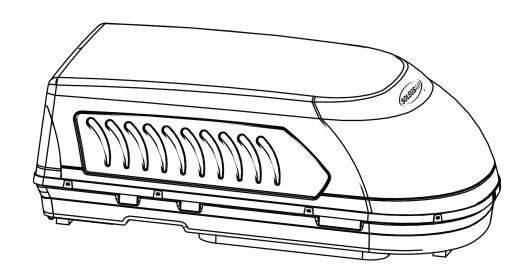
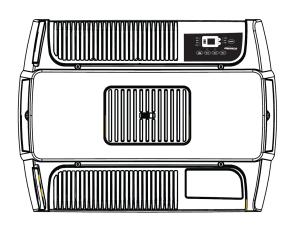


# 13500 BTU RV Air Conditioner Installation and Operating Instructions





Model No.:HCB-R135-A-ID HCB-R135-A-OD



Thank you for choosing a Soleus Air RV Air Conditioner. This owner's manual will provide you with valuable information necessary for the proper care and maintenance of your new product. Please take a few moments to thoroughly read the instructions and familiarize yourself with all the operational aspects of your new Soleus Air RV Air Conditioner.

store name/location, date purchased, and serial number below:
Store Name:
Location:
Date Purchased:
Serial Number (located on back of unit):

For your own records, please attach a copy of your sales receipt to this manual. Also, write the

#### IMPORTANT INSTRUCTIONS

Before installing and using your RV Air Conditioner, please read this owner's manual carefully. Store this manual in a safe place for future reference.

- 1. All wiring must be complied with local and national electrical codes. All wiring must be installed by qualified electricians. If you have any question about the following instruction, contact a qualified electrician.
- 2. Check the available power supply and resolve any wiring problems BEFORE installing and operating this unit.
- 3. This air conditioner is designed to operate from a 115V AC, 60Hz, 1 phase power supply.
- 4. This air conditioner is designed for recreational vehicles. Check the roof of the vehicle to determine if it can support both the roof top unit and the ceiling assembly without additional support. Make sure the interior ceiling amounting area will not interfere with existing structures.
- 5. A reinforced and framed roof hole opening must be cut (if there is no hole) or you may use existing vent holes.

# **SPECIFICATIONS**

MODEL NUMBER	HCB-R135-A-ID	HCB-R135-A-OD
COOLING CAPACITY	13500 BTU/Hr	
DEHUMIDIFYING CAPACITY	132 pts per Day	
COOLING POWER USAGE	Cooling 1290 Watts, 11.6 Amps	
AIR FLOW VOLUME(H/M/L)	490/400/346 CFM	
POWER SOURCE	115 V / 60 HZ	
SOUND PRESSURE LEVEL	Ceiling Assembly 50 dB(A) Roof Top 58 dB(A)	Ceiling Assembly 50 dB(A) Roof Top 58 dB(A)
PRODUCT WEIGHT	10 lbs	92.3 lbs
OPERATING TEMPERATURE	Cooling 64.4°F-109.4°F	
PRODUCT DIMENSIONS	26.25" W×19.5" D×3.625" H	41" W×22.375" D×14.5" H
REFRIGERANT	R-410A	

