









# A-France Owner's Manual

# TABLE OF CONTENTS

INDEX, WARRANTY STATEMENT	<b>PG. 3-4</b>
IDENTIFICATION INFORMATION	PG. 5
SAFETY	PG. 6-7
WELCOME	PG. 8
CONTACT INFORMATION	PG. 9
OVERVIEW	<b>PG. 10</b>
DEALER RESPONSIBILITIES	<b>PG.</b> 11
SAFETY DEFECTS	PG. 12
TOW VEHICLE AND TIRES	PG. 13-14
ELECTRICAL CONNECTION TO TOW VEHICLE	PG. 15
ON THE ROAD	<b>PG. 16</b>
SAFETY ON THE ROAD	PG. 17-18
FIRE AND SAFETY	PG. 19-21
EQUIPMENT	PG. 22-23
ELECTRICAL SYSTEMS	PG. 24-26
PROPANE SYSTEMS	PG. 27-28
APPLIANCES	PG. 29-31
FRESH WATER/WASTE SYSTEM	PG. 32-35
GENERAL MAINTENANCE	PG. 35-41
WINTERIZATION / STORAGE	PG. 42-45
OPENING / CLOSING YOUR CHALET	PG. 46-47



# LIMITED WARRANTY

# FOR RECREATIONAL VEHICLES MANUFACTURED BY CHALET INC. MANUFACTURING CORPORATION AND SOLD IN THE UNITED STATES AND CANADA

Chalet warrants to the original end user purchaser ("Owner") of this recreational vehicle ("Camper, A-Frame, Pop Up") to be free of defects in materials and workmanship and for structural integrity, under normal use, with reasonable care and maintenance, for one (1) year from the date of purchase (the "Warranty Period"), subject to the exclusions given below.

#### **COVERAGE PROVIDED**

Within the Warranty Period, Chalet is obligated to repair or replace any part covered by this warranty proven defective. In the event of such an occurrence, the Owner should contact the selling dealer for a service appointment. If it is not possible to return to the selling dealer, call the factory 541-791-4610 and they will provide you with the information required to file a warranty claim when service is being provided by other than a Chalet dealership. The cost of transportation to the dealer or service center shall be incurred and paid for by the Owner.

This is the only warranty given by Chalet Inc. other than express or implied warranties given by the component manufacturers. Any warranties implied by law are limited to the Warranty Period. Any other warranty, express or implied, not provided for in this Limited Warranty is waived by the Owner, to the extent allowed by law.

#### OWNER'S OBLIGATION

The purchaser must notify Chalet Inc. or a Chalet authorized dealer of any defect promptly upon discovery.

Warranty repairs by a non-authorized Chalet Inc. dealer or service center must be approved by the Chalet Inc. prior to any work being started.

#### **EXCLUSIONS**

The scope of this warranty is expressly limited to only items actually constructed by Chalet. Chalet therefore makes no warranty with respect to component parts constructed or assembled by other manufacturers, including, but not limited to, all electrical devices (sound systems, DVD player, antennas, batteries, etc.), the propane appliances, electrical appliances, heaters, refrigerators, plumbing fixtures, light fixtures, lights and windows. Such component parts may be warranted by their respective manufacturers, and copies of such warranties are included in the appliance packet included with the trailer.

This warranty does not cover damage caused by or related to (1) normal wear and tear, (2) accidents, abuse, misuse or negligence, (3) failure to comply with instructions contained in the Owner's Manual, (4) any alteration or modifications, or (5) environmental conditions, including, but not limited to, road salt, hail, or windstorm. Nor does this warranty apply to parts made out of cloth, leather, wood, paint, or chrome, which have been affected by airborne fallout, including, but not limited to, chemicals and tree sap.

No payment or other compensation will be made for incidental expenses, including, but not limited to, towing, telephone, transportation, lodging, travel, gasoline, loss of pay or indirect or consequential damage including, but not limited to, loss of use of the recreational vehicle, inconvenience, damage or injury to person or property, or loss of revenue, which might be paid, incurred or sustained by reason of manufacturer's defect covered by this warranty. Chalet does not warranty equipment or accessories installed at any dealership or other place of business, or by any other party.

As the manufacturer of the recreational vehicle you purchased, Chalet does not know the purpose or use you have in mind for your recreational vehicle, nor does Chalet know the Gross Vehicle Weight Rating ("GVWR") of your two vehicle. Therefore,

Chalet makes no warranties or representations, express or implied, as to the performance of your tow vehicle or whether the match up of your tow vehicle and camper/trailer exceeds the GVWR as specified by your tow vehicles manufacturer. Specifically, there is no express or implied warranty of merchantability or of fitness for the particular match of your tow vehicle to any particular camper/trailer model.

This Limited Warranty is intended to comply with the requirements of both State and Federal laws. Any part of this Limited Warranty in conflict with any law shall be ineffective to the extent of any such conflict. This warranty gives you specific legal rights, and you may also have other rights, which may vary from state to state.

# **IDENTIFICATION INFORMATION**

For identification purposes it is recommended that you record the following information. Pick a spot behind a drawer or inside a cabinet. Protect yourself from possible theft and be able to identify your property. **You should keep a copy of this information at home.** If the unit is ever stolen, the police can use the appliance serial number to identify the unit. It is also handy to have when service is needed.

# PLEASE TAKE A FEW MINUTES TO COMPLETE THE INFORMATION. IT WILL BE A HANDY REFERENCE FOR YOU.

Your Name	Trailer Model	Vehicle ID Number
Dealer	Address	Phone Number
Insurance Company	Phone Number	Policy Number
AC Manufacturer	Model Number	Serial Number
Furnace Manufacturer	Model Number	Serial Number
Key's Entry door	Baggage Door	Other
Stereo Manufacturer	Model Number	Serial Number
Water Heater Manufacturer	Model Number	Serial Number
Other		
Other		
Other		

# A FEW IMPORTANT WORDS ON SAFETY

Your safety, and the safety of others, is very important. Operating your tow vehicle and recreational vehicle is an important responsibility. As you read this manual, statements preceded by the following words are of special significance:

#### WARNING

Indicates a potentially hazardous situation which, if not avoided, may result in death or serious injury. **CAUTION** 

Indicates a potentially hazardous situation which, if not avoided, may result in damage to a component, the trailer or your tow vehicle.

This information is intended to help you reduce the risk of personal injury and prevent possible damage to others, your tow vehicle, trailer and its equipment, or the environment. To help you make informed decisions about safety, we have provided operating procedures and other information on labels in your camper and in this manual. There are also warnings in the appliance manuals in the Owner's Information Package. This information alerts you to potential hazards that could hurt you or others. Of course, it is not practical or possible to warn you about all the hazards associated with operating or maintaining your camper. You must use your own good judgment. This manual is filled with important safety information please read it carefully. If you have any questions regarding operation, maintenance, or service, please contact your dealer immediately so he can assist you. Chalet Inc. is required to furnish the following consumer information as provided by the National Fire Protection Association and the American National Standards Institute. The information and warnings found here might also be found in other chapters of this Owner's Manual. Please see chapters titled "PROPANE SYSTEM" and "APPLIANCES" for other safety and operating information.

#### WARNING

Propane containers must not be placed or stored inside the vehicle. Propane containers are equipped with safety devices, which relieve excessive pressure by discharging gas to the atmosphere.

The following label has been located in the cooking area to remind you to provide an adequate supply of fresh air for combustion. A warning label has been located near the propane container. This label reads:



IT IS NOT SAFE TO USE COOKING APPLIANCES FOR COMFORT HEATING. Cooking Appliances need fresh air for safe operation.

**BEFORE OPERATION:** 

Open overhead vent or turn on exhaust fan.
Open window. FAILURE TO COMPLY COULD
RESULT IN DEATH OR SERIOUS INJURY.

Unlike homes, the amount of oxygen supply is limited due to the size of the recreational vehicle, and proper ventilation when using 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

Do not bring or store propane containers, gasoline, or other flammable liquids inside the camper. Fire or explosion may be the result.



ALL PILOT LIGHTS, APPLIANCES AND THEIR IGNITORS (SEE OPERATING INSTRUCTIONS) SHALL BE TURNED OFF BEFORE REFUELING OF MOTOR FUEL TANKS AND/OR PROPANE CONTAINERS. FAILURE TO COMPLY COULD RESULT IN DEATH OR SERIOUS INJURY.



DO NOT FILL PROPANE CONTAINERS) TO MORE THAN 80 PERCENT OF CAPACITY. FAILURE TO COMPLY COULD RESULT IN A FIRE OR PERSONAL INJURY.

#### CAUTION

THIS PROPANE PIPING SYSTEM IS DESIGNED FOR USE WITH PROPANE ONLY. DO NOT CONNECT NATURAL GAS TO THIS SYSTEM.

Securely cap inlet when not connected for use. After turning on gas, except after normal cylinder replacement, test propane piping and connections to appliance for leakage with soapy water or bubble solution. Do not use products that contain ammonia or chlorine.

Overfilling the propane 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 propane.

#### Overfilled Propane tanks must be bled.

This is different than purging the tanks. When the tanks are new, they must be purged of the oxygen in the tanks used during the tank manufacturer's testing procedure prior to being filled with propane. Overfilled tanks will emit liquid into the propane system, which can cause problems/plugging with the regulators used on the tanks, range and generator. A bathroom scale can be used to weigh the tanks prior to reinstalling them in the camper. A 5-gallon tank should not weigh more than 35 lbs. when filled. A 7-gallon tank should not weigh more than 50 lbs. when filled. Instructions for bleeding the tanks are located on a label on the tank.



# WARNING

Carbon monoxide is toxic.

Breathing it can cause unconsciousness and even kill you. Avoid any enclosed areas or activities that expose you to carbon monoxide.

High levels of carbon monoxide can collect rapidly in enclosed areas, such as a garage or family room.

The following label has been placed in the vehicle near the range area:



# DANGER

#### IF YOU SMELL PROPANE:

- 1. Extinguish any open flames, pilot lights and all smoking materials.
- 2. Do not touch electrical switches.
- 3. Shut off the propane supply at the container 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.

FAILURE TO COMPLY COULD RESULT IN EXPLOSION RESULTING IN DEATH OR SERIOUS INJURY.

Propane regulators must always be installed with the regulator vent facing downward. Make sure the regulator vent faces downward to minimize vent blockage, which could result in excessive gas pressure causing fire or explosion.

#### **CARBON MONOXIDE HAZARD**

Your truck and your camper's generator exhaust contain carbon monoxide gas. You should have no problem with carbon monoxide entering into the camper if you maintain your truck and generator properly. Have the exhaust system inspected for leaks whenever:

□ The truck and camper is serviced.
□ You notice a change in the sound of the exhaust.
□ The truck or camper was in an accident that may have damaged the underside.



# **WELCOME**

Congratulations and welcome to the recreational vehicle lifestyle and the ever-growing family of Chalet owners. We sincerely thank you for choosing Chalet. Your selection of a Chalet is a wise investment. Chalet Inc. is confident that it will give you years of camping pleasure.

At Chalet Inc., we work hard to provide our customers with safe and dependable recreational vehicles.

We constantly strive to produce a quality product to meet your needs. Customer satisfaction is very important. If you are satisfied, then we know we have achieved our number one goal. That is to be the best folding camper manufacturer in the industry.

Your RV has been designed to conform with, or exceed, the American National Standards Institute (ANSI) 1192, National Fire Protection Association (NFPA) 1192, Canadian Standards Association (CSA) Z-240 (for Canadian built units), National Electric Code (NEC), and applicable motor vehicle standards. These standards establish the requirements for electrical, plumbing, fuel systems and equipment, fire and life safety provisions and other requirements for quality and safety. Chalet Inc. is a member of the Recreational Vehicle Industry Association (RVIA) and the Canadian Recreational Vehicle Industry Association (CRVIA) which oversees that our products are in compliance with the above agencies and organizations.

One of the best ways to enhance the enjoyment of your new Chalet is to read this manual along with the information provided in the Appliance Information Package. This information will help you learn how to operate all the features of your new Chalet. Afterwards, keep this Owner's Manual along with the appliance information Package in your trailer so you can refer to it at any time.

This Owner's Manual, along with the appliance Information should be considered a permanent part of the A-Frame folding trailer, and should remain with the trailer when it is sold.

