NOTICE:
The 12-volt system has a master shut-off switch set to the "OFF" position to avoid draining the battery. The 12-volt system operates the LPG detector, which must be functioning if the unit is occupied.

THIS UNIT MUST NOT BE OCCUPIED WITH THE MASTER SHUT-OFF SWITCH IN THE "OFF" POSITION.

SunnyTravelers
As the owner of this SunnyBrook brand product you are eligible for an active membership in the SunnyTravelers RV Club. For details write:
SunnyTravelers RV Club
PO Box 169 * Osceola, IN 46561-0169
Call toll free at: 1-800-262-5178
or visit our website at:
www.sunnybrookrvclub.com
WARNING: Joining WIT has been known to cause excessive fun.

You’ve chosen the best motor home around. So obviously, you’re not alone.

There are thousands of proud owners just like you. Many have already joined the WIT Club. And now we’d like to invite you to share in all the fun. It’s an excellent opportunity to make new friends with people who share similar interests. People who see travel and adventure as a way of life. People drawn to the open road. People who jump at the chance to explore the world around them.

To help explain all of the reasons to join WIT, we’ve divided this application into three sections: Travel, Clubs and Benefits. Because the more you learn about this exciting club, the more you’ll see what you can get out of it.

Travel

Adventure takes on a whole new meaning with a membership in WIT.

As a member of WIT, you’ll have the chance to meet fellow RV owners and head out to fabulous destinations throughout the country. Here are some of the fun get-togethers WIT is known for.

State Clubs/Local Chapters

Most states and several Canadian provinces boast of having a WIT Club. Plus, there are over 150 local chapters. Each one provides members with the chance to meet others in their area who share a love for a life on the road. Groups gather regularly for planned rallies and events.

Rallies

Rallies at popular events and destinations, such as the Albuquerque Balloon Fiesta, are planned and orchestrated by professional planners at the WIT headquarters. They include camping, tours, and visits to area attractions, several meals and professional Rally Hosts.

Grand National Rally

The granddaddy of all rallies is held in Forest City, Iowa, birthplace of Winnebago Industries. Every July, this quaint town in north central Iowa more than doubles in population as it welcomes over 1,500 RV’s to the River Oaks Rally Grounds for a week of fun, seminars, tours and entertainment.

Caravans

There’s no better way to see the country than by caravan. Caravans are cross-country RV adventures to appealing destinations — such as a 48-day dream tour of Alaska and Canada’s Yukon. Planned by WIT professionals from Forest City, these memorable trips are hosted by highly experienced Rvers called Caravan Hosts. Caravans also include camping, tours and visits to area attractions, plus several meals.

Clubs

365 Club (for those who travel six months per year to full-time travelers)
Handicap Club (provides an opportunity to share travel tips and experiences)
Duffers (golfing club)
WIT/LEO (retired or active law enforcement officers)
WITCARS (amateur radio services)
WIT Singers (for those who love to sing)
WIT Singles (for those traveling solo)
WIT Alley Cats (bowling club)
MILWIT (military, retired and active)
NETWIT Club (Internet users)
WIT Rods
RedHat WITS
Armed Forces Vet. Club
No-Tow-Bagos
Classic Winnies

Benefits

And you thought your RV was fully loaded.

A WIT membership is more than just fun and games. All the discounts and services included with a membership make joining WIT economically sensible, too. Look at everything a WIT membership includes:

- WIT Club News Magazine
- 10% discount on parts at Winnebago Industries Customer Service in Forest City, Iowa (30-day waiting period for all new and reinstated members)
- Discounts at hundreds of participating campgrounds
- Professional Trip Routing
- Free membership in Pilot Flying J Travel Plaza RV Real Value Club
- Plus these other available activities, benefits and programs of interest.
- 40 state/provincial clubs and more than 150 local chapters
- Grand National Rally in Forest City, Iowa
- Special rallies and caravans
- Opportunity to purchase — insurance designed especially for RVs
- — air ambulance service
- — roadside assistance
- — pet health insurance

Most Important - Life Long Friendships
Ready for some excessive fun?

Joining WIT is simple. Just complete the enclosed application or apply on-line at www.witclub.com and you’re on your way.