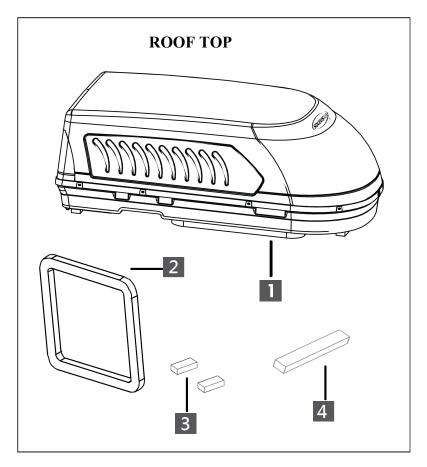
## **PRODUCT DIAGRAM**

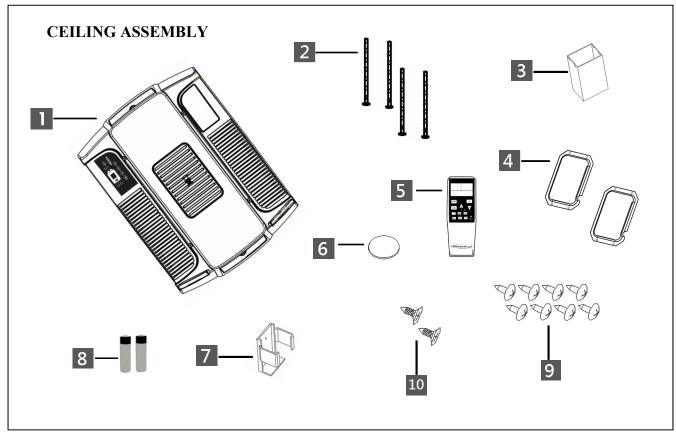
#### **ROOF TOP**

- 1. Roof Top Air Conditioner (1)
- 2. Sponge Air Duct (1)
- 3. Sponge Pieces (2)
- 4. Sponge Slip (1)

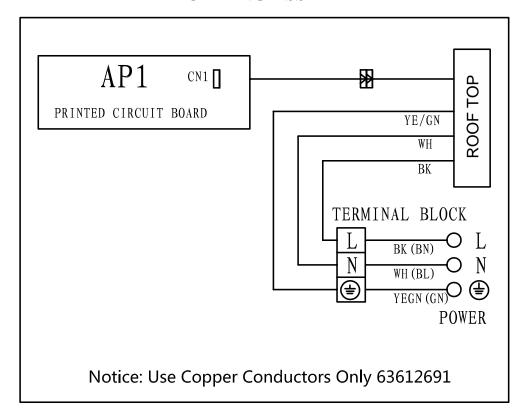
#### **CEILING ASSEMBLY**

- 1. Ceiling Grille (1)
- 2. Bolts (4)
- 3. Fabric Air Duct (1)
- 4. Air Vent Plates (2)
- 5. Remote Control (1)
- 6. Double-Sided Tape (1)
- 7. Remote Control Holder (1)
- 8. AAA Batteries (2)
- 9. Tapping Screws (8)
- 10. Remote Control Holder Screws (2)
- 11. Product Manual (1) (Not shown)