The information, specifications and photography included in this publication were as accurate as possible at the time of publication. For the most current product information and changes, please visit our website at <a href="http://chaletinc.com/a-frame/">http://chaletinc.com/a-frame/</a>, the appliance manufacturer's website. Your dealer is also a source of information. Chalet Inc. reserves the right, however, to discontinue or change specifications at any time without notice and without incurring any obligation whatsoever. All weights, fuel, liquid capacities, and dimensions are approximate.

Before calling your Chalet dealer, we suggest that you look for the answer to your problem in the Owner's Manual. Several warranties protect your new Chalet. and its appliances. Read each of the warranties thoroughly so you understand the coverages and are aware of your rights and responsibilities.

Chalet Inc. provides a limited warranty as defined at the front of this manual. Please read that warranty carefully. If you have any questions about the warranty or what it does or does not cover, please contact your Chalet dealer. At the time of sale, your dealer will fill out and mail your Chalet Inc. Warranty Registration Card to the factory.

Your appliances and various other components in your RV are warranted by their respective manufacturer and their warranties are included in the Appliance Information Package. Be sure to fill out the warranty registration cards for these items and mail them as soon as possible after taking delivery of your trailer

.

# **CUSTOMER RELATIONS INFORMATION**

It is best to return your trailer to the selling dealer for warranty service. If this is not possible, you can find the nearest dealer on our web site, www.chaletrv.com, under the dealer locator heading, or by contacting Chalet Inc. Customer Service at 541-791-4610.

Service and maintenance on your RV is easily accomplished by establishing a mutually agreeable partnership between you your Chalet or local RV repair facility. Take the time to get to know the people who will play an important role in helping you keep your trailer in prime working condition. Visit the dealer's service center to meet the service manager, technicians, service writers, and those charged with ordering the parts. Ask questions.

Following your appliance recommended scheduled maintenance will save you money in the long run. Carefully read all appliance operating manuals to obtain complete information on prescribed service intervals. Don't forget about your tow vehicle. It too needs regular service. If you prefer to perform general maintenance items on your own, your Chalet dealer service department can be a big

help when it comes to making sure you obtain the proper replacement parts. You can also

order direct from the factory or from Chalet's on line store <a href="http://chaletinc.com/parts/">http://chaletinc.com/parts/</a>
Some of the recommended service and maintenance items may fall outside the score

maintenance items may fall outside the scope of your capability. In these instances, you may decide to seek the assistance of a qualified RV service center to perform these tasks. Contact your Chalet dealership's service center in advance for a scheduled appointment time. Advise the service manager, in writing, the specific items needing repair to give the service center an idea of what parts will be required, and how long the work can be expected to take. Keep in mind that seasonal maintenance needs are a popular time of year at most service centers. Call early to schedule annual tune-ups. Always include your vehicle identification number when contacting your Chalet dealer. Chalet dealership personnel are trained professionals. They should be able to answer all your questions.

If you encounter a problem that your dealership does not solve to your satisfaction, please discuss the issues with the dealership's management. The Service Manager or General Manager can help.

If you are dissatisfied with the decision made by the dealership's management, contact Chalet Inc. Customer Service Center at:

Chalet Inc.
124 41<sup>st</sup> Ave. S.E.
Albany, OR. 97322
541-791-4610
E-mail inquiries to:
customerservice@chaletrv.com

When you call or write, please give us this information:

- Vehicle Identification Number
- Your name, address, and telephone number
- Date of purchase
- Name and address of the dealer where your camper was purchased.

This information will be on your Owner Registration Card. The serial number is also located on the identification tag located next to the entry door.

# INFORMATION ABOUT THIS MANUAL

This Owner's Manual is of a general nature only and does not cover every aspect of all models manufactured by Chalet Inc. Each owner should read this manual thoroughly and heed the warnings given herein, as well as those warnings given in the component instruction manuals contained in the Appliance Information Package.

#### PRODUCT CHANGES

Some equipment and features shown in this manual may be optional or not available on some models. Photographs or illustrations in this manual are representative of function and may not be specific in their depiction of actual equipment, fabrics, interior or exterior decor or design options as installed on or in your RV. For the most current product information and changes please visit our website www.chaletrv.com or contact your local Chalet Subsequent modification may be evident in the actual product. Specification are subject to change without notice. All weights, fuel, liquid capacities and dimensions are approximate.

#### **Appliance Information Package**

The appliance packet contains valuable documents explaining in detail how to use and maintain the major appliances, electrical system and equipment installed in your trailer. The appliance manuals also carry warranty information should you need service. Warranty registration cards included with the manuals should be filled out completely and mail in as instructed.

The appliance manuals should be considered a permanent part of the RV and should remain with the trailer when it is sold.

The Appliance Information Package includes the following items based on the standard features and applicable options on your particular trailer:

#### Owner's Manual

- Consumer Information
- Refrigerator Manual
- Range/Oven Manual
- Furnace Manual
- Thermostat Manual
- Water Heater Manual
- Air Conditioner Manual
- Water Pump Manual
- Converter Manual
- Smoke, Propane and Carbon Monoxide Detector Manuals
- Fantastic Vent Manual
- Stereo or DVD Manual

# DEALER RESPONSIBILITY

Your RV has been thoroughly inspected at the factory before shipment. However, your dealer is responsible for performing a complete predelivery inspection of all your trailer's components. This should assure you that all components are in proper working order and free of defects prior to you taking delivery.

During the delivery process, the dealer should have taken you through the inside, as well as around the exterior of the RV, to instruct and explain the proper usage of all of the following items:

- Appliances
- Dinette Bed Conversions
- Electrical System
- Fresh Water System
- Propane Gas System
- Loading and Unloading
- Optional Equipment
- RV Park Hookup
- Waste System
- Egress Exits

While the dealer has provided basic instructions on how to use your RV, it is ultimately your responsibility to make sure you fully understand how to use the trailer prior to doing so. To fulfill this responsibility, in addition to the instructions received from the dealer, you must read all instructional material furnished with the RV. If you do not understand how to operate any appliance or equipment, you should return to your dealer for further instructions.

Your Chalet comes with applicable loose items based on the standard features and options on your particular trailer. Please make sure that you have each of these items:

- Appliance Information Package
- Keys to the entry & baggage doors
- Fire Extinguisher (mounted)
- Remote controls
- Stabilizer jack handle

#### PLANNING AND PREPARATION

Proper planning of your trip will ensure a pleasurable experience. A thorough knowledge of your RV is important if you are going to get the most of the convenience and safety built into your trailer. You should become as familiar with your trailer as you are with your own personal car or truck. If you have trouble or questions, you should consult your dealer.

#### **INSPECTION AND MAINTENANCE**

- Maintaining your trailer according to the maintenance schedules given in this manual helps to keep your camping experiences trouble-free while preserving your investment. When your trailer needs maintenance, keep in mind that your Chalet dealer's staff is trained in servicing the many systems in your trailer. Your Chalet dealer is dedicated to your satisfaction and will be pleased to answer any questions and concerns.
- The Maintenance Chart located at the rear of this manual defines the minimum maintenance intervals. Adherence to this schedule will minimize the possibility of failure of important systems of your camper. The time spent inspecting and maintaining your trailer will provide you with many years of trouble free recreational pleasure.

# ALTERING OR MODIFYING YOUR RV MAY VOID YOUR WARRANTY

Even doing something as simple as hanging a picture. A drill, screw or nail could penetrate an unseen gas line or electrical circuit, which would be hazardous. If you are not sure, call your Chalet dealer for help! Also alterations or modifications to your trailer may void your warranty.

# REPORTING SAFETY DEFECTS

If you believe that your RV 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 Chalet Inc.

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

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-888-327-4236, or write to:

NHTSA, 400 Seventh St., S.W., Washington, D.C.20590.

You can also obtain other information about motor vehicle safety from the Hotline. They are on the web at www.safecar.gov.

# **Tow Vehicle**

#### MATCHING TRAILER AND TOW VEHICLE

Selecting the right combination requires understanding a few guidelines. Your Chalet dealer can be a valuable source of information when matching a recreational vehicle with your tow vehicle

A Federal Certification Label is required by law on all tow vehicles. It is usually located on the driver side door post. It lists the Gross Vehicle Weight Rating (GVWR), the maximum weight at which the vehicle may be operated. It also provides a Gross Axle Weight Rating (GAWR), the maximum weight allowed for each axle. The GAWR, divided by two, is the maximum axle rating for each end of an axle.

Trailers are considered "truck payload." New trucks have their payload capacity posted in the glove box or on a specification sheet located in the vehicles owner's manual. Trucks that have many options and/or a 4-wheel drive option have less payload. To calculate payload, the vehicle manufacturers assume all seat positions are filled with persons weighing 150 pounds.

One way to determine the actual payload available is to weigh the trailer full of water and propane.

RV's become overloaded when people put too many things into them. There is no easy way to determine the weight you've loaded, so there's a temptation to keep loading until every available space if filled. People are loading by volume, but weight is far more important. Unfortunately, you may have exceeded the load-carrying capacity of the tires before everything is on board. The only way to tell if your truck/trailer is overloaded is to weigh it fully loaded.

The most critical point about weighing a trailer is that it must be weighed with everything on board that will be there while you're traveling. That means you must weigh the RV with all the supplies, food, water, propane and the truck full of fuel. Keep in mind that water weighs 8.3 lbs per gallon and propane weighs 4.2 lbs per gallon. These two items alone can add over 400 lbs alone. Limiting your on-board water until you arrive at

your destination will lower your total weight. You must know the actual load on the axles and wheels, and there's no other way to do it other than on a commercial scale.

In addition to knowing the total weight, it is crucial to know the weight on each end of each axle. That's the only way you can find out if the load is both within the tire capacity, as well as whether or not the load is properly distributed.

You should be able to find certified scales by looking in your Yellow Pages for moving and storage companies, farm suppliers, gravel pits, recycling companies or commercial truck stops. Be sure to call in advance to determine whether the facility offers public weighing services, their hours of operation and any fees that might be involved.

WARNING Failure to properly match camper or trailer and the tow vehicle can result in undesirable handling characteristics and create a safety hazard.

Do not load your vehicle beyond its gross vehicle weight rating (GVWR) and/or gross axle weight ratings (GAWR). Both of these ratings are given on an identification label normally located at the driver's door post area.

In addition to knowing the overall weight that can be safely loaded in or attached to the tow vehicle, you should know how to distribute the weight in the RV so that correct amounts of weight are placed over each axle. Proper weight distribution is required for driving stability and will assure that the trailer is not rear, front or side heavy. Heavy weights placed at the rear end of the truck/camper may cause undesirable handling characteristics

When loading the RV, store heavy gear first, keeping it on or close to the trailer floor. Store only light objects on high shelves. Distribute weight to obtain even side-to-side balance of the loaded vehicle. Secure loose items to prevent weight shifts that could affect the balance of your vehicle.

# **TIRES**

Tires are available in a variety of load ratings and sizes, and if the tires you currently have cannot handle the load, it may be possible to replace your tires with tires of higher pound capacity. Keep in mind, that the ultimate capacity of the tow vehicle is determined by the weakest link in the system. This could be the tires, wheels, suspension or brakes. The maximum ratings are molded into the side of the tire. The sidewall of the tire shows maximum and minimum inflation pressure for that load. Be sure you also know the load and inflation pressure ratings for your wheels as well. Often, these are stamped on the inside of the wheels, but if not, your dealer can help you find out what they are. Never exceed the maximum load or inflation pressure of your wheels. Driving on under-inflated tires can cause the tires to overheat, which leads to the breakdown of the tire's internal structure. Improper inflation also can reduce your ability to control your vehicle. Tire blowouts occur more during summer months than any other time of the year. Properly inflated tires last longer, run quieter, grip better, increase fuel mileage and safely support and control your vehicle. Check your tire pressure once a month and each time before you take a trip with your truck and camper. Use a quality air pressure gauge to check the pressure. Do not under-inflate or over-inflate your tires. Inspect your tires for uneven or excessive wear. Look for bulges, cuts, or blisters on the sidewalls. When you're traveling, do as professional commercial drivers do: inspect your tires regularly and check and adjust cold inflation pressure every day that you travel.

**CAUTION** Individual wheel position weights must not exceed the maximum tire load capacity. Maximum tire load capacity can only be achieved utilizing the maximum allowable psi as listed on the sidewall of the tire.

