

Chill 13.5k/15k/Low Profile Rooftop Air Conditioner (R32)

MODEL (LIPPERT PN)

FACR13LPSA2-PS(2024031596) FACR15LPSA2-PS(2024031597)

FACR13LPSA2-PS-AM(2024044597) FACR15LPSA2-PS-AM(2024044599)

FACR13LPSA2-BL-AM(2024044598) FACR15LPSA2-BL-AM(2024044600)

FACR13LPSA3-PS(2025025421) FACR15LPSA3-PS(2025025424)

TROUBLESHOOTING AND SERVICE MANUAL



* Picture shown here is for reference only.

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Introduction

This document provides an overview on replaceable parts for Furrion® Chill 13.5k/15k/Low Profile Rooftop Air Conditioner (R32), as well as basic troubleshooting and service information.

NOTE: Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies may differ. For more detailed operation, including general safety instructions, warnings and cautions, see Instruction Manuals at:

Low Profile A/C with Electric Control (EN-FRCA) <https://support.lci1.com/documents/ccd-0008959>

Low Profile Rooftop Air Conditioner with Manual or Electric Controls (R32) <https://support.lci1.com/documents/ccd-0009380>

Chill 2, Low Profile A/C with Manual Control <https://support.lci1.com/documents/ccd-0008957>

or scan these QR codes:



CCD-0008959



CCD-0009380



CCD-0008957

Safety

Read and understand all instructions before installing or operating this product. Adhere to all safety labels.

This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system. Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the Lippert limited warranty.

WARNING

The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

WARNING

Failure to follow instructions provided in this manual may result in death, serious personal injury and/or severe product and property damage, including voiding of the component warranty.

CAUTION

The "CAUTION" symbol above is a sign that a safety risk is involved and may cause personal injury and/or product or property damage if not safely adhered to and within the parameters set forth in this manual.

CAUTION

Always wear eye protection when performing service, maintenance or installation procedures. Other safety equipment to consider would be hearing protection, gloves and possibly a full face shield, depending on the nature of the task.

Precautions/Warnings

National Codes

All Furrion® product referenced in this manual is to be installed in accordance with local and national codes, including the latest editions of the following standards:

USA

- NFPA 1192
- NFPA 70

Canada

- C22.1
- CSA Z240

Handling the Device

WARNING

- Installation and repair of the rooftop air conditioner must only be carried out by qualified personnel who are familiar with the risks involved and the relevant regulations. Inadequate repairs may cause serious hazards.
- Electrical devices are not toys. Keep electrical devices out of reach of children or elderly persons. Do not allow them to use electrical devices without supervision.
- Prevent inexperienced people from using the device without supervision.
- Do not undo the upper cover of the rooftop air conditioner in the event of a fire. Use approved extinguishing agents instead. Do not use water to extinguish fires.

CAUTION

- The rooftop air conditioner must be installed securely so that it cannot fall down.
- Only operate the rooftop air conditioner if you are certain that the housing and the cables are not damaged.
- Do not use the rooftop air conditioner near flammable fluids or in closed rooms.
- Make sure no combustible objects are stored or installed near the air outlet. A distance of at least 20" must be kept.
- Do not reach into air outlets or insert any foreign objects into the device.

Only use the device as intended.

Do not make any alterations or conversions to the device.

If faults occur in the refrigerant circuit, the system must be checked by a certified service technician and repaired properly. The refrigerant must never be released into the air.

WARNING

- RISK OF FIRE: Flammable Refrigerant Used. To be repaired only by trained service personnel. Do NOT puncture refrigerant tubing.
- RISK OF FIRE: Dispose of properly in accordance with Federal or local regulations. Flammable Refrigerant Used (R32).
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- If a component part is damaged, it must be replaced by the manufacturer, its service agent, or similar qualified persons to avoid a hazard.
- Follow local regulations regarding disposal of your air conditioner due to flammable refrigerant and gas. All air conditioner products contain refrigerants, which under the guidelines of federal law must be removed before disposal. It is the consumer's responsibility to comply with federal and local regulations when disposing of this product.

R32 Refrigerant Warning

WARNING

- RISK OF FIRE: Flammable Refrigerant Used.
- Prior to beginning work on Air Conditioner systems, safety checks are necessary to ensure that the risk of ignition is minimized. The work area around the unit is to be surveyed to make sure that there are no flammable hazards or ignition risks, including cigarette smoke.
- RISK OF FIRE: Installation, storage, and operation of the appliance in confined spaces shall be avoided (Floor area must be > 11ft 2").
- Do not install in an unventilated space if it is smaller than 11ft 2".

