

**AIRSTREAM**

A TRAILERING GUIDE



**OWNERS  
MANUAL  
BASECAMP**



The **Owners Manual** for your new Airstream trailer is designed to respond to the most frequent inquiries regarding the operation, function and care of the many systems that make modern trailering a joy.

Airstream realizes our customers possess varying degrees of expertise in the area of repairing and maintaining the appliances in their trailer. For this reason, the service and trouble-shooting information found in this manual is directed toward those with average mechanical skills.

We also realize you may be more familiar in one area than you are in another. Only you know your capabilities and limitations. We want you to use this manual, and hope you will find the information contained in it useful, however, should you ever feel you may be “getting in over your head” please see your dealer to have the repairs made.

A brief explanation of the operation of the appliances such as refrigerator, furnace, water heater and others are explained in this manual. However, you will also find the manufacturer’s information supplied in a packet included with this manual more detailed.

All information, illustrations and specifications contained in this manual are based on the latest product information available at the time of publication approval. If and when new materials and production techniques are developed which can improve the quality of its product, or material substitutions are necessary due to availability, Airstream reserves the right to make such changes.

We have provided many important safety messages in this manual. Always read and obey all safety messages.



**WARNING** indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.

# INTRODUCTION

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**CAUTION** indicates a potentially hazardous situation that, if not avoided, could result in minor or moderate injury.

**CAUTION** used without the safety alert symbol indicates a potentially hazardous situation that, if not avoided, could result in property damage.

**NOTE:** Important information regarding the maintenance of your recreational vehicle.

**(Optional)** This denotes items that may be an option on all or particular models. Additionally, some optional items can only be included during the manufacturing phase and cannot be added.

The inclusion of optional items does not imply or suggest the availability, application suitability, or inclusion for any specific unit.

## Important Safety Precautions

You'll find many safety recommendations on this page and throughout this manual. The recommendations on the next two pages are the ones we consider to be the most important. They are covered in depth in later sections of this manual.

### Do Not Allow Passengers to Ride in the Trailer During Travel

The transport of people puts their lives at risk and may be illegal. The trailer does not have seat belts, therefore, it is not designed to carry passengers.

### Reducing Fishtailing or Sway

Sway or fishtailing is the sideways action of a trailer caused by external forces. Excessive sway of your travel trailer can lead to the rollover of the trailer and tow vehicle resulting in serious injury or death. Be sure to follow the instructions in this manual.

## Mold

There are mold and mold spores throughout the indoor and outdoor environment. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.

## Towing and Weight Distribution

Weight distribution is an important factor when loading your travel trailer. A recreational vehicle with the cargo distributed properly will result in efficient, trouble-free towing. Be sure to follow the instructions in this manual.

## Formaldehyde

Formaldehyde is an important chemical used widely by industry to manufacture building materials and numerous household products. It is also a by-product of combustion and certain other natural processes. Thus, it may be present inside the trailer with some individuals being sensitive to it. Ventilation of the unit normally reduces the exposure to a comfortable level.

## Generator Safety

Do not operate the generator in an enclosed building or in a partly enclosed area such as a garage. Nor should the generator be operated while sleeping. Be sure to follow all instructions and warnings in this manual.

## Lug Nut Torquing

Being sure wheel mounting nuts (lug nuts) on trailer wheels are tight and properly torqued is an important responsibility that trailer owners and users need to be familiar with and practice. Inadequate and/or inappropriate wheel nut torque (tightness) is a major reason that lug nuts loosen in service. Loose lug nuts can rapidly lead to a

wheel separation with potentially serious safety consequences. Be sure to follow the instructions in this manual.

## **Appliances and Equipment**

The appliances (stove, refrigerator, outdoor grills, etc.) and equipment (hot water heater, furnace generator, etc.) typically operate on LP gas. LP gas is flammable and is contained under high pressure. Improper use may result in a fire and/or explosion. Be sure to follow all instructions and warnings in this manual (see page xxx) as well as the specific owners' manuals of the appliances and equipment.

## **Tire Safety**

Properly maintained tires improve the steering, stopping, traction, and load-carrying capability of your vehicle. Underinflated tires and overloaded vehicles are a major cause of tire failure. Be sure to read the Tire Safety Manual Addendum included with your owner's packet.

## **Chemical Sensitivity; Ventilation**

### **Chemical Sensitivity**

After you first purchase your new recreational vehicle and sometimes after it has been closed up for an extended period of time you may notice a strong odor and chemical sensitivity. This is not a defect in your recreational vehicle. Like your home, there are many different products used in the construction of recreational vehicles such as carpet, linoleum, plywood, insulation, upholstery, etc. Formaldehyde is also the by-product of combustion and numerous household products, such as some paints, coatings and cosmetics. However, recreational vehicles are much smaller than your home and therefore the exchange of air inside a recreational vehicle is significantly less than a home. These products, when new or when exposed to elevated temperatures and/or humidity, may "off-gas" different chemicals, including formaldehyde. This off-gassing, in combination with the minimal air exchange, may cause you to experience irritation of the eyes, nose, and throat and sometimes headache, nausea, and a variety of asthma-like symptoms. Elderly persons and young children, as well as anyone with a history of asthma, allergies, or lung problems, may be more susceptible to the effects of off-gassing.

### **Formaldehyde**

Most of the attention regarding chemical off-gassing surrounds formaldehyde. Formaldehyde is a naturally occurring substance. It is also a key industrial chemical used in the manufacture of the numerous consumer products which we referred to above and used in the construction of recreational vehicles. Trace levels of formaldehyde are also released from smoking, cooking, use of soaps and detergents such as carpet shampoos, cosmetics, and many other household products. Some people are very sensitive to formaldehyde while others may not have any reaction to the same levels of formaldehyde. Amounts released decrease over time.

# INTRODUCTION

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## Ventilation

To reduce or lessen exposure to chemicals from off-gassing it is of utmost importance that you ventilate your recreational vehicle. Ventilation should occur frequently after purchase and at times when the temperatures and humidity are elevated. Remember off-gassing is accelerated by heat and humidity. Open windows, exhaust vents, and doors. Operate ceiling and/or other fans, roof air conditioners, and furnaces and use a fan to force stale air out and bring fresh air in. Decreasing the flow of air by sealing the recreational vehicle increases the formaldehyde level in the indoor air. Please also follow the recommendations contained in Chapter 2 regarding tips to avoid condensation problems. Many of the recommendations contained in Chapter 2 will assist in avoiding exposure to chemicals that off-gas.

## Do Not Smoke

Finally, we recommend that you do not smoke inside your recreational vehicle. In addition to causing damage to your recreational vehicle, tobacco smoke releases formaldehyde and other toxic chemicals.

## Medical Advice

If you have any questions regarding the health effects of formaldehyde, please consult your doctor or local health department.

## Warranty Exclusion

Chemical gassing is not a "Defect" in your recreational vehicle and is not covered by the Limited Warranty. Please follow the recommendations in this manual to address this concern.

## Appliances and Equipment

All appliances are delivered to Airstream Inc. with in depth Owner's Manuals. Those manuals are included in the delivery case supplied by your dealer. The manuals may contain warnings, cautions, and operating instruction that should be read and followed before operating the appliances. The information contained in the appliances manuals supersedes any information contained in the Airstream Trailer Owner's Manual on appliances. If you believe contradictory information on appliances is contained in this manual, please contact the Airstream Customer Service Department at 937-596-6111 or write:

Airstream Factory Service Center,  
P.O. Box 629  
419 W. Pike Street  
Jackson Center, Ohio 45334-0629

If any appliance manuals have not been provided with your trailer, contact your dealer, the respective appliance manufacturer, or Airstream Customer Service. A manual will be provided to you.

**Maintenance:** Follow the instructions and warnings noted in the appliances and equipment owner's manuals as well as the ones listed below:

- Annual maintenance should be conducted on propane gas appliances and equipment by an authorized dealer or repair facility.
- Insects can build nests in the burners of various appliances and equipment. The burner and burner orifice of the propane gas appliances and equipment should be cleaned out by an authorized dealer or repair facility anytime circumstances or conditions warrant., but no less than on an annual basis.

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## I. SPECIFICATIONS

# WARRANTY AND SERVICE

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## WARRANTY COVERAGE

When you buy a new Airstream Travel Trailer from an authorized Airstream dealer, Airstream, Inc., warrants the trailer from defects in material and workmanship as follows:

### BASIC WARRANTY PERIOD

This warranty extends for a period of one year from the date of original retail purchase.

### ITEMS COVERED

Any part of the trailer or any component equipment installed by the factory is covered by the basic warranty except the following items, which are not covered:

- Tires
- Batteries

The tire and battery warranties will be handled by their respective service points and according to their written policy. This limited warranty does not include failure caused by accident, abuse, normal wear, overload or any cause not attributable to a defect in original material or workmanship of the trailer or component equipment as installed by the factory.

## LIMITATION OF IMPLIED WARRANTIES

All warranties of merchantability and fitness for a particular purpose, whether written or oral, expressed or implied, shall extend only for a period of one year from the date of original purchase. There are no other warranties, which extend beyond those described on the face hereof and which expressly excludes conditions resulting from normal wear, accident, abuse, exposure or overload. Some states do not allow limitation on how long an implied warranty lasts, so the above limitations may not apply to you.

## AIRSTREAM'S RESPONSIBILITY

The basic **Airstream Limited Warranty** applies for a period of one year from the date of original purchase, and the application date of all warranties is that indicated on the owner's Limited Warranty. Defects in items covered under this Warranty will be corrected without cost upon the return, at the owner's expense, of the trailer or defective part to an authorized Airstream dealer.



# WARRANTY AND SERVICE



## CARE AND MAINTENANCE

This warranty covers only defective material and/or workmanship; adjustments are made at the factory prior to shipment, and rechecked by the dealer prior to delivery to the customer. Adjustments thereafter become a customer responsibility.

Part of the Airstream exterior (not including the underside) is clear coated to prevent oxidation. This application is covered by a one-year warranty against peeling. Prolonged exposure to salt air or industrial fall-out will permit penetration through the coating material, causing damage to the exterior finish. Since Airstream, Inc., has no control over these conditions, it is necessary for the owner to wash and maintain their trailer as instructed in the Owner's Manual.

The owner is also responsible for following all recommendations, instructions and precautions contained in the Airstream Trailer Owner's Manual and the individual manuals furnished by the chassis, appliance and other manufacturers.

## INSTALLATIONS NOT COVERED

Airstream, Inc., does not accept any responsibility in connection with any of its trailers for additional equipment or accessories installed at any dealership or other place of business, or by any other party. Such installation of equipment or accessories by any other party will not be covered by the terms of this warranty.

## IF REPAIRS ARE NEEDED

If your trailer needs repairs under the terms of the basic Airstream Limited Warranty, you should:

1. Take your trailer to your selling dealer or other Authorized Airstream Dealer.
2. If the dealer is incapable of making the repair, request that he contact the Service Administration Department at Airstream, Inc., for technical assistance.
3. If repairs are still not made, the customer should contact:

### AIRSTREAM, INC.

419 W. Pike Street - P.O. Box 629  
Jackson Center, Ohio 45334-0629  
Attention: Owner Relations Department

Furnish the following information:

- The complete serial number of the trailer
  - Mileage
  - Date of original purchase
  - Selling dealer
  - Nature of service problem and steps or service, which have been performed.  
(The owner may be directed to another dealer at the owner's expense.)
4. If, after taking the above steps, repairs are still not complete, the Airstream owner may request the trailer be brought to the Factory Service Center at the owner's expense.

# WARRANTY AND SERVICE

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## DEALER REPRESENTATION EXCLUDED

The full extent of the basic Airstream Limited Warranty is set forth in detail in the folder, and in the explanation of the basic Airstream Limited Warranty covered in the Airstream Trailer Owner's Manual. Airstream Inc. will not be responsible for additional representations or implied warranties made by any of its dealers to the extent those representations are not a part of, or are contrary to, the terms and conditions of the basic Airstream Limited Warranty.

## CONSEQUENTIAL AND INCIDENTAL DAMAGES

**Airstream, Inc., will not be responsible for any consequential or incidental expenses or damages resulting from a defect. Incidental expenses include, but are not limited to: travel expenses, gasoline, oil, lodging, meals, telephone tolls, and loss of work and loss of use of the trailer. Some examples of consequential damages would be: stained curtains due to rain leaks or delaminated floor caused by a plumbing leak. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.**

## WARRANTY TRANSFER

The basic **Airstream Limited Warranty** is transferable to subsequent owners for the duration of the warranty period. Warranty transfer application forms are available from your dealer or the Airstream Inc. Service Administration Department.

## CHANGES IN DESIGN

Airstream Inc. reserves the right to make changes in design and improvements upon its product without imposing my obligation upon itself to install the same upon its products theretofore manufactured.

**This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.**

## EXPLANATION OF AIRSTREAM LIMITED WARRANTY

The Airstream Limited Warranty is detailed on a Warranty Card. It is filled out by the dealer and presented to the owner during delivery of a new unit. The Limited Warranty must be presented to a dealer to obtain warranty service. It should be kept in the trailer during the warranty period.

## EXCLUSIONS:

### **Normal Wear**

Items such as tires, curtains, upholstery, floor coverings, window, door and vent seals will show wear or may even wear out within the one year warranty period depending upon the amount of usage, weather, and atmospheric conditions.

### **Accident**

We strongly urge our dealers and customers to inspect the trailer upon receipt of

# WARRANTY AND SERVICE

delivery for any damage caused by accident while being delivered to the dealer, or while it is on the dealer's lot. Damage of this nature becomes the dealer or customer's responsibility upon acceptance of delivery, unless Airstream is notified and the person making the delivery verifies the damage. Glass breakage, whether obviously struck or mysterious, is always accidental and covered by most insurance policies.

## **Abuse**

Lack of customer care and/or improper maintenance will result in early failure for which Airstream cannot be held responsible.

## **Exposure**

Not unlike a car, the steel parts of a trailer can and will rust if subjected to prolonged exposure to moisture, salt air, or corrosive air-borne pollutants without repainting. Aluminum oxidizes when unprotected under similar conditions, and refinery chemicals of a sulfurous nature are harmful to finishes if not washed off periodically. Extremely hot or direct sunlight will deteriorate rubber and fade curtains and upholstery. Conditions of this nature, although they may be normal for the area, are beyond Airstream's control and become the responsibility of the owner.

It is the responsibility of the owner to take such preventative measures as are necessary to maintain the exterior caulking and sealer of your unit. It is the responsibility of the owner to use reasonable, prudent care to prevent foreseeable secondary damage from rain, plumbing leaks, and the natural accumulation of moisture in your unit, such as a delaminated floor; stained upholstery, carpeting, or drapes; mold formation and growth; furniture damage, etc. Mold is a natural growth given certain environmental conditions and is not covered by the terms of the Limited Warranty.

## **Overload**

Damage due to loading, either beyond capacity or to cause improper towing be-

cause of improper balance, is beyond Airstream's responsibility. The Airstream trailer is engineered to properly handle the gross vehicle load rating on the certification label. Load distribution has a definite effect upon the towing characteristics and attitudes of the trailer. Level hitch installations are a necessity, and very important on a tandem axle trailer. There are limits to the amount of load that can be safely transported depending upon speed and road conditions, and reasonable cause to believe these factors have been exceeded could void the Airstream warranty. For additional information on the loading of your trailer, consult your Owner's Manual or gross vehicle weight rating plate.

The Airstream axle is manufactured to a tolerance of 1-degree camber and 1/8" toe-in. These tolerances will only change if the trailer is subjected to abuse, such as dropping off a sharp berm, striking a curb, or hitting a deep hole in the road. Such damage could be considered as resulting from an accident which risks are not covered under the warranty. Abnormal tire wear and/or wheel alignment resulting from such damage is not covered under the terms of the warranty.

## **Chemical Gassing**

Chemical gassing is not a "Defect" in your recreational vehicle and is not covered by the Limited Warranty. Please follow the recommendations in this manual to address this concern.

## **SERVICE:**

Before leaving the factory, each and every vital part of the trailer is tested for performance. Each test is signed and certified by an inspector. After the trailer arrives on your dealer's lot all of these vital parts and systems are again tested. When you take delivery of your new trailer you will receive a complete check out.

At that time a specified list of performance checks on your trailer equipment will be



# WARRANTY AND SERVICE

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conducted and any deficiencies you have experienced since taking delivery will be corrected.

Please contact your dealer if you need service. Major service under your Airstream Limited Warranty is available through our nationwide network of Airstream Dealer Service Centers. An up-to-date list of Dealer Service Centers has been provided with your new trailer. This list is current as of the date of this publication.

Occasionally dealerships change, or new dealers are added who may not appear on this list. For this reason, it is suggested that you contact your local dealer from time to time and bring your list up to date. He can also provide you with additional copies if you need them. ALL CENTERS OPERATE ON AN APPOINTMENT BASIS FOR THE UTMOST EFFICIENCY.

When you require service from the Airstream Factory Service Center, or a Certified Dealer Service Center, please contact the service manager for an appointment, and kindly inform him if you are unable to keep the appointment date or wish to change it. Service may be arranged at the Factory Service Center by contacting the Service Coordinator at: Airstream Factory Service Center, P.O. Box 629, 419 W. Pike Street, Jackson Center, Ohio 45334-0629 Phone: 937-596-6111

## REPORTING SAFETY DEFECTS

If you believe that your vehicle has a defect, which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Airstream, Inc.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Airstream, Inc.

To contact NHTSA you may either call the Auto Safety Hotline toll-free at 1-888-327-4236 (TTY 1-800-424-9153); go to [www.safercar.gov](http://www.safercar.gov); or write to: Administrator, NHTSA, 400 Seventh St, S.W., Washington, D.C. 20590.

You can also obtain other information about motor vehicle safety from [www.safercar.gov](http://www.safercar.gov).

# WARRANTY AND SERVICE



## MAINTENANCE SCHEDULE



**WARNING: FAILURE TO MAINTAIN YOUR COACH CAN CAUSE PREMATURE AND UNEXPECTED PARTS BREAKAGE AND/OR ERRATIC OPERATION THAT MAY BE HAZARDOUS.**

Note: See appliance manufacturer's literature for further information

### EVERY 1,000 MILES OR 60 DAYS

Escape Window	Check operation of latches and upper hinge.
*Battery	Check water level
Smoke Alarm	Test and replace battery as required.
Tires	Check tire pressure (See Specifications).
Hitch	Check for loose bolts or unusual wear.
GFI Circuit Breaker	Test and record.



**WARNING: WHEEL SEPARATION CAN OCCUR**

1. On first trip, tighten wheel lugs at start and at 10, 25, and 50 miles.
2. Thereafter, check wheel lugs before each trip.
3. Following winter storage, check before beginning a trip.
4. Following excessive braking, inspect wheel lugs

**Torque aluminum wheels to 100 ft.. lbs.**

### EVERY 5,000 MILES OR 90 DAYS

Exterior Door Locks	Lubricate with dry graphite
Exterior Hinges	Lubricate with light household oil
LPG Hold Down	Lubricate with light household oil
LPG Regulator	Check bottom vent for obstructions
Main Door Striker Pocket	Coat with paraffin.
Wheel Lug Nuts	<b>Torque aluminum wheels to 100 ft. lbs.</b>
Break Away Switch	Pull pin and lubricate with household oil
7-Way Plug	Spray with contact cleaner.
Hitch Ball Latch	Lubricate with non-detergent motor oil
Hitch Ball	Lubricate with hitch ball lube or wheel bearing grease.
Main Door Step	Lubricate moving parts and check.

\* As a battery ages and becomes less efficient, the water level should be checked at more frequent levels.

# WARRANTY AND SERVICE

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## EVERY 10, 000 MILES OR 6 MONTHS

Brakes                                      Inspect, adjust or replace as necessary

Wheel Bearings                            Clean and repack

Tires                                         Inspect and rotate

Seals, Windows & Door                    Clean with mild detergent and coat with "Slipicone".

Exterior                                      Wax (Do not use an abrasive cleaner or wax).

## EVERY YEAR

Battery                                      Clean, neutralize and coat terminals with petroleum jelly.

A-Frame, Step                              Wire brush and paint frame at front and rear.

LP Bottle                                      Have purged by LP supplier.

Seams: Check and reseal exterior seams, windows, lights and vents as needed. Use Acryl-R seam sealer or equivalent.

Hitch Coupler and Ball: Check for wear or damage. Assure all parts operate freely. Replace any component if worn or damaged.

# WARRANTY AND SERVICE



## SUGGESTED MAINTENANCE PARTS AND LUBRICANTS

### BULBS, EXTERIOR

License Plate	12V C5W
Clearance Lights	LED
Tail light	LED

### BULBS, INTERIOR

Round Ceiling Light	12V-10W
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**WARNING:** Always replace the light bulb on a light fixture with the correct bulb for that light. Failure to heed this warning could cause fire, property damage, personal injury, or death.

### MISCELLANEOUS

Wheel Bearing Grease	Extra Hair Pin Clips for Hitch
Grease Seals	Dry Graphite
WD-40 or Equivalent Aerosol Lubricant	Silicone Lubricant
Oil Can with 30 Weight Non-Detergent Oil	Spray Contact Cleaner
Light Household Type Oil	Exterior Seam Sealer
Hitch Ball Lube (May use wheel bearing grease.)	

## FUSES

Charge Line, Breakaway switch (inside battery box)  
ATC 15 Amp, ATC 30 Amp fuse

Converter  
ATC 15 Amp, ATC 30 Amp fuse

LP Detector  
Antenna Power Amplifier  
AGC 1 Amp, Inline fuse inside roadside rear console

Radio  
ATC 15 Amp, back of radio

### 12-VOLT BREAKERS

Battery Cable  
40 Amp Type 1W.P. Breaker, Location: under the floor the floor on roadside exterior front end.

# WARRANTY AND SERVICE



## MAINTENANCE RECORD

DATE	DEALER	SERVICE PERFORMED

DATE	DEALER	SERVICE PERFORMED



## TOW VEHICLE

The light Gross Vehicular Weight rating of the BaseCamp provides many options in selecting a tow vehicle.

If you plan to buy a new vehicle to tow your trailer, we suggest that you consult with local automotive manufacturers on the towing capabilities and options offered. Options include such things as a heavy-duty alternator and radiator, heavy-duty springs (See Note), shock absorbers, transmission cooler, heavy-duty fan and flasher unit and others, depending upon the make of the vehicle. Most of these options are included in tow packages offered in today's market.

Transmissions may be manual or automatic, but an automatic transmission may prolong your tow vehicle's life and generally does a better job of controlling engine loads than the average driver using a manual shift.

Having adequate power is very important when considering the purchase of a new vehicle or the trailer towing capability of your present one. American manufacturers realize more than 30% of the vehicles they sell will be used for towing some type of trailer. The dealers are provided with guidelines to use when helping a customer decide on a tow vehicle. The guidelines are not just determined by the power output of the engine. The gear ratio of the differential is also a very important part of the guideline.

Inspect the vehicle's hitch regularly for loose bolts or nuts, cracked welds, loose ball mounts, and worn parts.

New trailerists often carry more food and other supplies than really needed. Remember that every item you take along is one more thing to stow and adds weight to the total load you must pull. Consolidate items in storage areas and in the refrigerator. Special care must be taken not to overload the front and rear ends of the trailer.

**NOTE:** Be realistic when ordering heavy duty springs. Only springs heavy enough to support your loaded vehicle (not including trailer) are necessary. Too harsh of spring rate will only shorten the life of the tow vehicle and trailer, and will make your journeys less enjoyable.

## ELECTRIC BRAKES

The brakes are operated by 12 volt current from your tow vehicle and **MUST BE HOOKED UP SO THAT YOU HAVE AN INTEGRAL SYSTEM WITH YOUR TOW VEHICLE BRAKES.** To prevent problems and insure satisfactory braking action, install an electronic controller in line with the brakes in your tow vehicle.

An electronic controller installed in your tow vehicle will synchronize the trailer brakes with your tow vehicle brakes. It is designed to apply the trailer brakes with your tow vehicle brakes.

Your brake controller should be adjusted to provide for a slight lead of the trailer brakes over the tow vehicle brakes. Follow the directions provided with your controller and keep the information for future reference. Don't be afraid to ask questions! If you don't understand the directions, have the installer explain the procedures.

Due to normal brake lining wear, the brakes and the controller setting should be checked and readjusted, if necessary, during the trailer manufacturer's recommended inspection intervals.

**Note:** Brake lining adjustment should be periodically checked (fully) to be sure trailer brakes are in the same adjustment as the tow vehicles.

**Properly set adjustments will provide for safe comfortable stops. They will also help assure optimum brake and tire life for both the tow vehicle and the trailer.**

# TOWING

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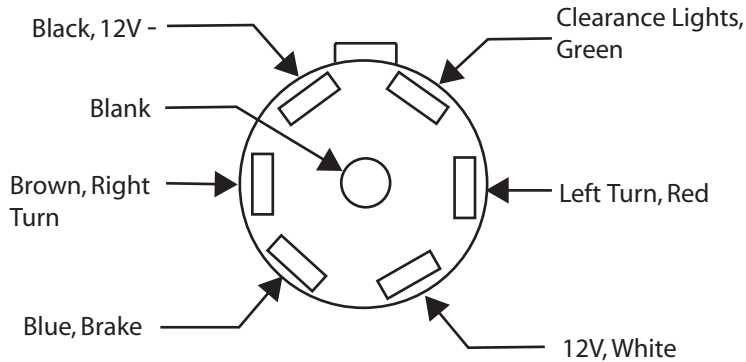
IN THE EVENT OF AN ACCIDENTAL SEPARATION of the tow vehicle and the trailer, the BREAK-AWAY SWITCH will set and lock the trailer brakes for a sufficient length of time to stop the trailer. The switch is activated when the wire attached to it and to the tow vehicle pulls out the small pin in the front of the unit. THIS PIN SHOULD BE PULLED OUT, LUBRICATED WITH LIGHT HOUSEHOLD OIL, AND REPLACED EVERY 90 DAYS.

To prevent corrosion within the breakaway switch, pull the switch's pin straight forward and spray the inside of the switch through the hole with an electric contact cleaner (such as Spra-Kleen) and re-insert pin. A drop of light household oil on the groove near the base of the pin will allow the pin to operate freely. WHEN THE TRAILER IS CONNECTED TO THE TOW VEHICLE, THE BREAKAWAY SWITCH LOOP SHOULD BE ATTACHED TO THE PERMANENT FRAME OF YOUR HITCH. When disconnecting the trailer from the tow vehicle remove wire loop from the frame. DO NOT REMOVE PIN FROM SWITCH BECAUSE THIS WILL APPLY THE TRAILER BRAKES.



**WARNING:** Do not use breakaway switch for parking brake.

## 7-way Plug Diagram



## LOADING

Below is a sample of the weight information chart provided in all Airstream vehicles. This information can be found inside the wardrobe of the vehicle about 60" up from the floor on the side panel.

**TRAILER WEIGHT INFORMATION**

**VIN OR SERIAL NUMBER**

**GVWR (GROSS VEHICULAR WEIGHT RATING)** IS THE MAXIMUM WEIGHT OF THIS TRAILER WHEN FULLY LOADED. IT INCLUDES ALL WEIGHT AT THE TRAILER AXLE(S), AND TONGUE OR PIN.

**UVW (UNLOADED VEHICLE WEIGHT)**, IS THE WEIGHT OF THIS TRAILER AS MANUFACTURED AT THE FACTORY. IT INCLUDES ALL WEIGHT AT THE TRAILER AXLE (S) AND TONGUE OR PIN. IF APPLICABLE, IT ALSO INCLUDES FULL GENERATOR FLUIDS, INCLUDING FUEL, ENGINE OIL, AND COOLANTS.

**CCC (CARGO CARRYING CAPACITY)** IS EQUAL TO GVWR MINUS EACH OF THE FOLLOWING: UVW, FULL FRESH (POTABLE) WATER WEIGHT, (INCLUDING WATER HEATER, FULL PROPANE WEIGHT).

CARGO CARRYING CAPACITY (CCC) COMPUTATION	POUNDS	KILOGRAMS
GVWR.....		
MINUS UVW.....		
MINUS FRESH WATER WEIGHT OF   GALLONS @ 8.3 LB/GAL		
MINUS PROPANE WEIGHT OF   GALLONS @ 4.2 LB/GAL		
*CCC FOR THIS TRAILER.....		

\*DEALER INSTALLED EQUIPMENT WILL REDUCE CCC

**CONSULT OWNER MANUAL (S) FOR SPECIFIC WEIGHING INSTRUCTIONS AND TOWING GUIDELINES**

**CD-133**

See specification section in this manual for definition and weight pertaining to this label.