<table>
<thead>
<tr>
<th>New Membership</th>
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<tr>
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<tr>
<td>$70.00 — 3 years</td>
<td>$65.00 — 3 years</td>
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</table>

WIT Membership Application

Name
Spouse/Companion
Address
City
State ZIP
Telephone No.
E-Mail Address
Motor home Serial No. (Begins with 10, 70 or 80 and has 11 or 12 digits)
Towable Serial No. (Begins with 54C and has 17 digits)

☐ Personal Check/Money Order (Canadian residents must pay in U.S. funds)
☐ Visa/MasterCard/Discover Card No.

Expiration Date Security Code

If you are being sponsored by a current WIT member, please complete the following information about that member. (not required)

Membership sponsored by
WIT No.

New Membership Renewal/Reinstatements
☐ $35.00 — 1 year ☐ $30.00 — 1 year
☐ $55.00 — 2 years ☐ $50.00 — 2 years
☐ $70.00 — 3 years ☐ $65.00 — 3 years
WIT No.

WIT
P.O. Box 268
Forest City, IA 50436-0268

WIT Phone numbers
(641) 585-6874
(800) 643-4892 (ext. 1)
Fax: (641) 585-6703
e-mail: wit@winnebagoind.com
www.witclub.com
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Introduction

Winnebago of Indiana, LLC’s management and employees welcomes you to our growing family of Travel Trailer and Fifth Wheel owners. Since Winnebago of Indiana, LLC’s inception, our goal has been to provide towable recreational vehicles designed and engineered to give many years of enjoyment to our customers, who love the great outdoors. This manual has been compiled to assist campers, both novice and experienced in set-up, use, and preventative maintenance for continued like-new appearance and performance from their travel trailer or fifth wheel. Like finely crafted furniture or highly engineered automobiles, SUNSET CREEK travel trailers and fifth wheels require care and regular maintenance to retain maximum performance characteristics. If, after taking delivery of your new trailer, it requires additional adjustment, please return the trailer to your dealer as soon as possible. This Owner’s Manual, along with information provided in your Owner’s Information Package, outlines important areas of maintenance and provides maintenance schedules to ensure safe, trouble-free service. Knowledge of trailer usage, components and maintenance will help you enjoy many miles and years of recreational living.

INITIAL DEALER RESPONSIBILITY

Winnebago of Indiana, LLC employees assemble travel trailers and fifth wheels to standards, which meet or exceed local, state and national codes. Each trailer has been thoroughly inspected at our facilities prior to shipment. Every SUNSET CREEK dealer has the responsibility to re-inspect and to prepare every travel trailer and fifth wheel during the pre-delivery phase of the sale. Dealership personnel will provide instruction in basic trailer use and features plus complete a pre-delivery inspection with you. Dealership pre-delivery instruction and inspections should be supplemented by a thorough review of all material furnished with the trailer by Winnebago of Indiana, LLC and component and appliance manufacturers.

The dealer/customer pre-delivery instruction and inspection should review:

- Tow Vehicle/Trailer Connections
- Trailer Connection Maintenance
- Coupling & Uncoupling
- Breakaway Switch
- Trailer Loading
- Exterior Inspection
- Interior Décor Inspection
- Emergency Exits
- Fire Extinguisher
- Door, Window & Lock Operations
- Fresh Water System Operation
- Water Pump Operation

Pre-Delivery Inspection (Cont.)
- Waste Water System Operation
- Water Heater Operation
- Lavatory and Tub/Shower Care
- Converter Function & Operation
- Ground Fault Interrupter (GFI)
- Circuit Breakers
- Interior Lights, Switches & Receptacles
- Refrigerator Operation
- Range or Range/Oven Operation
- Furnace Operation
- Operation of Other Appliances
- Monitoring Panel Functions
- Propane Gas System & Propane Leak Detector
- TV Antenna & Related Components
- Awnings
- Bed Conversions
- Curtains, Carpet & Countertops
- Table Setup & Storage
- Spare Tire Carrier
- Explanation of Sunnybrook Warranty
- Explanation of Component & Appliance Warranties
- Acceptance of Trailer Cleanliness
- Weight Distribution

GENERAL INFORMATION

The Owner’s Manual will provide general information and instruction. Product information or instruction may not apply, may be excluded or may be generalized because:

- Equipment and features described or shown may be optional or unavailable on some models.
- Ongoing design changes may not be included because of continuous product improvement.
- Specifications may change without notice.