Defrosting & Anti-Freezing Instructions

⚠ DANGER

FIRE/ELECTRIC SHOCK HAZARD

Do not use means to accelerate the defrosting process to clean, other than those recommended by the manufacturer in this manual. The appliance shall be stored in a room without continuously operating ignition sources (For example: Open flames, an operating gas appliance or an operating electric heater.) DO NOT pierce or burn. Be aware that refrigerants may not contain an odor.

Frost or even ice formed on part of or the entire evaporator coil is not unusual under certain conditions or below combined conditions:

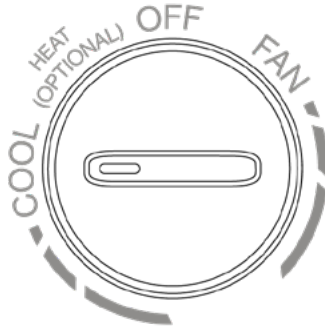
1. The air conditioner is operating with very cold temperature setting;
2. The air conditioner is operating at very low Fan speed;
3. The air outlet of the air conditioner is obstructed, for example, the shutter of the cool air outlet or the ducts vents are closed, or the filters are obstructed;
4. The ambient temperature is relatively low, e.g. $\leq 78^{\circ}\text{F}$ (25.5°C).

If the frosting or icing should occur, please follow the instructions in the next section to clean up the frost or ice.

Cleaning Frost and/or Ice

1. Rotate the operating mode control knob (Fig.1) to the "HIGH FAN" mode position and keep the air conditioner running for half an hour. Then the frost and ice will be melted and drop down of the evaporator coil, and the air conditioner will be resumed.

Fig. 1



⚠ WARNING

During the defrosting or Anti-Freezing process, the frost or ice will be melted into water and might drop down from the trim kit to the floor or furniture. Make sure you have prepared protections for your floor or furniture in advance, or you can use a bucket to collect water.

Preventing Frost/Ice Buildup

1. Do not rotate the temperature control knob (Fig.2) to the "MAX COOL" position (as shown above) at night to prevent frost/ice buildup.
2. When the operating control mode knob is in "COOL" mode position, always keep at least 2 duct vents open to prevent being frozen up.

Fig. 2



⚠ WARNING

The air conditioner could be frozen up when the ambient temperature is relatively low, E.G. $\leq 78^{\circ}\text{F}$ (25.5°C).

Cleaning and Maintenance

A blocked filter will impair the cooling and heating performance of the unit significantly. The filter must be cleaned periodically to ensure that it does not become clogged with dust and other particles. The state of the filter can be ascertained from its appearance. If it appears dirty or clogged then it should be cleaned.

⚠ WARNING

Airborne particles can pose a health risk, particularly to young children and the elderly. Ensure that filters are cleaned in a safe and well ventilated area.

To Clean the Filter

The filter should be cleaned every four weeks or more when in use. Prolonged use, higher concentrations of airborne particles and various other factors may result in the filters needing to be cleaned more often.

1. Remove the filter by pushing the tabs to release.
2. The filter can be washed with warm soapy water. Care must be taken to avoid ripping the fabric.
3. Replace the filter and decoration plate by reversing the above process.

NOTE: The filter must be completely dry before re-installation.