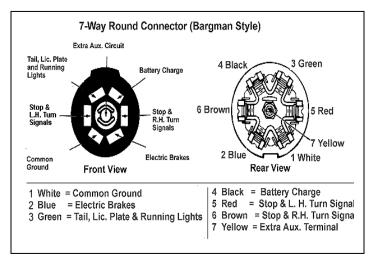
# **ELECTRICAL CONNECTION TO TRUCK**

Your Chalet comes equipped with a 12-volt electrical cord with a molded connector. The truck electrical connector will be installed by your Chalet Dealer to your truck wiring system. With the wiring and connectors hooked-up, your truck will supply 12-volt DC power to charge your trailer's battery and provide power for the 12-volt power needs while the truck is operating.

Under no circumstances should the plug be altered or changed to another type.

#### **COLOR GAUGE FUNCTION**

- Black 8 12-volt power
- White 8 Ground (-)
- Green 14 Running Lights
- Red 16 Left Turn Signal
- Brown 16 Right Turn Signal
- Yellow 16 Back-up Lights



#### **NOTE:**

Do not use less than 8 gauge wire size for charge lines. Also, do not attach them to smaller gauge wires. Your RV maybe equipped with a 3-way refrigerator which uses 120v, 12v or LP gas to operate. Selecting the 12v operation requires a large amount of amperage. This selection should only be used while traveling when your truck alternator can produce this amount of amperage. Using an 8 gauge wire from your truck battery to the trailer will ensure that adequate amperage will be supplied to the refrigerator.

To protect your truck's 12-volt system from overload, a 40-amp circuit breaker should be installed at the power source under the hood. A Battery Separator may be necessary to install on your vehicle. Its purpose is to protect your truck's starting battery from discharge. To handle the trailer's electrical requirements and to charge the trailer's battery, 8 gauge hot and ground wires must be run from the power source under the truck hood to the 12-volt camper electrical connector location in the truck bed.

# ON THE ROAD

#### **LOADING**

When loading camping gear, store heavy items first and place down low. Distribute weight as evenly as possible from side to side. REMEMBER: overloading or uneven loading can create a serious safety hazard. Secure and brace stored items so they won't move during travel, thereby shifting the load in the trailer. Do not load heavy items near the end of the RV. Carry only as much water as needed for travel use or to balance the load. Whenever possible, empty the waste water holding tanks before traveling.

#### **STORAGE**

All cabinets and storage areas should have the heaviest items on the bottom and lighter items overhead. After loading you should have the skillets and can goods on the floor or bottom shelf, and the cereals and crackers in the overheads. Use the unbreakable type plates and saucers, and consider storing your dishtowels around them. Clothing hung in wardrobes should be kept on hangers that snap over the clothes rods to keep them from "jumping" off on rough roads.

#### PREPARING FOR TRAVEL

Properly preparing for a trip before you leave can make things more enjoyable. Make a list of items you will need or wish to take. Keep in mind the following categories:

- Bathroom & cleaning supplies
- Kitchenware, Bedding, Clothing
- Fire Extinguisher
- First aid items
- Food
- Holding tank chemical
- Personal items
- Road flares & Tools

#### PRE TRIP CHECKS

#### Exterior

- 1. Connect battery(s) and check condition.
- 2. Check for fluid leaks.
- 3. Check tires and wheels for damage and proper inflation. Check tires for cuts or other damage.
- 4. Check tires for unusual tread wear that may indicate a balance or suspension problem.
- 5. Always keep tires in good condition and when replacing, be certain that the new tires have the load carrying capacity of your vehicles GVWR.
- 6. Check that access doors are securely closed.
- 7. Check engine and power plant oil levels.
- 8. Check engine coolant level, windshield washer reservoir, and batteries.
- 9. Check all running lights, taillights and electrical system.

#### Interior

- 1. Secure all loose items.
- 2. Close all drawers and cabinets.
- 3. Secure range and refrigerator doors.
- 4. Check that entry door is locked.

#### **Systems**

- 1. Fill fresh water tank.
- 2. Drain holding tanks and secure drain cap.
- 3. Check operation of interior lights and appliances.
- 4. Check propane gas level. Check for kinked propane lines and possible leaks.

#### **POST-TRIP CLEAN-UP**

- 1. Clean unit and check for damage.
- **2.** Drain waste-holding tanks.
- **3.** Clean waste drain hose and secure drain cap.
- 4. Drain fresh water tank and rinse.
- **5.** Close outlet valve on propane tank.
- **6.** Disconnect the battery cables or turn off battery disconnect switch if equipped.

#### SAFE DRIVING RULES

Your vehicle when towing will have different handling and stopping characteristics. The following rules will help you develop needed skills for safe driving.

**Travel slowly** until you have learned the handling and stopping characteristics. Practice turning, stopping, and backing in a secluded place away from traffic.

**Do not permit** a driver who is inexperienced to tow your trailer without your direct supervision.

**Drive at moderate speeds** allowing for adverse highway and wind conditions. Even under the best of conditions, do not exceed 55 miles per hour. As speed increase driving stability, stopping ability and the ability to make emergency maneuvers are greatly reduced.

**Reduce speed before starting down hills** – even short ones - and avoid heavy braking on downgrades. Truck stability is reduced when traveling downhill.

**Slow down before entering turns** and avoid heavy braking in turns. Truck stability is reduced in turns, and the weight of the trailer on the truck will affect the way the truck handles. Avoid quick steering movements that can reduce truck stability.

**Maintain at least twice** the normal stopping distance while towing your trailer. The increased weight of the trailer on the truck requires greater stopping distance.

**Use lower gears on long grades**. Downshift on upgrades to avoid overheating or undue engine loads. Downshift on downgrades to allow engine braking to assist in controlling vehicle speed. Avoid continuous or frequent brake application.

**Allow ample time for passing**. Your acceleration will be much slower when you are towing the trailer.

**Become familiar** with the position of the trailer in traffic, and be cautious when maneuvering to allow for its length and width. Always allow extra room to corner and to change lanes. Learn to use the side mirrors to view the road behind and to the sides. Check them often.

Allow for extra height of your trailer. Check for low hanging tree branches or other obstructions whenever you drive, park, or when pulling in for fuel or service. Always check overhead clearance of overpasses and bridges, especially if you drive with the roof vents slightly open or if the RV is equipped with a roof air conditioner, roof rack,

TV/radio antenna, or a satellite dish. Measure your height from the ground to the highest point on the roof. Write it down on a piece of tape and put it in a visible place in your truck. This will help you when you get to that "low overpass".

**NOTE:** Be sure to lower TV antenna before driving.

#### RIDING IN THE TRAILER WHILE TRAVELING

For the safety of passengers, it is not advisable to ride in the RV while traveling. In some states it may be illegal.

#### **CARBON MONOXIDE GAS**

#### **Safety Precautions**

Carbon monoxide gas is colorless, tasteless, and odor-less. It is a combustion by-product of fuel burning engines. The engines in your truck and generator system (if installed) produce it constantly while they are running. Carbon monoxide gas is deadly. Please read and understand the following warnings and precautions to protect yourself and others from the effects of carbon monoxide gas.

WARNING Exhaust gases are deadly. Do not block the tailpipes or situate the vehicle in a place where the exhaust gases have any possibility of accumulating either outside, underneath, or inside your vehicle or any nearby vehicles.

**WARNING** Outside air movement can carry exhaust gases inside the vehicle through windows or other openings remote from the exhaust outlets.

WARNING Operate the engine(s) only when safe dispersion of exhaust gases can be assured, and monitor outside conditions to be sure that exhaust continues to be dispersed safely.



WARNING Do not under any circumstances

operate any engine while sleeping. Beware of exhaust gas (carbon monoxide) poisoning

#### **Symptoms include:**

Dizziness

Headache

Weakness and sleepiness

Nausea

Vomiting

Muscular twitching

Throbbing in temples

Inability to think coherently

If symptoms indicate the possibility of monoxide gas poisoning: Turn off engine(s) immediately. Get out into fresh air at once. Summon medical assistance Check the exhaust systems during routine maintenance and repair any leaks, damage, or obstruction before further operations. Do not modify any exhaust system in any way.

## EFFECTS OF PROLONGED OCCUPANCY

Your RV 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 of space and air tight construction of a modern recreational vehicle means 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 your RV during use in cold weather when the relative humidity of interior air is high. This condition is increased because the insulated walls of the trailer 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 this 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 your trailer, you should take action to minimize their effects.

**NOTE:** Your RV is not designed to be used as permanent housing. Use of this product for long term or permanent occupancy may lead to premature deterioration of the 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 neglect, and may therefore reduce your warranty protection.

#### VENTILATION AND MOISTURE CONTROL

You can reduce interior moisture condensation by taking the following steps:

Ventilate with outside air. Partially open one or more roof vents and one or more windows to provide

circulation of outside air into the interior. While this ventilation may increase furnace-heating load during cold weather, it will greatly reduce water condensation. Even when it is raining or snowing, ventilation air from outside will be far drier than interior air and will effectively reduce condensation inside the camper.

#### Minimize moisture release inside the trailer.

Run the range vent fan when cooking and the bath vent fan (or open the bath vent) when bathing to carry water vapor out of the RV. Avoid making steam from excessive boiling or use of hot water. Remove water or snow from shoes before entering to avoid soaking the carpet. Avoid drying overcoats or other clothes inside the camper.

# DO NOT HEAT THE INTERIOR WITH THE RANGE OR OVEN!!

In addition to the hazards of toxic fumes and oxygen depletion, open flames add moisture to the interior air, increasing condensation. Do not use an air humidifier inside the trailer. Water put into the air by the humidifier will greatly increase condensation.

Ventilate closets and cabinets. During prolonged use in very cold weather, leave cabinets and closet doors partially open to warm and ventilate the interior of storage compartments built against exterior walls. The airflow will warm the exterior wall surface, reducing or eliminating condensation and minimizing possible ice formation.

**Install a dehumidifier.** During prolonged, continuous use, a dehumidifying appliance may be more comfortable and effective in removing excess moisture from the interior air. While use of a dehumidifier is not a "cureall", ventilation, and moisture reduction continue to be important, operation of the dehumidifier will reduce the amount of outside air needed for ventilation. Heating load on the furnace will be reduced, and the interior will be less drafty.

**INTERIOR ODOR** New units may have a strong odor and even cause eye and lung irritation when closed up in hot weather. This is due to glues used in production of forest products (plywood, paneling, etc.). This condition passes with time, but in an extreme condition, open the door, windows, and vents to allow the interior to "air out" for several hours.

## FIRE AND SAFETY

The hazard and possibility of fire exists in all areas of life, and the recreational lifestyle is no exception. Your trailer is a complex device made up of many materials - some of them flammable. But like most hazards, the possibility of fire can be virtually eliminated by recognizing the danger and practicing common sense safety and maintenance habits.

Recreational vehicle fires are generally caused by unattended food cooking on the stove or in the oven, faulty or damaged wiring and electrical devices, fuel leaks (both gasoline and propane), or carelessness.

The most common careless acts include smoking in bed, leaving children unattended and cleaning with flammable liquids.

#### **Consider These Fire Safety Suggestions:**

Before refueling your truck or any fuel tank in the vicinity of your RV, be sure to turn off all pilots and appliances in your trailer. Consider the cause and severity of the fire and the risk involved before trying to put it out. If the fire is major or is fed by gasoline, propane or any type of oil product, stand clear of the vehicle and wait for the fire department or other emergency assistance.

# If your RV is damaged by fire, do not use it until it has been thoroughly examined and the cause of the fire is found and fixed.

All occupants of the trailer should become familiar with the audible sound of the smoke, propane leak and CO detectors. If an alarm sounds, investigate the cause. Do not remove the detector in an attempt to silence the alarm. Teach everyone in the RV how to use the entry door locking system and emergency exits. Occasionally open the emergency exit to prevent the seal from sticking. Always keep the dead bolt on the entry door in working condition.

#### FIRE EXTINGUISHER

The fire extinguisher in your trailer is located near the main entry door. Your fire extinguisher should be replaced immediately after use or discharge. The fire extinguisher furnished with your camper is rated for Class B (gasoline, grease, flammable liquids) and Class C (electrical) fires since these are the most common types of fires in recreational vehicles. Read the instructions on the fire extinguisher. Know how and when to use it. You and your family should be familiar with its operation. If you find it necessary to use the fire extinguisher, stand 45 degrees from the flame and spray side to side, starting at the top of the flame. Use caution to avoid standing upwind or uphill. If flames are climbing, spray vertical and work the retardant downwards. Dry chemical flame retardant should be cleaned away as soon as possible.