**WARNING:** Never add items such as generators, heavy toolboxes or motorcycle racks to the back of the trailer. Weight behind the axle will tend to magnify any sway that may occur when passing trucks or in gusty wind. If a heavy generator is mounted on the rear of the trailer, what may have been an almost unnoticeable sway turns into a severe sway you may not be able to control.

When loading heavy objects such as tools, skillets, irons, and boxes of canned goods, etc. keep them as low as possible - preferably on the floor. Try to hold additional weight behind the axle to a minimum.

**CAUTION:** Damage to your trailer caused by mounting heavy objects on the rear is considered abuse, and is not covered by warranty.



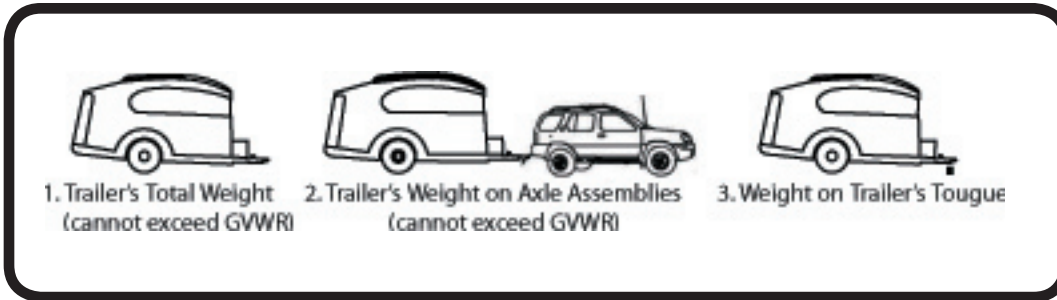
**WARNING:** The roof rack tubes are for decorative purposes only and are not intended for carrying cargo. DO NOT attach cargo, luggage carriers, or other equipment intended for cargo purposes to the tubes.



# TOWING

## WEIGHING YOUR TRAILER

The diagram below shows how to weigh the trailer on scales.



**CAUTION:** The allowable personal cargo must be distributed in your trailer in such a manner that the Gross Axle Weight Rating is not exceeded.

To determine this, it is necessary to load all of your allowable personal cargo and variable weights. Then hitch the trailer to the tow vehicle with load equalizing hitch properly adjusted as shown on the following pages.

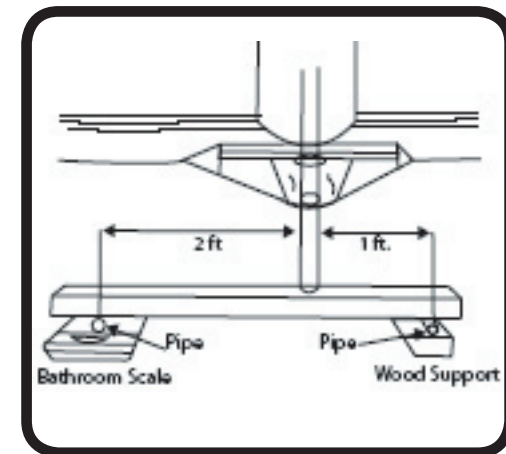
Place the trailer on a scale with both axles only on the scale. See illustration above. If the weight on the axles exceeds the axle system G.A.W.R. then some of the personal cargo must be redistributed forward in order to place some of this weight on the tongue. The tongue weight should be in between 10% - 15% of the trailer's total weight, but must not exceed the manufacturer's maximum recommended hitch weight of the tow vehicle or hitch.

To determine tongue load, unhitch tow vehicle and place the tongue hitch post on a scale. The trailer must be properly loaded as determined above, with your allowable personal cargo and variable weights.

Use a scale, such as a bathroom scale, that has a lower weight limit than your tongue load to check the tongue weight by using the following method (See illustration).

Place a piece of wood of approximately the same thickness as the bathroom scales on the ground in line with the trailer hitch jack as shown. It should be so spaced that a short piece of pipe or other round piece will lay exactly one foot from the center line of the jack extension. Place the scales so that another round piece can be exactly two feet from the center line of the jack extension in the other direction. Place a 4 x 4 on the two round pieces and screw

the jack extension down on the top of the 4 x 4 until the tongue of the trailer is supported by it. Multiply the scale reading by three. This will be the tongue weight of your trailer. If you exceed the capacity of the bathroom scales, increase the two-foot dimension to three or four more feet, but always multiply the scale reading by the total number of feet between the wood and scales.



**Note:** Be sure trailer is level when you read scales.

## HITCHING UP

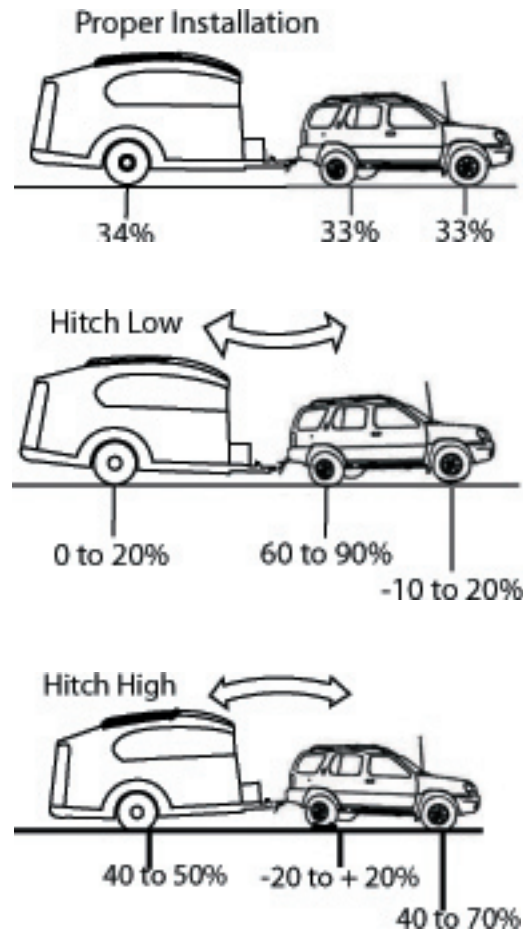
Hitching up your trailer is something that will become almost second nature with practice. The following section includes proper hitch load distribution and a procedure for hitching up.

### Equalizing Hitch Load Distribution

When a trailer is hitched up properly to a tow vehicle with a load equalizing hitch, approximately 1/3 of the trailer's tongue weight will be on the trailer's axles and 2/3 will be transferred to the tow vehicle, 1/3 of this weight transfer will be carried by the front wheels and 1/3 by the rear wheels of the tow vehicle (See diagram), Thus, the tire load of each wheel on the tow vehicle will be increased by 1/6 of the trailer's tongue weight. The tire air pressure of the tow vehicle should be increased to compensate for this additional weight. Refer to the vehicle's owner's manual for this information.

**⚠ WARNING:** The tongue weight should be approximately 10% to 14% of the trailer's total weight. Under no condition should it exceed the hitch rating. Your hitch installer should provide your hitch rating information to you.

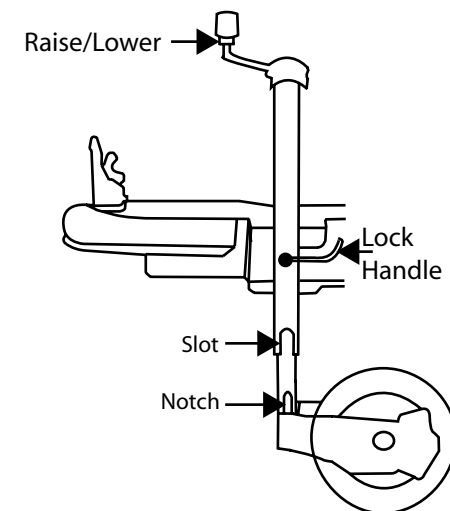
### Percentage of Tongue Load distributed to car and or trailer wheels



## HITCH JACK

The manual hitch jack raises and lowers the trailer for hitching and leveling. To operate, turn the lock handle counter clockwise to loosen the collar. This will allow the jack to slide up and down in the collar. Slide the jack down until the foot pad is resting almost on the ground. Tighten the lock handle to hold the jack firmly in place. Turn the jack crank to raise or lower the trailer.

To store the jack after use, hitch the trailer to a stable tow vehicle. Raise the jack with crank handle. Be sure the notch on the jack shaft is aligned with the slot on the jack case as you raise the jack completely up. This will lock the wheel in place and prevent the wheel/shaft from spinning and sustaining damage during travel. After raising the wheel, loosen the lock handle and lift the jack assembly to its highest position. Tighten the lock handle firmly to safely store the jack for travel.



# TOWING

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## Steps for Hitching Up, Typical Hitch

### TYPICAL HITCH LEVELING BAR SYSTEM

**B** The following is an example of a typical hitching scenario. Due to the infinite variety of hitch systems in the present marketplace, the installation and use of your hitch towing system may be different than as explained below. Always refer to the instructions and training as provided with your tow vehicle, hitch, and by the equipment providers. Consult a local dealer if you have any questions on your application.

Step 1. Jack up the trailer hitch until there is clearance for the HITCH BALL to slide under. Remove the safety pin, slide the locking lever forward and raise. Back the tow vehicle straight back to the hitch. This can best be accomplished through the use of prearranged hand signals with the help of another person; but if you are hitching up by yourself we recommend the use of a HOOK-UP VIEW MIRROR.

Step 2. Lower the trailer hitch onto the hitch ball. Then close the locking lever and insert safety pin.

Step 3. Now raise the trailer and tow vehicle to the full height of the hitch jack and then attach the LEVELING BARS and lever the tension on the bars.

Step 4. Lower the tow vehicle and trailer. The hitch ball should be level to slightly higher. Readjust leveling bars until this condition is correct by increasing or decreasing the length the chain engaged in "A" frame saddle bracket. Short chain raises hitch ball, longer chain lowers it. A level condition will result in the best balance for towing and steering control as the weight-equalizing hitch distributes the hitch load.

A low hitch ball increases tail wagging tendencies by lowering the nose of the trailer, thus changing the center of support for the trailer and reducing the weight on the four wheels of the tow vehicle. With proper hitch installation and hitching up, the bar should have a noticeable amount of the deflection or bending. A little practice with

your rig will teach you how far to pull the bar; you may wish to mark the chain links that match your rig.

**Note:** If your tow vehicle is equipped with adjustable load leveling air shocks, you must load the tow vehicle first with typical luggage and passengers and bring it back to level. Then attach the trailer and adjust the load leveling bars. Otherwise the air shocks on the tow vehicle will overload the rear wheels. Do not use air shocks to level tow vehicle and trailer after hitching up.

**Note:** Leveling the trailer end to end, then measuring from the ground to the inside top of the ball socket determines hitch ball height for the tow vehicle

**CAUTION; Retract the hitch jack completely for maximum ground clearance. CHECK THAT THE MANUAL JACK IS ROTATED AND LOCKED IN IT'S UP POSITION. NEVER TOW YOUR TRAILER WITH THE JACK DOWN.**

Step 5. Attach the safety chains to the welded portion of the hitch or tow vehicle's frame, but never to the removable ball mount. Cross the safety chains under the hitch.

Step 6. Remove the jack pad and stow in the tow vehicle's trunk along with the leveling jack and other gear used when stopped.

Step 7. Always choose level ground for checking correct hookup. Move the rig ahead about 50 feet and test the trailer brakes, then check the ground for forgotten objects. Regularly check the condition of your tires, air pressure, and the tightness of your lug nuts.

**CAUTION; Check that the step is up and LOCKED in its store position and that the trailer door is completely closed and LOCKED for towing. If they are not locked the constant vibration of travel may cause them to open with possible damage.**

## **Sway Control Device**

Although Airstream has not intruded into the hitch manufacturers field of expertise and preformed formal testing, we find the vast majority of Airstream owners purchases sway-control devices.

When passed by large trucks or when exposed to sudden crosswinds the trailer will be “pushed” and this action will be felt in the tow vehicle. It’s our understanding the sway control devices will reduce the amount of movement and make towing more comfortable and add some safety.

Follow the directions of the sway control manufacturer when having it installed and using it.

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# TOWING

## TOWING TIPS

A few hours of towing practice in a large empty supermarket lot will make pulling your trailer over the road much easier. Line out two corners for left and right turns. You may also use these corners to practice backing and parking.

After thoroughly inspecting your hitch, brakes, and tires you should be ready to tow. Check traffic, signal that you are about to pull away, and start slowly. Look often in your mirrors, and observe the action of the trailer, then carefully move into the proper lane of traffic. Remember that the trailer wheels will not follow the path of the tow vehicle wheels; therefore, WIDER TURNS ARE NECESSARY WHEN TURNING TO THE LEFT OR TO THE RIGHT.

We want every owner to be a safe and courteous driver. On a two-lane road cars may be lining up behind you because you travel at a lower speed. It is both courteous and sensible to signal, pull onto the shoulder, and let them pass. Your trailer is designed to be towed easily at any legal speed, so if you are not careful you may be inclined to forget it is there.

The BRAKE CONTROLLER is activated when you apply the brakes of the tow vehicle. Your tow vehicle brakes will automatically apply the trailer brakes first when properly adjusted. This will help keep your tow vehicle and trailer in a straight line and make you stop as if you were driving the tow vehicle alone. If swaying or swerving should occur, briefly operating the controller separate from the vehicle brakes may help correct the situation. Practice this maneuver on a clear highway. Don't wait for an emergency then grope for the controller.

When trailering you might encounter a temporary cooling system overload during severe conditions such as hot days when pulling on a long grade, when slowing down after higher speed driving, or driving long idle periods in traffic jams. If the hot indicator light comes on, or the temperature gauge indicates overheating and you have your air conditioner turned on, turn it off. Pull over in a safe place and put on your emergency

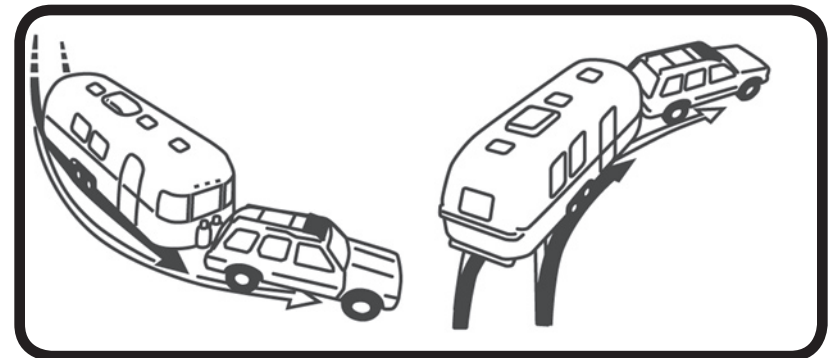
brake. Don't turn off the engine. Increase the engine idle speed. Lift the engine hood and check for fluid leaks at the radiator overflow outlet. Check to see that all drive belts are intact and the radiator fan is turning. The fan may be powered by an electric motor instead of a belt. This type of fan is electronically activated and will run only if the engine coolant reaches a certain temperature. If you have a problem have it fixed at the next opportunity. If there is no problem, the light should go off or temperature should come down within one minute. Proceed on the highway a little slower. Ten minutes later resume normal driving.



**WARNING:** Never open a radiator cap when the tow vehicle is hot. Check the coolant level when the vehicle is cool. Read your tow vehicles owner's manual and follow all instructions on the cooling system.

## Tracking

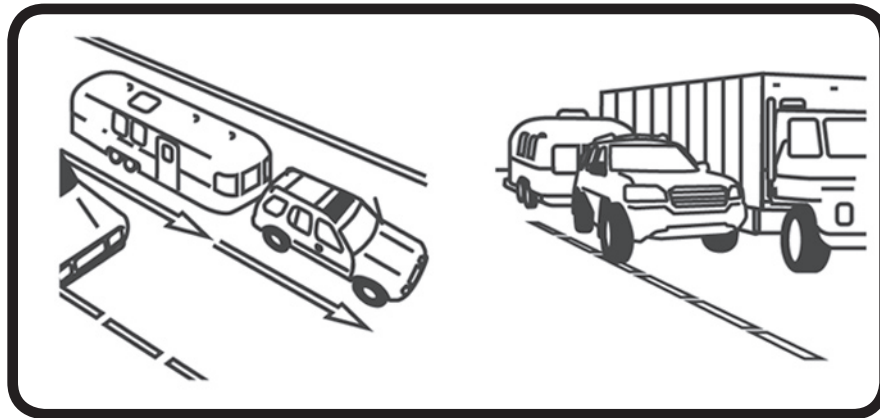
OBSERVE THAT THE TRACKS MADE BY THE TRAILER WHEELS ARE DISTINCTLY DIFFERENT FROM THOSE MADE BY THE TOW VEHICLE. Studying this will make it easier for you to correct mistakes. Truck or trailer type fender or door grip rear view mirrors are a must for maximum visibility and in most states the law requires them.





## Passing

ON FREEWAYS OR EXPRESSWAYS try to pick the lane you want and stay in it. Always maintain plenty of space between you and the car ahead, at least the length of the tow vehicle plus trailer for every ten miles per hour. Remember that in order to pass another vehicle you will need longer to accelerate. You must also allow for the length of the trailer when returning to the right hand lane.



When going downhill in dry weather, down shift or if so equipped, turn the Overdrive off on the tow vehicle transmission so that engine compression will slow the whole rig down. Take dips and depressions in the road slowly and do not resume normal driving speeds until you are sure that the trailer wheels are clear of the dip.



**WARNING:** On slippery pavement do

not use engine drag to help slow down as this may cause the rear wheels of the tow vehicle to skid. On icy pavement drive slowly and if you feel the tow vehicle skidding gently apply the trailer brakes only. This will bring the tow vehicle and trailer back into a single line. Chains do not help trailer wheels.

**CAUTION:** When driving in mud and sand let the momentum carry the rig through. Apply power gently and use as little as possible. Stay in the tracks of

the vehicle ahead and keep the tow vehicle in the highest possible gear. If you get stuck it is best to tow out the entire rig together without unhitching.

Despite the best hitch you will notice

that whenever a large bus or truck overtakes your rig the displaced air first pushes the trailer rear slightly to the right and then affects the front. It may be necessary to steer very slightly, momentarily, toward the bus or truck to help compensate for the sway induced by the passing-vehicle. Do not apply the vehicle brakes, as this can tend to exaggerate the situation. You may find, however, that briefly applying the trailer brakes with your manual control will help eliminate sway.



**WARNING:** When stopping on a hill or slope, leaving your tow vehicle in gear is not enough for standstill safety. **CHOCK THE TRAILER WHEELS** to be double sure. Do not use trailer brakes as parking brakes.

# TOWING

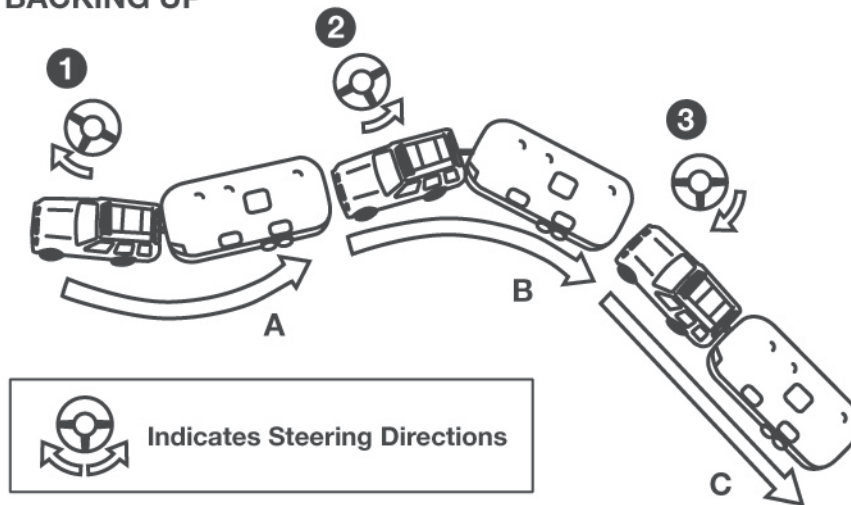
## Backing Up

In BACKING UP the important thing to remember is to DO EVERYTHING SLOWLY and to correct immediately if you see the trailer turning the wrong way. Concentrate on the rear of the trailer. With your tow vehicle and trailer in a straight line back up slowly and turn the bottom of the steering wheel in the direction you want the trailer to go. Watch out the window or in the mirror until the rear of the trailer is pointing in the desired direction. Your vehicle will be following the trailer in an arc. Straighten the tow vehicle and trailer by turning the steering wheel more sharply, and then when they are in line, straighten the steering wheel.

ALWAYS TRY TO BACK TO YOUR LEFT BECAUSE THE VISIBILITY IS MUCH BETTER. (See Illustration) When you don't make it on the first try it is usually much easier to pull forward to your original position and start over.

If your spouse or traveling companion normally directs you when backing they should position themselves forward of the tow vehicle so the driver can easily see them. Their directions should always indicate to the driver the direction the rear of the trailer should go. A little practice in a parking lot with the person giving directions can save a lot of frustration when backing into a campsite.

### BACKING UP



Position (A) start. Turn steering wheel as shown in (1) will put you in trailer Position (B). Turning steering wheel show in position (2) puts you in trailer position (C). Steering position (3) returns front wheels for straight backing.

## Controlling Sway or Fishtailing

Sway or fishtailing is the sideways action of a trailer caused by external forces. It is common for travel trailers to sway in response to strong winds or crosswinds or when passed by or passing a semi-tractor and trailer or driving downhill.



**WARNING:** Excessive sway or fishtailing of your travel trailer can lead to the rollover of the trailer and tow vehicle. Serious injury or death can occur. It is important that you read and understand the information in this section.

Sway or fishtailing of your recreation vehicle can be controlled and is primarily impacted by four factors:

- Equipment
- Tongue weight
- Driving
- Corrective measures

**Equipment** – When hitched together, the trailer and the tow vehicle must be level. The tires of both the trailer and tow vehicle should be in good condition and inflated to the pressure recommended as noted on the exterior of the trailer and in the owner's manuals of the trailer and tow vehicle.

Your trailer brakes should work in synchronization with your tow vehicle brakes. Never use your tow vehicle or trailer brakes alone to stop the combined load. Your brake controller must be set up according to the manufacturer's specifications to ensure proper synchronization between the tow vehicle and the trailer. Additionally, you may have to make small adjustments occasionally to accommodate changing loads and driving conditions.

Also, we recommend a friction sway damper or hitch with built-in sway control be provided for your unit. Please consult your dealer regarding this equipment, as the RV

manufacturer does not provide sway control devices.

**Tongue weight** – The tongue weight should be between 10% to 15% of the total travel trailer weight. See page xxx of this manual regarding the proper weight distribution of your recreation vehicle.

**Driving** – This is the most important component. The tendency for the vehicle to sway increases with speed therefore, obey all speed limits and reduce speed during inclement weather or windy conditions.

### **Corrective measures – If sway occurs the following techniques should be used:**

1. Slow down immediately, remove your foot from the accelerator. Avoid using the tow vehicle brakes unless there is a danger of collision. Reduce speed gradually whenever possible. If you can do so safely, use the brake hand controller (independent of the tow vehicle brakes) to gently and progressively apply the trailer brakes. This will help to keep the vehicles aligned. Practice using the brake hand controller on a deserted parking lot. Don't wait until an emergency occurs before using it. Location of the brake hand controller is important and should be made easily accessible.
2. Steer as little as possible while maintaining control of the vehicle. Because of natural reaction lag time, quick steering movements to counter trailer sway will actually cause increased sway and loss of control. Keep both hands on the wheel. Hold the wheel as straight as possible until **stability is regained**.
3. Do not jam on the brakes or attempt to press on the accelerator to speed your way out of the fishtailing. Both actions make the situation worse and could cause severe injury or death.
4. Once the swaying is under control, stop as soon as possible. Check tire pressures, cargo weight distribution and look for any signs of mechanical failure. Travel at reduced speeds that permit full control until the problem can be identified and corrected.



# TOWING

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## SUGGESTED PRE-TRAVEL CHECK LIST

### Interior

1. Turn off water pump switch.
2. Close windows and vents.
3. Close all interior cabinet doors.
4. Latch refrigerator door. (Seal containers first.)
5. Hold down or stack securely all loose, hard and sharp objects.
6. Turn off interior lights.
7. Pull up or retract step.
8. Secure curtains.

### Exterior

1. Disconnect and stow the electrical hookup cord.
2. Check battery water level.
3. Turn off gas at LP tanks.
4. Retract stabilizing jacks.
5. Check Hitch: It must be properly attached.
6. Check safety chains and breakaway switch cable.
7. Fully retract jack, lift, and stow into travel position.
8. Check clearance, turn signals, and stop lights.
9. Check lug nuts.
10. Check tires for correct pressure.
11. Secure and lock main doors.
12. Adjust tow vehicle mirrors.
13. Pull forward some 50 ft., test brakes, and check site for forgotten objects and cleanliness.



### **WARNING: WHEEL SEPARATION CAN OCCUR**

1. **On first trip, tighten wheel lugs at start and at 10, 25, and 50 miles.**
  2. **Thereafter, check wheel lugs before each trip.**
  3. **Following winter storage, check before beginning a trip.**
  4. **Following excessive braking, inspect wheel lugs**
- Torque wheels to 100 ft. lbs.**

### Home

1. Leave house key with your neighbors
2. Valuables and important papers should be stored in a safe place.
3. Newspaper, milk and other deliveries should be discontinued.
4. Ask the Post Office to hold your mail for you.
5. Arrange with the telephone company for discontinued or "vacation service".
6. Arrange care for your pets.
7. Your lawn, garden and houseplants should be cared for.
8. Lock all windows and doors securely. Keep shades open for a lived in look.
9. Cover all food to keep out mice and insects.
10. Eliminate all fire hazards. Place matches in a tin box or glass jar.
11. Store oil, gasoline, and other flammables properly.
12. Destroy all newspapers, magazines and oily rags.
13. Notify police of your departure and return dates.

## Trailer Equipment and Accessories

1. Power cord adapter 30-amp capacity.
2. 50 ft.. electric cord, 12-3 wire, 30-ampere capacity.
3. 25 ft.. electric cord, 10-3, 30-ampere capacity.
4. Woodblocks for leveling.
5. Wheel chocks.
6. Hydraulic jacks.
7. Cross type lug wrench.
8. Torque Wrench
9. Quality tire gauge.
10. Emergency road warning triangle.

## Personal

1. Tow vehicle insurance to cover you and your family fully along with proof of insurance.
2. Try to avoid large amounts of cash. Use Travelers Checks and credit cards.
3. Confirm reservations.
4. Have sunglasses, sun block, and bug spray for everyone.
5. Pack camera and film.
6. Make a checklist of clothing for everyone, and toilet articles.
7. Prescribed medications.
8. Birth certificate, Passport.
9. Medical insurance cards.


## Motoring Essentials

1. Display the tow vehicle and trailer registration properly.
2. Carry valid drivers license and proof of insurance.
3. In Canada you'll need a non-residence liability insurance card.
4. In Mexico you must have special auto insurance.
5. Carry an extra set of the tow vehicle keys in a separate pocket, or in your wallet.
6. Keep an operating flashlight with fresh batteries in the glove compartment.
7. Pack so that you can reach the tools and spare tire without completely unpacking.
8. Keep sharp or hard articles securely packed wherever they may be.
9. Do not packed things in the passenger seating area. You need the maximum space for comfort.
10. WEAR easy wash, drip-dry traveling clothes.
11. Do not make your vacation trips a mileage marathon. Stop and relax frequently.
12. Carry a first-aid kit.
13. Carry your pet's dish, food, leash, and health and registration papers.

# TOWING

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## Ram Air System

 The Base Camp Trailer is equipped with a ventilation system to be used when hauling equipment utilizing an internal combustion engine or whenever fumes from cargo could be dangerous.

The system consists of a roof vent located in the forward section of the ceiling and a round closeable vent located in the roadside rear black console.

The Ram-Air roof vent can be opened by squeezing the top part of the handle to release the vent and rotating the vent lid forward or backward. The round vent in the console is closed and opened by rotating it.

Both vents in the Ram Air System should be closed when traveling in rain. Failure to do so will allow water to enter the cargo area.


NOTES

**B**

# CAMPING

## SAFETY


Throughout this manual **CAUTION** and  **WARNING** notations are used.

Failure to observe **CAUTION** can damage equipment.  **WARNING** notes the possibility of personal and/or fatal injury if not observed. As always, safety should be one of your top priorities. Make sure you, and everyone traveling with you is familiar with and follows these cautions and warnings.