Descriptions or photographs in this manual are representative of function and may not specifically depict actual equipment, fabrics, interior or exterior décor or design options as installed with your trailer.

THIS PRODUCT IS DESIGNED FOR RECREATIONAL USE AND SHORT-TERM OCCUPANCY ONLY.

SUNSET CREEK travel trailers and fifth wheels are not designed or intended to be used as permanent housing. Using this product for long term or permanent occupancy may lead to premature deterioration of appliances, plumbing, interior finishes, fabrics, carpeting and drapes. Damage or deterioration due to long term occupancy is not considered normal, and constitutes misuse or abuse under the warranty terms, therefore voiding your warranty protection.
Obtaining Service

Make an Appointment
Always make an appointment in advance with the service center. Schedule as far in advance as possible, then confirm the appointment as the date approaches. Do not show up without an appointment for service and expect that the service center will be able to “fit you in”. Arriving without an appointment may cause additional aggravation when your request is met with “I’m sorry but our schedule is full for the next four weeks.”

Preparation for an Appointment
If you have made an appointment to have warranty service, be sure to have the correct papers with you. Take your Warranty Registration paperwork and owner’s packet with you to your appointment. Not all work to be performed may be covered by the warranty. Keep a maintenance log of your trailer’s service history. This can often provide a clue to the current problem.

Prepare A List . . .
Make a written list of your trailer’s problems or the specific work you would like completed. If you’ve had an accident, or work done that is not on your maintenance log, let the service advisor know. Don’t keep secrets.

Be Reasonable With Requests . . .
If you list a number of items, and you must have your trailer by the end of the day, discuss the situation with the service advisor and list the items in order of priority. Please do not expect to add to the list for service beyond what you have previously scheduled when you arrive for your appointment. Even though the service center may be able to complete the additional requests, their schedule has been determined based on your original request.

If You Need Assistance . . .
Winnebago of Indiana, LLC and our dealers are vitally interested in your satisfaction. We want you to be happy with our products and services.

Your selling dealer is best equipped and most anxious to provide prompt resolution for any warranty issue or related matter that you may experience. Winnebago of Indiana, LLC dealers have the facilities, trained technicians, special tools and the latest information to assure your trailer is fixed correctly and in a timely manner.

If special circumstances arise, always talk to your dealer’s service manager first. Most matters can be resolved with this process. If for some reason your are still not satisfied, talk to the general manager or owner of the dealership. They want to know if you need assistance. If your dealership is unable to resolve the concern, you may contact Winnebago of Indiana, LLC Customer Service.

Inspecting Repairs
Winnebago of Indiana, LLC and your servicing dealer want you to be satisfied with any repair. After a repair is performed, inspect the workmanship carefully. Check your service list and go over the repairs with the service center representative. Once satisfied, sign the Winnebago of Indiana, LLC claim form. In the event a problem should reoccur after you have left the dealership, contact the repair center or Winnebago of Indiana, LLC as soon as possible, so that the situation can be resolved in a timely manner.

Any communication to Winnebago of Indiana, LLC Customer Service should include the following information:

- Owner’s Name and Address
- Owner’s Telephone Number
- Dealership Name
- Trailer Identification Number
- Trailer delivery date
Tow Vehicle Recommendations

MANUFACTURER SPECIFICATIONS
Winnebago of Indiana, LLC travel trailers and fifth wheels can be towed by many types of vehicles. When selecting a tow vehicle for travel trailers and fifth wheels, complying with vehicle manufacturer specific recommendations concerning towing capabilities and restrictions is critical. Many vehicle manufacturers and dealers can provide special towing packages based on specific requirements, such as trailer size, maximum trailer load and tow vehicle demands during travel (i.e. terrain, trip lengths, etc.).