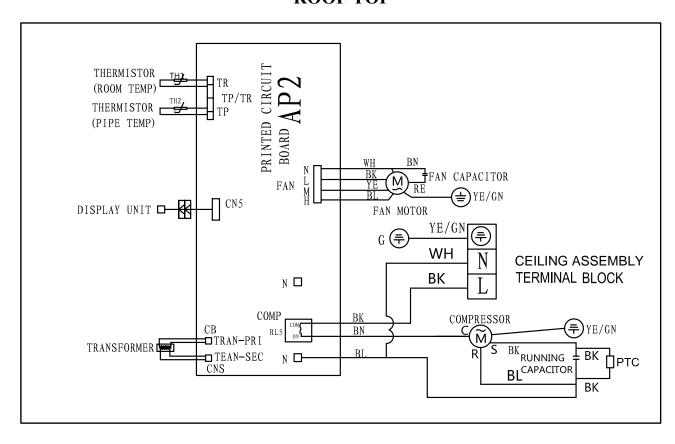




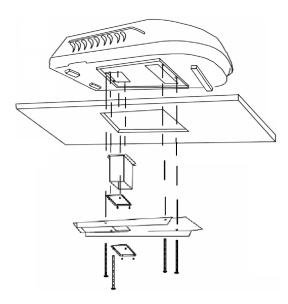
#### **CEILING ASSEMBLY**



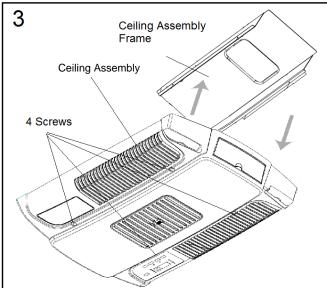
## **ROOF TOP**



# **RVAC INSTALLATION INSTRUCTION**



2. Mount the Roof Top Air Conditioner on top of where the opening was created.



5

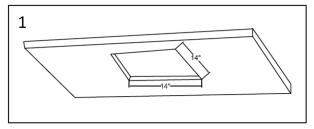
Ceiling

Frame

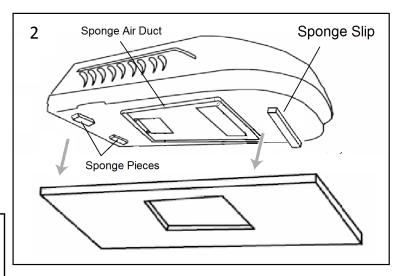
Assembly

**Bolts** 

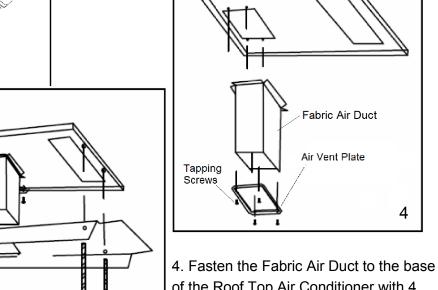
5. Fasten the Ceiling Assembly Frame to the base of the Roof Top Air Conditioner with the 4 Bolts.



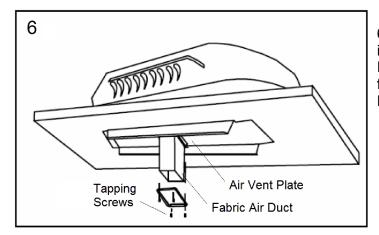
1. Create an 14" x 14" opening on top of the roof.



3. Unscrew the screws and remove Ceiling Assembly Frame from Ceiling Assembly.

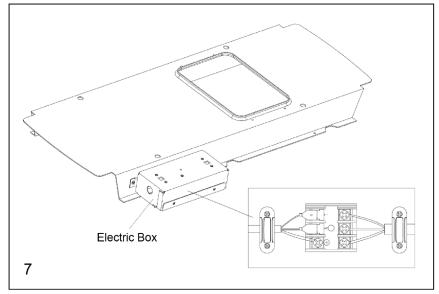


of the Roof Top Air Conditioner with 4 Tapping Screws by Air Vent Plate.



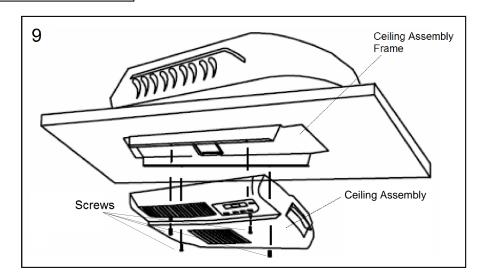
6. Fasten each side of the Fabric Air Duct by securing the Air Vent Plate to the Ceiling Assembly Frame with 4 Tapping Screws. Trim any excess fabric that may extend beyond edge of Air Vent Plate.

7. Use the provided power supply in Electric Box located on the side of the Ceiling Assembly Frame for electrical wiring (see P8 Figure 1,2).