## ESCAPE WINDOW OPERATION


There is one emergency exit window on each side of the trailer. Make sure you, and everyone traveling with you can operate the rear doors and the emergency exit window(s) rapidly without light. Run frequent emergency drills. The escape window(s) are identified by red release knobs on the telescoping rod and are opened by lifting up the release latch, then turning the latches toward the center. Loosen the red telescoping rod knob. Push out on the glass and it will swing clear. The telescopic rod has a plastic rod cover on its end that will pop off allowing the rod to clear the knob assembly. The window can then be swung open enough to allow escape. For testing purpose the plastic rod cover can be removed and replaced as needed. The window operation should be checked each trip and the latches lubricated with WD-40 or equivalent every six months.

 **WARNING:** Learn and practice the escape window operation.


 **WARNING:** Check the emergency escape routes outside your escape windows at every stop. At each campsite make sure you have not parked in such a manner as to block the operation of the escape windows by being too close to trees, fences or other impediments. Scenic views are one reason for traveling, but don't park so the beautiful lake or steep cliff is just outside your escape window. Never park your trailer so the escape windows cannot be easily used


for emergency exits.

 **WARNING:** You and all your family should practice escape procedures so they can be rapidly accomplished even in total darkness. Never block the interior or exterior access to the emergency escape windows.

 **WARNING:** Read the directions carefully on the fire extinguisher. If there is any doubt on the operation, you and your family should practice, then replace or recharge the extinguisher. You will find your local fire department or any fire safety service will be happy to assist you and answer any questions.

 **WARNING:** Maintain and check smoke detector per its owner's manual recommendations.

 **WARNING:** Always shut off the LP gas when gasoline is added to the tow vehicle.

 **WARNING:**

- Don't smoke in bed.
- Keep matches out of reach of small children!
- Don't clean with flammable material!
- Keep flammable material away from open flame!

We have all heard these warnings many times, but they are still among the leading causes of fires.

Other safety information on the LPG system of your trailer is located in the plumbing section of this manual.



## CAMPGROUND SETUP

Airstream owners have parked virtually every place imaginable from filling stations to farmlands. In time you'll develop a knack for spying wonderful little roadside locations by turning off the main highway and exploring.

While there are many modern parks including State, County and Federal parks with good facilities where you might obtain full service hookups, BaseCamp gives you the ability to go to that out of the way place and take a few toys too. A BaseCamp is a retreat close to the action. A camp waiting for you after climbing that mountain, canoeing that stream, fishing that lake, or going 4-wheeling on that primitive trail.

When stopping for the night, your Airstream is built to be safely parked in any spot that is relatively level and where the ground is firm. Unless the tow vehicle is needed for transportation, it is not necessary to unhitch.

Try to pick as level a parking spot as possible. Stabilizing jacks or blocks probably won't be required during an overnight stay. However, if you crank the hitch jack down to take the weight off the tow vehicle's springs this will provide some stability. If you must park on a slope, **PARK FACING DOWNHILL**. It is easier to level the trailer this way.

All you need to do to enjoy the Airstream BaseCamp is to turn on the LP gas, light any appliance pilots, and plug into a 30 amp shoreline if available. On overnight or weekend trips chances are you probably will not run down the battery which supplies the 12 volt current to your water pump and lights. However, if camping in a area where 110 volt shoreline hookups are not available, running your tow vehicle with the 7-way power cord hooked up will charge your battery if it does run low on power.

Before moving on, check your campsite for both cleanliness and also be sure you haven't left anything behind. Turn off the gas supply and make sure everything is properly stowed. Use your PRE-TRAVEL CHECK LIST and you are ready for more

travel adventure.



**WARNING:** Do not parked in a manner that would prevent the escape windows from opening.



**WARNING: CARBON MONOXIDE GAS WILL KILL YOU** Stoves, heaters, grills, lanterns, candles, and other fuel-burning devices such as ATVs or motorcycles that burn propane, natural gas, charcoal, kerosene, coal, gasoline, diesel, or other fuels produce a toxic gas called carbon monoxide. Because carbon monoxide gas is invisible, odorless, and colorless, a dangerous level of carbon monoxide gas can accumulate in a trailer and/or tent which cannot be detected by sight, smell, or taste.

When breathed in, even small quantities, carbon monoxide is absorbed into the bloodstream, replacing and reducing the oxygen in the bloodstream and causing carbon monoxide poisoning and suffocation, which will cause death, serious injury, or permanent disability. Exposure to high concentrations of carbon monoxide for even a few minutes will also cause death, serious injury, or permanent disability. For these reasons:

- DO NOT use stoves, heaters, grills, lanterns, candles, or other fuel burning devices inside or near a camper without proper ventilation.**
- DO NOT leave your vehicle running while using your camper.**
- DO NOT start ATVs, motorcycles, or other fuel burning devices while they are located in your camper.**

**Your failure to follow this warning will cause death, serious injury, or permanent disability to you or others.**



# CAMPING

## TRAILER LEVELING AND STABILIZING

When you plan to stay in the same place for several days, you will want your trailer to be as level and steady as possible. Check the attitude with a small spirit level set on the inside work counter or the trailer hitch “A-Frame”. If a correction is necessary then YOU MUST LEVEL FROM SIDE TO SIDE FIRST This can be done easily by backing the trailer up on one or more 2” x 6” boards. We do not recommend placing tires in a hole for leveling.

LEVEL FROM FRONT TO REAR by disconnecting the hitch from the tow vehicle, and adjusting the jack up or down until you are level. Block or chock the wheels to keep the trailer from rolling. In softer ground a 1 ft. x 1 ft. board will keep the stand’s footpad from sinking in the dirt.

Use the STABILIZING JACKS at the two rear corners as shown in the diagram to eliminate the natural spring action of the axles. STABILIZING JACKS should only be used to stabilize trailer.



**WARNING:** Whenever the trailer must be lifted with a jack, as when changing a tire or leveling on very rough terrain, ALWAYS PLACE THE LIFTING JACK UNDER THE MAIN FRAME RAIL. NEVER USE STABILIZING JACKS or A HITCH JACK TO LIFT THE TRAILER.

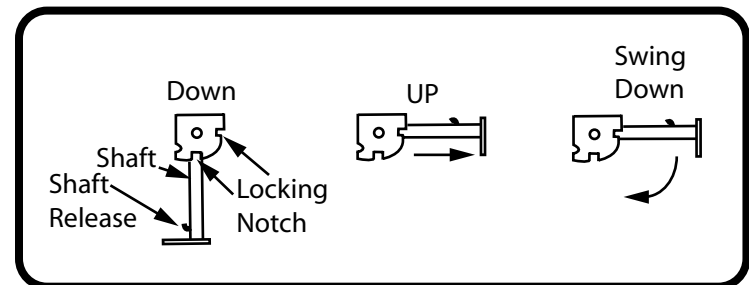
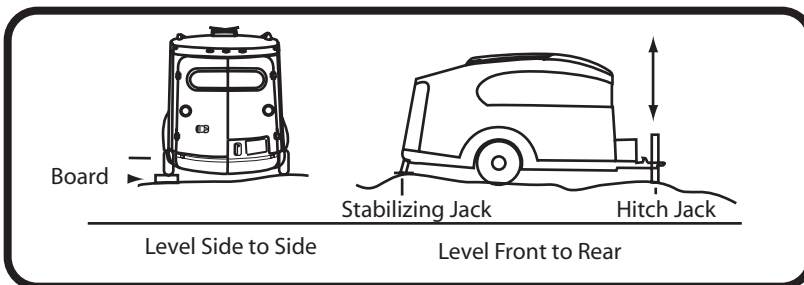
### STABILIZING JACKS (Option)

The stabilizing jacks are located at the rear corners of the trailer and come with a handle resembling a miniature tire iron. The shaft assembly is locked into the mounting bracket in its up and down position by two locking notches shown in the diagram below. To release the shaft assembly, grasp the shaft and pull straight out so the shaft clears the notch. Rotate the shaft down until it locks into the lower notch. Use the handle to open the shaft release. This will allow the shaft to extend the foot pad to the ground. The spring loaded release will automatically lock the shaft into place at about one inch intervals.

To store the jacks, use the handle to release the shaft and raise it up into the jack assembly. Be sure it locks into place. Pull straight down on the jack until the shaft assembly clears the lower locking notch and rotate the shaft assembly up until it locks into the upper locking notch.



**WARNING:** When the trailer is unhooked from the tow vehicle the stabilizing jacks should be deployed and checked before using the rear step or optional loading ramp. Failure to do so could cause the trailer to tip back as the load is shifted to the rear of the cargo area causing property damage, personal injury, and/or death. If the trailer is not equipped with stabilizing jacks, hitch the trailer to a tow vehicle before loading and unloading the rear cargo area.



## CAMPGROUND HOOK UPS

The **Power Cord** receptacle is on the roadside rear of the trailer.

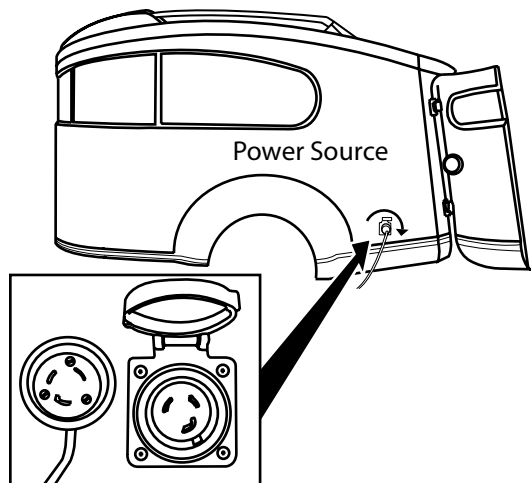
The power cord is plugged into the trailer receptacle by lining up the female end of the cord with the male end on the side of the BaseCamp. Once securely pushed together, rotate the yellow part of the cord clockwise to lock the cord into the trailer plug. Plug the other end of the cord into a 110 volt, 30 amp power service.

**CAUTION:** When operating with city power make very certain that the service is 110 volt w/30 amp service and not 220 volt.

Turn on gas supply. Light the appliance pilots. Start the refrigerator.

When you stay for an extended period where electric hookups are not available, you must make regular checks on the charge condition of your 12-volt battery system. Hooking up the tow vehicle/trailer electrical connector and running the tow vehicle engine at a fast idle. 45 minutes per day should provide about 3-4 hours of power.

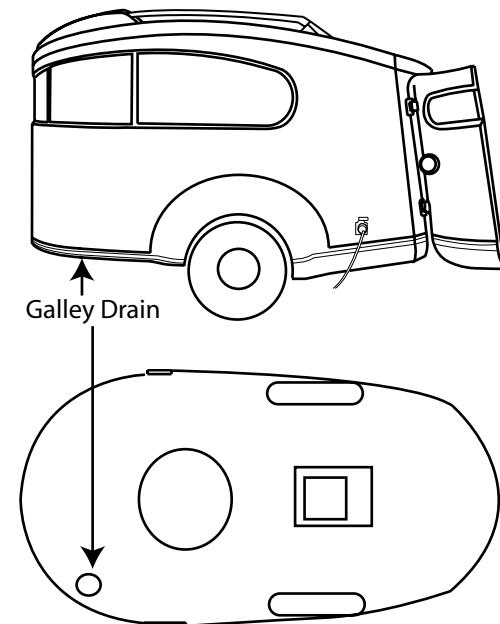
Carry drinking water in a clean bucket to refill your tank.



## Galley Drain

The galley drains through the floor on the roadside front of the trailer. A flexible line runs from the sink to a fitting mounted on the floor. The drain line can be disconnected from the fitting for galley removal. The exterior part of the fitting is capped and is located just inside the round bumper and threaded for a standard garden hose.

Most state laws do not allow the running of gray water directly onto the ground, nor is it environmentally responsible to do so. RV Service and Parts Centers have portable tanks that will slide under the trailer and store the used water until it can be disposed of properly.



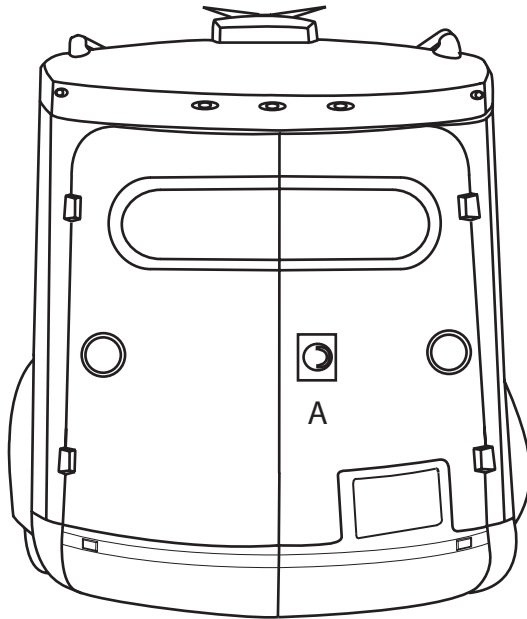
# CAMPING

## REAR DOORS

To open the rear doors:

1. Unlock and turn handle a FULL ONE HALF TURN from the verticle position. (Figure one, item A)
2. The handle must be returned the full half turn to the verticle position to lock.

Figure1

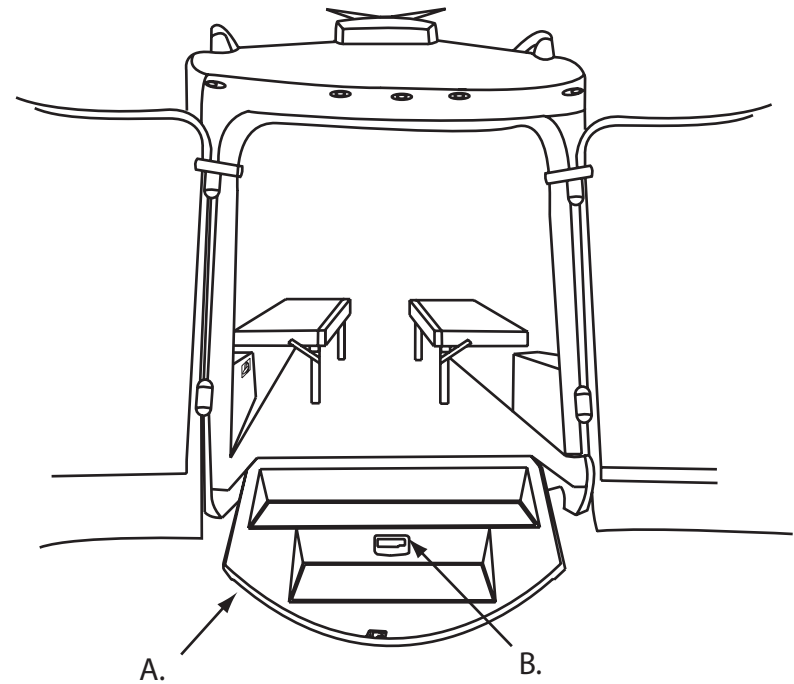


## REAR STEP

To Lower Step

1. While facing the rear step, place one hand on the curve of the step (Figure 2, arrow A), be prepared to support the step with handle upon step release.
2. Make sure there is nothing under the step including your feet.
3. Pull the release handle (Figure 2, arrow B) while using the hand on the step to curve to gently lower the step to the ground.

Figure 2.



## EXTERIOR WINDOWS

There is one opening window on each side of the trailer. For normal use open and then turn the release knob, loosen the red telescopic rod knob, push open the window to the distance you desire and tighten the red telescopic rod knob. For normal use do not open window past the plastic cover on the end of the telescopic rod.

Both opening windows are emergency exit windows. Make sure you, and everyone traveling with you can operate the rear doors and the emergency exit windows rapidly without light. Run frequent emergency drills. The escape windows are identified by red release knobs on the telescoping rod and are opened by lifting up the release latch, then turning the latches toward the center. Loosen the red telescoping rod knob. Push out on the glass and it will swing clear. The telescopic rod has a plastic rod cover on its end that will pop off allowing the rod to clear the knob assembly. The window can then be swung open enough to allow escape.

For testing purpose the plastic rod cover can be removed and replaced as needed. The window operation should be checked each trip and the latches lubricated with WD-40 or equivalent every six months.



**WARNING:** The escape windows are identified by red release knobs and are opened by lifting up both latches, then turning the latches toward the center. Push out on the glass and it will swing clear. The telescopic rod has a plastic rod cover on its end that will pop off allowing the rod to clear the knob assembly.



**WARNING:** Check the emergency escape routes outside your escape windows at every stop. At each campsite make sure you have not parked in such a manner as to block the operation of the escape windows by being too close to trees, fences or other impediments. Scenic views are one reason for traveling, but don't park so the beautiful lake or steep cliff is just outside your escape window. Never park your trailer so the escape windows cannot be easily used

for emergency exits.



**WARNING:** You and all your family should practice escape procedures so they can be rapidly accomplished even in total darkness. Never block the interior or exterior access to the emergency escape windows.

The opening and fixed windows are made from tempered glass and are cleaned in the same manner that automotive windows are. Clean the seals with a damp cloth or mild detergent every three to six months, taking care not to use a strong solvent, as it will damage the seals. A coat of natural silicone lubricant applied after the seal has dried will keep it flexible. Spread the lubricant evenly with a brush or finger, working it into the surface. This is a good practice for all rubber seals on your Airstream. For replacement of a damaged window contact an Airstream Dealer Service Center or the factory.



# CAMPING

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## EFFECTS OF PROLONGED OCCUPANCY

Your trailer was designed primarily for recreational use and short-term occupancy. If you expect to occupy the trailer for an extended period, be prepared to deal with condensation and the humid conditions that may be encountered. The relatively small volume and tight compact construction of modern recreation vehicles mean that the normal living activities of even a few occupants will lead to rapid moisture saturation of the air contained in the trailer and the appearance of visible moisture, especially in cold weather.

Just as moisture collects on the outside of a glass of cold water during humid weather, moisture can condense on the inside surfaces of the trailer during cold weather when relative humidity of the interior air is high. This condition is increased because the insulated walls of a recreation vehicle are much thinner than house walls. Estimates indicate that a family of four can vaporize up to three gallons of water daily through breathing, cooking, bathing, and washing. Unless the water vapor is carried outside by ventilation, or condensed by a dehumidifier, it will condense on the inside of the windows and walls as moisture, or in cold weather as frost or ice. It may also condense out of sight within the walls or the ceiling where it will manifest itself as warped or stained panels. Appearance of these conditions may indicate a serious condensation problem. When you recognize the signs of excessive moisture and condensation in the trailer action should be taken to minimize their effects. For tips on controlling condensation see the “Tips To Controlling Condensation” section.

**Note:** Your trailer is not designed, nor intended, for permanent housing. Use of this product for long term or permanent occupancy may lead to premature deterioration of structure, interior finishes, fabrics, carpeting, and drapes. Damage or deterioration due to long-term occupancy may not be considered normal, and may under the terms of the warranty constitute misuse, abuse, or

## TIPS TO CONTROLLING CONDENSATION

Allow excess moisture to escape to the outside when washing dishes, hair drying, and using appliances and non-vented gas burners.

Always use the vent when cooking.

Do not hang wet clothes in the trailer to dry.

In hot weather, start the air conditioner, if so equipped, early as it removes excess humidity from the air while lowering the temperature.

Keep the temperature as reasonably cool during cold weather as possible. The warmer the vehicle, the more cold exterior temperatures and warm interior temperatures will collide on wall surfaces, thus creating condensation.

Use a fan to keep air circulating inside the vehicle so condensation and mildew cannot form in dead air spaces. Allow air to circulate inside storage areas (leave doors partially open).

The natural tendency would be to close the vehicle tightly during cold weather. This will actually compound the problem. Simply put, you need to remove some of the warm air, and allow some cool outside air to get inside the vehicle.

## ABOUT MOLDS

### What are molds?

Molds are microscopic organisms that naturally occur in virtually every environment, indoors and out. Outdoors, mold growth is important in the decomposition of plants. Indoors, mold growth is unfavorable. Left unchecked, molds break down natural materials, such as wood products and fabrics. Knowing the potential risks is important for any type of homeowner to protect their investment.

### *What factors contribute to mold growth?*

For mold growth to occur, temperatures, indoor or outdoors, must be between 40 degrees and 100 degrees Fahrenheit and also have a source of moisture, such as humidity, standing water, damp materials, etc. Indoors, the most rapid growth occurs with warm and humid conditions.

### How can mold growth be inhibited?

By controlling relative humidity, the growth of mold and mildew can be inhibited. In warm climates, use of the air conditioner will reduce the relative humidity. Vents are located in the bathing and cooking areas and constant use is advised during food preparation and bathing, even during colder weather. Additionally, opening a window during these activities will assist in ventilation. In extremely humid conditions, the use of a dehumidifier can be helpful.\*

Frequent use of your RV or cleaning regularly is an important preventive measure. Further, any spills should be wiped up quickly and dried as soon as possible. Avoid leaving damp items lying about. On safe surfaces, use mold or mildew killing cleaning products. Check sealants regularly, and reseal when necessary to avoid water leaks. Proper preventive maintenance to the RV and its accessories, as described both in this manual and in accompanying literature, will provide the best protection to the RV.

For more information of controlling moisture in the RV, please read, "Tips to Controlling Condensation," located in this manual.

\*If using a dehumidifier, please read and follow all manufacturer instructions and recommendations to the use and cleaning of the dehumidifier.



# EXTERIOR

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## Cleaning

As a general rule of thumb we recommend the trailer be washed about every four weeks and waxed in the spring and fall. In industrial areas cleaning and waxing should be done on a more frequent schedule.

**CAUTION: ABRASIVE POLISHES OR CLEANING SOLVENTS SUCH AS AUTOMATIC DISHWASHER OR ACID ETCH CLEANERS ARE TOO STRONG AND SHOULD NEVER BE USED. RINSE ALL GRIT FROM SURFACE PRIOR TO WASHING. Use soft rags or wash mitts always moving lengthwise with the trailer. NEVER rub hard on the Aluminum skin coating or painted areas. Even the softest rag will damage the aluminum skin coating if excessive pressure is applied.**

ALWAYS CLEAN YOUR TRAILER IN THE SHADE OR ON A CLOUDY DAY WHEN THE SKIN IS COOL. Oil, grease, dust and dirt may be removed by washing with any mild non-abrasive soap or detergent. Cleaning should be followed by a thorough clean water rinse. Drying the unit with a chamois or a soft cloth may prevent spots and streaks. WHEN WASHING OR WAXING YOUR TRAILER, ALWAYS WIPE "WITH" THE GRAIN OF THE METAL ON THE ALUMINUM SKIN.

After cleaning and drying, a good grade of nonabrasive automotive paste or liquid wax will increase the life of the finish, especially in coastal areas where the finish is exposed to salt air or in polluted industrial areas. It will also protect the shell from minor scratches and make subsequent cleaning easier.

It is important to remove sap, gum, resin, asphalt, etc. as soon as possible after they appear by washing and waxing. Sunlight and time will bake-harden these materials making them almost impossible to remove without heavy buffing. If asphalt remains on the trailer after washing, use a small amount of kerosene on a rag and wipe the spots individually, being careful not to scratch the finish.

If a substance is found on the coating that cannot be removed by normal washing procedures, Airstream recommends using DX 330 Acryli-Clean made by PPG Industries. Follow all directions and warnings on the product container. Acryli-Clean should be used by trained personnel only, using the proper equipment under controlled conditions. Use the Acryli-Clean as sparingly as possible to remove glue, tar, and other similar substance. Always rinse with cool water and dry after using the cleaner

To keep your trailer looking new, paint the "A" frame, LPG tanks, and rear frame as needed.

It is recommended that the caulking and sealant used in external seams and joints such as end shell segments and around window frames, light bezels, beltline and rub rail molding, etc. be checked regularly. If this material has dried out and become cracked or checked, or if a portion has fallen out, it should be replaced with fresh material to prevent possible rain leaks. Caulking and sealing material is available from your Airstream dealer.

Precautions should be taken to prevent excessive sealant from getting on the coated and painted surfaces. Remove excessive sealant before it cures using DX 330 Acryli-Clean made by PPG Industries as explained above.

**CAUTION: It may be possible for solvents other than those recommended to extract materials from sealants that could stain the coated surface or could prove harmful to the sealants; therefore, these possible effects must be considered. Test a small area first.**



## Chassis

The standard RECOMMENDED HITCH BALL HEIGHT for your Airstream is listed in the "Specifications" section of this manual. If you plan long trips with the trailer heavily loaded, you should check your trailer, after loading, to determine the optimum height. To check, park the trailer on a level surface and crank the front jack up or down until the measurement from the frame to the ground is the same front and rear. Measure from the ground to the upper surface of the hitch ball coupler. Add one inch to this figure when setting the ball height on the tow vehicle to allow for the suspension settling under the added weight.

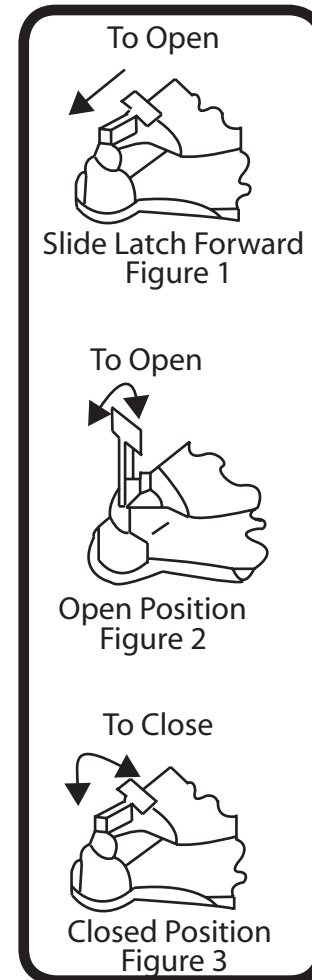


**WARNING: ALWAYS OPEN LATCH HANDLE BEFORE INSERTING BALL.**

## OPERATION INSTRUCTIONS

### 2" Ball Coupler

1. To open - slide latch forward (Figure 1) and pull up to open latch (Figure 2) before inserting ball
2. Place coupler on ball of same diameter as coupler and of same or greater capacity.
3. When ball is completely nested in socket, push top of latch handle rearward until handle snaps into closed position. (Figure 3)
4. Extend jack to ground and lift car/trailer combination 2-4" to insure coupler is securely attached to tow ball. Retract jack before towing.
5. Insert padlock through hole in handle for theft prevention.



# EXTERIOR

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## AXLE AND RUNNING GEAR

Each RUBBER TORSION axle is aligned during manufacturing, and double-checked on a random basis. Alignment after delivery is the customer's responsibility.

**CAUTION:** Never allow heat to be applied to the axle tube since the rubber providing the spring torsion action will be severely damaged.

Hitting chuck holes or rough railroad tracks while going straight will only cause misalignment after the tire has been struck many repetitive times. Of course, a deep enough hole can affect the alignment immediately.

The worse culprit is a curb because they are normally struck at an angle. Surprisingly rear axles are occasionally damaged when people are attempting to park beside a curb and are backing up their trailer.

As you look under your trailer is it normal for the axle to be bent up in the middle. This bend is how the camber is obtained.

Toe-in is built into the axle by very slight bends in the axle tube on each end.

If tire wear ever indicate misalignment check with your dealer for the nearest location having the proper equipment.

### Rubber torsion Axle Alignment Specifications

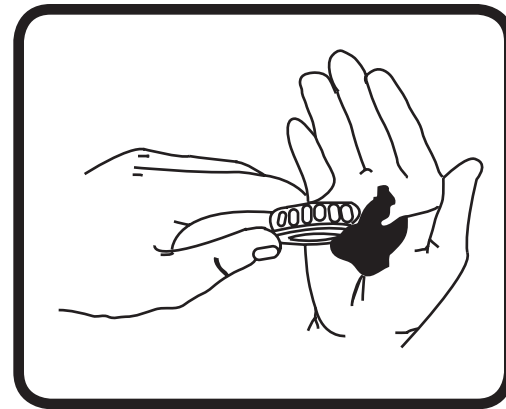
Toe-In each side 1/16"	Tolerance 1/16" + or -
Camber each side 3/4° positive	Tolerance 3/4° + or -

## Wheel Bearing Maintenance

1. Jack trailer at marked jack location pad behind axle on mainframe.
2. Remove hubcap or spindle cover, wheel and tire.
3. Remove cotter pin.
4. Remove dust cap.
5. Remove spindle nut and washer.
6. Remove bearings, hub and rotor.
7. Lay down hub and rotor with inside grease seal down. Knock out inner bearing and grease seal using wood or plastic dowel and hammer.
8. Clean all parts thoroughly with kerosene.
9. Check all bearings and races for chips or roughness of any kind. Any damaged component must be replaced.
10. Pack bearing with a good grease (No 2 grade-265 ASTM penetration or equivalent).
11. Install inner bearing.
12. Install new grease seal in hub or rotor using wooden or rawhide mallet.
13. Install hub and drum on spindle.
14. Install outer bearing.
15. Install washer and spindle nut
16. While rotating the wheel, tighten the spindle nut with a 12" wrench until there is a slight tension. Then back off one notch and install cotter pin. There should now be from .001" to .010" endplay in hub. If not, back off one notch.
17. Check the lug nuts at 10, 25, and again at 50 miles of travel after replacing a wheel.