VEHICLE TUNE-UP
Proper vehicle maintenance is necessary including engine tune-ups and lubrication. An engine may overheat on long upgrades, which may be prevented with a larger, heavy-duty radiator and proper care.

BATTERY AND ALTERNATOR
During travel the tow vehicle battery and alternator must support some of the trailer’s electrical equipment including taillights, turn signals, brake lights, clearance lights and electric brakes. The battery and alternator must be in good condition and able to handle this load.

HITCHES
Many types and ratings of trailer hitches are available. Important factors when selecting the proper hitch are:
- Follow the tow vehicle manufacturer’s and the hitch manufacturer’s recommendations to ensure proper installation and size requirements.
- Keep the tow vehicle and the trailer level to maintain equal weight distribution and ensure maximum steering control.
- Heavier springs and/or overload shock absorbers will help increase hitch load capacity.

ELECTRONIC BRAKE CONTROLLERS
Many types of electronic brake controllers are available. Consult your dealer to determine specific needs. Insist that any electronic brake controller be installed per the manufacturer’s instructions. It may be necessary to install a resistor in the trailer’s braking system. If the trailer skids or the brakes grab, a resistor in the circuit may remedy the problem. Follow the individual resistor’s instructions. Do not use more than one resistor in the circuit.

REAR VIEW SIDE-MOUNTED MIRRORS
Rear view, side-mounted mirrors on both driver and passenger sides of the tow vehicle are a necessity. Side-mounted mirrors provide a clear view of following traffic and an unobstructed view of the trailer action. They should be properly extended offering an unobstructed view of the rear of the trailer and possible traffic hazards. A travel trailer chassis (springs, wheels, tires, axles, frame and tongue) is engineered to carry certain maximum load.

Trailer Loading

WEIGHT DISTRIBUTION
Proper weight distribution between axles and tongue is also critical to safe towing. Factors to consider when evaluating proper weight distribution are:
- On travel trailers, tongue proportion of the GROSS VEHICLE WEIGHT should be approximately 10% to 15% for tandem axle trailers. Depending on the tow vehicle, 11% to 12% tongue-weight is ideal. Hitch weight proportion on fifth wheels is a larger percentage of the GROSS VEHICLE WEIGHT.
- Proper distribution required for towing stability, assures the trailer is not rear, front, or side heavy.
- A light tongue weight or heavy weight placed at the rear end of the trailer may cause trailer sway.

Too much weight on the tongue can overload the tow vehicle, and cause poor tow vehicle stability and handling, poor braking, poor cornering, and may damage the trailer frame.

TRAVEL TRAILER EQUALIZER HITCHES
Travel trailer load equalizer hitches can add 33% plus or minus of hitch weight to trailer axles when the trailer and tow vehicle are level. If the tow vehicle tilts front or rear, the tension on the equalizer bars will affect the amount of weight distributed to the axles.

REAR BUMPER LIMITATIONS
The rear bumper of a travel trailer or fifth wheel is not intended to be a weight bearing structure. The bumper is not capable of supporting any additional weight beyond that of the tire carrier and spare tire. Besides being unable to support added weight, adding weight to the rear of the travel trailer will affect the hitch weight and the stability of the trailer while towing.

WARNING: The rear bumper of travel trailers and fifth wheels are not intended to be used as steps and are not designed to support more than 70 pounds.
**WEIGHT RATINGS**

The Trailer Weight Information label (located inside the inside lower bar on the screen door on almost all trailers and fifth wheels) provides weight data critical to understanding the maximum load of a travel trailer or fifth wheel.

**GROSS VEHICLE WEIGHT RATING (GVWR)** is the maximum permissible weight of the trailer. The weight of the empty trailer, plus weight added in the form of water, food, clothing, and anything else in or attached to the trailer must not exceed the GVWR. In other words, the GVWR is equal to or greater than Unloaded Vehicle Weight plus the Cargo Carrying Capacity.

The **UNLOADED VEHICLE WEIGHT (UVW)** is the weight of the travel trailer or fifth wheel as manufactured. This is the weight on the trailer axles and tongue or pin.

**CARGO CARRYING CAPACITY** is the maximum weight of personal belongings, food, fresh water, PROPANE gas tools, accessories, etc. that can be loaded.

