



INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS FOR 45400 SERIES 48 VDC AIR CONDITIONERS

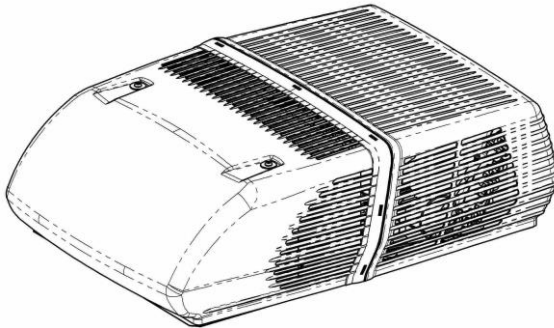


TABLE OF CONTENTS		
I.	General Information	3
II.	Air Conditioning Sizing	3
III.	Selecting an Installation Location	3
IV.	Installing the Roof Top Unit	3
V.	Electrical Wiring	6
VI.	Installing Ceiling Assembly	7
VII.	System Checkout	9
VIII.	Operation and Maintenance	10
i.	General Information	10

ii.	Operation	10
IX.	Bluetooth Pairing	10
i.	Pairing New Thermostat	10
ii.	Pairing Additional Thermostats	12
iii.	Pairing a Previously Paired Thermostat	12
X.	Operation	13
XI.	Warranty Service	14
XII.	Optional Extended Warranty	16

These instructions are a general guide for installing the 45400 Series 48 VDC Coleman®-Mach® roof top Air Conditioners. For specific Air Conditioner details, it will be necessary to refer to ALL printed documents supplied with this unit.

IMPORTANT NOTICE

These instructions are for the use of qualified individuals specially trained and experienced in installation of this type equipment and related system components.

Installation and service personnel are required by some states to be licensed. PERSONS NOT QUALIFIED SHALL NOT INSTALL NOR SERVICE THIS EQUIPMENT.

NOTE: The words "Shall" or "Must" indicate a requirement which is essential to satisfactory and safe product performance. The words "Should" or "May" indicate a recommendation or advice which is not essential and not required but which may be useful or helpful.

WARNING! – SHOCK HAZARD To prevent the possibility of severe personal injury or equipment damage due to electrical shock, always be sure the electrical power source to the appliance is disconnected.

CAREFULLY FOLLOW ALL INSTRUCTIONS AND WARNINGS IN THIS BOOKLET TO AVOID DAMAGE TO THE EQUIPMENT, PERSONAL INJURY OR FIRE.

WARNING! Improper installation may damage equipment, can create a hazard and will void the warranty. The use of components not tested in accordance with these units will void the warranty, may make the equipment in violation of state codes, may create a hazard and may ruin the equipment.

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I. GENERAL INFORMATION

OEM – Please make sure all documentation accompanies the Air Conditioner.

INSTALLER AND/OR DEALER – Please make sure all documentation is presented to the product consumer. The product consumer should also be afforded the opportunity to purchase the **OPTIONAL THREE (3) YEAR PARTS REPLACEMENT CONTRACT** available from Airxcel, Inc.

For more information about the contract, please review the sample contract located at www.Aixcel.com/Warranty. Use the application on the back of the **OPERATION AND MAINTENANCE INSTRUCTIONS** to apply for the extended parts contract.

INQUIRIES ABOUT THE UNIT – Inquiries to your AIRXCEL, Inc. representative or to Airxcel, Inc. pertaining to product installation should contain both the model and serial numbers of the roof top Air Conditioner. These rooftop Air Conditioners have model and serial number identification in two locations: (1) Rating Plate sticker – may be viewed by looking through the shroud louvers on the compressor side of the roof top air conditioning unit. [The rating plate sticker can be viewed without removing the outer plastic shroud.] (2) Model/Serial number sticker (silver color) – located on the return air section of the basepan of the rooftop Air Conditioner. If the Air Conditioner is installed, the sticker may be viewed by lowering the ceiling assembly shroud.

II. AIR CONDITIONER SIZING

The ability of an Air Conditioner to cool down a vehicle or maintain a consumer desired temperature is dependent on the heat gain of the vehicle. The physical size of the vehicle, the amount of window area, the quality and amount of insulation, the position exposure to sunlight, the number of people using the vehicle and the outside temperature, may increase the heat gain to such an extent that the capacity of the Air Conditioner is exceeded.

As a general rule, air supplied (discharge air) from the air conditioner will be 15 to 20 degrees F cooler than the air entering (return air) the ceiling assemblies bottom air grilles.

For example, if the air entering the Air Conditioner is 80 degrees F (return air), the supply air (discharge air) into the vehicle will be 60 to 65 degrees F. As long as this temperature difference (15 to 20 degrees F) is being maintained, the unit is operating properly.

Again, give careful consideration to the vehicle heat gain variables. During extreme outdoor temperatures, the heat gain of the vehicle may be reduced by:

- Parking the vehicle in a shaded area
- Keeping window and doors closed
- Avoiding the use of heat producing appliances
- Using window shades (blinds and/or curtains)

For a more permanent solution to high heat gain situations, additional vehicle insulation, window awnings and /or glass tinting should be considered.