Refrigerant Decommissioning

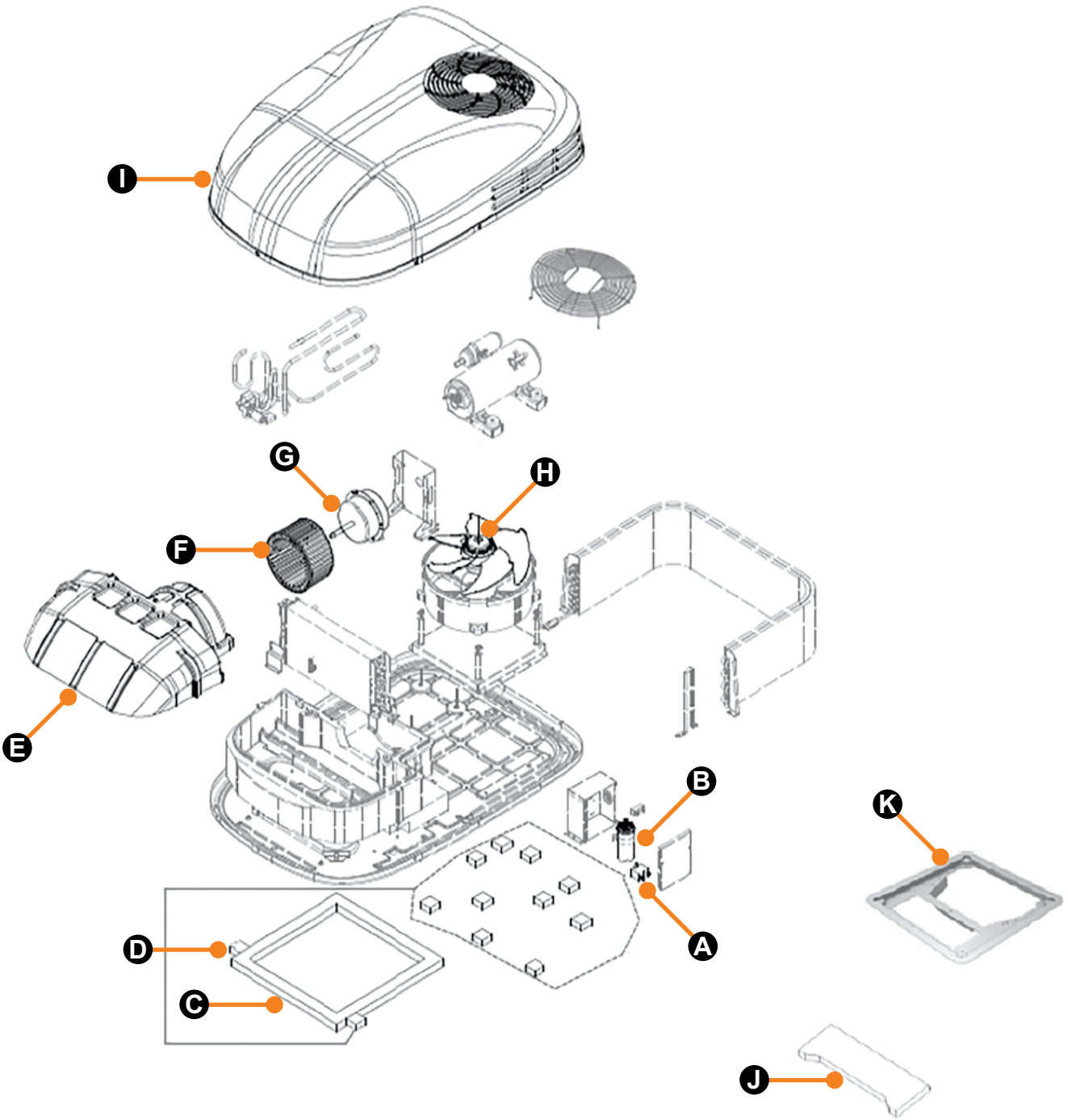
Any repairs in the refrigerant system including decommissioning must be carried out by a certified service technician. Flammable refrigerant used.

To Replace the Filter

Filter changes should be carried out depending on the amount of use, it is recommended to change at least every 12 months. Never operate the air conditioning system without a filter, since this can decrease performance and indoor air quality.

Replacement return air filters can be ordered directly from Furrion®.

Replaceable Parts List



Callout	Part #	Description	Model
A	2024054563	Start Capacitor, Evap	All
B	2024054564	Outdoor Condenser Motor and Compressor Start-up Capacitor	FACR13LPSA2-PS/BL
	2024054565	Outdoor Condenser Motor Start-up Capacitor, R32	FACR15LPSA2-PS/BL
C	2022452402	EVA Gasket	All
D	2022452404	EVA Leveling Shim Kit (12 pcs)	All
E	2022452405	Upper Evaporator EPP Foam Cover	All
F	2022452406	Indoor Evaporator Fan Blades	FACR13LPSA2-PS/BL
	2024054566	Indoor Evaporator Fan Blades	FACR15LPSA2-PS/BL
G	2024054567	Indoor Evaporator Motor	All
H	2022452410	Outdoor Condenser Motor with Fan Impeller	FACR13LPSA2-PS/BL
	2024054568	Outdoor Condenser Motor with Fan Impeller	FACR15LPSA2-PS/BL
I	2022452411	Low Profile Aircon White Top Cover Shroud with 9 screws	FACR13LPSA2-PS FACR15LPSA2-PS
	2024114391	Low Profile Aircon White Top Cover Shroud with 9 screws	FACR13LPSA2-BL FACR15LPSA2-BL
J	2023057417	Middle Partition Gasket	All
K	2022120382	Replacement Mounting Frame	All