**Torque wheels to 100 ft. lbs.**

When greasing bearings by hand, place a glob of grease in the palm of one hand and push the large end of the bearing down into the grease (see illustration). Keep turning the bearing around and forcing it down through the grease until the grease is extruded up through the opposite end. Wipe the extra grease in your hand around the outside of the bearing. It's not necessary to fill the hub and dust cap with grease.



# EXTERIOR

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## ELECTRIC BRAKES

A CONTROLLER installed in your tow vehicle will synchronize the trailer brakes with your tow vehicle brakes. It is designed to apply the trailer brakes whenever the tow vehicle brakes are applied.

## TYPICAL ELECTRONIC CONTROLLER

ELECTRONIC CONTROLLERS are inertially activated. The controller senses deceleration and generates an output, which reflects the inertia sensed. When you are stationary, the controller does not apply the brakes unless the manual slide bar is activated.

**NOTE:** Study all material provided with your particular brake control. If you don't understand the information, have the installer explain the information to you or call the manufacturer of the controller.

In THE EVENT OF AN ACCIDENTAL SEPARATION of the tow vehicle and trailer, the BREAKAWAY SWITCH will set and lock the trailer brakes for a sufficient length of time to stop the trailer. The switch is activated when the wire attached to it and to the tow vehicle pulls out the small pin in the front of the unit. THIS PIN SHOULD BE PULLED OUT, LUBRICATED WITH LIGHT HOUSEHOLD OIL AND REPLACED EVERY 90 DAYS.

To prevent corrosion within the breakaway switch, turn you trailer battery disconnect to "STORE", pull the switch's pin straight forward and spray the inside of the switch through the hole with an electric contact cleaner (such as Spra-Kleen) and reinsert the pin. A drop of light household oil on the groove near the base of the pin will allow the pin to operate freely. WHEN THE TRAILER IS CONNECTED TO THE TOW VEHICLE, THE BREAKAWAY SWITCH LOOP SHOULD BE ATTACHED TO THE PERMANENT FRAME OF YOUR HITCH. When disconnecting trailer from tow vehicle remove wire loop from the frame. DO NOT REMOVE PIN FROM SWITCH BECAUSE THIS WILL APPLY THE TRAILER BRAKES.



**WARNING:** Do not use breakaway switch for parking brake or leave the pin out for longer than a few minutes with the battery disconnect in the "ON" position.

## HOW TO USE YOUR ELECTRIC BRAKES PROPERLY

Your trailer brakes are designed to work in synchronization with your tow vehicle brakes. Never use your tow vehicle or trailer brakes alone to stop the combined load.

Your trailer and tow vehicle will seldom have the right amperage flow to the brake magnets to give you comfortable, safe braking unless you make proper brake system adjustments. Changing trailer load and driving conditions as well as uneven alternator and battery output can mean unstable current flow to your brake magnets. It is therefore imperative that you maintain and adjust your brakes as set forth in this manual, use a properly modulated brake controller, and perform the synchronization procedure noted below

In addition to the synchronization adjustment detailed below, electric brake controllers provide a modulation function that varies the current to the electric brakes with the pressure on the brake pedal. It is important that your brake controller provide approximately 2 volts to the braking system when the brake pedal is first depressed and gradually increase the voltage to 12 volts as brake pedal pressure is increased. If the controller "jumps" immediately to a high voltage output, even during a gradual stop, then the electric brakes will always be fully energized and will result in harsh brakes and potential brake lockup.

Proper synchronization of tow vehicle to trailer braking can only be accomplished by road testing. Brake "lockup, grabbiness, or harshness" is quite often lack of synchronization between the tow vehicle and the trailer being towed, too high of a threshold voltage (over 2 volts), or under adjusted brakes.

## TIRES

Your trailer is equipped at the factory with name brand trailer tires. Airstream dealers cannot make adjustments to tires. A dealer who handles that particular brand must do this. If you ever have tire problems check the local telephone directory for the nearest dealer.

To get the maximum performance from your tires check the air pressure often, but only when the tires are cool. Never bleed out air immediately after driving. Recommended tire pressures vary with tire type and size.



### **WARNING: WHEEL SEPARATION CAN OCCUR**

1. On first trip, tighten wheel lugs at start and at 10, 25, and 50 miles.
2. Thereafter, check wheel lugs before each trip.
3. Following winter storage, check before beginning a trip.
4. Following excessive braking, inspect wheel lugs

**Torque wheels to 100 ft. lbs.**

Try to park out of the sun whenever possible when in warm climates. In desert regions use tire covers to prevent ultra-violet deterioration to tires.

To CHANGE A TIRE with a jack place the jack on the main frame rail just forward of the axle mounting plate.



**WARNING:** Never attempt to change any tire without securely chocking remaining wheels. Never position yourself in a manner where a raised trailer can come down on you if it should become dislodged from a jack or ramp.

All tire and wheel assemblies are balanced at the factory. Be sure to rebalance the tire and wheel assemblies each time a tire is changed.



**WARNING:** When removing aluminum-forged wheels, if so equipped, from the spindle, it is very important to mark them to assure the wheel is placed in the same position of the drum when reinstalling. If the aluminum-forged wheel is to be mounted on a different drum it is important to sand all loose corrosion from the mating surfaces.



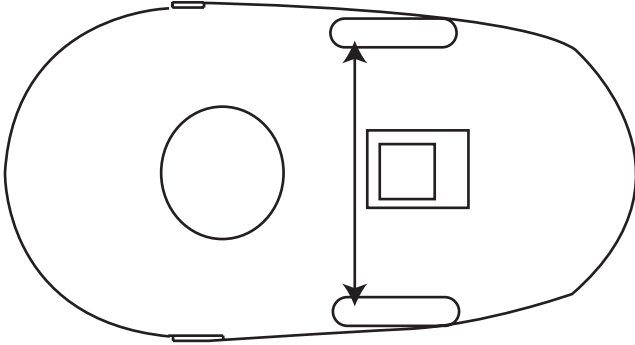
**WARNING:** Whenever the trailer must be lifted with a jack, as when changing a tire or leveling on very rough terrain, ALWAYS PLACE THE LIFTING JACK UNDER THE MAIN FRAME RAIL. NEVER USE STABILIZING JACKS or HITCH JACK TO LIFT THE TRAILER.

# EXTERIOR

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## TIRE ROTATION

(10,000-mile intervals)



**WARNING:** On first trip after rotating tires, tighten wheel lugs at start and at 10, 25, and 100 miles. Torque to 100 ft. lbs. There after, check wheel lugs before each trip, after excessive braking, and following winter storage. Care should be taken at all times when handling the wheel because of possible damage to its appearance.



**WARNING:** Whenever the trailer must be lifted with a jack, as when changing a tire or leveling on very rough terrain, ALWAYS PLACE THE LIFTING JACK UNDER THE MAIN FRAME RAIL. NEVER USE STABILIZING JACKS or HITCH JACK TO LIFT THE TRAILER.

## SPARE TIRE & CARRIER (Optional)

The spare tire for Airstreams is stored under the front of the trailer. The front handle of the tire carrier is a one-inch tube protruding out from under the front A-frame on the curbside. It is secured by a bracket and bolt along the inside of the A frame rail. Removing the bolts allows the front on the tire carrier to be lowered and the spare tire removed.

## Load/Inflation Information for Your Tires

Maintaining proper tire inflation pressure is essential for both tire safety and performance.

### Proper Tire Inflation

The level of air in your tires affects your vehicle's overall performance. Not even the highest quality tire will perform well if it's not inflated properly. The correct pressure varies from vehicle to vehicle and depends in part upon driver preference. Each vehicle has a maximum inflation pressure, usually found on a metal tag riveted to the outside of the vehicle as well as on the original equipment tires.

Correct tire inflation is a key component in tire care. The recommended inflation pressures for your tires are indicated on the certification label or in this owner's manual. Since RVs can be loaded with many different configurations, the load on each tire will vary. For this reason, air pressure should be checked based on the load on each individual tire. Cold Inflation Pressure should be adjusted to handle the maximum tire load, and all tires on the axle should carry the same inflation pressure. **COLD TIRE INFLATION PRESSURE** is the tire pressure checked in the morning before you drive more than a few miles or before rising ambient temperatures or the sun's radiant heat affects it. Check your tires' air pressures at least once a month, before each trip and each morning you drive during a trip. Tire pressure should be checked cold, as tire pressure ratings have been designed with typical running heat/pressure build-up in mind. Make sure the valves and caps are free of dirt and moisture.

### Under Inflation

Under inflation brings a higher risk of damage due to road hazards, reduces casing durability, causes a loss in fuel economy, and uneven or irregular tire wear. Severe under inflation brings about an increased risk of tread separation, handling difficulties, and possibly tires failure, caused by overheating.

**IMPORTANT:** Lowering tire pressure in the search for a smoother ride is not only dangerous, it's relatively ineffective, and as the difference in the ride quality is not significant. When minimum inflation pressure requirements are not met, tire durability and optimum operating conditions are compromised. Tire inflation pressure should always meet the guidelines for vehicle weight.

- It may be necessary to inflate your tires at a truck stop or truck service center in order to achieve adequate air pressure for your coach's needs
- Only permanent air seal metal valve caps should be used.
- Be safe - if a tire has been run 20% under inflated, it must be dismantled and inspected by a trained professional. It should not be aired up without a full inspection or without using a safety cage. Use a calibrated gauge. If your tire is rated for higher inflation pressures, a special gauge will be required designed for larger tires.
- Don't bleed air from warm tires to reduce pressure buildup
- Don't inflate tires to cold PSI rating beyond rim specifications

### HOW OVERLOADING AFFECTS YOUR TIRES

Tire pressure is what enables your RV tire to support loads. Overloading your tires can have serious consequences for passengers and your RV. Too much weight can cause stress on your RV's suspension system, brake failure, shock absorber damage, handling and steering problems, irregular tire wear and possible tire failure. Excessive loads or under inflation can lead to an excessive amount of heat and tire failure. If you discover that your tires cannot handle the load, lighten the weight of the load on your tires.

Tire pressure should never be reduced below the vehicle manufacturer's recommended levels to support load conditions in order to improve the ride quality of a vehicle. The difference in ride quality is not significant. When inflation pressure requirements are not met, tire durability and optimum operation can be affected.



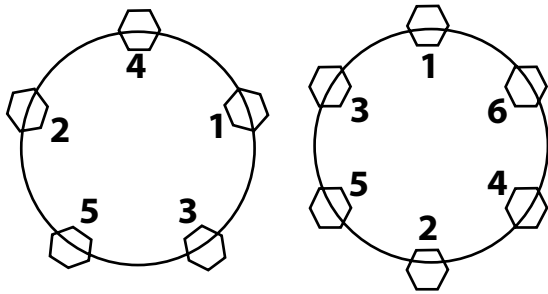
# EXTERIOR

## Lug Nut Torquing



### **WARNING: WHEEL SEPARATION CAN OCCUR**

1. On first trip, tighten wheel lugs at start and at 10, 25, and 50 miles.
2. Thereafter, check wheel lugs before each trip.
3. Following winter storage, check before beginning a trip.
4. Following excessive braking, inspect wheel lugs



NOTE: Use a torque wrench to tighten lug nuts. Tightening by hand or with an impact wrench is not recommended.

### **Torque forged aluminum wheels to 100 Ft. lbs.**

Proper wheel nut torque is very important to safe and dependable towing of your vehicle. The wheel and axle systems used in travel trailers and fifth wheels are similar, yet different, in many ways to those used on cars and trucks. These differences are important and require special attention to wheel nut torque both while the trailer is new and throughout the trailer's life.

Trailer wheels must carry much higher loads per wheel than passenger car or truck wheels. Each wheel may carry 1000 pounds and higher. Furthermore, wheels on tandem axle trailers do not steer, and are subjected to very high side load stress

whenever the trailer makes a tight turn. When you go around corners, especially slow, tight ones, the wheels on your trailer are subject to these strong side loads. This tends to flex the wheel and gradually loosen the wheel nuts. Although the materials and manufacturing methods are maximized for this kind of service, these extra loads can cause stress, which can result in flexing and loosening of wheel nuts.

Before each trip and any time a wheel is replaced, be sure to tighten the wheel nuts, following the sequence shown in the relevant lug pattern below. Set the torque specification in three stages as seen in the chart below. If the wheel was replaced, check the torque every 50 miles of the first 200 miles of travel.

If you notice wheel wobbling or hear a rattling sound coming from a wheel, especially at low speeds, a wheel lug nut may have come loose. This problem is usually caused by improper tightening or by faulty or damaged lug bolt threads. If you have a reason to believe a lug nut has come loose, safely stop the vehicle at the side of the road as soon as possible. Put up warning devices. Remove the lug caps and check the tightness of all the lug nuts. Tighten all lug nuts to the specified torque, using a torque wrench. If lug stud threads are damaged or faulty, get professional service help.

## Wheel Compatibility



### **WARNING: Do not mismatch wheels and tires.**

Axle systems are installed with hubs and drums that are compatible with many wheels used in the recreational vehicle industry that have matching bolt patterns. If the original manufacturer installed equipment is in need of replacement, the wheel manufacturer should be contacted for proof of compatibility prior to replacement and use.



Customers replacing original equipment that has not been tested for compatibility must ensure the replacements are compatible to the hub and drum assembly installed. Such elements of compatibility include, but are not limited to:

- Diameter of the hub-mounting surface.
- Stud length and diameter.
- Location and number of studs.
- Center hold diameter for the wheel.
- Wheel mounting offset from the rim center.
- Rated capacity of the wheel.
- Wheel fastener torque.
- Wheel nut size and shape.

Impact of any added wheel accessories (such as decorative center caps) that could affect proper seating of the wheel to the hub surface.

Certain tests are recommended by the manufacturer's of factory installed equipment, such as the cornering fatigue test based on SAE J1095/SAE J267 and field tests, are recommended for all wheels and rims to be installed in place of original factory equipment. Contact the wheel manufacturer to verify compatibility with the factory installed equipment prior to replacement.



# EXTERIOR

## Chassis Wiring Diagram

Locations:

Kill Switch: Roadside Rear Console.

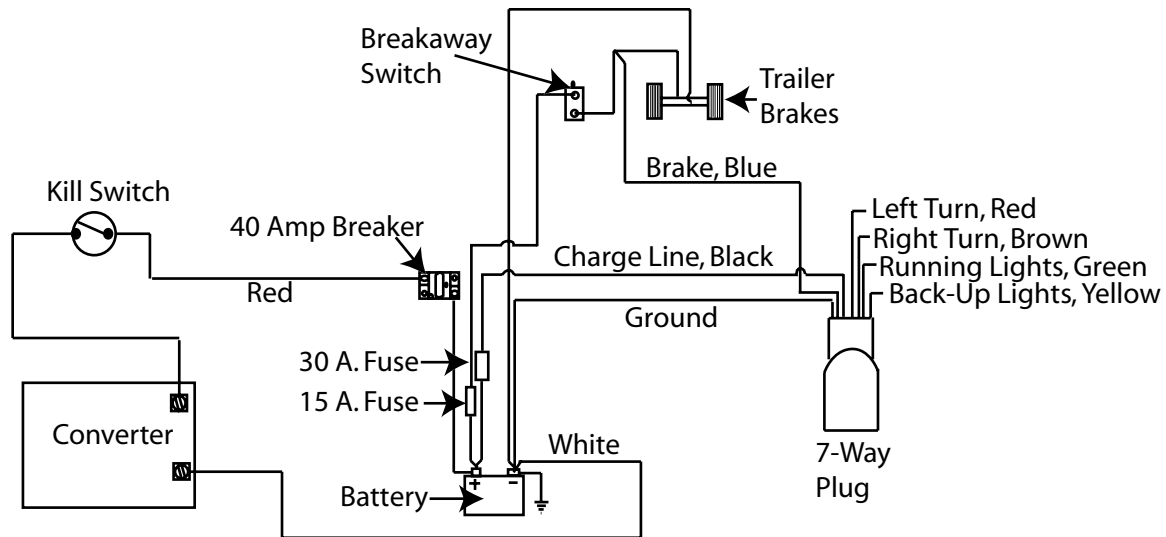
Converter (12-Volt Fuse Panel, 110 Volt Breaker panel): Roadside Rear Console.

Battery: Under Trailer, behind chassis front outrigger.

40 Amp Breaker: Under trailer in front of chassis front outrigger.

30 A. and 15 A. Fuses: Next to battery box.

Breakaway Switch: Chassis Tongue.



## Kelty Tent (Option)

### SAFETY INFORMATION

#### -IMPORTANT-

Read and follow all instructions before assembling and using!



#### **SAFETY WARNINGS: DOS AND DO NOTS**

Everyone who uses this shelter should read this section and become familiar with all safety warnings and precautions for safe use, assembly, care, maintenance, and storage.



**DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



**A WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



**A CAUTION** indicates a potentially hazardous situation which, if not avoided, could result in property damage.



**DANGER: FLAMMABILITY WARNING: KEEP ALL FLAME AND HEAT SOURCES AWAY FROM THIS TENT FABRIC.** This tent is made with flame-resistant fabric which meets CPAI-84 specifications. **IT IS NOT FIREPROOF.** The fabric will burn if left in continuous contact with any flame source. The application of any foreign substance to the tent fabric may render the flame resistant properties ineffective. For these reasons:

- DO NOT use matches, lighters, stoves, heaters, grills, lanterns, candles, cooking equipment, vehicles, or other fuel-burning devices inside or near a tent.
- DO NOT build fires under or near a tent.

- DO NOT leave campfires unattended.

Your failure to follow this warning will cause death, serious injury, or permanent disability to you or others.



**DANGER: CARBON MONOXIDE GAS WILL KILL YOU** Stoves, heaters, grills, lanterns, candles, and other fuel-burning devices that burn propane, natural gas, charcoal, kerosene, coal, gasoline, or other fuels produce a toxic gas called carbon monoxide. Because carbon monoxide gas is invisible, odorless, and colorless, a dangerous level of carbon monoxide gas can accumulate in a tent which cannot be detected by sight, smell, or taste.

When breathed in, even small quantities, carbon monoxide is absorbed into the bloodstream, replacing and reducing the oxygen in the bloodstream and causing carbon monoxide poisoning and suffocation, which will cause death, serious injury, or permanent disability. Exposure to high concentrations of carbon monoxide for even a few minutes will also cause death, serious injury, or permanent disability. For these reasons:

- DO NOT use stoves, heaters, grills, lanterns, candles, or other fuel-burning devices inside or near a tent.
- DO NOT leave your vehicle running while using your tent.

Your failure to follow this warning will cause death, serious injury, or permanent disability to you or others.

# EXTERIOR

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**DANGER: SUFFOCATION HAZARD** Any tent or shelter must be properly ventilated in all weather conditions to allow sufficient airflow into and out of the tent. If airflow into and out of a structure is obstructed (for example, if heavy snow obstructs the air flow) you and other persons will suffer from lack of oxygen and suffocate, resulting in death, serious injury, or permanent disability.

For these reasons:

- DO clear snow or other materials away from a tent frequently.
- DO NOT use stoves, heaters, grills, lanterns, candles, or other fuel-burning devices inside or near a tent (SEE CARBON MONOXIDE WARNING ABOVE).

Your failure to follow this warning will cause death, serious injury, or permanent disability to you or others.



**DANGER: SEVERE WEATHER HAZARD:** In some climactic conditions (for example, severe storms, high winds, or heavy snow cover), stakes and guy cords may not be sufficient to anchor a tent securely, which could result in the carport being picked up or blown away, causing death, serious injury, or permanent disability. Under such conditions:

- DO use supplemental means to securely anchor the tent, for example, snow pegs, skis, and/or heavy rocks or other heavy objects.
- DO seek appropriate shelter, for example, in a house, cabin, building, or secure structure other than a tent.

Your failure to follow this warning will cause death, serious injury, or permanent disability to you or others.



**DANGER: PROTECT YOUR CHILDREN:** Children will not understand and appreciate the FIRE, CARBON MONOXIDE POISONING, SUFFOCATION, AND SEVERE WEATHER hazards described above and will not know how to avoid

or respond to these hazards if no adults are present For this reason:

- DO NOT leave children unattended inside a tent or in camp.
- DO NOT allow children to assemble a tent.
- DO NOT allow children to enter or exit a tent except through the door.
- DO NOT allow children to remain in a closed-up tent on hot days.

Your failure to follow this warning will cause death, serious injury, or permanent disability to you or others.



**WARNING: WIND HAZARD** In windy conditions, stakes, guy cords, and roof attachments may not be strong enough to hold the tent securely to the ground or your Trailer, which could result in death, serious injury, or permanent disability to the user and serious damage to your vehicle. If such conditions exist:

- DO use supplemental means to anchor the shelter such as rocks or sand bags.
- DO attach the tent securely to your BaseCamp trailer following the included instructions.
- DO NOT use tent in cases of strong winds.
- DO take the tent down if hazardous conditions exist.

Your failure to follow this warning could cause death, serious injury, or permanent disability to you or others.



## **CAUTION**

DO attach tent directly to Airstream® BaseCamp trailer only.

DO save and keep instructions for future use.

DO remove tent from trailer prior to moving the trailer.

DO NOT move trailer while tent is attached.

Your failure to follow these warnings may cause permanent damage to your vehicle.

## SETTING UP YOUR TENT

**NOTE:** Rear step/ramp must be stored before setting up tent.

1. Assemble all of the poles (Figures 1 A, 1 B, and 1 C). Set the poles with the black end tips off to the side for now. **DO NOT** allow the shock cord to snap the pole sections together, as this can damage the poles.

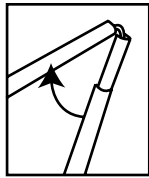


Figure 1A

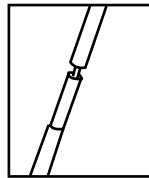


Figure 1B

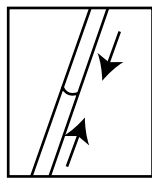


Figure 1C

2. Spread the BaseCamp tent body on the ground (make sure the pole sleeves are facing up) and locate the ends of the three pole sleeves that run across the tent (Figure 2, inserts). **NOTE:** The pole sleeve ends can be found under the navy patches found on either side of the doors.

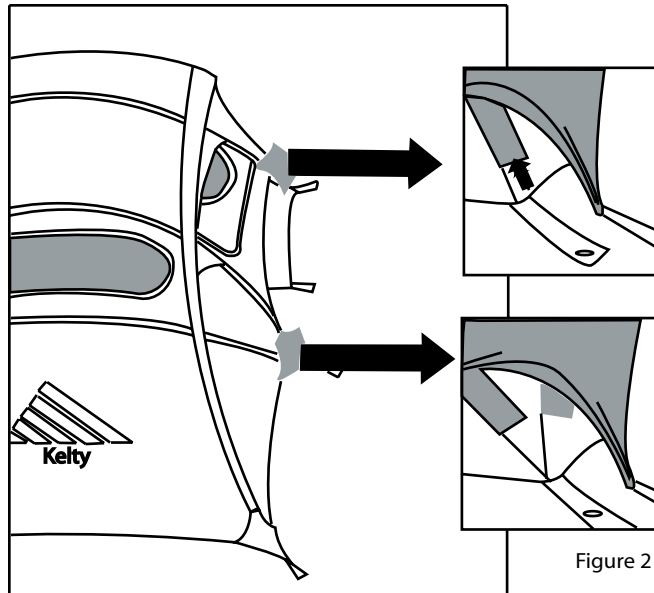


Figure 2

3. Insert the longest of the three poles with grommet tips into the sleeve at the top of the BaseCamp tent (Figure 3, the sleeve runs close to the opening that attaches to your Airstream® trailer).

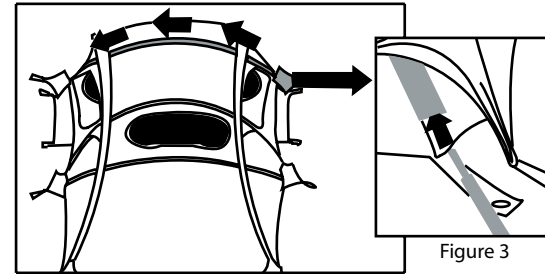


Figure 3

4. Insert the medium pole into the middle pole sleeve. **NOTE:** There are TWO poles sleeves under this navy flap. Make sure the medium pole uses the sleeve that runs closest to the door (Figure 4).

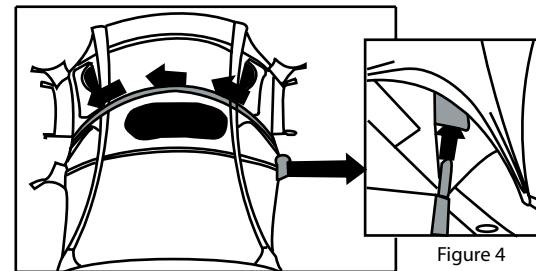


Figure 4

5. Insert the remaining pole with grommet tips on both ends into the final pole sleeve that runs the width of the BaseCamp tent (Figure 5).

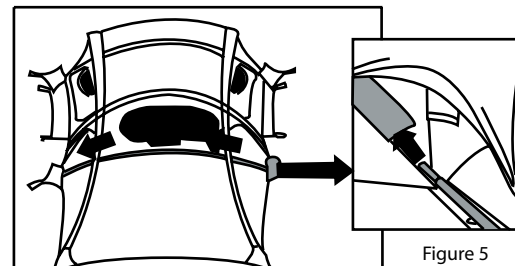


Figure 5

# EXTERIOR

6. Insert the pole ends into the grommet holes in the webbing (Figure 6A & 6B). You need to flex the poles in order to insert the other end of the pole into the grommets on the opposite side of the tent.

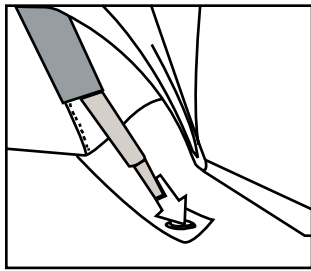


Figure 6A

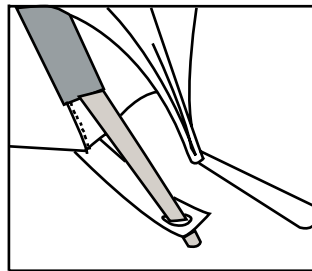


Figure 6A

7. Slide each of the long black-tip poles ball-end first into each of the navy sleeves that run the length of the tent (Figure 7). Feed each pole into the sleeve until it fully seats against the closed end at the top of the tent.

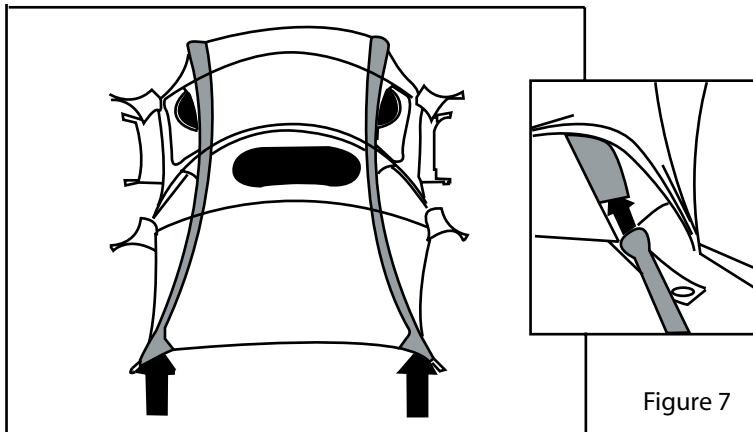


Figure 7

8. Insert the pole ends into the grommet holes in the webbing.

9. Locate the grooves in the BaseCamp trailers roof and bumper (Figure 9).

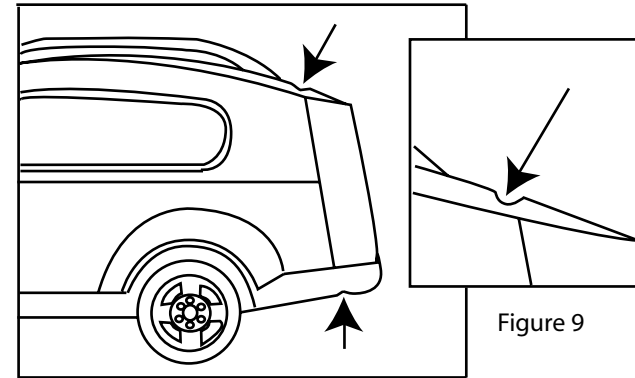


Figure 9

10. Locate the webbing that is sewn into the outer edge of the opening on the tent (Figure 10). This webbing will sit in the grooves in the top and bottom of the trailer.