III. SELECTING AN INSTALLATION LOCATION

Your Airxcel, Inc. Air Conditioner has been designed for use primarily in recreational vehicles.

Is the roof capable of supporting both the roof top unit and ceiling assembly without additional support

structures? Inspect the interior ceiling mounting area to avoid interference with existing structural members such as: bunks, curtains, tracks or room dividers. The depth of the ceiling assembly shroud is 3". Be sure to check clearance to doors which must be swung open (refrigerator – closets – cabinets).

Most of the time, roof mount Air Conditioners are installed at existing roof vent locations. If there are no roof vent (existing mounting hole), the following placement locations are recommended:

Motorhome – a single unit or the forward of two units should be mounted within 9 feet of the driver's compartment.

Travel Trailers or Mini-Homes – a location should be selected that is near the door slightly forward of the vehicle center length.

Vans – location should be in the center of the roof (side to side – front to back).

Truck with Camper – location should be between 4 to 5 feet from the rear of the camper to achieve maximum cooling effect.

IV. INSTALLING THE ROOF TOP UNIT

DANGER! SHOCK HAZARD DISCONNECT ALL POWER TO THE VEHICLE BEFORE PERFORMING ANY CUTTING TO THE VEHICLE. CONTACT WITH HIGH VOLTAGE CAN RESULT IN EQUIPMENT DAMAGE, PERSONAL INJURY OR DEATH.

IMPORTANT

TO PREVENT DAMAGE TO THE WIRING AND BATTERY, DISCONNECT THE BATTERY CABLE FROM THE POSITIVE BATTERY TERMINAL BEFORE PERFORMING ANY CUTTING TO THE VEHICLE.

This Air Conditioner is to be installed in accordance with NFPA Standard 501C.

If the Air Conditioner is being installed on a low friction roof surface such as aluminum, steel or gelcoat fiberglass, it is advisable to order a spring pad kit, part number 8333-3871 to add "spring pads" to maintain bolt tension and retard lateral motion of the Air Conditioner which could shear the mounting bolts. If the Air Conditioner is being installed subject to heavy lateral loads, it is advisable to order a "Roughneck" gasket/bolt package, part number 48207-3301 to maintain bolt tension, prevent lateral movement of the Air Conditioner and guard against bolt shear.

Once the location for your Air Conditioner has been determined (See Section III), a reinforced and framed roof hole opening must be provided (may use existing roof vent opening). Before cutting into the vehicle roof, verify that the cutting action will clear all structural members and crossbeams. Additionally, the location of any inner roof plumbing and electrical supplies must be considered.

1. If a roof vent is already present in the desired mounting location for the Air Conditioner, the following steps must be taken.

- a. Remove all screws which secure the roof vent to the vehicle. Remove the vent and any additional trim materials. Carefully remove all caulking from around the roof opening to obtain clean exterior roof surface.
- b. It may be necessary to seal some of the old roof vent mounting screw holes which may fall outside of the air conditioner basepan gasket.

- c. Examine the roof opening. If the opening is smaller than 14 x 14, the opening must be enlarged. If the opening exceeds 15" x 15", a mounting frame must be field fabricated to reduce the opening size (See Figure 1).
2. If a roof vent opening is not used, a new opening (See Figure 1) will have to be cut into the vehicle roof. A matching opening will also have to be cut into the interior vehicle ceiling. If the ceiling opening is carpeted, snagging could occur. After the opening in the roof and interior ceiling are the correct size, a framed support structure must be provided between the exterior roof top and the interior ceiling. The reinforced frame structure must provide the following:
- Capable of supporting both the weight of the roof top Air Conditioner and the interior ceiling assembly.
 - Capable of holding or supporting the roof outer surface and interior ceiling apart, so that when the roof top Air Conditioner and ceiling assembly are bolted together, no collapsing occurs.

Airxcel, Inc. requires that the spacing from the vehicle roof top to the interior ceiling be no less than 1". A typical support frame is shown in Figure 1. The frame must provide an opening through the frame to allow passage for the power supply wiring. Route the supply wiring through the frame at the same time the support frame is being installed.

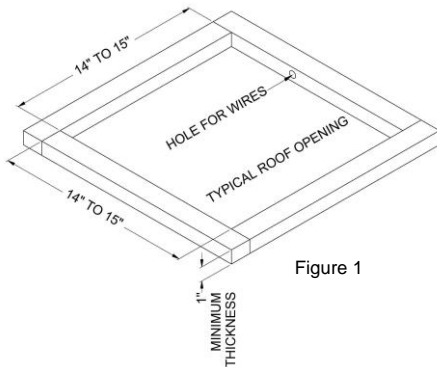


Figure 1

IMPORTANT – Allow 24" of supply wiring through the support frame (working length).

After the support frame is installed, seal off all gaps between the frame and both the roof exterior and the interior ceiling of the vehicle (cavity walls). Additionally, seal the gap around the electrical supply wiring.

3. The Air Conditioner must be mounted as near level front to rear and side to side as possible when the vehicle is parked level. Figure 2 shows the maximum allowable degree deviations mounting degrees from total surface flat plane).

If the roof of the vehicle is sloped such that the Air Conditioner cannot be mounted within the maximum allowable degree deviations, an exterior leveling shim will need to be added to make the roof top Air Conditioner level. A typical leveling shim is shown in Figure 3.