#### SMOKE DETECTOR

Most fire casualties are caused by inhalation of toxic fumes (smoke) from a fire and not by flame. The smoke detector responds to smoke that enters the sensing chamber. It does not sense gas, heat or flame. A ceiling mounted, battery powered smoke detector is located in the living /cooking area of your RV. Please read the smoke detector Owner's Manual for details on testing and caring for this important safety device. Test the smoke detector after the RV has been in storage, before each trip, and at least once a week during use. The smoke detector should never be disabled due to nuisance or false alarm from cooking smoke, a dusty furnace, etc. Ventilate your trailer with fresh air and the alarm will turn off. Do not disconnect the battery. Replace the battery once a year or immediately when the low battery "beep" signal sounds once a minute. The detector uses a standard 9-volt battery. Test smoke detector operation after replacing the battery. If the smoke detector fails to operate with a new battery, replace the detector with a new unit.

# COMBINATION CARBON MONOXIDE AND PROPANE LEAK DETECTOR

A permanently installed detector is located near the floor in the forward portion of the main camper floor area. The unit contains an alarm that will sound, alerting you to the presence of propane or carbon monoxide.





TO REDUCE THE RISK OF CARBON MONOXIDE POISONING OR PROPANE GAS EXPLOSION, TEST THIS ALARM'S OPERATION AFTER THE CAMPER HAS BEEN IN STORAGE, BEFORE EACH TRIP AND AT LEAST ONCE PER WEEK DURING USE.



DO NOT USE A CIGARETTE LIGHTER TO TEST THE CO / PROPANE GAS ALARM. Butane gas may damage the sensors.

DO NOT attempt to test the alarm by any other means than by using the TEST/RESET button. DO NOT attempt to produce CO to the alarm. The TEST/RESET button tests all functions of the alarm and is the ONLY safe way to be sure the alarm is working properly.

The alarm may be tested at any time. The TEST/Mute switch is located on the front of the alarm. Press and hold the test button for 1 second. The alarm is working properly if the GREEN indicator light changes color to RED and the alarm beeps 4 times. The Gas LED should also blink Red.

#### **OPERATION**

When the unit is first powered up, the CO sensor requires a ten (10) minute initial warm-up period to clean the sensor element and achieve stabilization. The GREEN LED indicator will flash on and off during the 10 minute warm-up period. This unit cannot go into a CO alarm during the warm-up period. After the warm-up period, the GREEN power ON indicator should glow continuously. If the ON

indicator light does not light see the section, "Trouble-Shooting Guide" in the User's Manual for this alarm provided in the Owner's Information Package.

This alarm will operate normally down to 7v DC. It will not work without power.

# VISUAL AND AUDIBLE ALARM SIGNALS

The CO / Propane Gas Alarm is designed to be easy to operate. The alarm has two indicator lights that display a specific color for each monitored condition. There also is a matching sound pattern for alarm conditions.

#### **CO ALARM**

The Red CO LED will flash and the alarm will sound 4 "BEEPS" then silent for 5 seconds. These signals indicate that the CO level over 70 ppm.

**IMMEDIATE ACTION IS REQUIRED**. This cycle will continue until the TEST/Mute button on the front of the alarm is pressed. Ventilate the Camper. The RED light will stay ON until the CO has cleared, or the alarm will reactivate in approximately 6 minutes if the CO is still present.

**DO NOT RE-ENTER THE TRAILER**. This alarm will return to normal operation after the RV has been properly ventilated.

# PROCEDURES TO TAKE DURING A CO ALARM

Actuation of this device indicates the presence of carbon monoxide (CO) or propane gases, which can kill you. If signal sounds (4beeps and flashing or solid red light), immediately turn off all combustion sources and ventilate the premises. Evacuate the premises immediately. Check that all persons are accounted for. Do not re-enter the camper until it has been aired out and the problem corrected. Have the problem corrected before restarting appliances.

WARNING Carbon monoxide cannot be seen or smelled and can kill you.

# PROPANE GAS ALARM

The Red LED will flash and the alarm will sound a steady tone whenever a dangerous level of propane or methane gas is detected.

IMMEDIATE ACTION IS REQUIRED. The detector will continue to alarm until the Test/Mute switch on the front of the alarm is pressed. Ventilate the Camper. The RED Gas LED will continue to flash until the gas is cleared, or the gas alarm will reactivate in

approximately 5 minutes if the gas is still present.

**DO NOT RE-ENTER THE TRAILER.** This alarm will return to normal operation after the Camper is properly ventilated.

**NOTE:** This device detects the presence of propane; it does not disconnect the gas supply.

# PROCEDURES TO TAKE DURING A GAS ALARM

Turn the propane off at the tank(s), turn off all propane appliances, extinguish all flames and smoking material and open all doors and major windows to air out the camper. Do not re-enter the RV until the alarm stops sounding. If the alarm sounds a second time after the propane is turned back on, leave the propane off and have a RV Service Center make the necessary repairs to the source of the propane leak.

Be aware of the difference between a propane leaks versus propane escaping from an unlit, open burner. Pure propane from a leaking pipe or fitting is heavier than air and will build up its heaviest concentration at the floor level first. Propane from open burners is intentionally mixed with air to induce burning and will dissipate into the air. The primary purpose of the detector is to detect propane leaks. The propane from open burners is mixed with air (oxygen) so that it will burn. When mixed with air, the propane becomes only marginally heavier than air and may not sink to the floor. If a burner is left on, the area around the burner, range and adjoining counter space will be combustible and will cause injury and damage if ignited. This condition may exist for an extended time period before the propane can reach the detector's location and be detected. The detector only indicates the presence of propane at the sensor. Propane may be present in other areas.

The detector is powered by the 12-volt DC system and is always powered as long as the camper is connected to the truck, a charged battery, or 120-volt AC power. The fuse for the detector is located in the Power Distribution Center.

**NOTE:** The detector is continuously powered; disconnect the battery if you are not using your trailer. The detector can evidentially drain the battery.

# **EQUIPMENT**

SOME FEATURES DESCRIBED HERE DO NOT APPEAR ON ALL CHALET MODELS. SOME FEATURES MAY BE OPTIONAL ON YOUR MODEL.

After taking delivery of your Chalet RV, spend some time familiarizing yourself with the exterior and interior features. Your interior has been designed with utility and comfort in mind to provide spaciousness and versatility. Familiarize yourself with the bedding and dining arrangements as well as the various storage areas inside and out.

#### **COMPARTMENT DOORS**

Various exterior compartment doors provide access to certain appliances, controls, and general storage. Exterior compartment doors may not be water tight in all weather and road conditions. Any article which could be damaged by water or dirt should be carried inside the trailer or truck. Outside storage compartments are not sealed or vented enclosures and may be accessible from inside the RV. Do not store hazardous chemicals/materials or flammable, volatile liquids in these areas.



The Water Heater Door provides access to the operating control of the water heater (if equipped).

The Refrigerator Vent/Door provides access to the rear of the refrigerator for service and supplies inlet ventilation for proper operation.

#### **VENTS**

All exterior vents and louvers provide needed air circulation. Be sure not to block these vents because damage to equipment, as well as hazards to individuals could result.

The roof vents are operated from inside and have built in screens. To operate, turn the crank in the center of the vent clockwise to open and adjust.

#### INTERIOR STORAGE

Interior storage areas may be found in a number of locations, under the dinette, under bed, and galley cabinets.

#### **BATHROOM**

The bathroom walls are sealed and waterproof, so do not worry if water splashes on it.

#### **TOILET**

The toilet is designed to flush with a minimal amount of water and still provide for proper disposal and odor control. Toilet chemicals are available at most RV retail outlets. Review the manufactures owner's manual supplied with the toilet for proper use, maintenance, and chemical usage.

# STABILIZER JACKS

All models except the LTW base come standard with four stabilizer jacks, one on each of the four corners. The jack is designed for fine leveling and stabilizing light weight trailers with up to 14" of clearance from frame to ground. Please refer to the data sheet included in your appliance packet for safety warnings and operating instructions.



- If soil condition is soft, be sure to use some type of block or support under the jack foot.
- Always level the trailer from side to side and front to back. Once the trailer is positioned and level, chock wheels so trailer will not shift.
- DO NOT attempt to use this stabilizing jack for jacking purposes or to support the full weight of the trailer.
- Use only the crank handle provided.
- DO NOT attempt to use this stabilizing jack for any purpose other than its intended design.
- DO NOT attempt to move the trailer unless the stabilizer jacks are fully retracted. Failure to do so may result in damage to one or more of your stabilizer jacks.

# **ELECTRICAL SYSTEMS**

The electrical system consists of a primary 12-volt DC system and a 120-volt AC system. The 12-volt system uses battery power similar to that used in automobiles. The 120-volt system requires a source of 120-volt power provided through the power supply cord.

These systems are connected through a power converter. When connected to 120-volt power, the converter transforms 120-volt AC input into 12-volt DC power output and charges the storage battery(s) when installed.



#### 12-VOLT DC SYSTEM

The 12-volt system provides power for the following components:

- Interior Lighting
- Exterior Lighting
- Water Pump
- Furnace Blower
- Refrigerator
- Water Heater Ignition
- Stereo/CD/DVD Player
- Fantastic Fan
- Power Vent
- Accessories plugged into 12-volt outlet

#### **BATTERY**

Maintenance of your 12-volt battery(s) is essential for carefree travel. Be sure to use a heavy-duty, minimum 95 amp/hr. (160 RC), RV/Marine deep cycle battery. Certain models can accommodate two batteries. Ensure that they are both the same size and type battery. Check the battery(s) frequently with the condition meter located on the monitor panel. Also check the water level often. The use of a

hydrometer is required to test for the specific gravity of the battery acid. Hydrometers are available through an auto parts store.

**NOTE**: The 12-volt battery(s) is not supplied with the RV by the manufacturer.

The battery(s) must be securely strapped at all times. The battery(s) is charged by the trailers charging system while the tow vehicle is running or when connected to 120-volt power through the power converter.

Check that the battery liquid level is correct (weekly in warm climate, monthly in cold climate). Don't forget to also check the condition of your truck battery. Add distilled water as required. Clean battery terminals and cables periodically with a wire brush and baking soda. Be sure the caps are securely in place when cleaning. Ensure that the wing nuts on top of the battery are tight. Loose wing nuts can cause arcing and intermittent or loss of 12-volt power. Use caution not to touch battery terminals to metal doorframe when removing or installing the battery. Always disconnect the negative (-) cable first and reconnect it last.

Remove rings, metal watchbands, and other metal jewelry before working around a battery. Use caution when using metal tools. If the tool contacts the battery terminals or metal connected to them, a short circuit could occur which could cause personal injury or fire.

Do not allow battery electrolyte to contact skin, eyes, fabrics or painted surfaces. The electrolyte is a sulfuric acid solution that could cause serious personal injury or property damage. Wear eye protection when working with batteries.

#### **BATTERY CHARGING**

Normally the battery(s) will be kept charged by either the trailers charging system while on the road, or by the AC/DC power converter when plugged into AC service. On those occasions when the battery needs to be charged from a different charging source, please follow these safety guidelines: Disconnect both cables to prevent damage to the trailer's electrical system. Do not smoke near batteries being charged or which have been recently charged. Please note that batteries are being charged while you drive, and while you are

connected to 120-volt AC power through the power converter/charging circuit.

#### **BATTERY STORAGE PRECAUTIONS**

When you store your RV for a week or more be sure to disconnect battery(s). Electronic tuning radios, the propane detector, and the CO detector all draw a small amount of current when the battery is connected. Even disconnected batteries will naturally "self-discharge" about 1 % of capacity per day. If you intend to store your RV for any length of time, remove the battery(s). Store it in a cool, dry place and recharge every month. Batteries will discharge on their own. Recharging will also help prevent problems with battery sulfating which leads to premature battery failure.

#### WATER PUMP CONTROL SWITCH

This rocker switch controls the demand water pump. The water pump is pressure sensitive and starts (with the switch ON) when a faucet is open, causing pressure in the line to drop. When the faucet is closed, pressure builds in the line

and the pump stops.



**TRAILER FUSE PANEL** 12-volt Interior Circuits A 12-volt interior fuse panel is installed

in the Power Distribution Center to protect the interior circuits. Circuit titles and fuse sizes are marked inside the removable access door. If a fuse blows, locate and correct the cause. Turn off all lights and motors, and then install a fuse with the same rating. If fuses continue to blow, a short circuit is indicated. Have the system checked by qualified personnel.