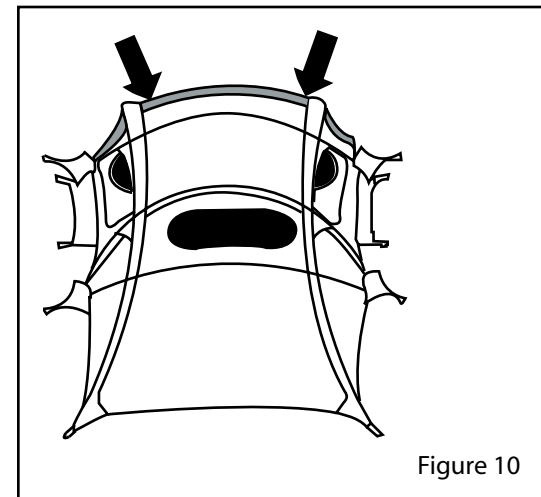


Figure 10

11. Place the webbing (and tent sleeve) in the grooves on the top and bottom of the trailer. Make sure that the webbing lies flat within the grooves.

12. Cinch down the ladder locks located on the top corners of the trailer (Figure 12) to provide a tight fit between the trailer and tent.

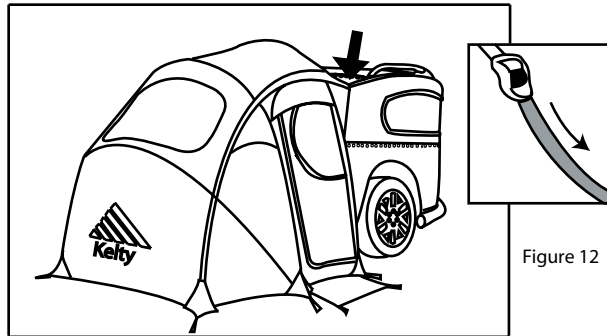


Figure 12

13. Stake down the tent (Figures 13A & 13B)

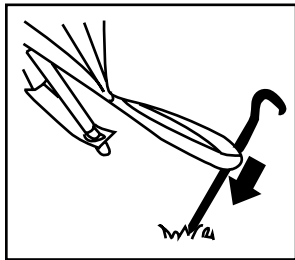


Figure 13A

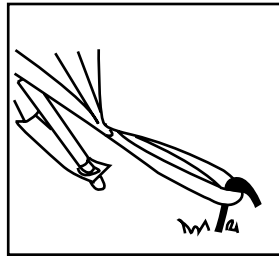
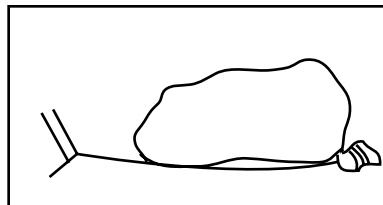


Figure 13B

**WARNING:** If strong winds exist, DO take the tent down to avoid serious injury or death and damage to the tent, the trailer, or your vehicle!

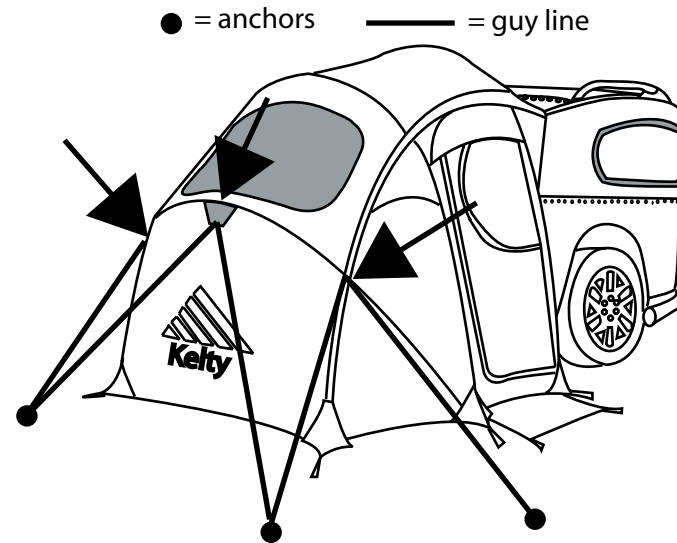
### Staking Tips.

The best way to use rocks for staking and guying out in rocky terrain (or on pavement) is to find one large rock and one small rock. Tie a piece of cord from your stake or guy off point around the small rock, set the large rock on top of the cord right next to the small rock, and pull until it is tight.



### GUYING OUT

If you run two cords at an angle from the side, all movement except toward the anchors will be prevented. Once you start using cords from the side, it becomes clear that they are much more useful than straight-out cords.



**NOTE:** For optimum strength (as shown) you will need to purchase additional guyline.

### NOTES & TIPS

- DO attach the tent securely to your trailer following these instructions.
- DO use supplemental means to anchor the tent such as rocks or sandbags.
- TO minimize UV damage from the sun, DO NOT keep the tent set up for long periods of time or when not in use.
- DO use guylines to further secure the tent.
- In case of light winds, consider using your trailer and vehicle as a wind break.

# EXTERIOR

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## ATV Bi-Fold Ramp (Optional Equipment)

Model SM69 0134

Manufacturer:

Cequent

1050 Indianhead Drive,

PO Box 8

Mosinee, WI. 54455-1799

PH. 800-604-9466

The operation manual for the ramp is included with the owner's packet. The manual contains specialized warnings and cautions specific to the ramp that should be reviewed prior to its use. If the manual is missing and has not been provided with your trailer, contact the ramp manufacturer, your Airstream Dealer, or Airstream Customer Service to obtain it.

The following warnings and instructions are a partial reprint of the manufacturer's owner's manual. Read the manufacturer's complete manual before using the ramp.



### **WARNINGS:**

- **Read, understand, follow and save all instructions before attaching and/or using product. NEVER allow anyone unfamiliar with the instructions to use this product.**
- **Read, understand, follow and save all instructions provided by the manufacturer of the product(s) that this ramp will be used with.**
- **Failure to follow these warnings and instructions may result in property damage, serious bodily injury, and/or death.**
- **Extreme caution should be used when loading or unloading your equipment.**
- **Do not exceed the rated capacity of the ramp.**
- **Do not exceed the Gross Vehicular Weight Rating of the trailer when using the ramp to load the trailer.**
- **Do not exceed the capacity of your loading surface (i.e. tailgate, bumper). If unknown, consult the manufacturer to find load capacities.**
- **Do not drive or ride any equipment up or down loading ramp.**
- **Straps must be secured tightly to limit any movement of the ramp while loading or unloading. If loading or unloading from a vehicle/trailer, be sure the vehicle is parked with emergency brake engaged and/or wheels are chocked and engine is off. If loading or unloading from a trailer, also make sure the trailer is properly coupled to the tow vehicle.**
- **Never stand in the path of equipment when loading/unloading with the ramp, and keep bystanders away from the ramps.**
- **This ramp must be used on a level and stable surface.**
- **Do not step between rungs, this may cause a person to fall through and possibly result in serious bodily injury.**
- **Ramp surfaces may be slippery when wet or dirty.**
- **Ramps are intended for loading/unloading equipment onto a trailer or pickup truck. Do not use ramp sections as a ladder, bridge, scaffolding, or for any other use.**
- **Keep body parts completely clear of the hinge pinch area at all times.**
- **Do not attempt to load or unload power equipment with its engine running.**
- **Do not leave ramps unattended when attached. Someone not knowing the intended use may misuse the ramps or move the ramps that may cause misalignment when returning to load/unload equipment.**
- **Do not cut, drill, weld or modify ramp sections. The ramp sections may become unstable. Never use ramp if there is any broken, bent or worn parts.**
- **Ramp may scratch loading surface (i.e. tailgate, bumper, trailer, ground surface).**
- **Remove ramp from loading position before moving vehicle or trailer.**



## Instruction For Use

See ramp manufacturer's operation manual. The operation manual for the ramp is included with the owner's packet. The manual contains specialized warnings and cautions specific to the ramp that should be reviewed prior to its use. If the manual is missing and has not been provided with your trailer, contact the ramp manufacturer, your Airstream Dealer, or Airstream Customer Service to obtain it.



**WARNING:** Do not use the ramp before reviewing Cequent's ramp operation manual. Read and follow all instructions, warnings, and cautions as instructed in the manufacturer's operation manual.

## Maintenance

- Periodically check the strap and the sewn connections on the strap for any fraying or excessive wear.
- Make sure the strap cam lock is operating properly (dirt, oil, or etc. build up may cause cam lock to work less effectively).
- Keep the ramp loading surface clean (free of dirt, oil, and etc.) to continue to provide maximum traction.
- Use only Cequent Trailer Products parts or parts of equal quality for repair. Replacement parts are available through Cequent Trailer Products, 1-800- 604-9466 or [www.cequentgroup.com](http://www.cequentgroup.com). Please specify product model number, name of parts, and part number.



**WARNING:** Never exceed the GVWR when using the ramp for loading your trailer. Gross Vehicular Weight Rating (**GVWR**): is the maximum permissible weight of this trailer when fully loaded. It includes all weight at the trailer axle (s) and tongue or pin.



# INTERIOR

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The interior of all Airstream trailers has been designed for flexibility, durability and appearance. How you use it and how you take care of it naturally depends on you. However, if you learn to operate the interior components and take care of them and the trailer properly, this knowledge will add to your pleasure as well as the long life of your trailer.

The lounge and curtain fabric should be cleaned regularly before substances such as dirt, roof particles, etc. are allowed to accumulate on and become embedded in the fabric. The fabric can be cleaned without being removed from the installation. Simply brush off any loose dirt, roof particles, etc.; hose down and clean with a mild solution of mild soap in lukewarm water (no more than 100 degrees F). Rinse thoroughly to remove soap. **DO NOT USE DETERGENTS.** Allow to air dry.

For more stubborn cases: Soak the fabric for approximately twenty minutes in a solution of no more than 1/2 cup (4 oz.) of a non-chlorine bleach and 1/4 cup (2 oz.) mild soap per gallon of water at approximately 100 degrees F. Rinse thoroughly in cold water to remove all of the soap. Note: Excessive soaking in non-chlorine bleach can deteriorate sewing threads. This method of cleaning may remove part of the water repellency and the fabric should receive an application of an air-curing fluorocarbon water repellent treatment, such as 303 Hi Tech Fabric Guard, if water repellency is a factor.

How Can You Get Service? Call the dealer or retailer from whom you purchased the product, to inspect the claim. They, in turn, will contact the manufacturer of the item purchased. The manufacturer will then contact Glen Raven and secure replacement fabric for you.

Glen Raven Custom Fabrics, LLC  
1831 North Park Ave.  
Glen Raven, NC 27217-1100  
(336) 221-2211  
Fax: (336) 586-1169

[www.sunbrella.com](http://www.sunbrella.com)



**WARNING:** Keep your furniture and family safe from fires caused by careless smoking. Do not smoke when drowsy. Remove immediately any flowing ash or a lighted cigarette, which falls on furniture. Smoldering smoking material can cause upholstered furniture fires.

## Interior Skin

The interior aluminum skin is the same metal as used on the exterior of the trailer and should be cared for and maintained using the same instructions.

## Rubber Floor

The rubber floor in your unit can be cleaned with mild soap and warm water.

## Counter Area

The counter areas around the sink are of a high-pressure laminate and can be cleaned with soap and water, or you can use a common solvent on tough spots. Be sure no abrasive cleaner is used, as there is the possibility it could scratch the surface. A protective pad should always be placed under hot utensils.

## Sinks

Cleaning can be accomplished using mild liquid detergent with a soft cloth. A complete Home Owners Guide for your sinks is supplied in your Owner's Folder. Please read these instructions before use.

## Ceiling Vent, Non Power

The vent is operated using the crank. Be sure vent is closed before travel. Lubricate vent every six months with a light household oil.

## Light Switches

Light switches are located on the front overhead and the rear of the trailer and are labeled for your convenience.

To change the bulb in the round ceiling light, first remove the lens assembly. The lens assembly is spring loaded and pops out of the fixture at its chrome ring. A small screwdriver may be used, be careful not to scratch the chrome and be sure the bulb is cool before attempting replacement. The bulb inserts into the ballast by two wire prongs. Grasp the bulb with a piece of cloth and pull it gently straight out from its ballast. Insert the new bulb, and replace the lens. The lens assembly has two grooves that must be aligned to the light fixture before snapping the lens back into place.

## Storage

All storage areas should have the heaviest items on the bottom and lighter items overhead. All items should be packed to immobilize them as much as possible. This will prevent damage to the interior due to shifting loads. After loading you should have the skillets and can goods on the floor or bottom shelf, and the cereals and crackers in the overhead areas. Use the unbreakable type plates and saucers, and consider storing your dish towels around them. Better yet, use paper plates. Who wants to wash dishes when on a trip or vacation?

## SMOKE ALARM - FIREX MODEL B

Maple Chase Company  
2820 Thatcher Road  
Downers Grove, Illinois 60515-4040

## IMPORTANT INFORMATION-SMOKE ALARM SAFETY CHECKLIST

1. Test your smoke alarm every week. To test the electronics, firmly depress the button. To test that smoke reaches the sensor, blow smoke in a careful fire-safe manner into your smoke alarm.
2. Your smoke alarm will not work without power. Never shut off its power or remove the battery to quiet the alarm. FOR BATTERY-POWERED UNITS: When your smoke alarm “beeps” about once a minute, the battery is weak. Immediately install a new battery correctly. Be sure to use only batteries specified in Owner’s Manual or on unit. Test unit after installing a new battery.
3. Clean and vacuum the openings on your smoke alarm once a month.
4. Do not open the smoke alarm or try to repair it. For replacement information see the WARRANTY in the Owner’s Manual.
5. Verify you have the proper number of smoke alarms in your home and the correct location for each one. A smoke alarm will not respond well in an incorrect location.
6. If your smoke alarm has one or more of these special features, please note:
  - FALSE ALARM CONTROL (Model C): Pushing test/hush button reduces sensitivity for up to 15 minutes, minimizing nuisance alarms,
  - FLASHING LIGHT (Model E): Pushing test button turns flashing safety light on. Very thick smoke may obscure light.



# INTERIOR

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7. Smoke alarms have technical limitations and may not respond in all situations. **FIRE PREVENTION** is your best safeguard.

8. For a replacement Owner's Manual or Safety Checklist, please indicate your unit model, include a self-addressed stamped envelope and send to:



**WARNING: Alarm battery is shipped deactivated. Check your alarm for proper battery installation.**

## WEEKLY TESTING OF YOUR SMOKE ALARM

1. FOR A COMPLETE WEEKLY TEST OF THE ELECTRONICS AND THE SENSOR OPERATION, FIRMLY DEPRESS THE TEST BUTTON ON THE COVER OF THE SMOKE ALARM FOR A FEW SECONDS. The smoke LED (light emitting diode), which is the indicator light under the clear Push-to-Test button, will blink once per second while the button is being pushed and the alarm is sounding. The smoke alarm will stop sounding when you release the button.
2. If your smoke alarm has the False Alarm Control or Safety Light feature see "SPECIAL SMOKE ALARM FEATURES" for further testing information.
3. **IMPORTANT:** Always test your smoke alarm upon returning from vacation, or any other time when no one has been in your household or residence for several days.
4. If a smoke alarm is installed in a mobile home, test the smoke alarm after you remove the vehicle from storage and before each trip.



**WARNING: If your smoke alarm does not respond as described in any of the above tests, check that a good battery is properly installed. If a good battery is properly installed, promptly remove the unit, repack it and return it for repair or replacement.**

## TAKING CARE OF YOUR SMOKE ALARM

Your smoke alarm has been designed and manufactured to be as maintenance-free as possible. Here are a few simple steps you must perform, in addition to the weekly tests described in the section "WEEKLY TESTING OF YOUR SMOKE ALARM," to keep your unit in good working order.

- The smoke alarm should be vacuumed monthly or more often if there is dust, dirt or kitchen grease that can accumulate. Use a soft brush or wand attachment and vacuum all slots in the cover and side. FOR YOUR SAFETY, you must properly clean and maintain your smoke alarm, since a dirty or malfunctioning unit may fail to alarm or cause unwanted nuisance alarms.
- If the unit is damaged or fails to operate properly, and you have checked that a good battery is installed correctly, follow the directions in the section "WHERE TO SEND YOUR SMOKE ALARM IF IT NEEDS SERVICE" for return. FOR YOUR SAFETY, DO NOT OPEN THE SMOKE ALARM AND TRY TO REPAIR IT YOURSELF. While smoke alarms are economical devices, they contain precision electronic components that are precisely calibrated. The manufacturer must do repairs.

## REPLACING THE BATTERY

The smoke alarm will "beep" once a minute for at least 30 days when the battery is weak. The battery must **immediately** be replaced with a fresh one.

The battery should also be changed if it does not sound an alarm when tested. TO REPLACE THE BATTERY:

1. Check if the tamper resist locking pin is installed in the smoke alarm (see "USING THE TAMPER RESIST LOCKING MECHANISM" section). If so, pull the pin completely out of the smoke alarm using long-nose pliers.

2. Remove the smoke alarm from the mounting bracket by twisting counterclockwise
3. Replace old battery with a fresh one. If your smoke alarm has a safety light, the miniature lamp operates on two AA batteries. (See recommended batteries below.)
4. Check that battery connections are secure and the battery is secured in its compartment
5. Test smoke alarm for proper operation (see "WEEKLY TESTING OF YOUR SMOKE ALARM" section). The smoke alarm operates on a 9-volt battery. The normal battery operating life will be one (1) year. The life of some batteries may be less.
6. Firex smoke alarms sold with Ultralife long-life lithium batteries require replacement approximately every ten (10) years or when the low battery signal sounds.

**CAUTION:** You should only use the batteries specified here or on the label of the unit.

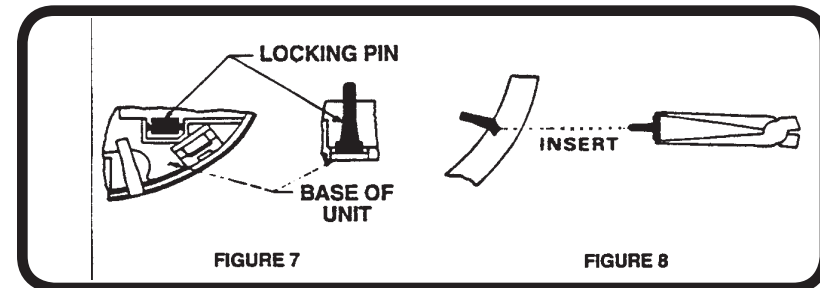
**For Models A, B, C, E and PB use: Eveready 216, 522 or 1222; Mallory MN1604; Duracell MN1604; or Ultralife U9VL-J.**

**For Model E also use AA Heavy Duty for light power.** The miniature lamp operates on two (2) AA batteries. For replacement, use heavy-duty or alkaline AA batteries: Eveready 1215, E91, or Duracell M15HD, MN1500.

**CAUTION:** Do not use any type of rechargeable batteries.

## USING THE TAMPER RESIST LOCKING MECHANISM

To make the smoke alarm somewhat tamper resistant, a "locking pin" has been provided in the base of the unit. It will help deter a child or other individual from removing the smoke alarm from the bracket. See Figure 7. The following directions can install this.



1. Remove the breakaway locking pin from the unit by rocking pin back and forth.
2. Put the smoke alarm back on the mounting bracket. (See section "HOW TO INSTALL YOUR SMOKE ALARM.")
3. Using long-nose pliers grab the head of the locking pin and insert into hole located on the side of the smoke alarm. See Figure 8.
4. The Tamper Resist feature is now installed and complete.

### To Remove:

5. Using long-nose pliers grasp the head of the locking pin and pull the pin completely out of the smoke alarm.
6. The smoke alarm can now be removed from the mounting bracket with a counterclockwise twist.

# INTERIOR

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## SPECIAL SMOKE ALARM FEATURES

If your smoke alarm has one or more of these special features, read the following:

- **BLINKING LED LIGHT** (Models B, C, E and PB): The indicator light under the Push-to Test button blinks about once per minute to indicate the smoke alarm is receiving power.



**WARNING:** Very thick smoke may obscure the light.

## LP GAS DETECTOR

The LP gas detector is located approximately six inches above the floor. LP gas is a mixture of gases produced and sold commercially as a fuel for heating and cooking appliances. LP gas is highly flammable and, as a result, can be explosive if ignited under certain circumstances. LP gas is heavier than air and, if confined in a closed space, will accumulate close to the floor. When the LP gas concentration in your unit exceeds 2000 PPM the detector will provide a visual and audible alarm by sounding a buzzer and flashing the red LED two times per second.



**WARNING:** Activation of this detector indicates the presence of LP gas, which can cause an explosion and/or fire. This normally indicates a leak in the LP gas installation or a LP gas appliance. Extinguish all open flames, open your windows and door and evacuate the unit immediately. Do not activate any electrical switch. Turn off the LP at your gas bottle(s). **DO NOT RE-ENTER YOUR UNIT UNTIL A QUALIFIED REPAIR TECHNICIAN HAS CORRECTED THE PROBLEM OR A FIRE DEPARTMENT OFFICIAL HAS CLEARED YOUR UNIT AS SAFE.**

## OPERATION

Your LP gas detector is wired directly to your vehicle battery and incorporates a 1-amp in-line fuse located inside the roaside console.. When the device is operating normally the green LED will be lit.



**WARNING:** It is not recommended that the detector be disconnected from the battery during periods of storage. There is a small heater on the sensor of the device, which “burns” away impurities in the air during periods of normal use. During periods when power is interrupted, impurities can build up on the sensor. When power is returned to the detector the detector alarm may activate until the impurities are “burned” off. This could take a number of hours, during which time the alarm will be constantly “on”.

## LP DETECTOR TEST

Press the test button for 5 to 6 seconds until the alarm sounds then release the test button. The red LED should flash and the alarm sound for approximately 4 minutes. This test should be performed at least once a week during normal vehicle operation, and after periods of storage, and before each trip.

## LOW VOLTAGE

Below 10 VDC the detector will continue to operate but will blink alternately green and orange. Below 8 VDC the unit will behave erratically and will eventually shut off. To ensure proper operation, do not operate the unit below 10 VDC.

## COMPONENT FAILURE

The failure of any circuit component will cause the detector to display a continuous orange LED fault light and a short beep indicating failure. If this occurs, immediately contact your dealer or Airstream Customer Service for the name of the nearest detector service center.

Please read the operating instructions for your detector, which have been supplied with the paper work of your unit.



**WARNING:** Have a professional check your system if you have any doubts.

## FIRE EXTINGUISHER

The fire extinguisher should have the charge checked on a regular basis. Make sure your family, especially the cook, knows how to release the extinguisher storage bracket, and how to properly operate the extinguisher. If you find the directions on the extinguisher unclear, check with your local fire department for professional advice on its operation and use. We're sure they will be happy to assist you and your family.

**SAFETY: Many things can be construed as safety related, but the most important is your common sense. If you are careless with matches, cigarettes, flammable material or any other hazardous material, we are sure you realize your potential for accidents is greatly increased.**



# INTERIOR

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## CARBON MONOXIDE ALARM

The following information is highlights from the folder provided by the alarm manufacturer. The folder, with more detailed information, is contained in your Owners' Packet.

CAREFULLY READ AND UNDERSTAND THE COMPLETE CONTENTS OF THE INSTRUCTION MANUAL BEFORE USING THE ALARM.

STORE THE MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE. PAY PARTICULAR ATTENTION TO THE SAFETY WARNINGS. PASS THE MANUAL ONTO ANY SUBSEQUENT USERS OF THE ALARM



**WARNING:** Activation of your CO alarm's audible horn indicates the presence of carbon monoxide (CO) which can KILL YOU.



**WARNING:** Alarm battery is shipped deactivated. Check your alarm for proper battery installation.



**WARNING:** THIS PRODUCT IS INTENDED FOR USE IN ORDINARY INDOOR LOCATIONS OF FAMILY LIVING UNITS. IT IS NOT DESIGNED TO MEASURE COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) COMMERCIAL OR INDUSTRIAL STANDARDS.

INDIVIDUALS WHO ARE AT SPECIAL RISK FROM CARBON MONOXIDE EXPOSURE BY REASON OF AGE, PREGNANCY OR MEDICAL CONDITION MAY CONSIDER USING WARNING DEVICES WHICH PROVIDE AUDIBLE AND VISUAL SIGNALS FOR CARBON MONOXIDE CONCENTRATION UNDER 30 PPM. IF IN DOUBT CONSULT YOUR MEDICAL PRACTITIONER.

THIS CARBON MONOXIDE ALARM IS NOT

1. Designed to detect smoke, fire or any gas other than carbon monoxide.
2. To be seen as a substitute for the proper servicing of fuel-burning appliances.
3. To be used on an intermittent basis, or as a portable alarm for spillage of combustion products from fuel-burning appliances.

**CAUTION:** This carbon monoxide alarm is designed for indoor use only. Do not expose to rain or moisture. Do not knock or drop the alarm. Do not open or tamper with the alarm as this could cause malfunction. The alarm will not protect against the risk of carbon monoxide poisoning when the batteries are dead or missing. The alarm will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas.

## IMPORTANT

Carbon monoxide is produced by the incomplete combustion of fuels such as wood, charcoal, coal, heating oil, paraffin, gasoline, natural gas, propane, butane, etc.

Ideally, it is recommended that a carbon monoxide alarm should be installed in or near every room that has a fuel burning appliance such as any room heaters, water heaters, cookers, grills, etc.

Ensure that the alarm horn can be heard by all those who are intended to hear it. Seek medical help if it is suspected that a user of the RV is suffering from carbon monoxide poisoning.

If the alarm sounds, make sure to investigate the problem. Ignoring the alarm may result in sickness, injury or death. (CO may be present even if nothing is seen or smelled by the user).



Room spaces should be well ventilated when household cleaning supplies are used as these may cause a false alarm.

Alarm should be tested once per week. If further details are required which do not appear in this manual contact BRK Brands Inc. First Alert.

## Introduction

This alarm which is designed to detect the presence of carbon monoxide. This manual contains information on operation of the CO alarm. The green light flashes at approximately 60-second intervals to indicate the alarm is operating correctly. The red light will flash continuously and the horn will sound if carbon monoxide is detected. The alarm is suitable for use in areas where cooking and heating appliances burn fuels such as wood, charcoal, coal, oil, gas, etc.

This carbon monoxide alarm is designed to detect carbon monoxide gas from any source of combustion

## WHAT IS CARBON MONOXIDE

Carbon monoxide (CO) is a highly poisonous gas which is released when fuels are burnt. It is invisible, has no smell and is therefore very difficult to detect with the human senses. Under normal conditions, in a room where fuel burning appliances are well maintained and correctly ventilated, the amount of carbon monoxide released into the room by appliances is not dangerous.

These fuels include: Wood, coal, charcoal, oil, natural gas, gasoline, kerosene, and propane.

Common appliances are often sources of CO. If they are not properly maintained, are improperly ventilated, or malfunction, CO levels can rise quickly. CO is a real danger in "Air-tight" RVs with added insulation, sealed windows, and other weatherproofing can "trap" CO inside.

The following conditions can result in potentially dangerous CO situations.

1. Excessive spillage or reverse venting of fuel burning appliances caused by outdoor conditions, such as:
  - a. Wind direction and/or velocity: including high gusts of wind. Heavy air in the vent pipes (cold/humid air with extended periods between cycles).
  - b. Negative pressure differential resulting from use of exhaust fans.
  - c. Simultaneous operation of several fuel burning appliances competing for limited internal air.
  - d. Vent pipe connections vibrating loose from clothes dryers, furnaces or water heaters.
  - e. Obstructions in or unconventional vent pipe designs which can amplify the above situations.
2. Extended use of unvented fuel burning devices.
3. Temperature increase that can trap exhaust gases near the ground.

## SYMPTOMS OF CARBON MONOXIDE POISONING.

These symptoms are related to CO POISONING and should be discussed with users of the RV.

1. Mild Exposure - Slight headache, nausea, vomiting, fatigue, ("flu-like" symptoms),
2. Medium Exposure - Throbbing headache, drowsiness, confusion, fast heart rate.
3. Extreme Exposure - Convulsions, unconsciousness, heart and lung failure,
4. Exposure to carbon monoxide can cause brain damage, death.



**WARNING! Many causes of reported CARBON MONOXIDE POISONING indicate that while victims are aware that they are not well, they become so dis-oriented that they are unable to save themselves by either exiting the building or calling for assistance. Also young children and pets may be the first to be affected.**

# INTERIOR

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**WARNING!** Test units used in RVs after the vehicle has been in storage, before each trip and once a week while in use. Failure to test units used in RV's as described may remove your protection.