Ceiling Assembly Roof Top

8. Connect Ceiling Assembly and Roof Top connectors (see P9 Figure 3,4).

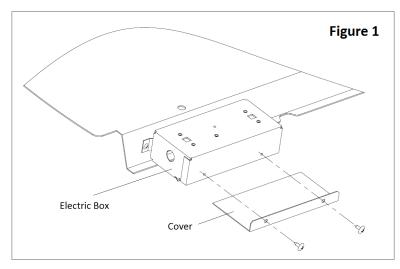


9. Re-screw the Ceiling Assembly to the Ceiling Assembly Frame.

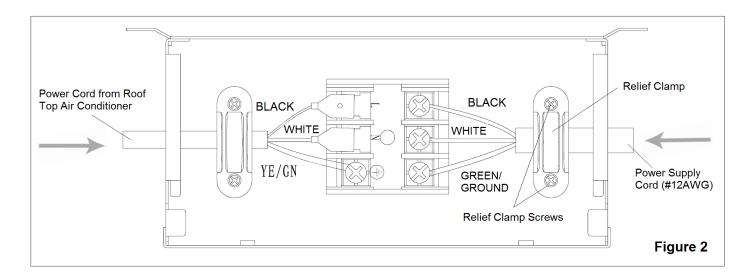
## **ELECTRIC WIRING**

Make sure that all power supply to the unit is disconnected before starting any work on the unit to avoid the possibility of shock or injury and/or damage to the equipment. After the interior ceiling assembly frame is properly secured to the Roof Top Air Conditioner, the following electrical connections must be performed.

1. Route a copper with ground, supply wiring with minimum #12AWG for 13500 BTU/H unit. The wiring from its power source to the electric box. Do not attach them at this time.

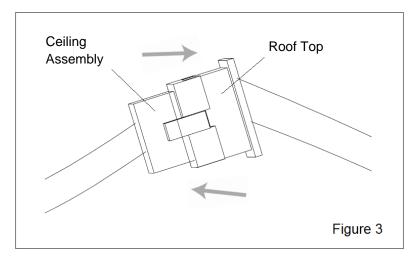


- 2. Unscrew 2 screws and remove the Electric Box cover (see Figure 1).
- 3. Connect Roof Top Air Conditioner power cord to the side of the Electric Box (see Figure 2).
- 4. Insert the power cord #12AWG to the other end of the Electric box (see Figure 2).

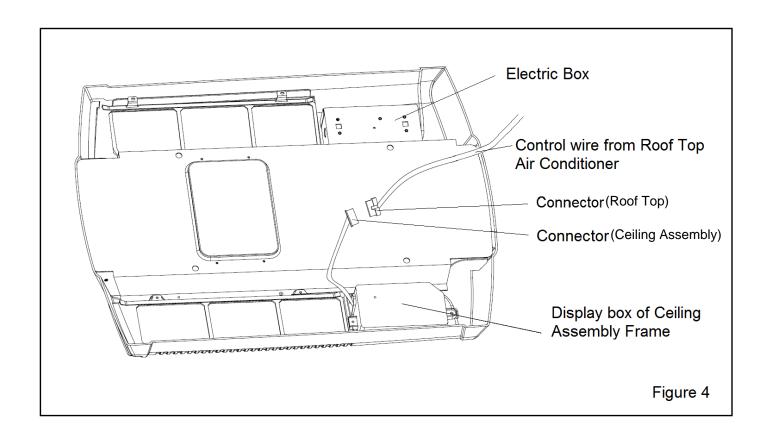


- 5. Connect the power supply cord (#12AWG) to the Black, White, and Green/Ground wires in Electric Box with a terminal board. Connect Black wire to Black wire, White wire to White wire, and Green/Ground wire to YE/GN wire (see Figure 2).
- 6. Tighten the relief clamp screws to secure the supply power cord, make sure DO NOT OVERTIGHTEN. Reinstall the Electric Box cover (see Figure 2).