The **GROSS AXLE WEIGHT RATING (GAWR)** represents the allowable empty vehicle’s axle weight plus Cargo Carrying Capacity excluding the hitch weight. The weight is divided between each axle and each has its own GAWR. The total of axle load plus the tongue weight must not exceed the trailer GVWR. The GAWR is located on the manufacturer’s Federal ID label on the left side front corner outside the trailer.

**DETERMINING TRAILER WEIGHT**

To determine the weight of a loaded trailer:
1. Locate public weight scale.
2. Park your trailer and disconnect it on the scale. Both wheels and jacks should be on the scale.
3. The reading will be the Gross Vehicle Weight of the trailer and should not exceed the GVWR as indicated on the manufacturer Federal ID tag.

To determine Gross Axle Weight - Both Axles:
1. Leave trailer connected to the tow vehicle.
2. Be certain the trailer is level.
3. Leave the tow vehicle off the scale.
4. Roll forward far enough so both trailer axles are on the scale.
5. The reading will be the Gross Axle Weight for both axles.

To determine Gross Axle Weight - Each Axle
1. Leave trailer connected to the tow vehicle.
2. Be certain the trailer is level.
3. Leave the tow vehicle off the scale.
4. Roll forward far enough so only rear trailer axle (two tires) is on the scale.
5. The reading will be the Gross Axle Weight for the rear axle.
6. Subtract the total Gross Axle Weight from the rear axle weight to calculate the front axle weight.

To determine hitch weight:
1. Subtract the total Gross Axle Weight reading from the Gross Vehicle Weight reading. This figure is the loaded hitch weight.
2. If equalizer equipment is installed, this will affect both hitch and axle weight.

---

**Sample Trailer Weight Information Labels**

These labels should be affixed on the front roadside of most travel trailers & fifth wheels.

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**TIRE AND LOADING INFORMATION**

The weight of cargo should never exceed 1,320 KG or 2,911 Lbs.

<table>
<thead>
<tr>
<th>TIRE</th>
<th>SIZE</th>
<th>COLD TIRE PRESSURE</th>
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</thead>
<tbody>
<tr>
<td>FRONT</td>
<td>T225/75D15D</td>
<td>449 KPA, 65 PSI</td>
</tr>
<tr>
<td>REAR</td>
<td>T225/75D15D</td>
<td>449 KPA, 65 PSI</td>
</tr>
<tr>
<td>SPARE</td>
<td>T225/75D15D</td>
<td>449 KPA, 65 PSI</td>
</tr>
</tbody>
</table>

**MANUFACTURED BY:** SUNNYBROOK RV, INC. **DATE:** 4-07

**CA. I.D.** NC-28071

**GVWR** 5,781 KG (12,700 LBS)

**GAWR ALL2,305 KG (5080 LBS)** PER AXLE WITH TIRE 15X6 JJ RIM AT 449 KPA (65 PSI) COLD SINGLE

**THIS VEHICLE CONFORMS TO ALL APPLICABLE US FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.**

**VIN:** 4UBB80S2781Y00000 **TYPE:** TRAILER **MODEL:** 288FWBHS

**RECREATION VEHICLE TRAILER CARGO CARRYING CAPACITY**

**VIN:** XXXXXXXXXXXXXXXXXXXX

**THE WEIGHT OF CARGO SHOULD NEVER EXCEED**

**xxx kg or xxx lbs**

**CAUTION:**

A full load of water equals **xxx kg or xxx lbs** of cargo @ 1 kg/L (8.3 lb/gal)
IMPORTANT:

- Determine hitch and axle weights with both vehicles level.
- Tilting the trailer forward will add front axle weight.
- Hitch weight and tension of the equalizer bars will be affected by leveling the trailer and tow vehicle.
- Have the tow vehicle level if equalizers are used. Have tire pressure up to specifications as indicated on the tire sidewall.

Consider load weights when determining weight distribution. Proper trailer positioning and loading are important not only for ease of hauling, but for safety. Remember: 10% to 15% of a travel trailer’s weight should be on the hitch. A fifth wheel will be slightly more as a percentage.