Troubleshooting

Problem	Cause	Remedy
Rooftop air conditioner Abnormal shutdown	Freeze sensor has tripped.	Outer temperature is too low or all air nozzles are closed.
Rooftop air conditioner Abnormal shutdown	Freeze sensor has tripped.	Outer temperature is too low or all air nozzles are closed
Not cool enough	Refrigerant leakage	Contact an authorized service agent or Furrion (see the detail contact info at the back page of this manual).
	The rooftop air conditioner is not set to cooling.	Set the rooftop air conditioner to cooling.
	The set temperature is too high.	Select a lower temperature.
	The evaporator fan is damaged.	Contact an authorized service agent or Furrion® (see the detail contact info at the back page of this manual).
	The condenser fan is damaged.	Contact an authorized service agent or Furrion® (see the detail contact info at the back page of this manual).
	The air intake grilles are blocked or obstructed.	Remove any leaves and other dirt from the ventilation grilles of the rooftop air conditioner.
	The blower is defective.	Contact an authorized service agent or Furrion® (see the detail contact info at the back page of this manual).
Water enters the vehicle	The condensation water drainage openings are clogged up.	Clean the drainage openings for condensation water.
	The seals are damaged.	Contact an authorized service agent or Furrion® (see the detail contact info at the back page of this manual).
Rooftop air conditioner does not switch on	No supply voltage connected.	Check the power supply.
	The voltage is too low.	Contact an authorized service agent or Furrion® (see the detail contact info at the back page of this manual).
	Fuse blown or circuit protector tripped.	Check the electrical fuse of the power supply.

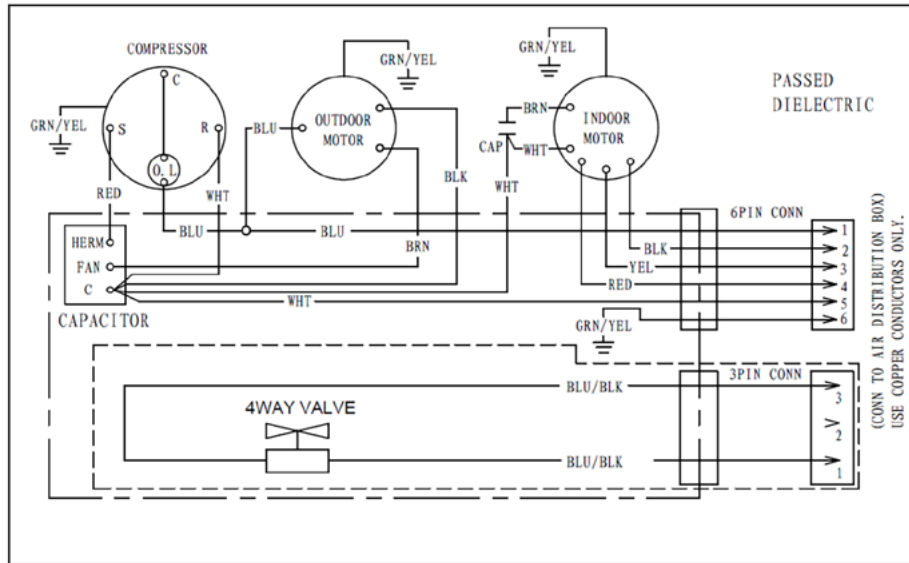
Specifications

Model Number	FACR13SA-PS FACR13SA-BL	FACR13HESA-BL FACR13HESA-BL-AM	FACR14SA-PS FACR14SA-BL-AM	FACR15SA-PS FACR15SA-BL-AM	FACR15HESA-BL FACR15HESA-BL-AM
Cooling Capacity (Btu/h)	13,500	13,500	14,500	15,500	15,500
Dehumidification (pint/h)	2.5	1.8	2.7	3.2	3.0
Applicable vehicle length (feet)	23	23	26	31	31
Refrigerant	R410A	R410A	R410A	R410A	R410A
Charge (Oz)	15.9	13.9	19.8	23.1	20.8
Roof top Unit Dimensions (L x W x H) (inch)	34-7/8" x 27-5/8" x 13-5/8"	34-7/8" x 27-5/8" x 13-5/8"	34-7/8" x 27-5/8" x 13-5/8"	34-7/8" x 27-5/8" x 13-5/8"	34-7/8" x 27-5/8" x 13-5/8"
ELECTRICAL					
Volts/Frequency	115V~/60Hz/1Ph	115V~/60Hz/1Ph	115V~/60Hz/1Ph	115V~/60Hz/1Ph	115V~/60Hz/1Ph
Power Watts (Cooling)	1450	1283	1620	1720	1760
Amps (Cooling)	13.1	11.3	14.6	15.4	15.6
Power Cord Gauge Min. (mm2)	AWG12	AWG12	AWG12	AWG12	AWG12

