusa.com before trying to obtain warranty work.***

WARNING!

- Do not use the Cruise N Comfort Air Conditioner if it is visibly damaged.
- Installation and repairs to the Cruise N Comfort USA air conditioner may only be carried out by qualified personnel who are familiar with the risks involved and the relevant regulations. Inadequate repairs may cause serious hazards. For repair service, please contact Cruise N Comfort USA.
- People (including children) whose physical, sensory or mental capacities or whose lack of experience or knowledge prevent them from using this product safely should not use it.
- Cruise N Comfort USA products are only for the purpose specified by the manufacturer please do not make any alterations or structural changes to the device.
- Always keep and use the product out of the reach of children. Keep clear of moving fans and parts.
- Children must be supervised to ensure that they do not play with the product or insert foreign objects into product.
- This product is not ignition protected, do not use in any combustable environment.
- The evaporator of this unit is not sealed and should not be used near vehicle exhaust and be ducted inside the vehicle.
- Make sure no combustible objects are stored or used near the product.
- Do **not** remove the cover of the Cruise N Comfort Air Conditioner in the event of a fire. Do not use water to extinguish fires.Only use approved extinguishing agents instead.
- Do not reach into air grills or ventilation nozzles or insert any foreign objects in the system.
- Always remember to properly fuse and size wire appropriately to maximum current load of the Cruise N Comfort USA unit.

CAUTION!

- Disconnect all power supply lines when working on the Cruise N Comfort unit (cleaning, maintenance etc).

Failure to read and abide by warnings and cautions above could lead to serious injury or death.

Your Cruise N Comfort USA is designed to give you years of trouble free operation providing the consumer provides routine maintenance. Please call or email us for any issues you may have.