Once the Air Conditioner has been leveled, some additional shimming may be required above the interior ceiling assembly.

ALLOWABLE SIDE TO SIDE TILT

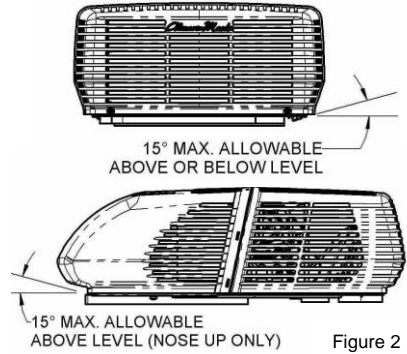


Figure 2

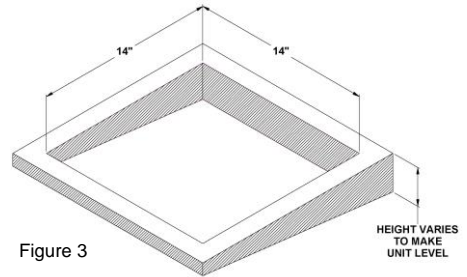


Figure 3

NOTE: The Air Conditioner and interior ceiling assembly must have a squared installation relationship before they are secured together.

4. After the mounting hole is properly prepared, remove the carton and shipping pads from around the Air Conditioner. Carefully lift the unit to the top of the vehicle. Do not use the outer plastic shroud for lifting. Place the Air Conditioner over the prepared mounting hole. The pointed end (nose) of the shroud must face towards the front of the vehicle. Pull the electrical conduits down from the roof Air Conditioner, through the mounting opening and let hang.

5. Securing the roof top unit to the roof:
A mounting frame is supplied with the ceiling assembly. Follow the steps below to secure the Air Conditioner to the roof. Refer to Figure 4.

- On the Roof - Position the Air Conditioner with the basepan gasket over the square opening in the roof.
- In the Coach - Install the ceiling assembly mount frame using the four bolts, washer and springs found with the ceiling assembly.
- Proper tension has been achieved for each bolt when any portion of each gasket indicating tab has been pulled down even with the roof (See Figure 4). The upper unit has now been properly installed with optimum gasket compression.

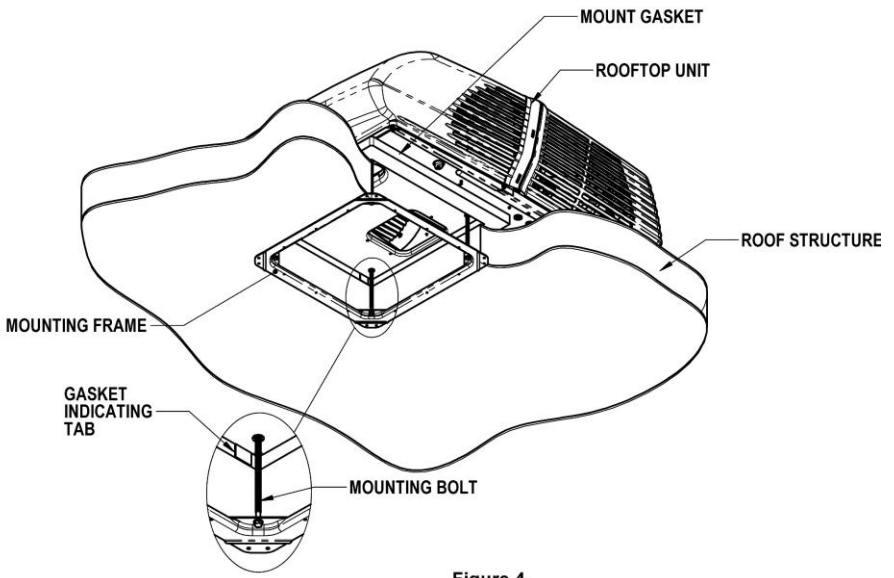


Figure 4

V. ELECTRICAL WIRING
ROUTING 48 VDC Wiring

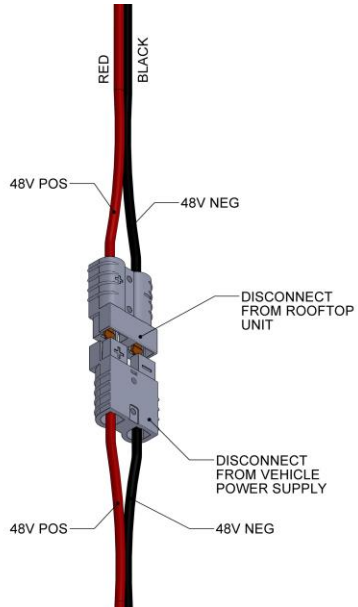
Following Airxcel's high voltage wiring specifications and all local and national electrical codes, route the 48 VDC supply wiring from its power source to the rooftop unit. High Voltage Wiring Specifications based on Minimum Overcurrent Protective Device Amperage – (see upper unit nameplate)

1. U.L. requires copper conductors only with minimum #10 AWG when using the minimum recommended overcurrent protection device. Higher rated devices or longer wiring runs will require #8 AWG or greater copper conductors.
2. To prevent voltage drops greater than 10% during starting loads, adhere to the following guideline:
For lengths greater than 50', use #8 AWG or larger copper conductors. Match to the overcurrent protection device provided.