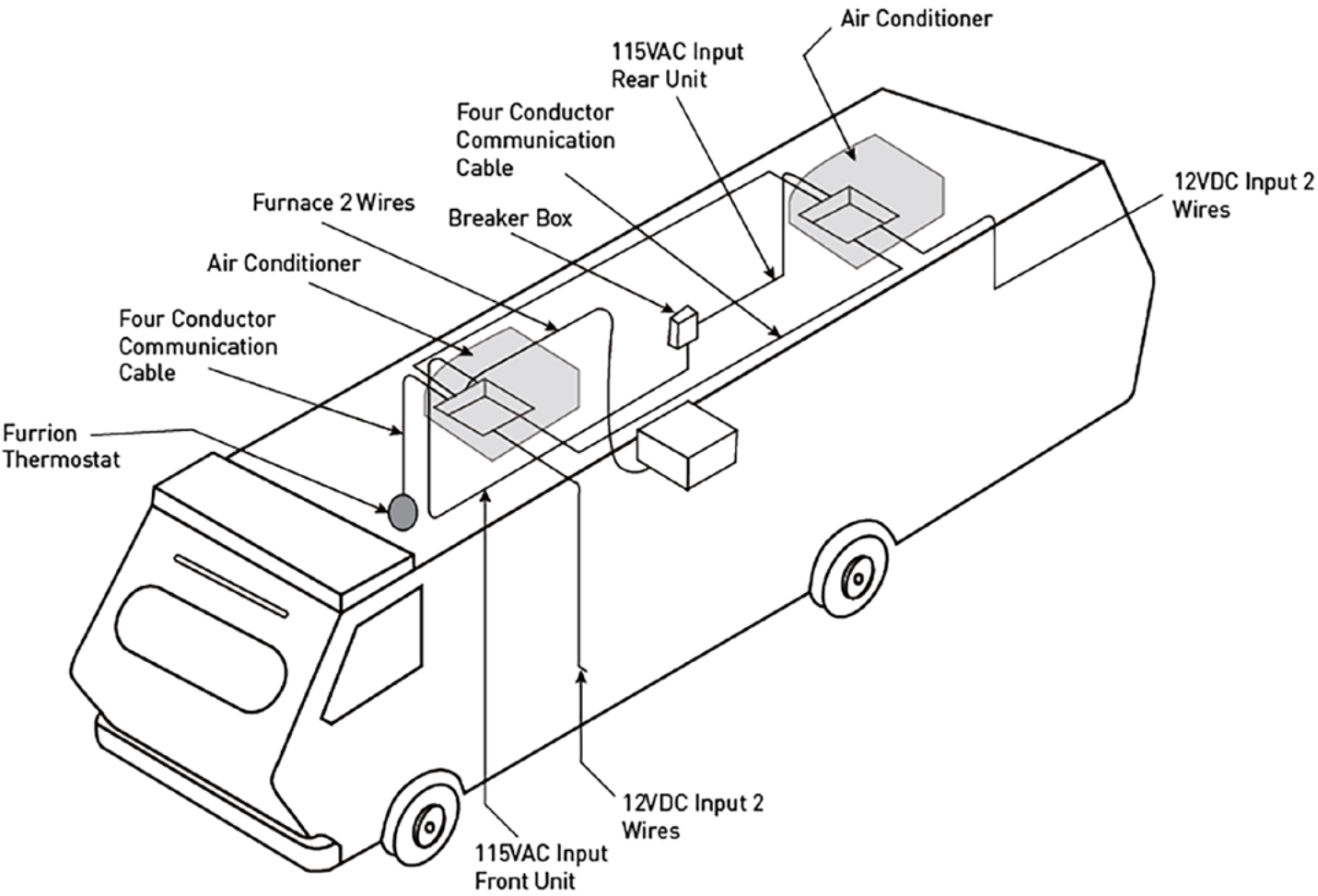
Wiring Diagram



- Disconnect power before servicing. Failure to obey this warning could result in death or serious injury.
- Provide grounding in compliance with all applicable electrical codes. Failure to obey this warning could result in death or serious injury.



Multi Zone Wiring Diagram





FURRION®

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