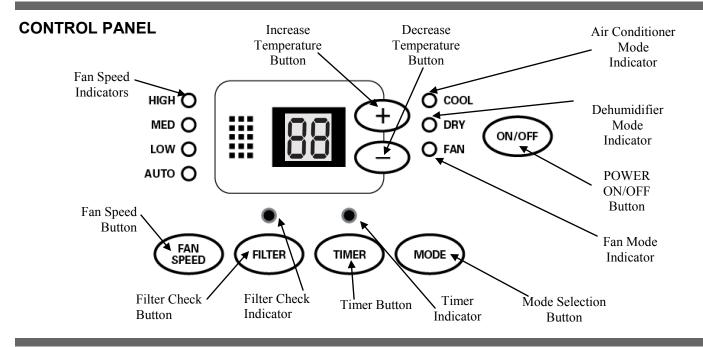
# **ELECTRIC WIRING (CONTINUED)**



7. Connect the Ceiling Assembly and Roof Top connectors (see Figure 3, 4).



# CONTROL PANEL, DISPLAY, & OPERATING INSTRUCTIONS



#### **OPERATING INSTRUCTIONS**

#### **CONTROL PANEL BUTTONS**

- 1) **Power On and Off** Press the **ON/OFF** button once to manually turn the unit on. Press the **ON/OFF** button once more to turn the unit off.
- 2) <u>Mode Selection</u> Press the MODE button repeatedly to cycle between the different modes: Auto mode, Air Conditioner mode, Dehumidifier mode, and Fan only mode. NOTE: Auto mode indicator is not shown on control panel.
- 3) **Temperature** Select the desired temperature by pressing either + or key when using the unit in Air Conditioner mode. The temperature indicator flashes to display the desired temperature setting. After the temperature is set, the unit will display this temperature setting until it is changed by the user. The LED display shows temperature in Fahrenheit. Press and hold + and simultaneously for 2 seconds to switch between Celsius and Fahrenheit

#### 4) TIMER -

**Auto-On:** To program the timer, when the unit is off, press the **TIMER** button. Once **TIMER** is pressed, the TIMER indicator will light up. Press the buttons + or - to set the timer. The timer can be set in intervals of 0.5 hours up to 10 hours, then in intervals of 1 hour up to 24 hours.

**Auto-Off:** To program the timer, when the unit is on, press the **TIMER** button. Once **TIMER** is pressed, the TIMER indicator will light up. Press the buttons + or - to set the timer. The timer can be set in intervals of 0.5 hours up to 10 hours, then in intervals of 1 hour up to 24 hours.

- 5) **FILTER** When the filter needs to be replaced, FILTER indicator will light up. Clean the filter and slide it back to the compartment, press **FILTER** button to reset the unit before operation.
- 6) **FAN SPEED** To change fan speed, press **FAN SPEED** button to select desired fan speed (High, Medium, Low, Auto), the associate indicator will light up.

# **OPERATING THE UNIT USING THE REMOTE CONTROL**

# **REMOTE CONTROL**



<sup>\*</sup> Remote Colors may differ from the image above.

#### REMOTE CONTROL OPERATING INSTRUCTIONS

- 1) Power On and Off If the unit is already on, press the I/O button on the remote while pointing the remote away from the unit. This will turn the remote on. If the unit is off, press the I/O button once to manually turn the unit on. Press the I/O button once more to turn the unit off. When you press the I/O button the upper right square on the remote control LCD display will light up. When in Air Conditioner mode and Auto mode, the selected temperature will appear on the remote control LCD display. When the unit is in Fan mode and Dehumidifier mode you will see "--" icon instead of the set temperature. This shows that temperature selection is not available when the unit is in Fan or Dehumidifier mode.
- 2) <u>Mode Selection</u> Press the MODE button repeatedly to cycle between the different modes: Auto mode, Air Conditioner, Dehumidifier, and Fan-Only mode. The upper left square on the Remote control display will light up showing which mode is selected. In Air Conditioner mode the display will show "COOL", in Dehumidifier mode the display will show "DRY", in Fan mode the display will show "FAN", and in Auto mode the display will show "AUTO".
- 3) **Fan Speed** Press the **FAN** speed button to cycle through Auto, High, Medium, Low fan speeds. The display on the remote control will show High, Medium, Low, under the "SPEED" label on the remote control LCD display. There is an additional AUTO speed setting that is enabled in only cooling mode. This speed is the next setting after Low when pressing the FAN speed button on the remote control. The speeds will cycle through this order: **High, Medium, Low, Auto**. Each change in speed will be associated with a "beep" sound from the unit. The remote control will not display "AUTO" under the speed label. Once Auto fan is selected the unit will beep and there will not be a fan speed displayed on the remote control.
- 4) <u>Temperature Setting</u> When the unit is in Air Conditioner mode and Auto mode, Press the + or to select your desired temperature setting. The temperature on the LCD display on the remote control will increase or decrease accordingly. Press and hold + and simultaneously for 2 seconds to switch between Celsius and Fahrenheit.
- 5) **SLEEP MODE** -(This mode can only be selected when using the remote control).
  - a) To set Sleep mode, make sure the unit is in Air Conditioner mode.
  - b) Press the **SLEEP** Button on the remote control, the icon appears on the remote control display.
  - c) When in **SLEEP** mode, the fan will run on low to keep fan noise at a minimum. Sleep mode can be set up to 8 hours, when 8 hours is reached or Sleep mode is canceled, the unit will switch to previous set mode.
  - d) When in Air Conditioner mode, the temperature setting will gradually increase to 1°F above the original set temperature for each of first 2 hours. The unit will keep operating the same temperature for 6 hours and switch to set temperature.
  - e) Control panel LCD display and all indicator lights on control panel will turn off 5 seconds after SLEEP mode is set. Press any button on control panel or remote control to turn on LCD display and all indicator lights again.