Heavier items should be placed over the axles. Avoid placing too much weight at the front or rear of the trailer. Excess weight in/on the rear of the trailer can have a negative effect on the stability of both vehicles. Stability and weight can be affected if waste is in the holding tanks or water in the fresh water holding tank.

CAUTION: Do not attach such items as motorcycles, fuel or water containers, etc. on the rear of your trailer.

SECURE FOR TRAVEL

Before starting out, make certain everything is secure in the trailer.
- Check cabinets and drawers; make sure nothing can spill in cabinets or refrigerator.
- Ensure that the refrigerator latch is engaged.
- Lock windows and rockguards.
- Close roof vents.
- Secure loose chairs and other items.
- Disconnect all hoses and close all valves.
- Make sure electrical cords and adapters have been disconnected and put away.

Hitch Connection

Using the proper hitch on the tow vehicle is critical for maximum safety when towing a travel trailer. Load-leveling or load-equalizing hitches with anti-sway bars are recommended for added stability and maneuvering. Several factors need to be considered when selecting the proper hitch including:

- Gross weight of the trailer.
- Tongue weight.
- A welded or bolted weight-carrying hitch on the frame or body of the tow vehicle.
- A 2 5/16 inches hitch ball. (Lubricate the hitch ball periodically).

Consult your dealer and/or a representative of your tow vehicle manufacturer in selecting a hitch and accessories for your trailer.

SAFETY CHAINS

The Department of Transportation federally mandates use of safety chains on travel trailers. Safe towing recommendations include:

- Attach safety chains to the tow vehicle separate from the hitch.
- Leave only enough slack in each length of chain to permit the vehicle to turn during normal driving.
- The chains should not contact the ground or road surface.
- Cross the chains from the trailer hitch to the tow vehicle.
- When all connections are secure, be certain the 7-pin electrical connector cord and the breakaway switch lanyard cable are longer than the extended safety chains.
- Should the hitch ball become disengaged from the coupler, the safety chains will extend, the 7-pin connector should remain connected to the tow vehicle for braking and the breakaway switch should not engage.

VEHICLE & TRAILER HOOK-UP

Connecting the tow vehicle hitch to the coupler on the travel trailer or fifth wheel is a simple procedure, described by the following:

TRAVEL TRAILERS

1. Before dropping the coupler over the hitch ball, the coupler-locking arm must be in an unlocked position.
2. The coupler should be slightly behind the ball (away from the tow vehicle), permitting the coupler to slide down over the ball positively.
3. After locking the coupler over the ball, be certain the ball is fully engaged with the coupler.
4. Attach the safety chains to the tow vehicle. Be sure to cross the chains from the trailer hitch to the tow vehicle. Be careful to leave slack in each length of chain to permit the vehicle to turn during normal driving.
5. Check the vehicle’s turning capabilities.
BREAKAWAY DEVICE

Should your trailer become completely disconnected while being towed, the breakaway device is designed to actuate the trailer brakes and bring it to a stop, preventing a runaway trailer. The switch has a pull-pin linked to the tow vehicle with a steel cable; the cable pulls the pin free. This causes two contacts in the device to go together, immediately closing the circuit between the trailer battery and the trailer brakes.

CAUTION: Never tow a trailer without the trailer battery being hooked up and fully charged. Attach the breakaway lanyard cable so it is longer than the safety chain. When connected to the vehicle, the pull on the pin is in a straight line with the cable. Do not hook the cable over the trailer ball.

FIFTH WHEELS

1. Open the hitch locking device in the truck.
2. Lower the tailgate of the truck. NOTE: If not required, the rear tailgate can be removed to simplify coupling and uncoupling.
3. Back the truck to engage the kingpin in the hitch latch plate. It is important the pinbox and hitch latch plate are as level as possible.
4. Latch plates will engage the kingpin automatically on some hitches, but the handle grip must be pushed to the locked position (see manufacturer’s instructions for full details). On other hitches, the lever will be used to engage the kingpin (manually) and to lock it in position.
5. Visually check that the hitch is locked to the small diameter portion of the kingpin.
6. Raise the tailgate of the truck.
7. Raise the front jacks of the fifth wheel trailer.
8. Plug the electrical connector cord into the receptacle on the truck.
9. Attach the safety cable for the breakaway device to part of the truck hitch. Keep the cable in a straight line with the switch on the trailer as much as possible and allow enough slack for turns.
10. Apply trailer brakes only and proceed very slowly to confirm proper engagement of the hitch.
11. Test operation of all exterior lights on the trailer.
Suspension & Tires
The suspension system of your new travel trailer or fifth wheel consists of tandem axles, leaf-type springs, wheels, tires and electric brakes on each wheel. The following is an overview of these components:

AXLES & LEAF SPRINGS
Our travel trailers and fifth wheels axles are suspended on heavy-duty, double-eye leaf springs designed to absorb sharp jolts from the road, prevent jolts from being transmitted to the trailer and maintain full tire contact with the road.

Spring shackle mounts are welded to the frame of travel trailers. Adjustable, multi-hole, plate mounts are welded to fifth wheel frames. The springs and shackle bolts are self-lubricating. Check the shackle bolts periodically for tightness. Do not reuse shackle bolts/nuts, if an axle must be removed. Self-locking nuts must be replaced if removed.

TIRES
All tires meet or exceed load and wear specifications for trailers. Proper inflation pressure must be maintained for safe trailer stability and maximum tire life. Load range and maximum cold inflation pressure are stamped on the sidewall. Always inflate the tires to this maximum pressure.

A tire gauge should always be part of your tool kit. Check tire pressures before starting out, when the tire is cold. Do not bleed air out of warm tires. Inflation specifications are for cold tires.

Inflate the rear tires of the tow vehicle to the maximum cold inflation pressure stamped on the tire sidewalls. Higher rear tire pressure improves tow vehicle stability.

WARNING: CHECK TIRE PRESSURES OFTEN. ALWAYS CHECK PRESSURE WHEN TIRES ARE COLD. DO NOT EXCEED MAXIMUM RECOMMENDED PRESSURE.

WARNING: KEEP TIRES PROPERLY INFLATED. TIRES MAY LOSE AIR SUDDENLY AND/OR CATCH FIRE, IF DRIVEN FOR LONG DISTANCES OR AT HIGH SPEEDS WHILE SERIOUSLY UNDER INFLATED. TIRES COULD OVERHEAT WHERE DAMAGE TO THE VEHICLE, CONTENTS AND/OR PERSONAL INJURY MAY OCCUR.

SPARE TIRE & COVER
Note that a spare tire and/or spare tire cover are not standard on all models. To help extend the life and look of your spare tire cover, cover the spare tire with a heavy duty garbage bag before putting on the spare tire cover. This will help keep the spare tire from bleeding through the spare tire cover.

CHANGING TIRES
1. Turn on the tow vehicle’s hazard warning flashers.
2. Set up flares or warning lights.
3. Chock the opposite tire and unhitch the trailer from the tow vehicle, or eliminate tension on equalizer bars, if applicable.
4. Place scissors-type or hydraulic jack on a block of wood directly under the frame, close to the tire you intend to change.

CAUTION: When using bottle-type jacks, a metal plate or block of wood to relieve stress against the steel frame should be inserted between jack and frame. DO NOT use a bumper jack. It may damage the sidewalls or floorboard of the trailer.

5. Raise the jack to take weight off the tire.
6. Loosen the lug nuts.
7. Raise the jack until the tire clears the ground.
8. Remove the lug nuts and old tire and put the spare on the hub.
9. Replace and tighten the nuts.
10. Lower the jack until the tire touches the ground.
11. Tighten the lug nuts to a torque of 90 to 95 ft. lbs.
12. Lower and remove the jack.
13. Hook up equalizer bars, if applicable.
14. CHECK THE TORQUE IMMEDIATELY.

Tips on Wheel Torquing
Always use a quality, calibrated ratchet-style torque wrench to torque a wheel. Torque each lug nut to the specified torque.

- Allow the wheels to cool to room temperature before loosening or tightening the lug nuts.
- Tighten the lug nuts in the proper sequence. Tightening in a random pattern can cause warping.
- Properly support the tire and wheel assembly when torquing.
- Use the correct size socket otherwise damage can occur to the lug nuts.
- While tightening the lug nuts carefully rock the wheel to make sure each lug nut is centered properly.
- Always final torque all of the wheels before completely lowering the vehicle.
- Do Not try to get the full torque at one time. Work gradually up to the final torque to avoid warping or cracking.