## CARE AND MAINTENANCE OF ALARM

The alarm should be tested weekly by pressing and holding the test/reset button on the front of the alarm for several seconds. The alarm is pre-calibrated at the factory and requires no maintenance other than to clean the outside casing occasionally with a cloth. Ensure that the holes on the front of the alarm are not blocked with dirt and dust. DO NOT USE CLEANING AGENTS, BLEACH OR POLISH: The unit requires 3 x 1.5V alkaline batteries. The following are suitable replacements. Gold Peak 24A LR03, Energizer E92 LR03. Use only the batteries listed. Use of batteries not listed may affect performance of the unit.

## USING THE ALARM

To activate the alarm, insert the 3 batteries which are included, fit the battery compartment cover and close the detector lid (battery compartment cover cannot be fitted unless batteries are inserted.) When inserting the batteries, ensure the polarity is correct - ie. positive end of battery (+) align with the (+) symbol in the battery housing. The green and red lights will flash briefly and the horn will sound a short chirp. Press the test/reset button and check that the red light flashes and the horn sounds. The alarm is now operating and ready for use.

### Medical Kit

[www.adventuremedicalkits.com/](http://www.adventuremedicalkits.com/)

The portable medical kit is designed by Adventure Medical Kits specifically for a week-end excursion. It organizes supplies by injury for fast and safe results and comes with a

guide for wilderness and travel medicine. As you enjoy the BaseCamp become familiar with the manual and be sure to keep it stocked with supplies.

## Floor Tie Downs

The BaseCamp has several tie downs available for securing cargo. What you carry and how you decide to secure the cargo is up to you, but there are limitations on how much weight can be placed in the trailer. Read and follow all recommendations, cautions, and warnings on loading your trailer as described in this manual. DO NOT overload the trailer and its axle and tires.

**CAUTION:** The allowable personal cargo must be distributed in your trailer in such a manner that the Gross Axle Weight Rating and the tire load range is not exceeded.



**WARNING:** Never exceed the GVWR when loading your trailer. Gross Vehicular Weight Rating (GVWR): is the maximum permissible weight of this trailer when fully loaded. It includes all weight at the trailer axle (s) and tongue or pin.



**WARNING:** Failure to properly secure cargo could cause, property damage, injury, and/or death.

## Sofa

The pair of sofas can be used as seating or converted into a bed. They can be stored out of the way or removed completely to make room for more cargo. The diagram below shows one sofa in the seating position and one in the sleeping position.

Cushion A adheres to the wall by way of a magnet.

Cushions B and D form the bed cushions and filler cushions for the sofa.

Cushion E is not used for the bed cushions but as a filler in the sofa seat.

Item F is a shoulder bolt used to fasten the sofa assembly to the wall hinge.

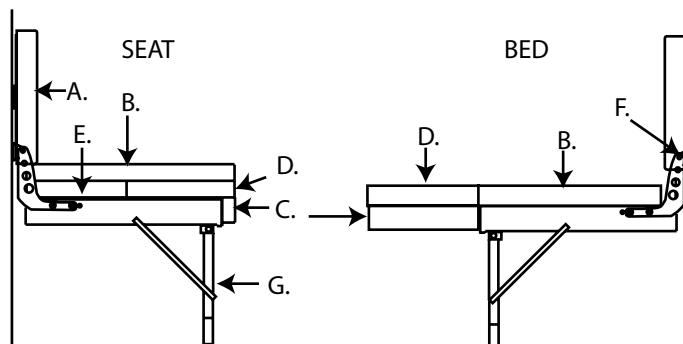
Item G is the fold up sofa leg.

To make the sofa into a bed, pull out the bed slides (C) on both sofas and adjust the cushions as shown.

The sofa assemblies may be removed from the trailer by removing the shoulder bolt (F) on each hinge.



**WARNING:** Sofa leg must be extended completely and locked into place before using sofa as bed or seat.



## Sofa Storage

The diagram below shows the sofa in the storage position. The sofa assembly is hinged and folds neatly against the wall for storage.

Item A is the fold up sofa leg.

Item B is a seat belt type strap used to gather the cushions into one convenient bundle.

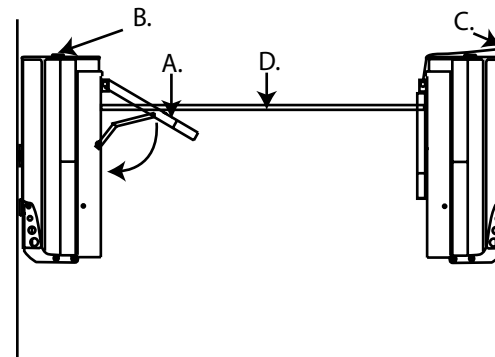
Item C is a tether cord used to fasten the sofa assembly to the wall.

Item D is the travel rod. It must be installed during travel if the sofas are in the storage position.

**CAUTION:** The travel rod (D) must be installed whenever the trailer is moved with the sofas in the stored position. The tether strap (C) is for convenience only and never should be used as the sole means of keeping the sofas in the storage position during travel. Failure to use the travel rod may cause tether strap failure and allow the sofas to fall during travel causing damage to the trailer and/or cargo.

To store the sofas:

1. Strap the cushions (B) together.
2. Lift the sofa assembly to the wall and fasten the tether strap (C) to the wall eyelet.
3. Fold down the sofa leg (A).
4. Install the travel rod (D).



# INTERIOR

## Galley Removal

The galley can be removed by loosening the bolts holding it to the wall and floor. The cook top LPG supply and sink drain have quick disconnects to aid the galley removal. For ease of removal we suggest the water tank(s) and pump be removed and drained before the galley is loosened.

The galley top is laminated Formica and can be cleaned using mild soap and water. Never use abrasive cleaners as this could damage the Formica top.

## Cargo Tie Down Rings

There are several tie down rings located in the floor of the trailer. These rings are used to stabilize and immobilize the cargo you choose to carry. Straps and tie down systems are varied and numerous in the present market place. Whatever the cargo and tie down system you choose, it is important to immobilize your cargo securely and safely.

## Interior Carrier Tracks (Optional Equipment)

Track	TB60
Foot	Rapid Tracker II Model 430R
Foot Base	Model TK1
Load Bars	Model RB47

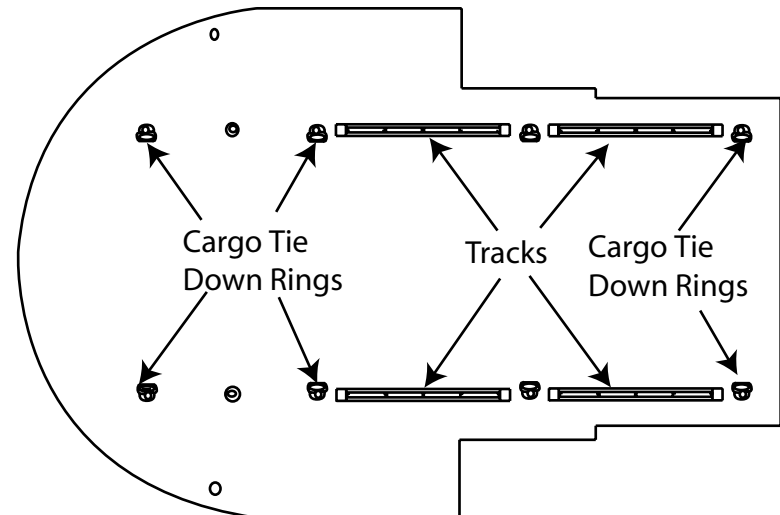
Thule Inc.  
42 Silvermine Road  
Seymour, CT 06483  
USA  
phone: 1 203 881 9600  
fax: 1 203 888 4252

Two optional equipment packages are available with the base camp trailer.

The Tracks with Track Cover includes four 24" tracks with end caps and four Track Covers.

The Rapid Aero Tracker System with Track Covers includes two 47 inch load bars, four Rapid Tracker II feet, four 24" tracks with end caps, and four track covers. This system features quick rack removal with a convenient push button.

Additional accessories for various uses can be obtained from a Thule dealership including Thule's custom fitting Tracker Kits.





**WARNING:** Never exceed the GVWR when loading your trailer. The Gross Vehicular Weight Rating (GVWR) is the maximum permissible weight of this trailer when fully loaded and is listed in the specification section of this manual. It includes all weight at the trailer axle(s) and tongue or pin.



**WARNING:** Failure to properly secure cargo properly could cause, property damage, injury, and/or death.



**DANGER:** Any motorized vehicle or any motorized equipment powered with flammable liquid can cause fire, explosion, or asphyxiation if stored or transported within the recreational vehicle. To reduce the risk of fire, explosion, or asphyxiation:

- (1) Passengers shall not ride in the vehicle storage area while vehicles are present.
- (2) Occupants shall not sleep in the vehicle storage area while vehicles are present.
- (3) Doors and windows in walls of separation (if installed) shall be closed while the vehicles are present.
- (4) Fuel shall be run out of engines of stored vehicles after shutting off fuel at the tank.
- (5) Motor fuel shall not be stored or transported inside this vehicle.
- (6) The vehicle storage area shall be ventilated.
- (7) Propane appliances, pilot lights, or electrical equipment shall not be operated when motorized vehicles or motorized equipment are inside vehicle.

**FAILURE TO COMPLY COULD RESULT IN AN INCREASED RISK OF FIRE, EXPLOSION, OR ASPHYXIATION, DEATH, OR SERIOUS INJURY**



# PLUMBING

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## LIQUID PETROLEUM GAS (LPG)

### FILL VALVE

Your trailer is equipped with LP tank fill valves called “RV Type I Acme” connection. The large, green, nylon swivel nut is a right hand thread and is designed for hand operation only.

The valve features an internal spring-loaded module that will not allow gas to flow from the cylinder until a positive seal has been made at the connection. The valve outlet has 1-5/16” Acme threads on the outlet exterior and female POL, left-handed threads on its interior. This feature allows for connection of the new wrenchless, right-handed, Acme RV connection and still accommodates the standard left-handed POL fittings used for filling propane cylinders.

The mating, green swivel nut and brass nipple also incorporates new features: the green nylon nut swivels on a black bushing that is heat sensitive. Between 240 degrees F and 300 degrees F the bushing will yield (melt) allowing the spring-loaded module in the valve to push the brass nipple back (approximately 1/4”) closing the module and stopping the flow of gas from the cylinder. Inside the brass nipple is a flow-limiting device designed to sense excessive gas flow. If an excessive flow is sensed, the flow-limiting device shuts the flow down to a maximum of 10 SCFH (Standard Cubic Feet per Hour) or less. This is also referred to as the by-pass flow.

By-pass flow is extremely important in the proper operation of this connection. The flow-limiting device may activate if the cylinder valve is opened quickly. When all appliances are off, the by-pass flow allows the pressure downstream from the flow-limiting device to equalize. When pressure is equalized, the flow-limiting device will supply normal flow to the system. Equalization occurs in approximately 5 seconds and in most cases goes completely unnoticed. If, however, an appliance is left on or there is a leak or open flow in the system, the by-pass pressure will not be able to equalize and allow the flow-limiting device to re-open. Symptoms of this condition would be

appliances that light but have lower than normal flame or starve out from lack of gas, a substantial reduction in the flame when another appliance is operating, or pilots that are difficult to light. If this should happen, the following steps should eliminate the condition:

1. Close LP cylinder valve.
2. Extinguish all flames and smoking materials
3. Be sure all gas appliances, including their pilot lights, are off.
4. Open LP cylinder valve slowly. DO NOT SNAP OPEN.
5. Wait at least 15 seconds before lighting appliances.
6. If operational difficulties continue, there may be a leak in the system. Immediately close the LP cylinder valve and have the system inspected by a qualified RV service technician.

**Again, make sure all appliances are off before opening propane cylinder valves. Exception: when reconnecting a full cylinder to an auto changeover regulator it is not necessary to shut off the appliances or close the valve of the cylinder already in service.**

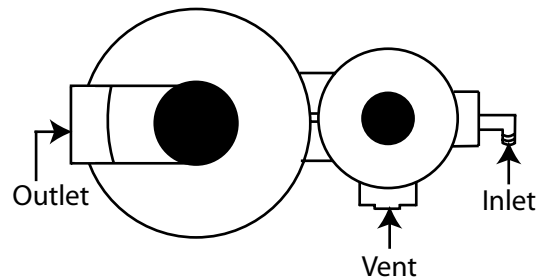


**WARNING: LEAKING LP GAS MAY IGNITE CAUSING A FIRE OR EXPLOSION WHICH COULD RESULT IN SERIOUS BODILY INJURY, PROPERTY DAMAGE, OR DEATH.**

How long a full tank of gas will last is dependent on usage. On the average, with normal cooking and other appliance use you can probably count on two to three weeks of service from a tank.

## AUTOMATIC GAS REGULATOR

All models are equipped with an automatic gas regulator. The LPG tank is connected to this regulator.



## LPG BOTTLE

The following step-by-step procedure gives you the proper method of removing and installing the bottle:

1. Shut off the cylinder valve on the empty cylinder.
2. Disconnect the green swivel nut from the cylinder valve at the bottle to be removed.  
(This fitting has a common right hand thread and turns in the same direction to most threaded fittings.)
3. Loosen black knurled tank mounting screw until tank clears bracket.
4. Slide tank out from under foot cross member and lift from tank cover.

### To Install

1. Place tank so tank foot is inserted into the foot cross member.
2. Tighten knurled black tank mounting screw so bracket holds tank securely in place.
3. Hand-tighten the green nylon swivel nut onto the tank valve outlet.
4. Slowly turn on cylinder shut off valve and test all fittings with a soap suds or detergent solution and watch for bubbles.

## LIQUID PETROLEUM GAS (LPG)

**! WARNING:** LP gas regulators must always be installed with the diaphragm vent facing downward. Regulators that are not in compartments have been equipped with a protective cover. Make sure that regulator vent faces downward and that cover is kept in place to minimize vent blockage, which could result in excessive gas pressure causing fire or explosion.

**CAUTION:** The LPG bottle is securely mounted on the front "A" frame of your trailer. If the bottle must be removed for service or replacement it is important that they be reinstalled correctly in order to prevent any possibility of their falling off or becoming dislodged during travel.

**! WARNING:** Your LP tanks must be filled as directed by the tank manufacturer. Instructions are located on a decal near the fill valve. The decal must not be defaced.

**! WARNING:** Your LP tank must be, and can only be, placed in the proper position when remounting on the front of the trailer. In any other position the base of the tank will not fit into the recess.

**! WARNING:** Use only the gas bottle furnished with your trailer. If replacement is required it must be a bottle of the same size and design.

**! WARNING:** The vent at the bottom of the regulator must be kept free of any obstructions and must be pointed downward. A good habit is to check the vent each time a bottle is removed for filling. It is especially important to check



# PLUMBING

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the vent if the trailer has not been used regularly.

Twice a year, or after a long storage period, we suggest you take your unit in for a checkup and cleaning of the gas operated appliances.

## BASIC RULES FOR SAFETY



**WARNING:** Do not store LP containers within a vehicle. LP containers are equipped with safety devices that vent gas should the pressure become excessive.



**WARNING:** Do not use cooking appliances for comfort heating. Cooking appliances need fresh air for safe operation. Before operation open an overhead vent or turn on an exhaust fan and open a window.

A warning label has been located in the cooking area to remind you to provide an adequate supply of fresh air for combustion. Unlike homes, the amount of oxygen supply is limited due to the size of the recreational vehicle; and, proper ventilation when using the cooking appliances will avoid dangers of asphyxiation. It is especially important that cooking appliances not be used for comfort heating as the danger of asphyxiation is greater when the appliance is used for long periods of time.



**WARNING:** Portable fuel burning equipment, including wood and charcoal grills and stoves, shall not be used inside the recreational vehicle. The use of this equipment inside the recreational vehicle may cause fires or asphyxiation.



**WARNING:** A warning label has been located near the LP gas container. This label reads: **DO NOT FILL CONTAINER (S) TO MORE THAN 80 PERCENT OF CAPACITY.**

Overfilling the LP gas container can result in uncontrolled gas flow, which can cause fire or explosion. A properly filled container will contain approximately 80 percent of its volume as liquid LP gas.



**WARNING:** Do not bring or store LP gas containers, gasoline or other flammable liquids inside the vehicle because a fire or explosion may result.



**WARNING:** IF YOU SMELL GAS:

1. Extinguish any open flames, pilot lights and all smoking materials.
2. Do not touch electrical switches.
3. Shut off the gas supply at the tank valve(s) or gas supply connection.
4. Open doors and other ventilating openings.
5. Leave the area until odor clears.
6. Have the gas system checked and leakage source corrected before using again.



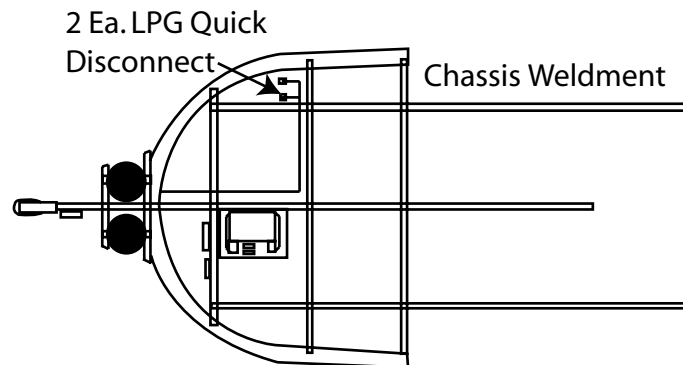
## LPG CONNECTIONS

Two quick connect LPG connections are located on the curbside front of the trailer. One connection is used to provide LPG to the optional cooktop and is routed through the floor to the cooktop as equipped.

The other is a utility connection to use for an outside grille or other LPG appliance.

The connections are relative easy to use. Check that the LPG bottle valve is turned completely off. Slide the collar on the female end back and plug the male hose into the connection. Release the collar and check that the hose is properly connected by giving a firm pull on the hose. Turn the LPG bottle on and recheck all connections to the appliances and quick connection to be sure no leaks are present.

Follow all instructions, cautions, and warnings presented in this manual when connecting and disconnecting appliances.



# PLUMBING

## FRESH WATER SYSTEM

Manufacturer:

Comet Leisure Products

1767 Lakewood Ranch Blvd.

Suite 113

Bradenton, Fl. 34211

Ph: 941.322.9179

Fax: 941.322.8519

The water tap system consists of a switched faucet (London Model), 12 volt immersion pump, and a 3 gallon portable water tank. It is powered by a 12 Volt outlet on the wall under the galley.

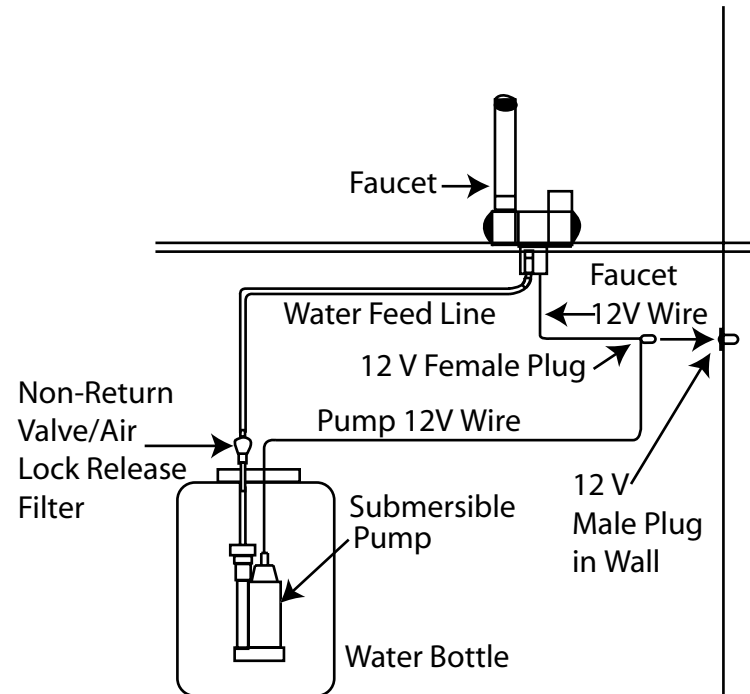
The faucet has a built-in switch that activates the pump when the lever is moved to the open position.

The portable tank has two caps. One which is vented with connection ports for the water feed line and the immersion pump 12 volt feed cable and a sealed cap for transporting the tank to be filled.

To fill the tank simple remove the cap and pull the pump assembly out of the tank, Install the sealed cap and transport the tank to be filled.

### Winterizing

To winterize system add a gallon of approved non-toxic RV anti-freeze to water tank. Open the galley drain under the floor and place a small container under the drain to catch anti-freeze as you run water through the faucet, sink, and galley drain. Open the faucet and run water until anti-freeze comes out of faucet, runs through the galley drain, and is filling the small container. Disconnect the 12 volt water pump plug from the power port.



## FRESH WATER TANK SANITIZING

Potable water systems require periodic maintenance to deliver a consistent flow of fresh water. Depending on use and the environment the system is subject to, sanitizing is recommended prior to storing and before using the water system after a period of storage. Systems with new components, or ones that have been subjected to contamination, should also be disinfected as follows:

1. Use one of the following methods to determine the amount of common household bleach needed to sanitize the tank.
  - A) Multiply “gallons of tank capacity” by 0.13; the result is the ounces of bleach needed to sanitize the tank.
  - B) Multiply “Liters of tank capacity” by 1.0; the result is the milliliters of bleach needed to sanitize the tank.
2. Mix into solution the proper amount of bleach within a container of water.
3. Pour the solution (water/bleach) into the tank and fill the tank with potable water.
4. Open all faucets (Hot & Cold) allowing the water to run until the distinct odor of chlorine is detected.
5. The standard solution must have four (4) hours of contact time to disinfect completely. If you double the solution, this concentration allows for contact time of one (1) hour.
6. When the contact time is completed, drain the tank. Refill with potable water and purge the plumbing of all sanitizing solution.

**Note:** The sanitizing procedure outlined above is in conformance with the approved procedures of RVIA ANSI A119.2 and the U.S. Public Health Service.



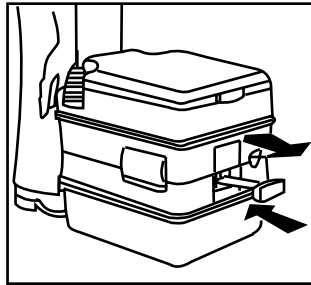
# PLUMBING

## TOILET

Porta Potti Model 565  
Manufacturer:  
Thetford Corporation  
Customer Relations: 1-800 521 3032

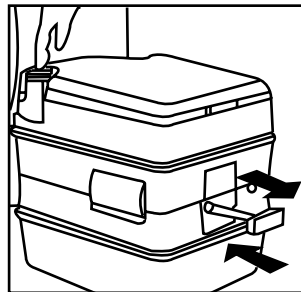
### Before each use

With seat cover closed, open and close the holding tank valve to vent any pressure that may have built up as a result of heat or altitude. This prevents upward splashing of bowl contents when toilet is flushed.



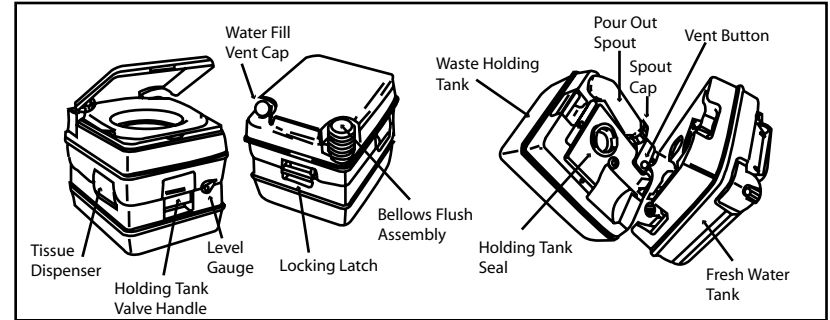
### Bellows Flush

1. Pullout holding tank valve handle.
2. Push down on bellows to rinse the bowl.
3. Push valve handle all the way in to insure an odor tight seal.



### Simple design

The top section includes the seat, cover, bowl, flushing bellows and a fresh water storage tank. The lower section is an odor-tight, gas-tight detachable waste holding tank. The unit is made of high-impact polypropylene and has an “easy care/ easy clean” finish.



### Deodorizing

Use Thetford's Aqua-Kem liquid holding tank deodorant for maximum deodorizing performance. Also recommended are Aqua-Kem Green non-formaldehyde deodorant, Aqua-Kem Toss-Tabs, Aqua-Kem Toss-Ins or Aqua-Kem DRI.

Read and follow all instructions, cautions and warnings on the packaging.

### Care

Use Thetford Aqua-Clean. DO NOT USE SCOURING POWDERS, ACIDS OR CONCENTRATED CLEANERS, WHICH CAN DAMAGE PLASTIC PARTS AND RUBBER SEALS.

Aside from simple cleaning, Thetford marine heads require no routine maintenance. If after extended use, the holding tank valve blade begins to stick, apply a light film of silicone lubricant to the blade.

### Refilling Tissue Dispenser

Separate tanks. Rotate the tissue dispenser past its dispense position and unthread it from the four track pins. Spread the tissue dispenser ends to remove the empty tissue tube and install the new roll. NOTE: overspreading will result in damage to the tissue dispenser.

## Preparation

### Separate unit

Slide locking lever to the left “unlocked” position and hold (Fig. 1, A). Separate the units (Fig. 1, B).

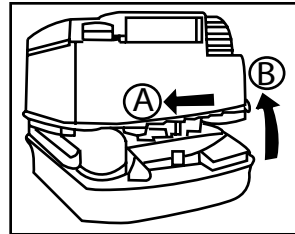


Figure 1

### Add deodorant

With the waste tank (Lower section) sitting flat, open valve by pulling handle out (Fig. 2, A).

Add deodorant through the valve opening (Fig. 2, B). Use Thetford Holding Tank Deodorant (sample included in built-in storage compartment (Fig. 2, C).

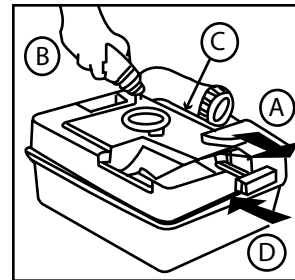


Figure 2

Add water to cover tank bottom. Close valve (Fig. 2, D) and replace deodorant.

### Recombine the unit

Align hinge with front interlocking tabs. To secure unit, press downward...it should click into place.

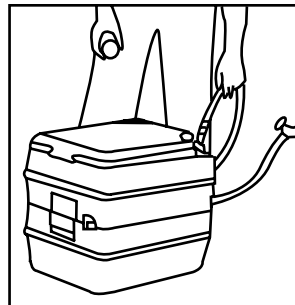


Figure 3

### Fill fresh water tank

Remove water fill cap and fill tank with fresh water (Fig. 3). (NEVER add holding tank chemical to the fresh water tank assembly.) Replace and tighten the cap securely.

## Emptying Waste Tank

1. DO NOT ALLOW THE TANK TO BECOME OVERFILLED.

Empty the 500 Series Porta Potti tanks when the waste level indicator changes from green to red (Fig. 6).

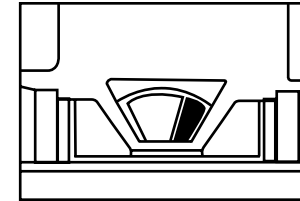


Figure 6

2. Make sure waste valve handle is in the closed position.

3. Remove fresh water tank from waste holding tank (Fig. 7).

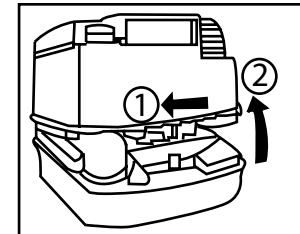


Figure 7

4. Carry the waste holding tank to any permanent toilet facility. Remove pour out spout cap while it is pointing upward. Swivel the pour out spout to empty and press air relief valve with thumb to prevent splashing (Fig. 8).



Figure 8

5. Rinse waste holding tank and recharge as described under Preparation section.

6. Reassemble unit.

## Winter Use

To prevent flushing water from freezing, add anti-freeze to the fresh water tank. Refer to the chart on the anti-freeze container to obtain the desired level of protection. **Use a non toxic (propylene glycol) type anti freeze.** Flush one to two times to winterize the pump and prevent damage. Add deodorant chemical to the waste holding tank.

# ELECTRICAL SYSTEM

## 12 VOLT OPERATION

The major portion of electrical power in your Airstream is 12-volt. The 12-volt current powers the exterior and interior lights, water tap system, cook top igniter, ceiling fan, TV Antenna Amplifier, and 12 volt power ports for optional equipment.