#### **FUSES**

All the electrical circuits in your RV have fuses to protect them from short or overload. If something electrical in your trailer stops working, the first thing you should check for is a blown fuse. Determine from the chart, or the diagram on the fuse panel, which fuse or fuses control that component. Check those fuses first, but check all fuses before deciding that a blown fuse is not the cause. Replace any fuses and check the component's operation. Do not install fuses with amperage ratings greater than that specified on the label. Replacing a fuse with one that has a higher rating greatly increases the chances of damaging the electrical system. If you do not have a replacement fuse with the proper rating for the circuit, install one with a lower rating until you can replace it with the proper rated fuse. If the replacement fuse of the same rating blows in a short time, there is probably an electrical problem with your RV.

Leave the blown fuse in that circuit and have your camper checked by your Chalet dealer.

#### **120-VOLT POWER CORD**

Your RV is equipped with a heavy-duty power cord for connection to an external 120-volt, 30 amp rated service.

The cord is commonly called the "shore power cord". The cord and plug are molded together to form a weatherproof assembly. Do not cut or alter the cord in any way. Do not remove the ground pin from the attachment plug. If you have to use an adapter to plug into an electrical service, make sure the ground is maintained. Never use a two-conductor extension cord, or any cord that does not assure appropriate and adequate ground continuity. Use a 30-amp RV extension cord with a maximum length of 25'. Never plug the 120-volt cord into an ungrounded receptacle.



# GROUND FAULT CIRCUIT INTERRUPTER

A Ground Fault Circuit Interrupter (GFCI) protects the galley, and patio 120-volt receptacles. This device is intended to protect you against the hazards of line to ground electric faults and electrical leakage shocks possible when using appliances in damp areas. **NOTE:** The GFCI device does not prevent electrical shock. It does not protect a person who comes in contact with both the "hot" and

"neutral" sides of the circuit. It does not protect you against electrical overload.

TEST the GFCI at least once a month while operating on 120-volt AC power. To test the GFCI: Push the TEST button. The RESET button should pop out, indicating that the protected circuit has been disconnected.

If the reset button does not pop out when the test button is pushed, a loss of ground fault protection is indicated. Do not use the outlet or other outlets on the same circuit. Have the camper electrical system checked out at an authorized Chalet Dealer Service Center. Do not use the system until the problem has been corrected.

To restore power, push the RESET button.

**NOTE**: If the galley or patio receptacles don't work, check the GFCI. Reset the button if necessary. If the GFCI continues to trip, have the trailers electrical system checked at an authorized Chalet Dealer Service Center or by a qualified electrician.



#### PROPANE SYSTEM

Please observe the warnings and cautions contained in this section as well as the manufacturers supplied information with each gas appliance. Propane is stored in a high-pressure tank in liquid form and is delivered to the appliances in a gaseous form. The propane container(s) must not be placed or stored inside a vehicle. The container(s) are equipped with safety devices that relieve excess pressure by discharging propane to the atmosphere.

#### BTU'S

One gallon of propane produces approximately 91,502 BTU's. Using the BTU rating of each gas appliance in your RV, you can determine about how long your supply will last according to your usage. Dual 5 gallon propane bottles hold approximately 862,026 BTU's

#### **SAFETY PRECAUTIONS**

Propane is of course highly flammable and also heavier than air. It's treated to have a garlic like odor to detect a leak. If a leak should occur, the propane can collect in pockets along the floor and thereby dissipate the air. If unnoticed, this could result in suffocation or an explosion.

#### **USING PROPANE SYSTEM**

It is normal to have a slight gas odor when initially opening the outlet valve. Fully open and seat valve by hand only to prevent leakage past the valve stem. If an odor seems to linger perform a leak test. Keep outlet valves closed when not using the propane system. Do not attempt to adjust the regulator. The manufacturer has preset it. If any adjustment is required, a qualified propane service technician using special equipment must make it.

**PROPANE TANKS** are equipped with a two-stage automatic changeover regulator, which transfers propane demand automatically to the second tank when the first tank becomes empty. For proper operation, both outlet valves must be opened. Turn or slide the tank selector knob so it points to the tank you wish to provide service. A small glass window is located on the regulator. A clear or green band will appear in the window indicating that pressure is in the line from the tank. After all propane is used from that tank, the regulator will automatically switch service to the other tank, and a red band will show in the window, with the arrow or slide pointing to the empty tank. The empty tank can be removed for filling without disturbing the gas flow to the camper by rotating or sliding the tank selector to the full tank. The red band will disappear from the window indicating Pressure supply from the full tank.



#### DANGER

#### IF YOU SMELL PROPANE

- 1. Extinguish any open flames, pilot lights and all smoking materials. Do not touch electrical switches. Shut off the propane supply at the tank valve(s) or propane supply connection. Open door and other ventilating openings. Leave the area until odor clears. Have the propane system checked and leakage source corrected before using again.
- **2.** Inspect the entire propane system for leaks or damaged parts before each trip.
- **3.** Never check for leaks with an open flame. Use an approved leak detection solution or a non-ammoniated, non-chlorinated soap solution only. If the leak cannot be located, have the system checked by qualified personnel.
- **4.** Always be careful when drilling holes or fastening objects to the camper. A nail or screw could puncture the propane supply lines.
- **5.** Do not restrict access to propane tanks. In an emergency, the tank service valve must be easily accessible. Do not store items or block ventilation openings in the propane compartment.
- **6.** Do not use any propane tanks other than those furnished with your camper. Turn off main propane valve and individually turn off all propane appliances or electrically disconnect automatic ignition appliances before entering propane bulk plant or motor fuel service station. When not individually turned off, automatic ignition appliances may continue to spark. Do not fill propane containers to more than 80% capacity. Overfilling can result in uncontrolled propane flow that can cause fire and explosion. A properly filled container holds about 80% of its volume as liquid.
- **7.** Propane regulators must always be installed with the diaphragm vent facing downward within 45° of vertical to minimize vent blockage that could result in excessive propane pressure causing fire or explosion.
- **8.** Do not use a wrench or pliers to close the service valve. This valve is designed to be closed leak tight by hand. If a tool is required to stop a leak, the valve probably needs repair or replacement.
- **9.** When attaching the hose connector to the valve, don't force, jam or cross-thread the fitting. Always check fitting for leaks after tightening.
- **10.** Be sure the tanks are securely fastened whenever they are mounted on the camper.
- 11. Go to a Chalet dealer for any propane system repairs.
- **12.** Always think safety.

#### PROPANE AT LOW TEMPERATURES

Propane systems can and do freeze up in very cold weather. It is a common misconception that the regulator or the propane itself freezes. Actually, it is moisture or water vapor that gets trapped in the system or absorbed by the propane that freezes and causes the problem. Where does the water come from? From a variety of sources. The propane can be saturated with water when it comes out of the gas plant or refinery unless care is taken to see that it is thoroughly dehydrated. The propane can absorb water while it is transported if the tank cars contain water; or the propane storage tanks may have water in them because moist air has been trapped in the tank because a valve was left open.

When this water freezes, the ice can build-up and partially or totally block the propane supply. There are a number of things you can do to prevent this freeze up.



- **1.** Be sure the propane tank is totally moisture-free before it is filled.
- **2.** Be sure the tank is not overfilled. This is also a safety consideration.
- **3.** Keep the valves on empty tanks closed.
- **4.** Have the gas tanks purged by the propane service station if freeze-up occurs.
- **5.** Have the propane service station inject an approved antifreeze or de icer into the tank(s).
- **6.** Be sure you have the proper propane blend for your traveling area. If you have the proper propane blend, it is very unlikely that the propane is at fault.

If, despite precautions, you do experience freeze-up, try melting the ice by warming the regulator with a cloth soaked in warm water if available or regular tap water. DO NOT USE AN OPEN FLAME. If the problem persists, ask your propane supplier to service the tank or regulator as required.

## **APPLIANCES**

Follow the operating and maintenance instructions supplied by the appliance manufacturer for safe and dependable use. The following information is supplied as only a supplement to that provided with each appliance. If you have a problem, see your local Chalet service center or call the appliance manufacturer.

#### LIGHTING PROPANE APPLIANCES

**NOTE:** New propane tanks or empty tanks that have been sitting with the valve open for a period of time must be purged of air and moisture prior to filling. Air trapped in the propane lines may delay the initial lighting of any appliance. It could take several seconds or minutes for the propane to reach the appliance. To purge some of the air from the propane system, first light a burner on the range. The other appliances will then light more quickly.

The first time the furnace or oven is operated, paints and oils used in manufacturing may generate some smoke and fumes. If this occurs, open doors and windows to air out the RV. These materials should burn off in a short time. Always follow the appliance manufacturer's lighting and operating instructions.

#### REFRIGERATOR

The refrigerator operates on 120-volt AC power, propane and on 12-volt DC (if equipped). The operating instructions supplied in the Owner's Information Package will help you with detailed information from the manufacturer. recreational vehicle propane type refrigerator operates on the "absorption" principle and therefore must be reasonably level. When your trailer is stationary, it should be leveled for comfortable living. If you can occupy the trailer comfortably, the refrigerator unit should perform well. If the refrigerator unit is not "close to level", it may not function properly and your food will not be adequately cooled. When the RV is in motion, the continuous movement will not affect operation. The operating instructions are printed inside near the controls and may be found in the manufacturer's instructions manual.

#### **OPERATING TIPS**

Operate the refrigerator on 120-volts for 8 to 12 hours (overnight) before you leave on a trip. This will allow the refrigerator and freezer to get cold and

even have some ice ready. Pre-cool food and drinks before putting them into the camper refrigerator. For off-truck use, some refrigerator models must have 12-volt battery hookup to power the electronic controls. Refer to the supplied appliance manuals for proper operating instructions.

#### **RANGE**

The gas burners and oven use propane gas for fuel. Operation is similar to the range in your home. However, cook temperatures will vary from home ranges depending on the altitude. The three (3) burner range is equipped with one (front) high output burner when additional heat is needed. For additional information, please refer to the operating manual supplied in your Owner's Information Package. Before turning on the main propane supply, be sure all burner control knobs are in the "OFF" position. It is not safe to use cooking appliances for comfort heating. Do not use open flames to warm the living area.

# Cooking appliances need fresh air for safe operation.

Before operation:

- 1. Open overhead vent or turn on exhaust fan.
- 2. Open window.

A warning label above 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 appliance(s) will avoid danger 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. Never use portable fuel-burning equipment, including wood and charcoal grills and stoves inside the vehicle because a fire or explosion may result.

#### WATER HEATER (if equipped)

Your RV may be equipped with a fully electronic water heater, which has no pilot light, simply turn ON the water heater switch. The water heater will cycle on and off as needed. If the water heater fails to ignite, a red light on the panel will appear. Check to make sure you have adequate gas and battery supply. Move switch off and back on again.

#### WATER HEATER CONTINUED

Do not operate the water heater until it is filled with water. Turn on the hot water at the galley sink, and when water flows continuously the heater is full. Occasionally you may experience "weeping" of the pressure/temperature relief valve. This is normal operation. It is caused by the normal expansion of the water while being heated. The tank is designed with an internal air gap at the top to reduce this weeping phenomenon. In time, though, the heating and expansion of the water will absorb this air. To replace the air and reduce relief valve weeping: Wait until the water in the heater tank is cool before performing the following steps.

- 1. Turn off the water heater.
- 2. Turn off incoming water supply.
- 3. Open a faucet in the camper.
- 4. Pull the handle of the relief valve straight out and let water flow until its stops.
- 5. Release the relief valve handle and let the valve snap shut.
- 6. Turn on the water supply.
- 7. Close the faucet when water flows continuously without sputtering.
- 8. Turn on the water heater.

These procedures will re-establish the air pocket at the top of the tank. If the relief valve weeps again, repeat the above procedure.

**CAUTION:** Do not plug the pressure-temperature relief valve under any circumstances. If the water heater will be "out of service" for some time, it should be drained. See "Storage" chapter for more information. When using hot water faucets in the trailer for the first time after heating water, open the valve slowly to reduce water splattering from pressure build up.