Circuit Protection – Refer to upper unit nameplate.

Electrical Wiring High Voltage Wiring Specification is based on Overcurrent Protection Device rated higher than the minimum required (see upper unit nameplate). Follow all local and NEC (National Electrical Code) for proper sizing of wire AWG based on Overcurrent Protection Device selected and the length of the wiring run to the Air Conditioner.

DANGER – SHOCK HAZARD
MAKE SURE THAT ALL POWER SUPPLY TO THE UNIT IS DISCONNECTED BEFORE PERFORMING ANY WORK ON THE UNIT TO AVOID THE POSSIBILITY OF SHOCK INJURY OR DAMAGE TO THE EQUIPMENT.
SNAP TOGETHER THE UNIT CONNECTOR WITH THE SUPPLY CONNECTOR.
THE SUPPLY CONNECTOR SHOULD BE SMH SY Series 50A 600V.



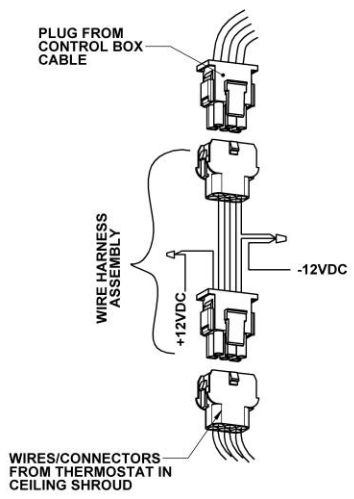
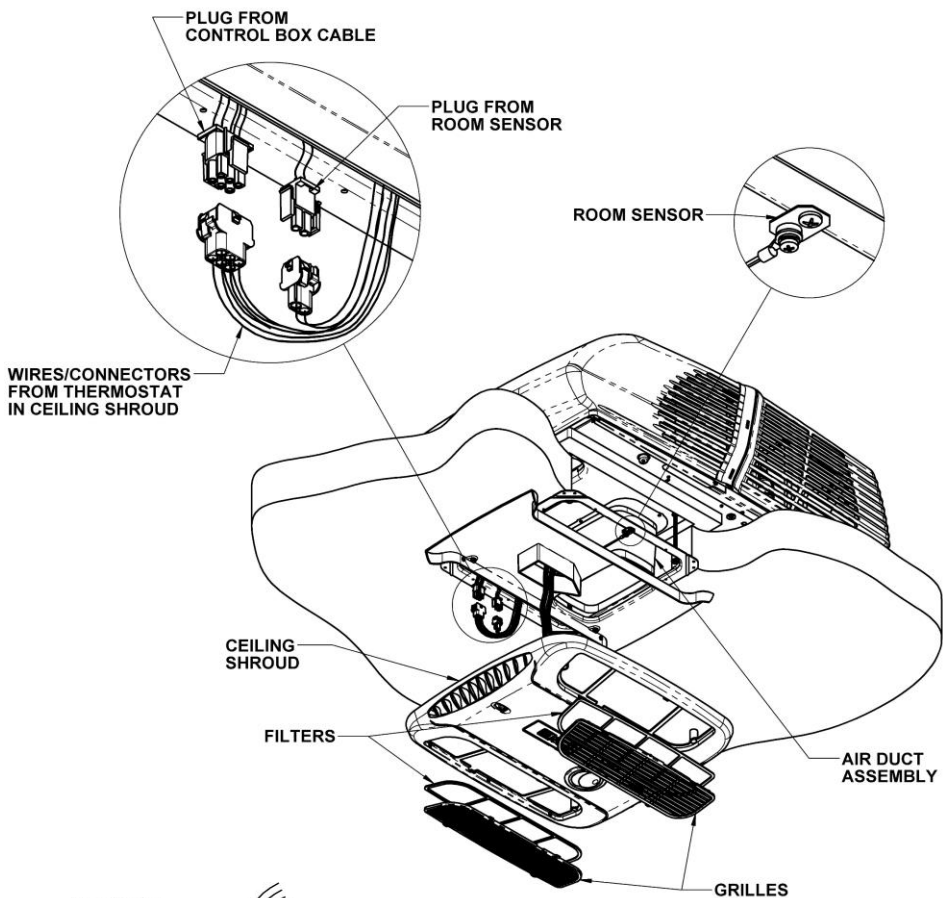
VI. INSTALLING THE CEILING ASSEMBLY

Make sure that you have properly matched the roof top Air Conditioner and interior ceiling assembly. The following step-by-step instructions must be performed in the following sequence to insure proper installation.

- A. Remove ceiling assembly from carton, separate individual items and remove the two grilles and filters from the ceiling shroud.
- B. Locate the cloth duct assembly. Fasten the duct collar to the Air Conditioner basepan with 3 provided screws (See Figure 5).
- C. Raise the ceiling assembly chute to align with the cloth duct assembly. Attach the chute to the steel mount frame with 4 short screws. Expand the cloth duct to drop through the ceiling assembly opening.
- D. Pull the fabric duct material through the ceiling chute discharge opening. Gently peel off the release liner from the VHB (Very High Bond) double sided tape around the opening. Press the fabric duct material uniformly around the perimeter of the opening to adhere the cloth duct to the plastic chute. Carefully trim the excess cloth duct (a razor knife is very effective

for this) taking care not to tear the fabric beyond the adhesive strip.