## REMOTE CONTROL OPERATING INSTRUCTIONS(CONTINUED)

- 6) <u>TIMER</u> To program the timer, first press the **T-ON** button. Once **T-ON** is pressed the auto-on timer will blink in the bottom right rectangle of the remote control display. Press the **MIN** and **HOUR** buttons to change the clock to the desired time for the unit to automatically turn on. The minutes will increase by 10 with each press of the **MIN** button and the hours will increase by 1 with each press of the **HOUR** button. Press the **T-OFF** button and the remote control display will flash the desired auto-off timer. Press the **MIN** and **HOUR** buttons to change the clock to the desired time for the unit to automatically turn off. The timer is set when the auto-off time stops flashing and the words "**ON**" and "**OFF**" are displayed next to the time.
- 7) **AUTO SWING** This function is not available.

#### **OPERATING THE UNIT**

#### **Air Conditioner Mode**

- 1) Turn on the unit by pressing the 1/O button on remote control or **ON/OFF** button on control panel.
- 2) Press the **MODE** button until the air conditioner mode indicator lights up on the control panel display or press **MODE** button in remote control to select **COOL** mode.
- 3) Press the + or on control panel or remote control until the desired room temperature appears on the control panel display or remote control LCD display. The temperature ranges from 61°F 88°F (16°C 31°C).
- 4) Select the desired fan speed by pressing the **FAN** button by using the remote control or **FAN SPEED** button on control panel.

#### **Dehumidifier Mode**

- 1) Turn on the unit by pressing the 1/O button on remote control or **ON/OFF** button on control panel.
- 2) Press the **MODE** button on control panel until the dehumidifier mode indicator lights up on the control panel display or press **MODE** button in remote control to select **Dry** mode.

**NOTE:** The unit operates at low fan speed during dehumidifier mode. The unit cools room slightly during the dehumidification process. Keep the windows and doors closed to aid the effectiveness of the unit in removing the moisture from the RV.

**NOTE:** When the room temperature is lower than 82.4°F, the unit will be set to 64.4°F automatically. When the room temperature is higher than 82.4°F, the unit will be set to 82.4°F automatically. The unit will not perform in dehumidifier mode when the room temperature is lower than 64.4°F.

#### **Fan Mode**

- 1) Turn on the unit by pressing the **I/O** button on remote control or **ON/OFF** button on control panel.
- 2) To select desired fan speed (High, Medium, Low, Auto), press **FAN SPEED** button on control panel or **FAN** button in remote control.
- 3) When the unit is in Fan mode, the temperature selection is not available and will not be displayed. When the fan is set in High, Medium, or Low speed, the compressor is turned off. When unit is in Auto fan mode under Auto mode, the fan speed will only run in low fan speed.

#### **Auto Mode**

- 1) Turn on the unit by pressing the 1/O button or ON/OFF button on control panel.
- 2) Press the **MODE** button on control panel or remote control to select Auto mode.
- 3) Press the + or– in remote control or control panel to select desired temperature.
- 4) **NOTE:** During Auto mode, the air conditioner is set to 75.2°F, the operating temperature ranges from 61°F 88°F (16°C 31°C).