#### **FORCED AIR FURNACE** (Automatic Ignition)

The furnace is a forced air unit fueled by propane and electronically powered by 12-volts. A wall-mounted thermostat similar to those used in homes controls it. To start the furnace, set thermostat switch to the ON position and set desired temperature. The furnace will cycle on and off as needed. To stop the furnace, set the thermostat to lowest setting and the Off position. If your furnace does not operate properly, check the battery condition and propane supply.

**CAUTION**: The furnace will not operate properly if your stored personal items block the free flow of air at the registers or return air to the furnace. The operating manual included in your Owner's Information Package detailed operating and contains maintenance instructions. During the initial lighting of a furnace, smoke and fumes may be created as a result of the burning off of manufacturing compounds. This is normal, however, the initial lighting should be done with windows and doors open and should be of adequate duration to completely burn off residue. Portable propane appliances are not safe for heating inside the camper. Asphyxiation or carbon monoxide poisoning can occur.

#### **AIR CONDITIONER** (if equipped)

The Air Conditioner operates on 120-volt power, which is supplied through the 30-amp power cord from an outside 120-volt power service. The factory installed air conditioner is a high efficiency, power saver unit. The air conditioner will provide cooled air for your comfort. However, it is the largest single load of electrical usage. It is important to manage your electrical usage when you have either an air conditioner or microwave oven installed or both.

- **1.** Be sure air conditioner is OFF before connecting electricity.
- **2.** When the air conditioner has been shut down, wait at least five minutes before restarting.
- **3.** Do not operate without a filter installed.

Helpful Notes for Using the Air Conditioner:

Keep window curtains closed.

Use kitchen vent fan when cooking.

Air conditioning removes moisture from the air and it is normal to have water discharge. Experience has shown that some RV parks may experience reduced power (low voltage) on days with high heat or humidity, commonly referred to as a "brown out". This condition may result in the air conditioner circuit breaker tripping in your power distribution center. This protects your air conditioner motor from damage and is necessary during low voltage conditions. This breaker tripping is sometimes perceived as a fault in your trailer, but it is a necessary "safety valve".



## FURNACE/COOL KAT THERMOSTAT

The wall-mounted combination thermostat will operate either the furnace or air conditioner from one location. The operating instructions included in your Owner's Information Package contain detailed operating and maintenance instructions.

### FRESH WATER SYSTEM

Your RV is outfitted with a system designed to provide fresh (potable) water service from an onboard water tank or a city water connection with a fresh water tank fill located on the outside of the trailer. When connecting to the city water hookup, use only a non-toxic water hose, available at most RV supply stores. Since water pressures at campgrounds and household hookups vary, you should install an inline pressure regulator at the water supply faucet. This will protect both the RV water system and supply hose from excessively high water pressure.



**CAUTION:** The pump is not equipped with a dry tank shut-off switch. Turn the pump switch OFF if water in tank becomes depleted or when system is not in use.

The pump operates when water pressure within outlet plumbing drops below a predetermined pressure. A drop in pressure occurs when a faucet or a toilet valve is opened. When the faucet is closed the pump shuts off as soon as the system is re-pressurized.

Turn the pump ON to pressurize the water system. When the faucet is opened, the water may sputter for a few seconds. This is normal and no cause for alarm. The water flow will become steady when all air is bled from the water lines. If a faucet is open slightly, allowing water to flow slowly, the pump may pressurize the plumbing faster than the water is released, causing the pump to cycle on and off.

A built-in check valve prevents back flow and protects the pump and fresh water tank from

excessive city water system pressures. The pump operates at 2.8 GPM and 45 PSI. At free flow the pump draws approximately 4 amps. A fuse located in the power center protects the water pump circuit.

When traveling, always turn OFF the water pump.

This will reduce the possibility of water flowing during travel. If the pump cycles on and off when no water is being used, you may have a partly open faucet, a leak in the water system or an empty water tank.

Never attempt to service the pump without first turning off the power and opening all faucets to relieve pressure in the water system. Consult the installation and operation manual for full details in the Owner's Information Package.

#### WATER TANK FILL

The fresh water system should be sanitized at the initial filling, after a period of storage or if contaminated.

Fill tank slowly. Do not overfill. Do not leave unattended while filling. Structure damage may occur.

#### Filling the fresh water tank:

- **1.** Close water tank drain petcock located on the outside of the water tank.
- **2.** Remove cap on fresh water fill inlet.
- 3. Using a 3/8" hose adapter, fill the water tank through the exterior fill spout slowly at a low volume until water overflows out the vent. Do not force water into spout since air in the tank must be released during filling. Do not put the potable water hose into the mouth of the fill use a 3/8" Plastic Hose Adapter For Filling Water Tank
- **4.** Set pump control switch to ON.
- **5.** Open each faucet one by one until water flows evenly, and no air bubbles are evident.
- **6.** Top off water tank through the exterior fill spout to replace water used in filling the water heater and purging the water lines of air.
- 7. Replace cap

#### CITY WATER INLET

It's a good idea to purchase a pressure regulator to protect your RV from possible damage due to excessive water pressure. To supply city water to your trailer's water system and bypass the water pump:

- **1.** Attach a potable water hose to the exterior city water inlet connection.
- **2.** Pump switch should remain in OFF position.

#### **WATER SYSTEM DRAIN**

The water system should be drained if it will be out of service for more than one week. This will prevent algae and bacteria contamination of your fresh water system.

To drain your trailer:

- **1.** The trailer should be level and pump control switch in OFF position.
- **2.** Open all faucets and showerheads.
- **3.** Open water tank drain valve located in rear basement.
- **4.** Open water line low point drains located in rear basement.
- **5.** Open water heater drain and relief valves.



POTABLE WATER ONLY. SANITIZE, FLUSH AND DRAIN BEFORE USING. SEE INSTRUCTION MANUAL. FAILURE TO COMPLY COULD RESULT IN DEATH OR SERIOUS INJURY

#### SANITIZING FRESH WATER SYSTEM

Sanitize the fresh water system and piping at initial use, at least once a year and whenever the RV sits for a prolonged period. This will help keep the tank and lines fresh and will discourage the growth of bacteria and other organisms that can contaminate the water supply. Rinse the tank with a chlorine/fresh water solution as follow:

- 1. Drain water system.
- **2.** Prepare a chlorine solution with one gallon of water and 1/4 cup household bleach.
- **3.** Pour one gallon of solution for each 15 gallons of tank capacity into fill spout.
- 4. Fill tank with fresh water.

**3.** Open each faucet until water flows evenly.



- **5.** Open each faucet and water heater relief valve until water flows evenly.
- **6.** Set pump switch to OFF.
- **7.** Allow solution to stand for 3 hours.
- 8. Drain and flush with fresh water.
- **9.** To remove any chlorine taste or odor, fill tank with one-quart vinegar to 5 gallons water. Allow solution to remain in tank several days if possible.
- 10. Drain and flush with fresh water.

#### **SHOWER** (if equipped)

The showerhead is removable for hand-held use and equipped with a water flow control device to allow you to conserve water while showering. After showering, there may be some water discharge at the sink faucet. This water is draining from the shower hose through an anti-siphon valve in the faucet and is normal.

**NOTE:** For your protection, this faucet is equipped with a vacuum breaker (backflow preventer) to prevent contamination of your potable water supply. The water in the handheld shower hose will drain through this vacuum breaker when the faucet is turned OFF. This is not a leak. This drainage is inherent in the design of the vacuum breaker, and is evidence that it is functioning. Due to design precautions, hand held shower heads, when in the "hold" position must have a built-in leak rate of not less than 1 gallon per 30 minutes of time. This leakage is not a defect but is an attempt to reduce the possibility of scalding accidents due to temperature changes from fluctuating water pressure.

# WASTE SYSTEM (if equipped)

The waste holding system in your RV is made up of sinks, shower, toilet plumbing drain and vent lines, "gray water" holding tank. , and "black water" holding tank. The holding tanks make the system completely self-contained and allow you to dispose of wastewater at your convenience. A flexible sewer hose is required to connect the holding tank outlet to the inlet of an approved wastewater dump station or sewer system. The holding tanks are made of seamless plastic that will not corrode. On most units with dual tanks, one retains toilet waste and the other retains liquid waste from the sinks and shower. Drain all wastes at an approved site.

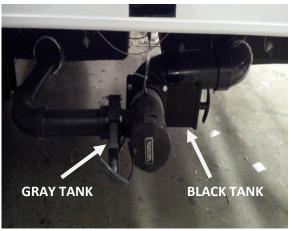
#### FRESH WATER FLUSH TOILET

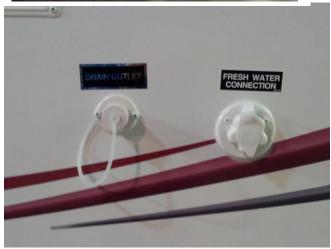
Your camper is equipped with a marine-type recreational vehicle toilet. This toilet is especially designed to operate with a minimum of water usage. The flushing mechanism allows a valve in the bottom of the bowl to open, permitting the contents to be flushed into the holding tank below. A stream of water under pressure from the camper's water system swirls around the bowl, cleaning and flushing the contents. Most models have two levers, each working independently of the other so the bowl can be filled with water prior to use. For additional information, please refer to the operating manual supplied with the toilet.

**NOTE:** The toilet requires a water supply for proper use. This can be from either a city water hookup, if available, or from the on board fresh water tank supply. The 12-volt water pump switch must be in the "ON" position when using water from the tank.

#### **BLACK WATER HOLDING TANK**

This holding tank must be primed with 2 gallons of water and one odor control chemical package at each initial use. Add more odor control chemical if needed until dumping is required. Refer to the chemical package available at most RV outlets for specific instructions.





#### **DUMPING THE HOLDING TANKS**

The holding tanks terminate in a valve arrangement that permits each tank to be dumped separately or together. During selfcontainment use, the sewer outlet line should be securely capped and valves closed to prevent leakage of waste material on the ground or pavement. Holding tanks are enclosed sewer systems and as such must be drained into an approved dump station. Both black and gray water holding tanks must be drained and thoroughly rinsed to prevent accumulation of harmful or toxic materials. Dump the holding tanks only when they are about 2/3 full. If necessary, fill the tanks with water to 2/3 full. This provides sufficient water to ensure complete flushing of waste material into the sewer line.

Whenever possible, dump the holding tanks before traveling. The holding tank outlet is set up to be used with are movable fitting that locks onto the outlet with a clockwise twist. The sewer drain hose is clamped on this fitting when you need to drain the holding tanks. When you are operating self-contained, or you store the camper, install the protective cap in place of the removable hose.

When you want to drain the holding tanks:

- **1.** Attach the sewer hose to the dump outlet.
- 2. Extend the hose and insert the hose end into the sewer or dump station inlet, pushing it firmly into the opening to be secure. In some cases, adapters may be necessary between the hose and inlet.
- **3.** Arrange the sewer hose so it slopes evenly and is supported to maintain the slope.
- **4.** Dump the black water holding tank first.
- **5.** Allow enough time for the tank to drain completely. Rinse and flush the tank and drain hose through the toilet with a bucket of water or a hose.
- **6.** When the tank flow stops, close the valve.
- **7.** Open the grey water holding tank. Repeat steps 4 through 6. This tank is dumped last to aid in flushing the outlet and drain hose.
- **8.** Remove the sewer hose and replace the outlet cap.
- **9.** Rinse out the sewer hose with fresh water and remove the sewer hose from the dump station.
- **10.** Replace sewer or dump station cover(s).
- 11. Store the sewer hose.

**NOTE:** To facilitate draining, the RV should be slightly higher in the front and raise the passenger side of the trailer to drain towards the driver's side. If you are parked at a site with a sewer hookup, keep the black water valve closed to allow the waste level to build up. The outlet will probably clog if you leave the valve open continually. Run enough water into the tank to cover the bottom. This will aid the

breakup of solid wastes. The gray water valve may be left open.

#### HOLDING TANK CARE/MAINTENANCE

Since holding tanks don't rely on any sophisticated mechanical devices for their operation, they are virtually trouble-free. The most common problem is also an unpleasant one, clogging. You can minimize chances of clogging by keeping the following considerations in mind:

- Keep the black water tank valve closed. Be sure to cover the tank bottom with water after dumping.
- Movement while driving will help liquefy the solids
- Use only toilet tissue formulated for use in septic tank or RV sanitation systems.
- Keep both valves closed, and the drain cap tightly in place when using the system on the road.
- Use only cleaners that are approved for use in septic tank or RV sanitation systems.
- Use a special holding tank deodorant chemical approved for septic tank systems in the black and gray water holding tanks. These chemicals aid the breakdown of waste and make the system much more pleasant to use.
- Do not put facial tissue, paper, grease, ethylene glycol-based or other automotive antifreeze, sanitary napkins or household toilet cleaners in the holding tanks.
- Do not put anything solid in either tank that could scratch or puncture the tank.