- E. Attach the room sensor to one of the middle holes of the steel mount frame with a short screw.
- F. Connect the two pin connectors together for the room sensor and the thermostat cable to the control box cable.
NOTE: If 12V power is being provided to the system, use the wire harness assembly provided in the ceiling assembly. A wiring diagram showing this wiring method is included which should be applied over the existing wiring diagram.
- G. Align the shroud with the air chute, ensuring that no wires are trapped between the plastic parts. Attach the shroud to the steel mounting frame with 4 short screws provided.
- H. Raise the ceiling shroud, ensuring it meshes with the chute, and secure to the mounting frame with the four provided screws. (See Figure 5).
- I. Re-install the filter and grilles into the ceiling assembly shroud.



VII. SYSTEM CHECKOUT

Airxcel, Inc. manufactures a wide range of roof top Air Conditioners which incorporate different product operation features. To properly evaluate the performance of a newly installed Air Conditioner, it

is necessary to review the specific unit operation characteristics (features) described in the product OPERATION AND MAINTENANCE INSTRUCTIONS section of this booklet.

OPTIONAL EXTENDED WARRANTY OFFER

- \$89.95 -

Cover your new purchase with our three (3) year extended parts only contract.

This warranty covers parts only (no labor) against manufacturer defects for an additional three (3) years beyond your original two (2) year warranty. This warranty excludes shrouds, filters and complete Air Conditioners.

What a great addition to your standard warranty – knowing you have protection for an additional three (3) years should you experience part failure (excluding shrouds, filters and complete Air Conditioners) on your Coleman-Mach Air Conditioner. Free replacement parts for three (3) years (excluding shrouds, filters and complete Air Conditioners) – how can you pass this up!

Apply today by filling out the application located on the back cover of this Installation and Operation Manual and mailing it in along with your check or money order for \$89.95 to Airxcel, Inc., P.O. Box 4020, Wichita, KS 67204. A contract will be sent to you within a few weeks. You should retain with your paperwork for proof of purchase.

To view the LIMITED 2 YEAR WARRANTY, the OPTIONAL THREE YEAR EXTENDED PARTS WARRANTY, a sample contract, terms, conditions, exceptions and exclusions, please visit www.Airxcel.com and type WARRANTY in the search bar.



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OPERATION AND MAINTENANCE INSTRUCTIONS FOR 45400 SERIES ROOF TOP AIR CONDITIONERS AND BLUETOOTH CEILING ASSEMBLY

i. GENERAL INFORMATION

This roof mount Air Conditioner is designed to operate from a 48VDC, 60 HZ, 1 Phase power supply.

Anytime an air conditioner is not operating properly, the power supply should be examined by qualified technician to verify that the Air Conditioner is receiving the proper power supply.

The ability of the Air Conditioner to maintain the desired inside temperature depends on the heat gain of the recreational vehicle.

The size of the vehicle, amount of window area, amount of insulation, direct exposure to the sun, outside temperature and the number of people in the recreational vehicle may increase the heat gain to such an extent that the capacity of the Air Conditioner is exceeded.

As a general rule, air entering the Air Conditioner will be cooled about 15 to 20 degrees, depending on the outside temperature and humidity conditions.



For example, if the air entering the return air grilles in the Air Conditioner is 80 degrees F., the air leaving the discharge grilles in the Air Conditioner will be 60 to 65 degrees F.





As long as this temperature difference is being maintained between the return air and discharge air, the Air Conditioner is operating at its capacity. If the desired inside temperature (normally 80 degrees F) cannot be maintained, then the heat gain of the RV is too great for the capacity of the Air Conditioner.

Parking the vehicle in a shaded area, keeping windows and doors shut and avoiding the use of heat producing

appliances in the vehicle will help to reduce the heat gain. When possible, the addition of insulation and tinted glass (especially in uninsulated vans) should be considered.

ii. OPERATION

The ceiling assembly display indicates the mode and the room temperature. When the mode button  is pressed once, the ceiling assembly display will wake and the backlight will illuminate. When the mode button  is pressed again, the mode will change.

Press the  or  button to wake the thermostat; the set temperature will display and the mode will flash. Press the  or  button again to change the set temperature. The thermostat will return to sleep mode after 5 seconds if no button is pressed.

There is a three minute anti-short cycle for cooling. After the cooling system has been de-energized, the system will not energize again for three minute, to protect your compressor. To bypass the anti-short cycle change the mode to OFF.

Note: Operating your cooling system when the outdoor temperature is below 50° F can cause damage to your cooling equipment.