**NOTE**: Auto mode indicator is not shown on control panel.

#### **Automatic Defrost**

When frost builds up on the evaporator coils, the compressor will cycle off and the fan will continue to run until the frost disappears. When the coils are completely defrosted, the compressor or fan will automatically restart and dehumidification and cooling will resume.

## **MAINTENANCE**

<u>Clean or Replace Filter</u> - When the unit operates over 250 total hours, the FILTER indicator will light up, the filter needs to be cleaned or replaced.

If the air filter is blocked with dust, the airflow volume may reduce. It is recommended to clean the filter once every two weeks or as needed.

- 1) Remove the filter from the filter compartment on the left of the unit.
- 2) Wash the air filter by immersing it gently into warm water with a neutral detergent. Rinse the filter and dry it thoroughly out of sunlight.
- 3) Re-install the filter into the filter compartment after it is thoroughly dried.
- 4) Press **FILTER** button to reset system.
- 5) If the filter is torn or unusable, order a new filter by calling the customer service number on the warranty page of this manual.

**Clean the unit Housing**- Clean the surface with a damp cloth and dry it with a soft towel.

#### **DISCLAIMER**

ALL INFORMATION AND THE TECHNICAL SPECIFICATIONS PRESENTED IN THIS USER'S MANUAL ARE THE PRESENTATION OF THE MANUFACTURER. SOLEUS HOME COMFORT HAS NOT CONDUCTED INDEPENDENT TEST TO THE INFORMATION AND THE SPECIFICATIONS PRESENTED HEREWITHIN.

# **SELF-DIAGNOSIS SYSTEM MALFUNCTION CODES**

# **SELF-DIAGNOSIS**

The appliance has a self diagnosis system to identify a number of malfunctions. Error messages are displayed on the appliance display.

Problem	Digital Display
Room temperature sensor does not work	E1
Evaporator does not work	E2
Defrosting temperature sensor does not work	E4

# Warranty

Soleus Home Comfort warrants the accompanying Soleus Air RV Air Conditioner to be free of defects in material and workmanship for the applications specified in its operation instruction for the period of parts specified below.

**5 YEARS FOR COMPRESSOR** 

2 YEARS FOR OTHER COMPONENTS

This warranty shall not apply to broken or marred cabinets, accessories, knobs, filters or routine maintenance. This warranty does not apply to uncrating, setup, installation, removal of the product for repair or reinstallation of the product after repair.

This warranty does not apply to repairs or replacements necessitated by any cause beyond the control of Soleus Home Comfort including, but not limited to, any malfunction, defect or failure caused by or resulting from unauthorized service or parts, improper maintenance, operation contrary to furnished instructions, shipping or transit accidents, modification or repair by the user, abuse, misuse, neglect, accident, incorrect power line voltage, fire, flood or other Acts of God, or normal wear and tear.

Warranty service must be performed by a qualified HVAC contractor. Soleus Home Comfort maintains a centralized service network to provide parts and assist in resolving service problems if difficulties are encountered. Soleus Home Comfort agrees to provide service information, sell repair parts and reimburse the dealer /serviceman for parts in accordance with Soleus Home Comfort's Policies and Procedures.

SOLEUS HOME COMFORT MAINTAINS THAT ALL WARRANTIES, INCLUDING IMPLIED WARRANTY OR MERCHANTABILITY ARE LIMITED TO THE TERMS AND CONDITIONS SPECIFIED ABOVE. SOLEUS HOME COMFORT DISCLAIMS ANY LIBILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES AND IN NO EVENT SHALL SOLEUS HOME COMFORT'S LIABILITY EXCEED THE RETAIL VALUE OF THE AIR CONDITIONER.

This warranty covers only new products purchased from our authorized dealers or retailers. It does not cover internet sales, used, salvaged, or refurbished products.

FOR TECHNICAL SUPPORT AND WARRANTY SERVICE, PLEASE CONTACT:

Soleus Home Comfort. 17911 East Ajax Circle, City of Industry, CA 91748. USA

Tel: 1-888-876-5387 Monday through Friday, 9:00 AM to 5:30 PM, PST

Email: Contact@soleusair.com

www.soleushomecomfort.com