#### If the drain system does get clogged:

Use a hand-operated probe to loosen stubborn accumulations. Seriously clogged P-traps may require disassembly. Be careful not to over tighten when reassembling. Do not use harsh household drain cleaners. Do not use motorized drain augers. Sometimes the holding tank valve will get clogged. In this case, a hand-operated auger may be necessary. Be ready to close the valve quickly once the clog is cleared. If the seal gets damaged, it must be replaced.

## **GENERAL MAINTENANCE**

This section explains why it is important to keep your RV well maintained, how to preserve the appearance of the exterior and interior and to follow basic maintenance safety precautions. Also included are several things you can do to help prevent corrosion. This section also includes Maintenance Schedules for when service should be performed on your trailer and instructions for simple maintenance tasks you may want to take care of yourself. Regularly maintaining your trailer is the best way to protect your investment. Proper maintenance is essential to your safety and will also reward you with many years of trouble-free use of your trailer.

The Maintenance Schedules specifies how often you should have your RV serviced and what things need attention. It is essential that you have your trailer serviced as scheduled to retain its high level of safety and dependability.

#### **EXTERIOR MAINTENANCE**

Some exterior parts of your RV are made of fiberglass, metal, rubber and plastic materials. The finish on these parts is durable, but not indestructible. Any material and finish will deteriorate over time. Exposure to sunlight, moisture, and airborne pollutants can chemically alter the composition of the base and finish materials and cause dulling and fading of the finish. Generally, changes in the finish due to weathering are cosmetic. They are on the surface of the part and do not affect its strength. The best insurance against these effects is routine maintenance. If the finish is not washed thoroughly and waxed, the surface can deteriorate very rapidly. The following guidelines can help you reduce these weathering effects:

Wash the exterior at least once a month using a mild liquid detergent. Never use strong abrasives to clean the exterior surfaces. Wash your RV in a shady area, not in direct sunlight. If the camper is parked in the sun, move it into the shade and let the exterior cool down before you start. Chemical solvents and strong cleaners can damage the siding, roofing, metal and plastic trims on your trailer. Rinse the RV thoroughly with cool water to remove loose

dirt. Fill a bucket with cool water. Mix in a mild detergent, such as dishwashing liquid or a product made especially for auto or RV washing. Wash the trailer using the water and mild detergent solution and a soft-bristle brush, sponge, or soft cloth. Start at the top and work your way down. Rinse frequently. Check the surface for road tar, tree sap, etc. Remove these stains with tar remover or turpentine. Rinse it off immediately so it does not harm the finish. Remember to re-wax these areas, even if the rest of the RV does not need waxing. When you have washed and rinsed the whole exterior, dry it with a chamois or soft towel. Letting it air-dry will cause dulling and water spots. As you dry your trailer, inspect around the seals and repair as necessary.

Wax the exterior at least once a year, preferably twice. Use automotive waxes or cleaners/polishes developed for use on fiberglass boats, showers and tubs. Be sure to follow the directions on the wax container. Some cleaners and waxes are recommended for use on only certain types of surfaces. Exterior streaking is reduced with more frequent waxing.

Do not use abrasive cleaners or rubbing compounds. Always wash and dry the whole RV before waxing it. Rubbing alcohol can be used on caulking that show signs of yellowing.

You should clean your RV at least four (4) times a year. For normal cleaning use a mild liquid detergent and water mixture, with a soft nylon brush or sponge. Do not use solid or granulated cleaners, as they will mar the finish. For more difficult stains, use a cloth dampened with mineral spirits.

#### **EXTERIOR GRAPHICS**

The pressure sensitive vinyl graphics installed on the exterior surface of your RV require little maintenance and should be treated similarly to a painted surface. The following cleaning and maintenance recommendations should be followed to ensure the maximum appearance and performance of your exterior graphics.

Wash your graphics with the same solution as noted above for washing the exterior of your RV. Be sure to rinse thoroughly.

Test any cleaning solution on a small section of the graphic before using the cleaning solution on a larger surface. A non-abrasive cleaner, suitable for high quality painted surfaces, is recommended. The cleaning solution should be neither high acidic nor highly alkaline; a pH range of 3 to 11 is recommended. The cleaning solution should be free of strong solvents or alcohol. Avoid contact of window cleaners that contain ammonia.

#### DAMAGE CHECKS

It is important to periodically check the exterior for damage. Pay particular attention to the following areas:

- Waste tanks and plumbing lines.
- Propane tanks and assembly.
- •Sealant around doors, roof, vents and windows.
- Exterior lighting.

#### **SEALANT RENEWAL**

## Only Covered Under Warranty for the first 90 days The adhesives and sealants used in the construction of your RV were developed to remain waterproof under sustained effects of weather and vibration. However, even the finest materials will eventually dry out and lose their effectiveness under the constant heat of the sun. attack by other elements and road vibration. This section outlines the procedures that you must follow to maintain the weather-resistant integrity of you camper. Leak damage caused by neglecting to follow these procedures may affect your warranty. Your dealer can perform the resealing inspection and work for you, and has current information on sealants used in your trailer and can recommend the appropriate

sealants if you prefer to do this work yourself. Always use the recommended sealants. To protect your RV from possible water intrusion damage, your unit should be inspected thoroughly and resealed bi-annually. Inspect the sealant around the roof moldings, windows and doors at least every six months. If any of the following are evident during inspection, the affected areas must be resealed:

- Weathering or drying of sealant.
- · Sealant cracked or peeling.
- Voids in sealant.
- Shrunken or separated sealant.
- Clean all areas to be resealed with mineral spirits.

Make sure that all areas to be resealed are absolutely dry before new sealant is applied. Mineral spirits is a flammable liquid. Use extreme care when handling. Do not expose to open flame, sparks, or smoking materials. Do not use in unventilated areas. If areas on the roof need to be resealed, remove any loose or cracked sealant being careful not to damage the roof. Use a wooden or plastic scraper that will not can be cut or punctured by sharp objects. Apply the new sealant in a continuous bead along the seams and flanges, being careful not to leave any voids. Apply enough sealant to flow over the heads of all fasteners. Allow at least 48 hours for the sealant to set completely (firm and tack-free when pushed with the thumb) before washing or waxing the camper.

#### **SKYLIGHTS**

Wash the skylight with a mild soap or detergent and lukewarm water using a clean sponge or soft cloth. Rinse well with clean water. Dry thoroughly with a chamois or moist cellulose sponge to prevent water spots. Do not scrub or use brushes on your skylights.

- DO NOT use abrasive or highly alkaline cleaners on this skylight
- NEVER scrape skylight with squeegees, razor blades or other sharp instruments
- NEVER use benzene, gasoline, acetone or carbon tetrachloride on skylight
- DO NOT clean skylight in hot sun or at elevated temperatures
- DO NOT use products containing butyl cello solve on the skylight

Care and cleaning: Majestic recommends the use of Novus 2 products to clean, polish, and protects your skylight. Novus also makes products to remove shallow scratches and improve overall skylight appearance. Novus products can be ordered on line at www.novuspolish.com

**Note:** For more information regarding your skylight see the data sheet included in your appliance packet or visit the Majestic web site www.majesticformedplastics.com

#### WHEEL LUGS

Because of the possibility that a wheel lugs could work loose, it is important that you check your wheel lugs every 50 miles when new until 200 miles is reached and then check lugs every 500 miles. The wheel lugs should also be checked after winter storage, before starting a trip, or following extensive braking. Also be sure to check the wheel lugs after changing a tire. Over-tightening can distort the wheel.

#### DOORS AND WINDOWS

Lubricate door hinges, locks and window mechanisms periodically with powdered

graphite. Clean window frames and tracks to ensure easy operation. Clean the glass windows, inside and out, with a commercially available glass cleaner. You can also use a mixture of one part white vinegar to ten parts water. This will remove the haze that builds up on the inside of the glass windows. Use a soft cloth or paper towels to clean all glass. Clean the seals with a damp cloth or mild detergent every three to six months, taking care not to use strong solvents, as they will damage the seals. A coat of natural silicone lubricant applied after the seal has dried will keep it flexible. This is a good practice for all the rubber seals in your RV. If the RV is exposed to salt air, more frequent lubrication will be required.

#### **OVERHEAD VENTS**

The vents can be cleaned from the top of the RV. Use soapy water on the vent cover. The screens may be vacuumed or lightly brushed to remove accumulation of leaves or other debris. Lubricate the gears and mechanisms yearly with a light, water resistant grease.

#### WIRING

Make sure the connector-plug prongs and receptacles are clean. Lightly coat all electrical terminal connections with non-conducting (dielectric), light waterproof grease.

Clean the prongs with very fine sandpaper, being careful not to damage the contact area.

#### LIGHTS, EXTERIOR

Check the operation of your RV's exterior lights prior to each trip. This also includes your trailer's lighting. A burned out bulb can create an unsafe condition by reducing your ability to signal your intentions to other drivers. When replacing exterior bulbs, take care that the sealant around the light fixture is not disturbed. This can cause a potential

water leak.

#### INTERIOR MAINTENANCE

#### INTERIOR ODOR

New RV's may have a strong odor and even cause eye irritation when closed up in hot weather. This is due to glues used in the cabinetry and paneling. This condition passes with time but in an extreme condition open the entry door and all windows and allow the inside to air out for several hours.

#### UPHOLSTERY AND DRAPES

Draperies, mattress covers, upholstery and wall pads are manufactured from quality materials and should be dry cleaned only. Some dry cleaning methods will damage vinyl or plastic found on cushions and drapes. Be sure to consult vour local cleaners. Frequent vacuuming or light brushes between cleanings will help prevent accumulation of dirt and grime. Use of water based or detergent based cleaners may cause shrinking. Water stains may become permanent. Minor spills should be cleaned up quickly to avoid staining. The affected area should be blotted, not rubbed, to prevent the stain from working deeper into the fabric. On vinyl upholstery, remove dirt and dust with a vacuum cleaner. Wipe the vinyl with a soft cloth and dampen in a solution of mild soap and water. Use the same solution with a soft-bristle brush on more difficult spots. You can also use commercially-available spray or foam-type vinyl cleaners.

**WARNING** Do not use lacquer thinner, nail polish remover, carbon tetrachloride, gasoline, or naphtha for any cleaning purpose. These products may cause damage to the material being cleaned, and are highly flammable or poisonous.

#### WALL AND CEILING PANELS

The paneling and ceiling of your RV may be any of several finishes and textures. Never use harsh detergents or abrasive cleaners on walls or ceilings. Most surfaces will clean with a soft cloth moistened with mild liquid detergent in warm water. Do not use large amounts of water, which could saturate the material.

#### FLOORS AND CARPETING

Vinyl flooring requires only washing and periodic waxing. Vacuum the carpeting frequently to remove dirt. Ground-in dirt will make the carpet wear our faster. Periodically shampoo the carpet to keep it looking new. Use one of the foam-type carpet cleaners on the market. Follow the instructions that come with the cleaner, applying it with a sponge or soft brush. Keep the carpeting as dry as possible.

#### WOOD PRODUCT CARE

Remove dust with a clean slightly damp cloth. Apply a quality furniture polish and buff with a soft, dry cloth. Never use harsh detergents and solvents.

#### LAMINATE TOP CARE

Use a mild dishwashing liquid with warm water to clean your laminate tops. Use a soft cloth for both washing and drying. Abrasive cleaners, steel wool or gritty cleaners will damage the surface.

#### REFRIGERATOR

Clean interior with mild soap and water after each trip. Defrost freezer and empty ice trays. When defrosting, be sure that the drip tray is in place under the finned evaporator - defrost water will be carried through a tube from the drip tray to the bottom of the camper overhang below the refrigerator. Periodically check the drain tube to assure it does not become plugged. Leave the door open after cleaning.

#### **DRAINS**

If a stoppage develops in the sink or shower drain, DO NOT use lye or any strong chemicals. Strong chemicals can harm the plastic in your waste system. A standard wire drain cleaner is recommended.