Mode	Temperature Range	
	°F	°C
Cooling (set)	33° F to 99° F	1° C to 37° C
Heating (set)	33° F to 99° F	1° C to 37° C

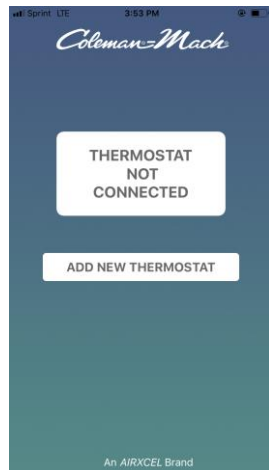
IX. BLUETOOTH PAIRING

i. Pairing New Thermostat

1. Download the **RV Climate** app to your smart device. The app is available on the Google Play Store and the Apple App Store.



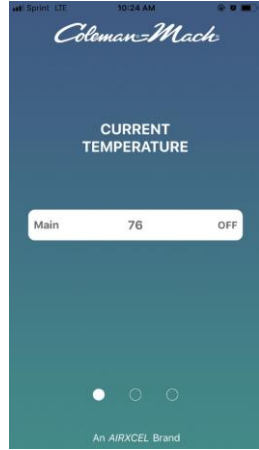
2. Open the **RV Climate** app on your smart device and select "**ADD NEW THERMOSTAT**".
3. On the ceiling assembly thermostat, hold the **UP** and **DOWN** buttons simultaneously for five seconds to enter the pairing mode.
4. On the App, select "**PAIR NEW THERMOSTAT**".



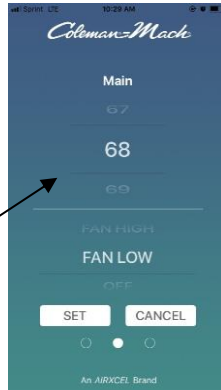
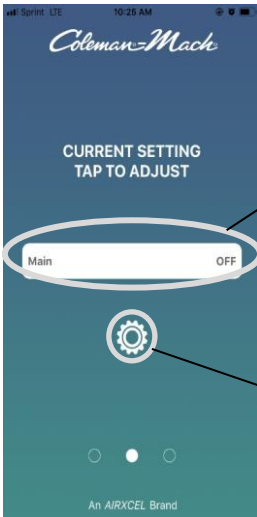
- When prompted, enter the 6-digit ID from the ceiling assembly thermostat and select "PAIR NEW THERMOSTAT".




- Once connected, the ceiling assembly thermostat will revert to the main/home screen.



- Slide the smart device screen to the left for the 2nd screen. Tap on indicated space to bring up the interface screen. Slide the screen to the desired temperature and fan speed. After the temperature and fan speed are selected, tap the SET button.




- Press  (settings).
- Select **"ZONE NAME"**.
- Assign a name or description to the thermostat (7 characters maximum).
- Select **"SET"** to save the assigned name or description.

Note:

Each ceiling assembly thermostat may be connected to a maximum of 4 individual smart devices. Any subsequent pairing connections will result in the oldest/first connections being automatically deleted in order.

ii. Pairing additional thermostats

- Open the **RV Climate** app and slide the screen to the left (last screen).
- Select **"PAIR NEW THERMOSTAT"**.
- On the ceiling assembly thermostat, hold the **UP** and **DOWN** buttons simultaneously to enter pair mode.
- When prompted, enter the 6 digit ID from the thermostat and select **"PAIR NEW THERMOSTAT"**.
- Once connected, the ceiling assembly thermostat will revert to the main screen.

- Slide smart device screen to the left for 2nd screen.
- Press  (settings).
- Select **"ZONE NAME"**.
- Assign a name or description to the thermostat (maximum of 7 characters).
- Select **"SET"** to save the assigned name or description.

Note:

A maximum of 3 units may be added to an individual smart device.

iii. Pairing a previously paired thermostat

- Using the RV Climate app, select **"PAIR NEW THERMOSTAT"**.
- On the ceiling assembly thermostat, hold the **UP** and **DOWN** buttons simultaneously to enter pair mode.
- The Thermostat will automatically pair.

automatically, when prompted enter the 6 digit ID from the ceiling assembly thermostat and select **"PAIR"**.

- Once pairing is complete, press the ceiling assembly thermostat's mode button to return to the main screen.

Note: If the thermostat doesn't pair



Details (2nd Screen)



ZONE NAME: Allows you to assign a name or description to the thermostat (maximum of 7 characters).

THERMOSTAT ID: Displays the thermostat's 6-digit ID.

FUNCTIONS: Displays available modes.

SET: Saves assigned zone name/description.


CANCEL: Reverts to the main screen.

REMOVE THERMOSTAT: Removes thermostat from the RV CLIMATE app.

Controlling the thermostat via RV Climate app:

- Select the **RV Climate** icon on your smart device.
- Slide screen to the left for 2nd screen.
- Tap the icon displaying the current settings [Kitchen 75 FAN HIGH].
- Select the desired temperature/mode.
- Press **"SET"**.

Removing a previously paired thermostat

- Select the **RV Climate** app on your smart device.
- Slide screen to the left for 2nd screen.
- Press .
- Select **"REMOVE THERMOSTAT"** and press **"OK"**.

CEILING ASSEMBLY - BUTTON FUNCTIONS



UP – Wake thermostat and increase temperature

DOWN – Wake thermostat and decrease temperature

MODE – Wake thermostat, change mode

Note: Hold mode button down for 5 seconds. The thermostat will change from Fahrenheit to Celsius or Celsius to Fahrenheit. The backlight will turn off after five seconds.