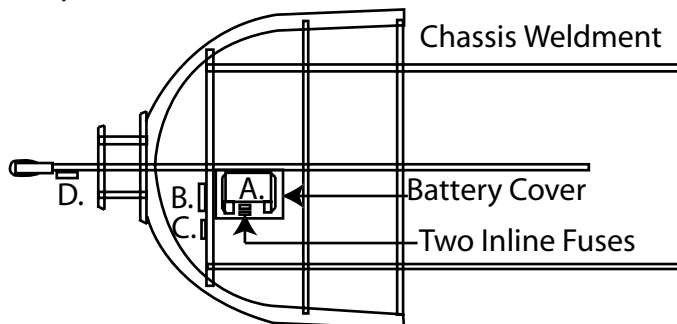
All 12-volt current comes through the converter/battery system. The battery is accessible in the battery box attached to chassis frame rail under the front of the trailer. A galvanized cover protects the battery. Inside the cover are two weather proof inline fuse holders. Just in front of the same chassis frame rail is a 40 amp fuse protecting the circuit from the battery to the converter.

A black box on the front of the same frame rail is the 7-way cord distribution center.

The two inline fuses are a 15 amp fuse going from the battery to the breakaway switch on the trailer tongue and a 30 amp fuse goes from the battery to the 12 Volt battery charge line in the 7-Way tow vehicle plug.

Below Floor Diagram

- A. Battery
- B. 7-Way Distribution Block
- C. 40 Amp fuse
- D. Break-Away Switch



## BATTERY DISCONNECT SWITCH

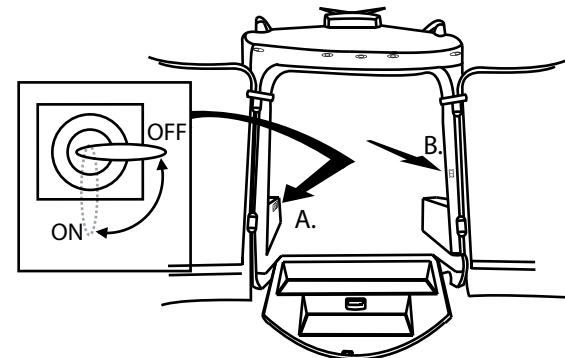
The battery disconnect switch is used to separate the battery from the 12-volt distribution panel and converter charging system.

When the switch is turned on and the trailer is plugged into a 110-volt shoreline, the 12-volt distribution panel will receive power and the battery will be charged through the converter.

When the switch is turned to off and the trailer is plugged into a 110-volt shoreline, the 12-volt distribution panel will still receive power from the converter, but the battery is disconnected from the converter and will not be charged.

When a shoreline is not available or the unit is being stored, turning the switch to the off position will prevent parasitic draws from discharging the battery.

The charge in the 12-volt batteries is replenished from the tow vehicle alternator through the 7-way cord. This charge will go to the battery no matter which position the Battery Disconnect Switch is in.



- A. Turns the battery on/off.  
Handle Down = On  
Handle Up = Off
- B. Light Switch Location

# ELECTRICAL SYSTEM

## BATTERY

The OPTIMA® BlueTop battery will keep you on the road longer. Its patented SPIRAL CELL® Technology means more running time, faster recharge, and up to twice the life of traditional RV batteries.

### Vibration Resistant

The OPTIMA® is over 15 times more resistant to vibration than other batteries. The constant vibration and jarring from waves can be deadly for traditional RV batteries. The tightly wound construction in OPTIMA® batteries minimizes plate movement and subsequent damage caused by harsh conditions - extending battery life.

### Nonspillable/Maintenance Free

The OPTIMA® is spill-proof and maintenance free. Because of its completely sealed case, OPTIMA® batteries are extremely safe. Acid can't leak or spill, making them clean, user-friendly and environmentally sound. In addition, the maintenance free sealed case design eliminates the need to add water or clean terminals. OPTIMA® Blue Top batteries are spill proof, so they can be mounted anywhere inside a boat or RV, in almost any position.

### Retains Charge Longer / Recharges Faster

In the off-season, sometimes RV batteries sit for months at a time and lose their charge. But the OPTIMA BlueTop battery has such a low rate of self-discharge, that it can go unused for up to one year without recharging, if kept at or below room temperature. And because of its low internal resistance, it recharges faster, getting you back on the road quickly.

MAINTAIN A CLEAN BATTERY TOP AND CHECK TERMINALS AND CABLES FOR TIGHTNESS AND CLEANLINESS. A dirty battery will dissipate its charge through

surface contamination. Clean battery top with a damp cloth and dry thoroughly.

The terminals should be tight and free of corrosion. To clean terminals, neutralize with a solution of baking soda, rinse in clear water, and dry.

To insure maximum battery capacity on the charge and the discharge, the battery terminals and the inside portion of the cable connector should be scraped or brushed until both of these surfaces are shiny bright. The cable connectors should then be reconnected to the battery and tightened. The complete assembly, battery post and cable connector should be coated with heavy body mineral grease, petroleum grease or petroleum jell.

**CAUTION: RECONNECT THE BATTERY CABLES TO THE CORRECT BATTERY POSTS.** The black cable should be connected to the negative (-) post and the red cable to the (+) post. The polarity of your tow vehicle must also be negative (-) ground since it must always match the trailer. Most tow vehicles are negative grounded, but always check your vehicle owner's manual to be sure.

During the winter the battery should be removed from the trailer and stored in a cool, dry place, where there is no danger of freezing.

For battery service or replacement, go to any service station or dealer who sells and services the make battery installed in your trailer.

When being towed, the 12-volt battery in your trailer is receiving a constant charge from the vehicle's generator or alternator through the seven-way connector. Your tow vehicle's voltage regulator controls the charge rate. It is important to keep the seven-way connector clean. One method is to use "Spray-Kleen".

Whenever possible use the automatic built in charge of the converter system for charging. The charging circuit automatically controls the current, reducing it as the battery increases in charge.



# ELECTRICAL SYSTEM

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## GLASS MATT (AGM) BATTERIES (Option)

In AGM sealed batteries, the acid is absorbed between the plates and immobilized by a very fine fiberglass mat. No silica gel is necessary. This glass mat absorbs and immobilizes the acid while still keeping the acid available to the plates. This allows a fast reaction between acid and plate material.

Battery Maintenance is an important issue. The battery should be cleaned using a baking soda and water mix; a couple of table spoons to a pint of water. Cable connection needs to be clean and tightened. regularly.

### Battery Storage:

The following recommendations may be helpful if the battery is to be stored:

Fully charge the battery before putting it in storage. Store in a cool place if possible.

When storing the battery in a vehicle or vessel, it is not necessary to leave it on charge. Disconnect the negative battery cable. This will prevent inadvertent discharging of the battery that may lead to a complete discharge.

Boost charge the battery every 90 days to ensure maximum battery life.

For answers to warranty questions, please contact Lifeline Inc. at (800) 527-3224.

### Battery Removal:

1. Turn Battery Disconnect Switch to the off position.
2. Remove the galvanized battery cover by loosening the two angle bolts. The cover bolt holes are slotted and it will slide out.
3. Disconnect the two inline fuses.
4. Disconnect the battery cables from the battery, negative (black) cable first. For

safety tape off the end of the positive (red) cable with electricians tape. This will prevent damage to the converter and/or electrical system if someone accidentally turns the Battery Disconnect switch on.

5. Remove the battery box angle bolts and the angle iron holding the battery in place.



**WARNING: Always support the battery so it can not fall free. The battery is heavy and personal injury can result from the battery falling.**

6. Slide the battery from its holder.

## POWER CENTER (Converter, 12-Volt Distribution, 110-Volt Distribution)

Model WF-8935AN

Manufacturer:

World Friendship Company

Distributor:

CHENG USA Inc. Elkhart

28255 Charlotte Avenue, Building 2

Elkhart Indiana 46517

Phone: (574) 294-8997

Fax: (574) 294-8698

The converter/charging system is the interior low voltage electrical system that enables you to use the interior lights, fans, pumps and 12-volt appliances whether operating on self-contained battery power or 120-volt city power. The 12-volt light bulbs give off the same light as regular household bulbs, so that when operating on self-contained battery power, everything works normally except the 110-volt convenience outlets and 110-volt appliances. The converter system is designed to maintain constant output voltages regardless of the variances that occur in city power systems.



# ELECTRICAL SYSTEM

## 12V POWER CIRCUITS

The current in the converter system is 12 volts direct current (12VDC) negative grounded.

Power sources that supply 12VDC current to the system are as follows:

- A. Main charge line from tow vehicle
- B. Trailer Battery
- C. Converter

The power sources above are all electrically connected to the 12-volt distribution fuse panel that distributes current to interior branch circuits. The circuits provide power to operate all 12-volt DC lights and systems.

The power converter is a solid-state electronic power supply and is maintenance free. It is so self-sufficient and quiet that you will probably not know it is working except for the fact that your batteries are always charged, and your 12-volt systems always work. If any 12-volt system fails to operate, first check your recreational vehicles 12-volt distribution fuse panel located behind the decorative front door of the converter and inspect all fuses. If a fuse is opened or blown replace it with the same size fuse (never install a larger use). If the fuse opens again, have an electrician or certified RV technician locate the circuit trouble. Replace blown fuses with Littelfuse type 257 fuses only.

If the power converter is not working, first confirm the RV supply or shoreline cord is plugged into a live circuit. Then check all the 120-volt breakers in your converter 110 volt distribution panel to make sure they are on. If the breaker is tripped, follow the instructions to reset the breakers. If the breaker trips again, consult an electrician or certified RV technician.

## CONVERTER OPERATION

The electronic power converter is designed to supply the nominal 12-volt filtered D.C. power for all 12 volt operated devices encountered in RV service. Although the converter is an excellent battery charger, the converter does not require a battery to be connected to it for proper operation.

**CAUTION:** When installing a battery (s) always observe polarity. Connecting a battery reverse polarity will blow the power converter main fuses located on the 12 volt D.C. distribution fuse block.

## 120 VOLT AC PANEL BOARD

The AC panel board section of the converter is located behind the converter's decorative door. This panel contains the 120 Vac branch circuit breakers for your RV. One of the breakers controls the 120 volt power to the 12 volt converter section located in the converter. This breaker may also control another branch circuit. Check the label next to each breaker for what each branch circuit breaker controls.

The 120 volt circuits may be turned "on" by putting their breaker handle up to the on position or "off" by flipping the handle down to the off position. To reset the tripped breaker move handle to off then on.

## CONVERTER COOLING SYSTEM

The electronic fan cooling system is the key to long life and trouble-free operation. The fan is never on more than required to cool electronic components in the converter. You may never hear the fan operate.



# ELECTRICAL SYSTEM

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## Fuses and Breakers

### Breakers

The WF-8935AN ULTRA Distribution Panel w/35 Amp Power Converter was designed to use a 30 AMP main breaker with branch circuits (Cutler-Hammer and SIEMENS are recommended breakers). Double breakers may be used for the branch circuits. Should a breaker become faulty replace with the same type breaker as provided by the GEM. Use only approved circuit breakers and 12V fuses. IMPORTANT: When replacing circuit breakers replace with the same type and rating as the original.

### AC Breaker Manufacturer:

1. Main Circuit Breaker-Listed, rated 120Vac, maximum 30 A Culter-Hammer: Type BR and C. T&B: Type TB. Siemens/ITE: Type: QP. Square D: Type: HOM
2. Branch Circuit Breaker-Listed, rated 120Vac, maximum 20 A Culter Hammer: Type BR and C, or BRD BD and A. T &B: Type: TBBD or TB. ITE/Siemens: Type QT or QP. Square D: Type HOM or HOMT

### 12 VDC Fuses

Each 12 VDC circuit in the WFCO Distribution panel was designed for a maximum of a 20 amp Little Type 257 automotive style fuse. Should one need to be replaced, be sure to replace it with the same type and amp rating as originally supplied by the Airstream. Replacing it with either a higher or lower amp fuse could result in the panel not functioning properly.

Each 12VDC circuit of the WFCO Distribution panel is provided with a LED indicator light. Should the fuse “blow” or an open be caused the LED will light up indicating which circuit is open and which fuse needs to be replaced.

REVERSE Polarity Fuses. The WF-8935AN is equipped with reverse polarity fuses, Should these fuses “blow” either during the manufacturing process or while connecting the batteries replace with the same type and rating fuse as originally provided with the equipment.

The WF-8935 AN Series is not weather resistant nor designed for installation in wet locations. The WF-8935AN Series must be protected from direct contact with water.

### Automatic Microcontroller Operation

The WFCO series of 3-stage switch mode power converter are fully automatic. The converter senses which mode it needs to be in by checking the condition of the batteries. The three modes include:

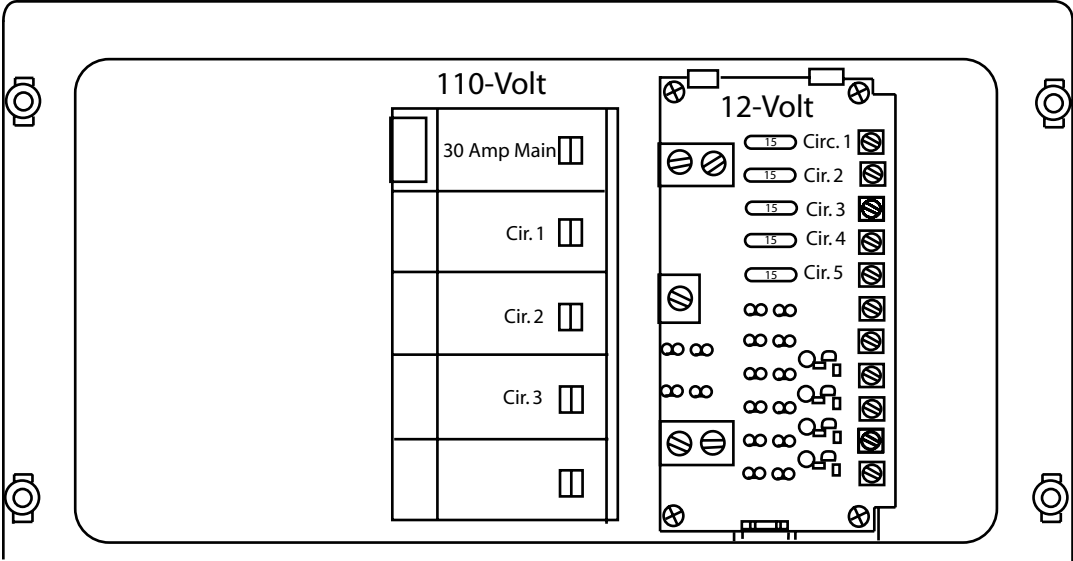
Absorption Mode: During this mode the converter output is at 13.6 VDC range. This is the mode that the converter will function at normally. This mode provides the 12 VDC and the current required by the trailer.

Bulk Mode: When the converter senses that the battery voltage is less than 13.2 VDC the converter will automatically go into the Bulk Mode.

Float Mode: If the RV is not being used for a period of time and the shore power has been left plugged in, the converter will automatically go into float mode. The converter senses if there has been any demand. If there is no activity for a period the converter will automatically go into float mode. When the converter senses a demand by turning on lights, the converter automatically goes into bulk mode and returns to absorption mode.

# ELECTRICAL SYSTEM

## Converter 12 V Circuit Diagram



Circuit 1. 15 Amp., 14 ga., Purple  
 6 Halogen Ceiling Lights  
 Ceiling fan  
 Water Pump  
 Cooktop Ignitor

Circuit 2., 15 amp., 14 ga., Yellow  
 Radio  
 TV Booster

Circuit 3. 15 Amp., 14 ga., Pink  
 Roadside 12V power Port

Circuit 4, 15 amp., 14 ga., Brown  
 Curbside 12V Power Port

Circuit 5, 15 amp., 14 ga., Blue  
 Forward 12V Power Port



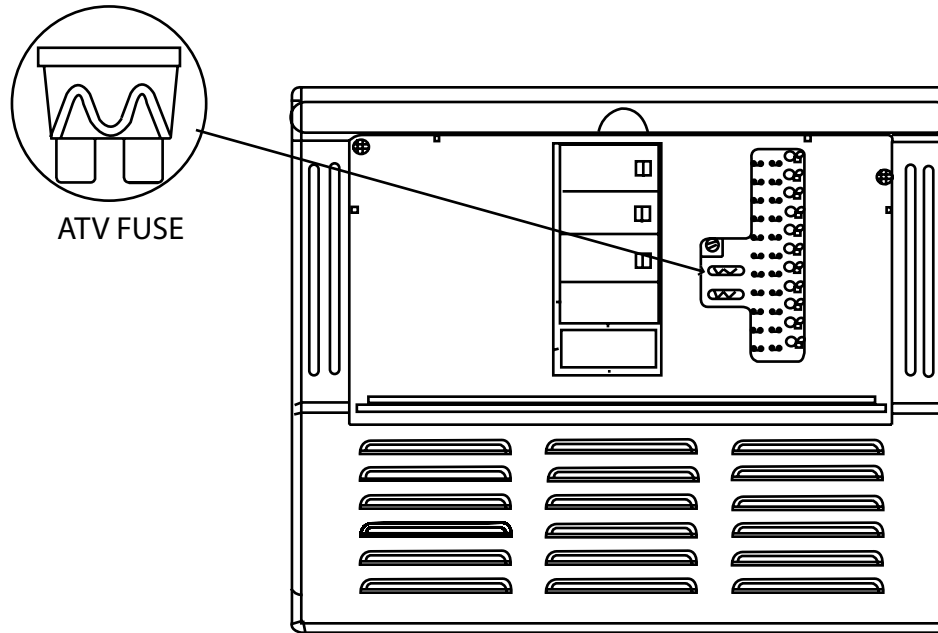
# ELECTRICAL SYSTEM

## REVERSE POLARITY

If there is power to the converter but no power to the entire 12 Volt system, then check the reverse polarity fuses on the front panel of the WF-8935 power converter. First visually inspect the fuses for any breaks then if none are seen use a continuity tester and check for continuity across the fuses.

If fuse(s) are blown this means the RV Battery was accidentally connected in reverse either at the battery or at the converter. Connect properly then replace the fuse(s).

**IMPORTANT:** These fuses protect converter from damage in the event RV Battery is accidentally connected in reverse. A reverse battery connection even for a second is the only thing that will blow these fuses.



# ELECTRICAL SYSTEM

## 110-VOLT ELECTRICAL SYSTEM

### City Power

The 110-volt electrical system provides power to operate the air conditioner, converter and 110-volt receptacles for portable appliances. The power is routed through the 110-volt city power flexible cord to the 110-volt distribution panel inside the power converter door, and then is distributed to each appliance or receptacle.

A 110-volt exterior outlet for is located on the exterior wall.

**CAUTION:** When operating with city power make very certain that the service is 110 volt and not 220 volt.



**WARNING:** When the three-pronged plug can be used there will be no problems with proper polarity or grounding.

In some older parks and other locations where three pronged outlets are not available, certain precautions to insure proper grounding and polarity must be taken. These precautions are listed below:

1. Attach the three-pronged plug to a two-pronged adapter. The third conductor line of this adapter has a short wire lead, which must be grounded.
2. For proper grounding connect the short ground lead to a grounded outlet box or to a cold water pipe. When no water pipe is available drive a metal rod two feet into the ground and attach the ground lug to it, thus providing the unit with proper grounding.

To operate self-contained, simply disconnect the power supply cable.

When your trailer is hooked up to 110 volt AC, the converter system automatically charges the trailer batteries with the battery disconnect switch in the on position and, if the 7-way cord is hooked up, your tow vehicle battery as well. The speed and degree of charge depends on how much power is used for lights and appliances, as only the surplus goes to charging the battery. If you are making an extended stay, then you should keep your trailer hooked up to a 110 volt current if it is available.

While you are connected to the 110-volt receptacle the wiring is protected by circuit breakers in the breaker panel. The circuit breaker panel for the 110-volt system is located in the converter and is accessed by opening the brown decorative converter door. **In the event of a failure of a 110-volt circuit, first check your trailer circuit breakers and the breaker for the outlet your trailer shoreline cord is plugged into.**

If a breaker continues to trip after you have reset it several times, your circuit may be overloaded with appliances or there may be a short in the circuit. Try lessening the load on the circuit. Perhaps an electric griddle, hair dryer, or an electric heater can be turned off. If that does not solve the problem consult an Airstream Service Center.

All wire, components, and wiring methods conform to federal and state requirements.



# ELECTRICAL SYSTEM

## GROUND FAULT CIRCUIT INTERRUPTER (GFCI)

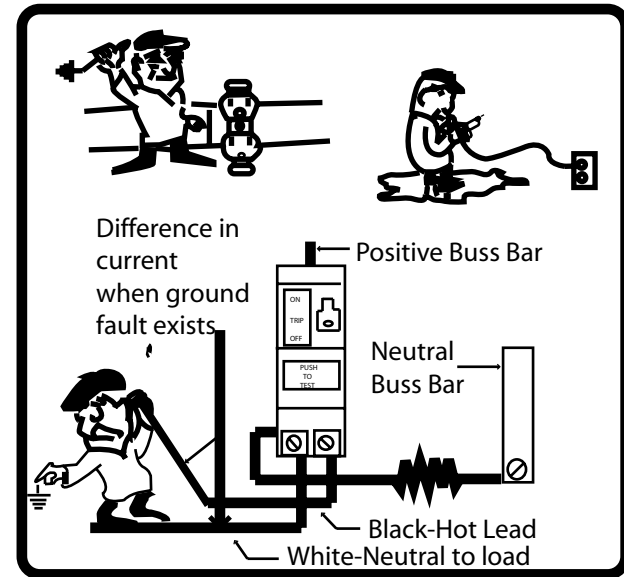
Many states require trailers which are sold in their state, and which have exterior 110 volt receptacles, to have a ground fault circuit interrupter.

Trailers manufactured for sale in these states have type THQL 15 amp GFCI breakers installed on the general circuit, since the exterior breaker is on this circuit. The breaker replaced the standard TQL-15 amp breaker.

When properly installed, the GFCI circuit breaker provides reliable overload and short circuit protection PLUS protection from Ground Faults that might result from contact with a "HOT" load wire and ground.

**IMPORTANT NOTE:** The GFCI circuit breaker will NOT reduce shock hazard if contact is made between a "HOT" load wire and a neutral wire or 2 "HOT" load wires.

Each GFCI circuit breaker is calibrated to trip with a ground current of 5 milliamperes or more. Since most persons can feel as little as 2 milliamperes, a distinct shock may be felt if the need for protection exists. However, the shock should be of such short duration that the effects would be reduced to less than the normally dangerous level. However, persons with acute heart problems or other conditions that can make a person particularly susceptible to electric shock may still be seriously injured.



# ELECTRICAL SYSTEM

While the GFCI circuit breaker affords a high degree of protection, there is no substitute for the knowledge that electricity can be dangerous when carelessly handled or used without reasonable caution.



**WARNING:** The GFCI circuit breaker provides protection only to the circuit to which it is connected. It does NOT provide protection to any other circuit.

OCCUPANT:

Make this test each month and record the date on the chart.

1. With handle B in "ON" position, press PUSH TO TEST button A.
2. Handle B should move to TRIP position, indicating that GFCI breaker has opened the circuit.
3. To restore power move handle B to "OFF" and the to "ON

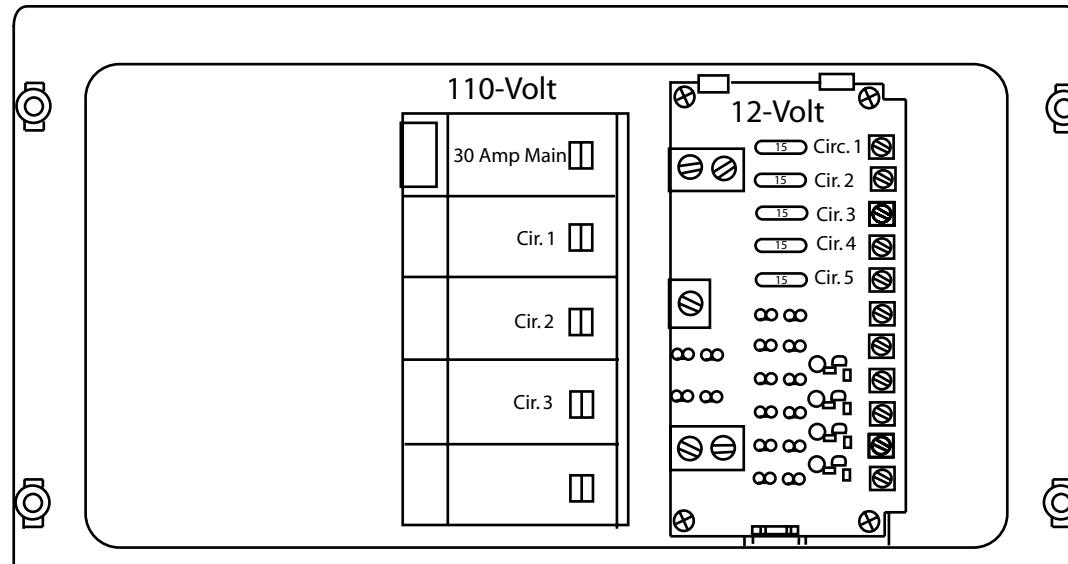
**Important:** If handle B does not move to TRIP position when test button is pressed, the GFCI breaker protection is not complete. If this happens, replace GFCI breaker.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2006												
2007												
2008												
2009												
2010												
2011												



# ELECTRICAL SYSTEM

## 120 Volt Circuit Diagram



G

30 amp Main Circuit

Circuit 1, 15 amp, HACR Breaker  
Air Conditioner Receptacle

Circuit 2, 15 amp, HACR Breaker  
Converter

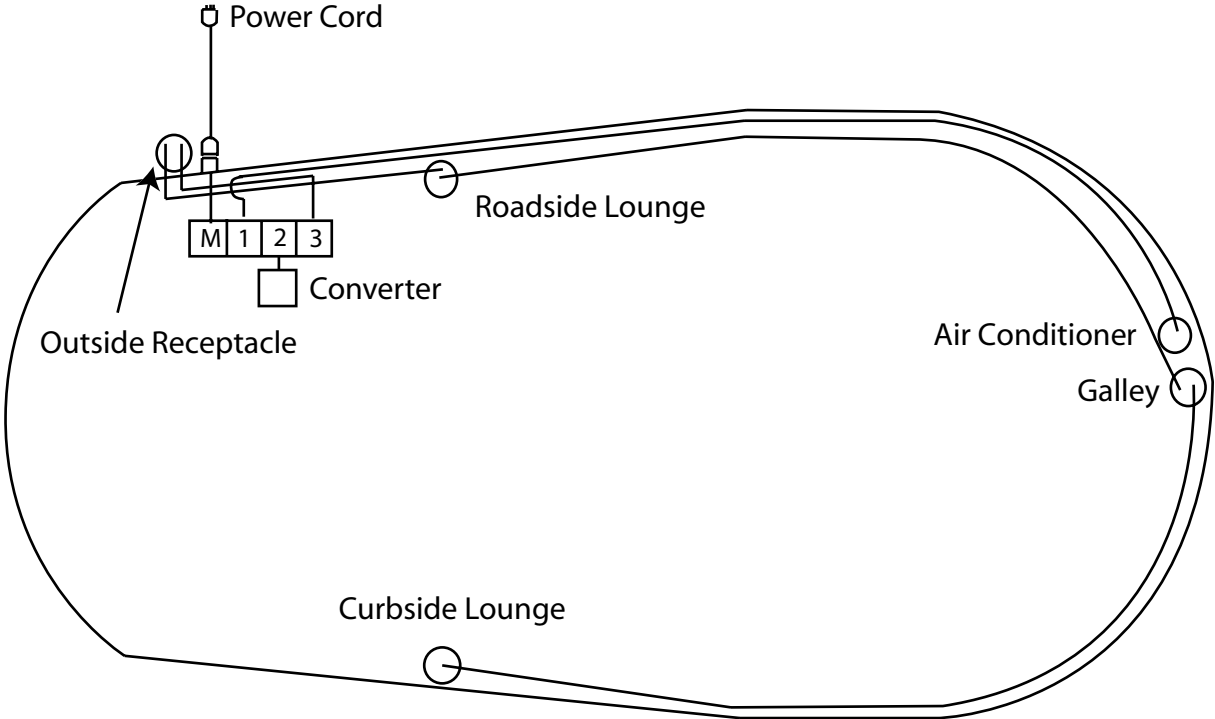
Circuit 3, 15 amp, GFI Breaker

Outside Receptacle  
Curbside Lounge Area Receptacle  
Roadside Lounge Area Receptacle  
Galley Area Receptacle



# ELECTRICAL SYSTEM

## 110 Volt Wiring Diagram



30 amp Man Circuit

Circuit 1, 15 amp, HACR Breaker  
Air Conditioner Receptacle

Circuit 2, 15 amp, HACR Breaker  
Converter

Circuit 3, 15 amp, GFI Breaker

Outside Receptacle  
Curbside Lounge Area Receptacle  
Roadside Lounge Area Receptacle  
Galley Area Receptacle



# ELECTRICAL SYSTEM

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## **TELEVISION ANTENNA SYSTEM (optional equipment)**

The television antenna is stationary multidirectional antenna with an inline signal booster. On the roadside console at the rear of the trailer is coax cable connector. Beside the connector is a small switch with a red light to indicate when the inline booster is on.