#### **SHOWER CARE**

For routine cleaning use a non-abrasive cleaner. Never use harsh detergents or abrasive cleaners Never use a razor blade or steel wool to clean the surfaces.

#### **SINK CARE**

- Do not use abrasive cleaners or scouring powders. Use of abrasive cleaners will dull or damage the surface of this product and could leave scratches.
- Do not use scouring pads, steel wool, "scotch brite" type scratch pads, or any

other abrasive scrubbers. Wipe only with a soft cloth or sponge. Always use a cutting board or a sink protector when using knives or sharp objects. It is recommended that you use protective mats, racks, or dishpans to help protect your sink. Always allow pans to cool before setting them in your sink.

# MAINTENANCE CHART

Service to be performed

Inspect wiring, connector plug & receptacles

Check exterior lighting

Inspect exterior sealant

Inspect propane system compartment for leaks and kinked lines

Test propane leak detector for proper operation

Check smoke detector operation

Check carbon monoxide detector operation

Check fire extinguisher

Inspect/clean battery cables, terminals and tighten wing nuts

Check battery charge (in storage)

Check battery electrolyte (in use)

Test GFCI

Wash exterior

Inspect sealants (required maintenance)

Inspect compartment and access doors, moldings and window seals

Inspect all hot, cold and drain plumbing

Sanitize fresh water tank

Complete propane pressure check & system check

Wax exterior

Clean & lube overhead vents

Lube locks, hinges and hardware

Replace smoke detector battery

START OF	BEFORE USE	MONTHLY
EACH TRIP	OR WEEKLY	
Х		
^		
Х		
	X	
	.,	
	Х	
	X	
	V	
	Х	
		Х
		,
		Х
		X
		Χ
		Х
		Λ
		Х
		X
EVEDV 6	44141114	
EVERY 6	ANNUALLY OR	
MONTHS	AFTER	
	STORAGE	
X		
X		
Х		
	Х	
	^	
	Х	
	X	
	X	
	Х	
	X	
	^	

# WINTERIZATION AND STORAGE

#### **OPERATING IN FREEZING CONDITIONS**

If water freezes inside the system, it can damage piping and equipment. Keeping the interior warm will aid in preventing water in the storage tank, pump and piping from freezing. Open inside cabinets and allow warm air to circulate over the water system components. Add nontoxic anti-freeze to the holding tank(s). Refer to instructions that came with the anti-freeze. Install a winter cover on the air conditioner. Propane for the appliances will work down to 44 degrees below zero (-44°). The sliding windows have weep holes, which drain water from the window tracks. In heavy rain and wind, water could be blown into the RV through these holes. Put a piece of sponge in the track over the hole to prevent this from occurring.

#### **STORAGE**

The following checklists will help you perform the steps necessary to prepare your RV for storage. Use the checklist that applies to the storage conditions you anticipate. These checklists do not include every detail required, and you may want to expand them to suit your needs.

# **SHORT-TERM STORAGE**(Less than 45 days - Above Freezing)

- **1.** Wash the exterior.
- **2.** Park the trailer as level as possible side to side. Front should be raised higher than the rear to encourage water to run off and not pool around rear roof seal and or skylights.
- **3.** Before disconnecting the battery cables, check the charge in the battery. Recharge as necessary. Clean terminals, top and sides of battery and battery box. Leave the battery disconnected.
- **4.** Drain the holding tanks, toilet, and fresh water tank. Turn off the water pump and water heater.
- **5.** Turn off the propane at tank valve.
- **6.** Turn off the refrigerator, furnace, all range and oven burner valves and pilot.
- **7.** Remove all perishables from refrigerator and galley cabinets. Leave the refrigerator door open to reduce odor buildup. An open box or tray of baking soda in the refrigerator will help absorb odors.

- **8.** Slightly open (1/4") a roof vent.
- **9.** Close and lock all windows. Be sure the vent fan and range hood fan switches are off.
- **10.** Cap and close the holding tank drain, city water inlet and fresh water fill spout.
- **11.** Turn off all radios, TV's, interior and exterior lights.
- 12. Close the mini blinds and day/night shades
- 13. Check the RV weekly

#### **LONG-TERM STORAGE** - Above Freezing

- 1. Perform all the preceding short-term storage steps.
- **2.** Operate air conditioner periodically to lubricate compressor seals.
- **3.** Remove and place the battery in a cool, dry area. Check the battery charge every 30 days. Recharge as necessary.
- **4.** Check the sealants around all roof seams, body seams and windows. Reseal if necessary.
- **5.** Remove the smoke detector's battery. Leave the cover open as a reminder to replace the battery.
- **6.** Cover exterior vents; water heater, furnace, air conditioner shroud, range hood, refer, to prevent insects and small animals from getting in the camper. Be sure to remove all covering materials before using appliances and vents.

#### STORAGE BELOW FREEZING

To avoid damage to the plumbing fixtures and other components, we recommend that your RV plumbing systems be properly drained and have antifreeze protection. The following is a procedure checklist you can follow if you prefer to winterize your camper yourself. Many owners prefer to have RV Service Center perform this service.

- **1.** Perform all steps in the short and long term storage procedures.
- **2.** Drain the fresh water tank by opening the water tank drain and leave open.
- **3.** Turn the water pump ON and open all hot and cold water faucets. When the flow of water stops, turn the pump OFF. Open the low point drains on the hot and cold water pipes.
- **4.** Drain the water heater by opening the drain plug at the bottom of the heater and open the pressure relief valve.
- **5.** Depress the toilet flush pedal or hand-operated lever. Shut OFF all faucets, close the water line

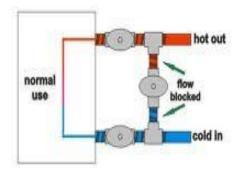
#### WINTERIZING

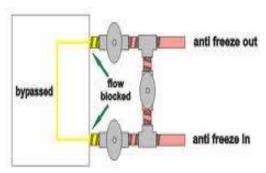
- **1.** Make sure the water pump switch is off.
- **2.** Insert the hose from the winterizing valve (if equipped) into a container of RV approved nontoxic anti-freeze.
- **3.** Turn the water heater bypass valve to Bypass Position (if equipped) and drain the water heater by removing the drain plug and opening the safety relief valve. Open faucets to relieve pressure. (Hot and Cold) Open the hot and cold low point drains.
- **4.** Drain the water tank by opening the tank drain and leave open to drain completely.
- **5.** After the system is completely drained, close all faucets and turn off the low point drain valves.
- **6.** Turn the winterize valve to "Winterize" position.
- 7. Turn ON the water pump switch.
- **8.** Open the hot water faucet farthest from the water tank. When antifreeze appears, let at least one cup run down the drain to winterize the Ptrap. Do the same to all other water outlets, hot and cold, including shower, toilet and outside shower.
- **9.** Turn OFF the pump switch.

- drain valves, fresh water tank drain valve, water heater drain and pressure relief valve.
- **6.** Drain the showerhead and hose by disconnecting the hose at the faucet from the inside and outside shower.
- **7.** Drain the waste water system by following the normal procedure for draining the holding tanks.
- **8.** Be sure ALL water from ALL plumbing has been drained.
- 9. Disconnect the 120-volt power cord .Draining the water system alone will not provide adequate cold weather protection. If the RV is to be unheated during freezing temperatures, consult your dealer for the best winterizing procedure for your climate. Your dealer can supply you with one of the special non-toxic antifreezes that are safe and approved for use in RV water systems. Follow the instructions furnished with the antifreeze. Do not use automotive or windshield washer antifreeze in the trailer water system. These could be harmful if swallowed.
- **10.** Open a water faucet to relieve pressure, and then close.
- 11. The procedure is complete.

#### WATER HEATER BYPASS (if equipped)

The water heater bypass valve is located behind the water heater and is used when winterizing the water system for storage. By rotating the valves to the bypass position, antifreeze will not enter the water heater requiring less antifreeze to protect the water system plumbing.





NOTE: Be sure to drain the water heater by opening the drain plug at the bottom of the heater and open the pressure relief valve.

#### To De-Winterize:

- 1. First fill the water tank.
- **2.** Turn the winterizing valve to normal flow position.
- **3.** Turn the water heater bypass valve to "bypass", this will keep antifreeze from entering the water heater.
- **4.** Turn ON the water pump switch until clear water appears. Shut off the faucet. Do this to all other faucets and the showerhead,
- **5.** Open the water faucet farthest from water tank, catching antifreeze in a container for future use, including outside shower.

- **6.** Turn the water heater bypass valve to normal flow position.
- 7. Open a hot water faucet until water appears.
- **8.** Your system is now ready for use.

#### **STORAGE**

Do not store your trailer under a plastic tarp. A plastic tarp will allow excess moisture and heat to build up and encourage the growth of mold, mildew and dry rot. Excessive heat may also damage your skylights. A breathable cover compatible with polycarbonate skylights may be used but is not recommended.

- It is best to store your trailer in the upright position if possible.
- If the trailer is to be stored in the closed position, use the jack post to elevate the tongue to the highest level. This will encourage water to run off and not pool around the fan, vents and skylights.
- Clean and check all rubber seals. Remove and replace any seals that have become worn out, torn or detached.
- Check silicone seals and fill or replace as needed.
- Check your bungee cords and replace as needed.

You should use a desiccant product to help absorb any excess moisture buildup during storage. If stored in a water proof area such as a garage or storage facility opening the vent and fan a little will encourage air circulation.

#### AFTER STORAGE

#### **OUTSIDE AREA**

- 1. Thoroughly inspect the outside of the camper and open all doors and compartments. Check for animals or insect intrusion, water damage or deterioration.
- **2.** Remove all appliance vents, ceiling vent and air conditioner coverings. Be sure all furnace, water heater, and refrigerator openings are clear and free of debris or insect nests, webs, etc.
- 3. Open vents and windows.

#### FRESH WATER SYSTEM

- **1.** If the fresh water system has been winterized, drain the antifreeze from fresh water system.
- **2.** Turn the water pump on and open all faucets until flow of antifreeze stops.
- **3.** Do not let antifreeze stand on plastic sinks or outside shower components or stains may occur.
- **4.** Open the water heater bypass valves.
- **5.** Flush and sanitize the fresh water system as outlined in the "Fresh Water System" section.
- **6.** Operate all faucets and fixtures in the fresh water system. Check for leaks at all joints and fittings.

#### PROPANE SYSTEM

- **1.** Turn on propane valves and inspect all pipes and fittings in the propane system. Check for leaks.
- **2.** Operate each propane appliance. Observe all burners and pilot flames for proper color and size. If there are any problems, refer to an authorized Chalet Service Center.

#### **GENERAL**

- 1. Install new 9-volt battery in smoke detector and remote control for electric jacks.
- **2.** Check the monitor panel operation.
- 3. Open and operate vents and vent fans.

#### **MAINTENANCE**

- **1.** Check the sealant around all roof, body seams, and windows. Reseal if necessary.
- 2. Lubricate all exterior locks, hinges and latches.
- **3.** Wash and wax the exterior. Inspect the body for scratches or other damage. Touch-up or repair as necessary.

#### **HOW TO OPEN YOUR CHALET RV**

1. Release the two white roof latches, one on each side of the trailer standing on the door side rear, raise the roof.









- 2. Lower the step
- 3. Open the lower entry door and fold the upper entry door back against the A-Wall. Raise the door side A-Wall carefully and secure to the roof with the A-Wall latches (Located on the inside of the trailer).





- 4. Raise the off door side A-Wall in the same manner securing to the roof with the A-Wall latches
- 5. Engage the sash lock between the upper and lower entry doors.

#### **HOW TO CLOSE YOUR CHALET**

Open the entry door and disconnect the sash lock between the upper and lower entry doors. Failure to unlatch the entry door may result in damaged or misalignment of the entry door.

- **1.** Store all tables in the down position. Be sure the counter tops are clear of all personal items and the folding faucet is in the down position.
- **2.** Disengage the Awall latches on the off door side and carefully lower the Awall down. If the sidewall is wet you may want to wipe off with a towel at this time.
- **3.** Disengage the Awall latches on the door side and lower the doorside Awall. If you forgot to disengage the sash lock the door side Awall will not fold down and you may damage and or misalign the entry door.
- **4.** Fold the upper entry door into place
- **5.** Close the lower entry door
- **6.** Pulling down on the rear roof will lower both front and rear roof panels.
- **7.** Retract the steps.
- **8.** Engage the roof latches. If the entry door can be opened without raising the roof the roof latches need to be tightened.