X. OPERATION

- A. Set the thermostat to the "LOW COOL" or "HIGH COOL" position.
- B. Adjust the thermostat (temperature control) to the position that is the most comfortable to you. The thermostat will turn the compressor on when the temperature of the air entering the Air Conditioner rises a few degrees above the setting you have selected. When the temperature of the air entering the Air Conditioner drops below the selected setting, the thermostat will turn the compressor off. The Air Conditioner, while in the cooling mode, will continue to cycle the compressor on and off in the above-mentioned fashion until the selector switch is turned to another mode of operation.
- C. Position the louvers to the desired direction the discharge air is to flow.

i. Operation During Cooler Nights (Cooling Operation)

It is important when the outdoor temperature drops in the evening or during the night to below 75°F, that the thermostat (temperature control) be set at a midpoint between "Warmer" and "Cooler". If the setting is at "Cooler", the evaporator coil may become iced-up and stop cooling. During the day when the temperatures have risen above 75°F, reset the thermostat switch to the desired setting.

NOTE: Should icing-up occur, it is necessary to let the cooling (evaporator) coil defrost before normal cooling operation is resumed. During this time, operate the unit in the "HIGH FAN" position with the system at maximum air flow. When increased or full air flow is observed, the cooling coil should be clear of ice.

ii. Short Cycling

When an Air Conditioner is in operation, its compressor circulates refrigerant under high pressure. Once off, it will take two to three minutes for this high pressure to equalize. The Air Conditioner compressor is unable to start against high pressure. Therefore, once the Air Conditioner is turned off, it is important to leave it off for two to three minutes before restarting.

Short cycling the compressor (or starting it before pressures have equalized), will in some instances, kick the circuit breaker or overload.

iii. For Air Circulation Only

- A. Set the thermostat to "LOW FAN" or, for maximum air flow, to "HIGH FAN".
- B. Position the louvers to the desired direction the discharge air is to flow.

NOTE: When the thermostat is in the "LOW FAN" or "HIGH FAN" position, the blower motor will operate continuously.

iv. Routine Maintenance

- I. Owner – One of the biggest advantages to your new Coleman®-Mach® Air Conditioner is that the needed maintenance needed to keep the unit in good working order is minimal. In fact, about the only thing you, the owner, must take care of is the cleaning and replacement of the filters.

Filters are made from long life non-allergenic natural fibers which can be cleaned and reused, and which completely filter the circulated air when the Air Conditioner is in operation. If the filters are not cleaned at regular intervals, they may become partially clogged with lint, dirt, grease, etc. A clogged filter will produce a loss of air volume and may eventually cause an icing-up of the cooling (evaporator) coil.

The ceiling assembly and the outside shroud can be cleaned with a damp cloth. When required, a mild detergent can be used.

IMPORTANT

Do not operate your Air Conditioner for extended periods of time without the filter installed.

An even more serious condition occurs when the Air Conditioner is operated without a filter. When this happens, the lint, grease, etc. that are normally stopped by the filter are now accumulating in the cooling coil. This not only leads to a loss of air volume and a possible icing-up of the cooling coil but could also result in serious damage to the operating components of the Air Conditioner. We recommend that the filters be cleaned and changed at least every two weeks when the Air Conditioner is in operation.

Cleaning and/or changing the filters:

1. Remove the two grilles from the ceiling assembly by pulling the tabs on the grilles.
2. Remove and clean or replace the two filters.
3. Re-install the filters and grilles in the ceiling assembly as shown in Figure 2.
4. If the vehicle is equipped with a flush mount ceiling assembly, remove the four return air grille screws. Remove the filter from the grille and either clean or exchange with new filters.

NOTE: If replacement filters are necessary, the filters can be purchased from most Airxcel, Inc. Authorized Service Centers. It is recommended that spare filters be carried with the RV at all times to replace worn, torn or deteriorated filters.

II. Service Person

- A. Electrical – All electrical work and/or inspection should be performed only by qualified service personnel. Contact your nearest Airxcel, Inc. Service Center if electrical problems should arise.
- B. Check Points – Failure to start or to cool the air are sometimes problems with Air Conditioner units. This Coleman®-Mach® RV Air Conditioner is designed to operate on 36-57V DC electrical power. If the compressor on the Air Conditioner fails to start, check with your Airxcel, Inc. Service Center to determine that the proper wire size is connected to the unit, the proper circuit breakers are installed as protection devices on the electrical circuit and the proper sized extension cord is being used for the distance covered from the utility outlet to the RV. The required minimum wire size is #10 AWG for lengths up to 25 feet (larger wire size for greater distances). Each Air Conditioner unit must be protected with a time delay fuse (U.L. Listed) or equivalent.

If the Air Conditioner continues to blow the fuse, have an electrician check the starting amperage and running amperage on the unit. If the fuse continues to blow and the electrical consumption is found to be normal, it will require the replacement of the faulty fuse.

If all electrical power to the Air Conditioner is normal but neither the fan or the compressor will operate, the connector plug located behind the ceiling assembly control box should be checked to determine whether it is faulty.