To operate the system hook a television to the cable connector following the television's owner manual and turn the booster on.

## **APPLE I POD / MP3 INPUT. 12V POWER PORT & RCA JACK CONNECTOR PANEL (option)**

A 12 volt port, two RCA jack cords, and a plug in is provided with this option. These are used to for a Apple Ipod or MP3 player input and are located on the front overhead

## **Radio (Optional Equipment)**

The radio is located in the front overhead and its antenna on the exterior of the unit. For units ordered without the optional radio, 12 volt power wiring, speaker wiring, and antenna lead are located in the front overhead. The unit is prewired for four speakers. If you decide to add a radio, please contact Airstream customer service for wall and ceiling speaker wire locations.



# ELECTRICAL SYSTEM

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NOTES



# APPLIANCES

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**WARNING:** The operation manual for all appliances is included with the owner's packet. Their manuals may contain specialized warnings and cautions specific to your appliances that should be reviewed prior to operating the appliance. If a manual is missing and has not been provided with your trailer, contact the appliance manufacturer, your Airstream Dealer, or Airstream Customer Service to obtain it.



**WARNING:** Most LP gas appliances used in recreational vehicles are vented to the outside of the vehicle. When parked close to a gasoline pump, it is possible that gasoline fumes could enter this type of appliance and ignite the burner flame, CAUSING A FIRE OR AN EXPLOSION.

## AIR CONDITIONER (OPTIONAL EQUIPMENT)

Manufacturer:

Whirlpool Inc.

Customer eXperience Center

553 Benson Road

Benton Harbor, MI. 49022-2692

1/800-461-5681

**Note:** Review the air conditioning literature supplied in your Owner's Packet before proceeding. In your Owner's Packet is a set of literature covering all Warranty, operating and maintenance instructions. If the literature is misplaced please contact the air conditioner manufacturer or your Airstream dealer for replacement.

The voltage to the air conditioner is critical. We commonly refer to 110 or 120 volts, but a check with a voltmeter may find voltage much lower. Your air conditioner will probably not function if the current drops below 105 volts. Low voltage is usually associated with older or poorly maintained trailer parks, but many people have found their homes, built only twenty or thirty years ago, may not be capable of operating the air conditioner on some receptacles, Parking your trailer so the power cord can

be plugged into a receptacle close to the fuse or circuit breaker box can alleviate the problem. Avoid extension cords and adapters whenever possible. If an extension cord must be used it should be as short and heavy as possible to provide the most current to the air conditioner.

If high temperatures are expected, you should make an effort to park in a shaded area. Starting the air conditioner early in the morning also helps. It is much easier to hold a comfortable temperature than it is to lower the temperature after the interior of the trailer is already hot.

## AIR CONDITIONER USE

Operating your air conditioner properly helps you obtain the best possible results.

This section explains proper air conditioner operation.

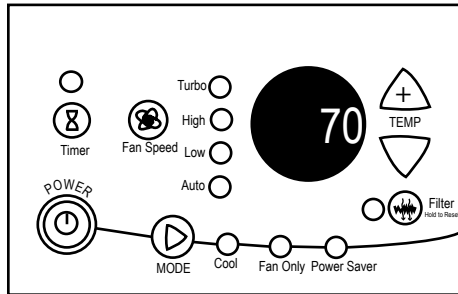
### IMPORTANT:

If you turn off the air conditioner, wait at least 3 minutes before you turn it back on. This prevents the air conditioner from tripping a breaker.

Do not try to operate your air conditioner in the cooling mode when the outside temperature is below 65 degrees (18 C). The inside evaporator coil will freeze up, and the air conditioner will not operate properly.

**NOTE:** In the event of a power failure, your air conditioner will operate at the previous setting when the power is restored.

## Starting Your Air Conditioner- Digital Control



NOTE: When the air conditioner is off, the display will show the current room temperature.

1. Press POWER to turn on air conditioner.



NOTE: When air conditioner is turned on for the first time after it is plugged in, it will display the default settings: Cool mode, Turbo fan speed, 72°F (22°C). When it is turned on at all other times, it will default to the previous settings.

2. Select mode. See “Mode.”
3. Select fan speed. See “Fan Speed.”
4. Set temperature. See “Temperature.”

### Mode

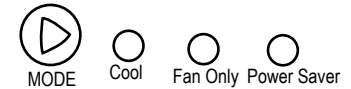
1. Press MODE until you see the indicator light come on for the desired setting.
2. Choose Cool, Fan Only or Power Saver.

Cool-Cools room. You can select fan speed by pressing FAN SPEED. You can then adjust the temperature by pressing the up or down arrow buttons.

Fan Only-Only the fan runs. You can select the fan speed by pressing FAN SPEED, but you cannot adjust the Temperature control setting. The display shows the current

room temperature.

Power Saver-fan and compressor run only when cooling is needed. Compressor re-starts in 3 minutes after the unit stops. Compressor will not stop running for the first 6 minutes after restarting unless unit is turned off.



NOTE: Auto fan speed cannot be selected in Fan Only mode.

### Fan Speed

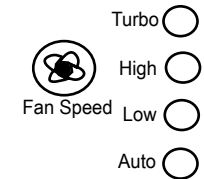
1. Press FAN SPEED until you see the indicator light for the desired setting.
2. Choose Turbo, High, Low or Auto.

Turbo-for maximum cooling.

High-for normal cooling.

Low-for sleeping comfort.

Auto-automatically controls fan speed depending on current room temperature and temperature control setting



NOTE: Auto fan speed cannot be selected in Fan Only mode.

NOTE: After 3 seconds, display will show the current room temperature.

### Filter Reset

1. When FILTER Indicator light glows, remove air filter and clean or replace air filter. See “Cleaning the Air Filter”
2. Replace air filter
3. Press and hold FILTER after replacing the air filter.

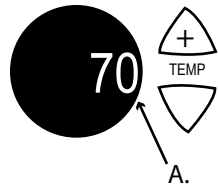


# APPLIANCES

## Temperature

Press the plus TEMP button to raise the temperature. The Set indicator light will turn on. Each time you press or hold the plus TEMP button, the temperature will go up 1 degree until it reaches 86°F (30°C).

NOTE: After 3 seconds, the Set indicator light will turn off and the display will show the current room temperature.



A. Set indicator light

Press the minus TEMP button to lower the temperature. The Set indicator light will turn on. Each time you press or hold the minus TEMP button, the temperature will go down 1° until it reaches 64°F (18°C).

NOTE: After 3 seconds, the Set indicator light will turn off and the display will show the current room temperature.

## Timer Delay

To set the Timer for a 1- to 24-hour delay until the air conditioner turns off (the air conditioner must be On):

- 1. Press TIMER. Indicator light will flash.
- 2. Press the plus or minus TEMP button to change the delay time from 1 to 24 hours.
- 3. Press TIMER again or wait 10 seconds. Indicator light will remain on.

To set the Timer to turn on the air conditioner, keeping previous settings:

1. Turn off air conditioner.

2. Press TIMER. Indicator light will flash.
3. Press the plus or minus TEMP button to change delay time (1 to 24 hours).
4. Press TIMER again or wait 10 seconds. Indicator light will remain on.

To set the Timer to turn on the air conditioner, changing the previous settings:

1. Turn air conditioner on.
2. Adjust Mode to Cool, Fan Only, or Power Saver.
3. Adjust Fan Speed to Turbo, High or Low, or Auto.
4. Adjust temperature between 64°F (18°C) and 86°F (30°C).
5. Turn off air conditioner.
6. Press TIMER. Indicator light will flash.
7. Press the plus or minus TEMP button to change delay time (1 to 24 hours).
8. Press TIMER again or wait 10 seconds. Indicator light will remain on.

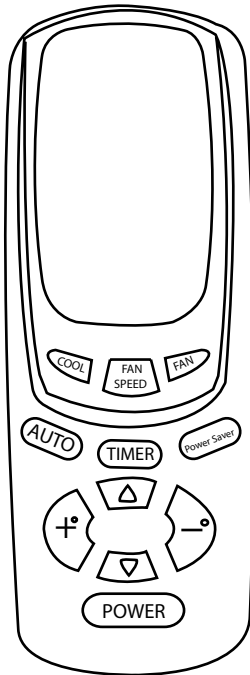
**To clear Timer delay program:** Press and hold TIMER for 3 seconds. Indicator light will turn off.

NOTE: Air conditioner can be either on or off.

To see the remaining time (in hours):

1. Press TIMER once after it has been programmed.
2. While the display is showing the remaining time, you can press the plus or minus TEMP button to increase or decrease the time.

## To operate air conditioner with remote control

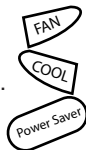


NOTE: Two AAA batteries (included) power the remote control. Replace batteries after 6 months of use, or when the remote control starts to lose power.

To turn the air conditioner on or off: Press POWER. **POWER**

To select the mode:

Press COOL, FAN, or POWER SAVER.



To select the fan speed:

Press FAN SPEED for Turbo, High or Low or AUTO.



NOTE: Auto fan speed cannot be selected in Fan Only mode.

To raise the temperature:



Press the plus button to raise the temperature. Each time you press or hold the plus button, the temperature will go up 1° until it reaches 86°F (30°C).

To lower the temperature:

Press the minus button to lower the temperature. Each time you press or hold the minus button, the temperature will go down 1° until it reaches 64°F (18°C).



To set Timer for a 1- to 24-hour delay before air conditioner is turned off (air conditioner must be On):

1. Press TIMER. Indicator light on air conditioner control panel will flash.



2. Press the plus or minus button to change the delay time from 1 to 24 hours.

3. Press TIMER again or wait 10 seconds. Indicator light on air conditioner control panel will remain on.

To set Timer to turn on air conditioner, keeping previous settings:

1. Turn off air conditioner.

2. Press TIMER. Indicator light on air conditioner control panel will flash.

3. Press the plus or minus button to change delay time (1 to 24 hours).

4. Press TIMER again or wait 10 seconds. Indicator light on air conditioner control panel will remain on.

To set Timer to turn on air conditioner, changing the previous settings:

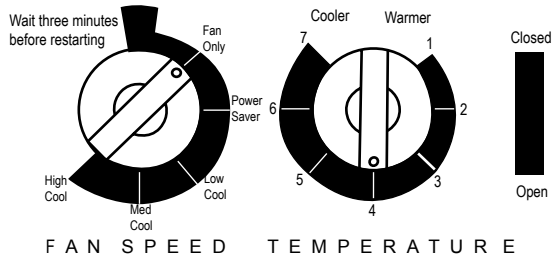
1. Turn on air conditioner.

2. Adjust Mode to Cool, Fan Only, or Power Saver.

# APPLIANCES

- Adjust Fan Speed to Turbo, High or Low, or Auto.
- Adjust temperature between 64°F (18°C) and 86°F (30°C).
- Turn off air conditioner.
- Press TIMER. Indicator light on air conditioner control panel will flash.
- Press the plus or minus button to change delay time (1 to 24 hours).
- Press TIMER again or wait 10 seconds. Indicator light on air conditioner control panel will remain on.

## Starting Your Air Conditioner. Rotary Control



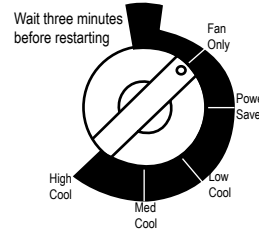
- Set exhaust control. See “Exhaust Control (on some models).”
- Select the fan speed. See “Fan Speed.”
- Set temperature. See “Temperature.”

## Exhaust Control (on some models)

- CLOSED** The Exhaust control set to CLOSED for maximum continuous cooling The Exhaust control set to OPEN allows you to draw stale or smoky air from the room.
- OPEN** Open-to exhaust room air to the outside.  
Closed-to circulate room air.

NOTE: The Exhaust control will function only when the Fan Speed is operating.

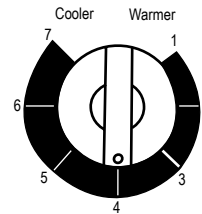
## Fan Speed



Set FAN SPEED to the desired setting. When the air conditioner is operating at Low Cool, High Cool (on some models), Med Cool (on some models) or Turbo Cool (on some models), the fan circulates air continuously.

- Turbo Cool (on some models) - for maximum cooling.
- High Cool (on some models) - for normal to maximum cooling (depending on model).
- Med Cool (on some models) - for normal cooling .Low Cool-for sleeping comfort
- Power Saver (on some models)-Fan run only when cooling is needed.
- Fan Only - to move air continuously without cooling.

## Temperature

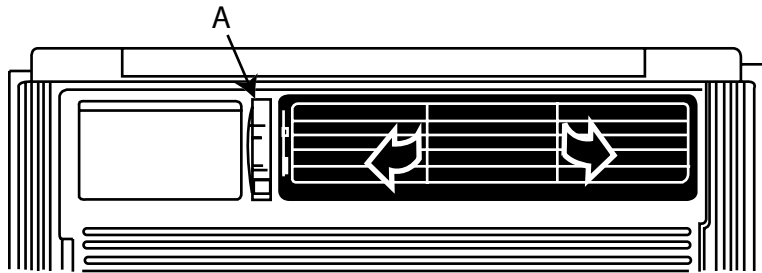


Turn the TEMPERATURE control to a mid-setting. Adjust the air conditioner’s performance by turning the Temperature control clockwise for maximum cooling. For less cooling, turn the TEMPERATURE control counterclockwise. Experiment to find the setting that suits you best.

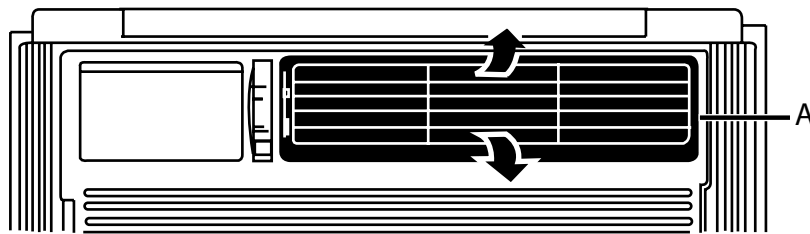


## Changing Air Direction

Roll the wheel or use the tab, depending on model, to direct the air right or left. Rotate the whole cartridge to direct air up, down or straight ahead.



A. Wheel



A. Cartridge

## Normal Sounds

When your air conditioner is operating normally, you may hear sounds such as:

Droplets of water hitting the condenser, causing a pinging or clicking sound.

The water droplets help cool the condenser.

Air movement from the fan.

Clicks from the thermostat cycle.

A high-pitched hum or pulsating noise caused by the modern high - ef efficiency compressor cycling on and off.

## AIR CONDITIONER CARE

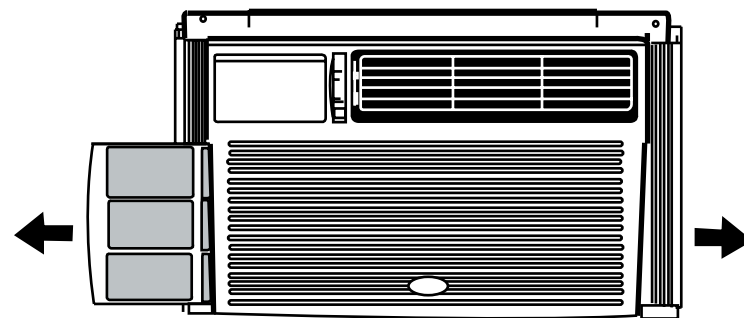
Your new air conditioner is designed to give you many years of dependable service. This section tells you how to clean and care for your air conditioner properly. Call your local authorized dealer for an annual checkup. Remember...the cost of this service call is your responsibility.

### Cleaning the Air Filter

The air filter is removable for easy cleaning. A clean filter helps remove dust, lint, and other particles from the air and is important for best cooling and operating efficiency. Check the filter every 2 weeks to see whether it needs cleaning.

NOTE: Do not operate the air conditioner without the filter in place.

1. Turn off air conditioner.
  2. Remove air filter by sliding filter out from either side of unit.
  3. Use a vacuum cleaner to clean air filter. If air filter is very dirty, wash it in warm water with a mild detergent. Do not wash air filter in the dishwasher or use any chemical cleaners. Air-dry filter completely before replacing to ensure maximum efficiency.
  4. Replace air filter by sliding filter back into either side of unit.
- 
4. Replace air filter by sliding filter down into filter door and closing filter door.



Filter may be removed from either side

# APPLIANCES

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## Cleaning the Front Panel

1. Unplug air conditioner or disconnect power.
2. Clean front panel with a soft, damp cloth.
3. Air dry front panel completely.
4. Plug in air conditioner or reconnect power.

## Repairing Paint Damage

Check once or twice a year for paint damage. This is very important, especially in areas near oceans or where rust is a problem. If needed, touch up with a good grade enamel paint. NOTE: To reduce paint damage during the winter, install a heavy-duty cover over air conditioner cabinet. For information on ordering a heavy-duty cover, see "Accessories" in the manual provided with your Air conditioner.

## Annual Maintenance

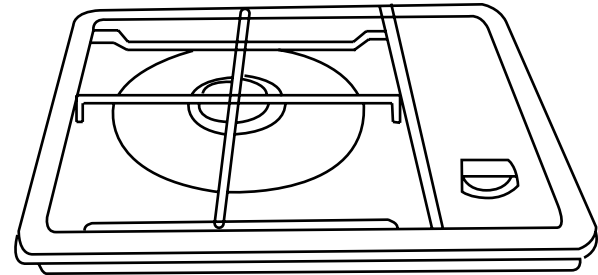
Your air conditioner needs annual maintenance to help ensure steady, top performance through out the year. Call your local authorized dealer to schedule an annual checkup. The expense of an annual inspection is your responsibility.

## RANGE (Optional Equipment)

Princess Range Top  
Model Number 1273

Manufacturer:  
Seaward Products  
3721 Capitol Avenue  
Whittier, CA. 90601-1732  
562-699-7997

People using gas ranges in their home will find little difference in the operation of the range in a recreation vehicle. Other customers, used to electric ranges may be a little apprehensive at first; but will quickly gain confidence. The basic operation of the gas ranges have been the same for many years, but please be sure to read all the directions furnished by the manufacturer and located in the Owner's Packet. Excellent service and parts manuals are available from the manufacturer.



PARTIAL REPRINT FROM COOKTOP MANUAL  
IMPORTANT INSTRUCTIONS



**WARNING:** LPG is heavier than air and if allowed to settle, accumulate, and if ignited, WILL CAUSE AN EXPLOSION!

1. **Proper Installation** - Be sure your appliance is properly installed. If electrical,

grounded by a qualified technician.

**2. Never Use Your Appliance for Warming or Heating the Room.**

**3. Do Not Leave Children Alone** - Children should not be left alone or unattended in area where appliance is in use. They should never be allowed to sit or stand on any part of the appliance.

**4. Wear Proper Apparel** - Loose fitting or hanging garments should never be worn while using the appliance.

**5. User Servicing** - Do not repair or replace any part of the appliance unless specifically recommended in the appliance manual. All other servicing should be referred to a qualified technician.

**6. Storage in or on Appliance** - Flammable material should not be stored in an oven or near surface units.

**7. Do Not Use Water on Grease Fires** - Smother fire or flame or use dry chemical or foam type extinguisher.

**8. Use Only Dry Potholders** - Moist or damp potholders on hot surfaces may result in burns from steam. Do not let potholder touch hot heating elements. Do not use a towel or other bulky cloth.

**9. Never Leave Unit Unattended** - Boil over causes smoking and greasy spillovers that may ignite.

**10. Glazed Cooking Utensils** - Only certain types of glass, glass/ceramic, earthenware, or other glazed utensils are suitable for range-top service without breaking due to the sudden change in temperature.

**11. Utensil Handles Should Be Turned Inward and Not Extend Over Adjacent Surface Units** - To reduce the risk of burns, ignition of flammable materials, and spillage due to unintentional contact with the utensil, the handle of a utensil should be positioned so that it is turned inward, and does not extend over adjacent surface units.

**12. Clean Ventilating Hoods Frequently** - Grease should not be allowed to accumulate on hood or filter.

**13. Turn The Ventilating Fan Off** - when flaming foods under the hood. The fan, if operating, may spread the flame.



**CAUTION: DO NOT TOUCH BURNERS OR GRATES OR AREAS NEAR**

**UNITS** -Units may be hot even though they are dark in color. Areas near burners and grates may become hot enough to cause burns. During and after use, do not touch, or let clothing or other flammable material contact units or areas near units until they have had sufficient time to cool. Among these areas are, burner top, main frame sides and back, sea rails, and potholders.

**OPERATING INSTRUCTIONS - LPG COOKTOP**

**1. Close tank valve whenever appliance is not in use.**

**2. Test system for leakage at least twice a month and after any emergency in accordance with the following procedure:**

**With appliance valves closed and tank valve open, note pressure on gauge.**

**Close cylinder valve. If the pressure drops, as indicated on the gauge, there is a leak in the system.**

**Locate leakage by application of liquid detergent or soap and water solution to all connections. After leak has been repaired, recheck system by repeating the above test. If leak cannot be repaired, close tank valve immediately and do not use the system. Remember LPG is heavier than air and if allowed to reach bilges, machinery space or other enclosed spaces, it can be extremely dangerous.**

**3. It is always a good idea to have an approved ABC type fire extinguisher in the galley area.**

**TO LIGHT BURNERS:**

**a. Push down knob firmly and turn counter-clockwise to high (large dot) position.**

**b. Hold knob down firmly until the spark ignites the gas and until the thermocouple is heated (approximately 5-6 seconds). This will activate the safety magnet and keep the burner lit.**

**c. Release knob and set to desired setting.**



# APPLIANCES

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## TO TURN BURNERS OFF:

- a. Turn knob counter-clockwise to off position.

## EMERGENCY INSTRUCTIONS:

1. Close tank valve immediately in ANY emergency.
2. Be sure all appliance valves are closed before opening tank valve.

## CARE AND CLEANING

Regular cleaning with a soft cloth and a warm detergent solution is generally enough to keep your cook top clean and beautiful. This is done when the cook top is cool. Use a dry cloth or paper towel to clean splatters and spills when surfaces are warm.

## PORCELAIN ENAMEL

**Porcelain enamel is glass fused on steel at very high temperatures. It is not extremely delicate, but must be treated as glass.** Sharp blows, radical changes in temperature, etc. will cause the enamel to chip or crack. Some foods contain acid which will dull the finish of enamel. Vinegar, lemon juice, tomatoes, and milk are a few. To avoid this happening, simply wipe surface clean immediately when any food is spilled on the enamel. Remember, the surface is glass and must be given consideration in cleaning. Steel-wool pads and coarse gritty cleansers will scratch and wear down the surface. Any gentle kitchen cleansing powder or chemical grease remover will do a good job and yet not harm the finish. We recommend the use of HOPE'S CULTURED MARBLE POLISH for care and maintenance of these porcelain surfaces. For more information about this product, contact The Hope Company, Inc., (800) 325-4026 for a dealer near you.

## REFRIGERATOR (Optional Equipment)

Coolmatic CF-35

Manufacturer Toll Free: 877 - 310 - 5443

info@coolmatic.net

The COOLMATIC CF-35 AC/DC box can be operated on 12 or 24 Volts as well as 110 volts without the need for an external converter.

The COOLMATIC CF-35 is equipped with a special electronic system that controls, besides the standard functions, a variety of valuable extra functions. The quick-chill function, for instance, makes the compressor run at maximum performance until the desired temperature has been reached. The temperature is variable in a range between +10° and -18°C. Thanks to the memory function, the carefully pre-set parameters won't get lost in case of a system restart. The emergency switch ensures reliable cooling in all situations.

# APPLIANCES

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## MAXXAIR VENT FAN

Model 00-062000

## MAXXAIR CORP.

Corporate Headquarters 5513 West Sligh Ave  
Tampa, FL 33634

## Toll Free Customer Service

(800) 780-9893

8:00 am - 5:00 p.m. EST

Monday - Friday

The MaxxFan is a unique, one-of-a kind ventilation system that keeps your RV interior safe from any weather- rain or shine. It brings fresh air in and circulates hot, musty air out - at any time - in any weather. Unlike all other RV vent fans that must use add-on vent covers to be rain proof, the MaxxFan is designed as a complete, all-in-one system. It fits all standard 14" x 14" roof openings and includes a built in rain shield that moves into position, automatically, every time the MaxxFan vent is opened. Best of all, this rain shield tucks away when the MaxxFan is closed, providing a low profile, euro-style appearance. No other RV ventilator combines all these features into one complete product like the MaxxFan.

The MaxxFan opens and closes like most standard roof vents using a manual knob located at the ceiling. The controls for the 3-speed fan, thermostat, and intake/exhaust functions are also placed at the ceiling around the fan intake screen. In addition, the MaxxFan features an easy to remove fan intake screen. Simply rotate four retaining knobs and remove the screen for cleaning, no tools required. The MaxxFan is designed to be durable and tough. It's available with a translucent white polyethylene or smoke tint polycarbonate vent lid. The MaxxFan's large exhaust vent employs a rigid louver system that, along with the internal heavy-duty screen, keeps rain, debris and critters from entering the vent

area when opened. With its powerful 4 amp, sealed ball bearing 12 volt fan motor the MaxxFan provides over 900 cubic feet per minute of airflow with a precision 10 bladed fan.

**Note:** The MaxxFan is designed to be fully opened or fully closed when the vehicle is moving.



# SPECIFICATIONS

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**Note:** All weights on the next page were made on prototype vehicles. Your production trailer may vary. For the weight specifications of your trailer read the weight label (see location information under “Loading” section of this manual) and check the manufacturing tag on the side of your trailer.

The Unit Base Weight (**UBW**) and the Net Carrying Capacity (**NCC**) is not the same as the Unloaded Vehicle Weight (**UVW**) and the Cargo Carrying Capacity (**CCC**) shown on the Trailer Weight Information tag in your vehicle. The UBW and NCC weights are for the base unit with no options and fluids. The UVW and CCC on the Trailer Weight Information tag are weights for the individual vehicle as built with its options and certain water capacities.

Gross Vehicular Weight Rating (**GVWR**): is the maximum permissible weight of this trailer when fully loaded. It includes all weight at the trailer axle (s) and tongue or pin.

Unit Base Weight (**UBW**): is the dry weight of the base unit with bedroom group and without options.

Net Carrying Capacity (**NCC**): is equal to GVWR minus UBW

Gross Axle Weight Rating (**GAWR**): is the value specified as the load carrying capacity of a single axle system, as measured at the tire-ground interfaces.

GAWR Gross Axle Weight ratings are located on the manufacturing tag that is positioned on the roadside side sheet of your travel trailer.

## Vehicle Identification Plate

The VIN plate is located under the trailer on the chassis. It can be found on the main frame rail just in front of the battery compartment.

# SPECIFICATIONS

MODEL	STANDARD	DELUXE	OFF ROAD
Exterior Length	16' 2"	16' 2"	16' 2"
Exterior Width	85.63"	85.63"	85.63"
Interior Width	76"	76"	76"
Exterior Height	8'	8"	8' 2"
Exterior Height W/Antenna	8' 4"	8' 4"	8' 6"
*Hitch Ball Height	18"	18"	20"
**Hitch Wt. (lbs.)	380	320	320
GVWR (lbs.)	3000	3000	3000
NCC (lbs.)	1285	1350	1350
UBW (lbs.)	1965	1900	1900
LPG Bottle (lbs.)	20	20	20
Tire Size	ST225/75R15	P275/45R20	235/75R15
Fresh water (gal.)	3	3	3
Fresh water w/option (gal.)	6	6	6

## \*Hitch Ball Height

The proper height will vary according to the weight you carry and the tires you use. However, checking the height on your trailer is relatively easy:

1. With trailer on fairly level ground measure from ground to bottom of frame, front and rear.
2. Adjust front jack until measurements are equal
3. Now measure from ground to the inside top of ball coupler. This figure is the hitch height. The hitch ball is then usually set ½" to 1" higher, according to the spring weight of your tow vehicle, to allow for it to settle when the trailer is hitched up.

## \*\* Hitch weight is without options or variable weight.

## Recommended Cold Tire Inflation Pressure

Standard	ST225/75R-15	65 PSI
Deluxe	P275/45R20	60 PSI
Off Road	ST235/75R15	75 PSI

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