- C. Mechanical Integrity – The Air Conditioner should be inspected periodically to be sure that the bolts which secure the unit to the roof are tight and in good shape. Also, an examination of the plastic shroud covering the Air Conditioner on the top of the roof should be made periodically. Be sure the four mounting screws and washers are snug and holding the shroud to the Air Conditioner. Also, examine the shroud to be sure it is not developing cracks or has suffered damage from impact.

XI. WARRANTY SERVICE

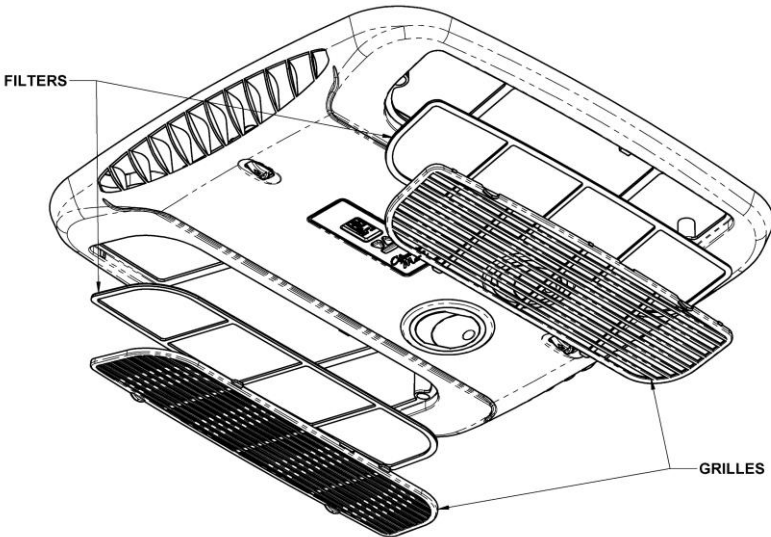
Let's face it. Sometimes even the best products may need service. To obtain warranty service on your Coleman-Mach Air Conditioner, please contact your selling dealer, or you may access our web site on the Internet at www.Airxcel.com for answers to the most frequently asked questions and service center locations.

Airxcel, Inc. support help may be accessed by e-mail at RVPSupport@Airxcel.com. All written correspondence should be directed to:

AIRXCEL, INC. - RV Products Division
P.O. Box 4020
Wichita, KS 67204

IMPORTANT

1. Carefully read the LIMITED 2 YEAR WARRANTY, the OPTIONAL THREE YEAR EXTENDED PARTS WARRANTY, sample contract, terms, conditions, exceptions and exclusions regarding your unit at www.Airxcel.com.
2. An optional three year extended parts only contract is available at an additional cost of \$89.95. To obtain this optional three year parts contract, fill out the application located on the back of this manual. Once completed, cut along the dotted lines and mail the application and your check or money order to the address above. Applications must be made **within ninety (90) days** of the original purchase.
7. Inquiries about your Coleman-Mach Air Conditioner must include the model and serial numbers and the date of purchase. The model and serial numbers can be found on the I.D. label located on the Air Conditioner basepan return air opening at the bottom of the roof unit. This information may also be found on the Air Conditioner rating plate.



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***** OPTIONAL EXTENDED WARRANTY OFFER *****

Cover your new purchase with our three (3) year extended parts only contract for \$89.95.

This warranty covers parts only (no labor) against manufacturer defects for an additional three (3) years beyond your original two (2) year warranty. This warranty excludes shrouds, filters and complete Air Conditioners.

What a great addition to your standard warranty – knowing you have protection for an additional three (3) years should you experience part failure (excluding shrouds, filters and complete Air Conditioners) on your Coleman-Mach Air Conditioner. Free replacement parts for three (3) years (excluding shrouds, filters and complete Air Conditioners) – how can you pass this up!

Apply today by filling out the application below and mailing it with your check or money order for \$89.95 to Airxcel, Inc., P.O. Box 4020, Wichita, KS 67204. A contract will be sent to you within a few weeks. You should retain with your paperwork for proof of purchase.

To view the LIMITED 2 YEAR WARRANTY, the OPTIONAL THREE YEAR EXTENDED PARTS WARRANTY, a sample contract, terms, conditions, exceptions and exclusions, please visit www.Airxcel.com and type WARRANTY in the search bar.

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CUT ALONG DOTTED LINE – RETURN THIS PORTION

APPLICATION FOR OPTIONAL THREE (3) YEAR PARTS CONTRACT
\$89.95

(DOES NOT INCLUDE LABOR. EXCLUDES SHROUDS, FILTERS AND COMPLETE AIR CONDITIONERS)
APPLICATION MUST BE MADE WITHIN 90 DAYS OF PURCHASE DATE OF THE AIR CONDITIONER OR THE RECREATIONAL VEHICLE IF THE AIR CONDITIONER IS ORIGINAL EQUIPMENT.

(PLEASE PRINT CLEARLY)

DATE OF PURCHASE: _____
(Air Conditioner)

Name of Purchaser: _____

Street: _____

City: _____ State: _____ Zip: _____

Place Model No./Serial No. sticker Here

BE SURE TO ENCLOSE A CHECK OR MONEY ORDER FOR \$89.95 (U.S. FUNDS)