The National Traffic Safety Administration (NHTSA) has published a brochure (DOT HS 809 361) that discusses all aspects of Tire Safety, as required by CFR 575.6. This brochure is reproduced in part below. It can be obtained and downloaded from NHTSA, free of charge, from the following web site:

Studies of tire safety show that maintaining proper tire pressure, observing tire and vehicle load limits (not carrying more weight in your vehicle than your tires or vehicle can safely handle), avoiding road hazards, and inspecting tires for cuts, slashes, and other irregularities are the most important things you can do to avoid tire failure, such as tread separation or blowout and flat tires. These actions, along with other care and maintenance activities, can also:

- Improve vehicle handling
- Help protect you and others from avoidable breakdowns and accidents
- Improve fuel economy
- Increase the life of your tires.

This manual presents an overview of tire safety, including information on the following topics:

- Basic tire maintenance
- Uniform Tire Quality Grading System
- Fundamental characteristics of tires
- Tire safety tips.

Use this information to make tire safety a regular part of your vehicle maintenance routine. Recognize that the time you spend is minimal compared with the inconvenience and safety consequences of a flat tire or other tire failure.

**Safety First–Basic Tire Maintenance**

Properly maintained tires improve the steering, stopping, traction, and load-carrying capability of your vehicle. Underinflated tires and overloaded vehicles are a major cause of tire failure.

Therefore, as mentioned above, to avoid flat tires and other types of tire failure, you should maintain proper tire pressure, observe tire and vehicle load limits, avoid road hazards, and regularly inspect your tires.

**Finding Your Vehicle’s Recommended Tire Pressure and Load Limits**

Tire information placards and vehicle certification labels contain information on tires and load limits. These labels indicate the vehicle manufacturer’s information including:

- Recommended tire size
- Recommended tire inflation pressure
- Vehicle Capacity Weight (VCW—the maximum occupant and cargo weight a vehicle is designed to carry)
- Front and rear gross axle weight ratings (GAWR—the maximum weight the axle systems are designed to carry).

Both placards and certification labels are permanently attached to the trailer on the forward half of the left side, and are easily readable from outside the vehicle without moving any part of the vehicle.

**Understanding Tire Pressure and Load Limits**

Tire inflation pressure is the level of air in the tire that provides it with load-carrying capacity and affects the overall performance of the vehicle. The tire inflation pressure is a number that indicates the amount of air pressure—measured in pounds per square inch (psi)—a tire requires to be properly inflated. (You will also find this number on the vehicle information placard expressed in kilopascals (kPa), which is the metric measure used internationally.)

Vehicle manufacturers determine this number based on the vehicle’s design load limit, that is, the greatest amount of weight a vehicle can safely carry and the vehicle’s tire size. The proper tire pressure for your vehicle is referred to as the “recommended cold inflation pressure.” (As you will read below, it is difficult to obtain the recommended tire pressure if your tires are not cold.)

Because tires are designed to be used on more than one type of vehicle, tire manufacturers list the “maximum permissible inflation pressure” on the tire sidewall. This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.

**Checking Tire Pressure**

It is important to check your vehicle’s tire pressure at least once a month for the following reasons:

- Most tires may naturally lose air over time.
- Tires can lose air suddenly if you drive over a pothole or other object or if you strike the curb when parking.
- With radial tires, it is usually not possible to determine underinflation by visual inspection.

For convenience, purchase a tire pressure gauge to keep in your vehicle. Gauges can be purchased at tire dealerships, auto supply stores, and other retail outlets.

The recommended tire inflation pressure that vehicle manufacturers provide reflects the proper psi when a tire is cold. The term cold does not relate to the outside temperature. Rather, a cold tire is one that has not been driven on for at least three hours. When you drive, your tires get warmer, causing the air pressure within them to increase. Therefore, to get an accurate tire pressure reading, you must measure tire pressure when the tires are cold or compensate for the extra pressure in warm tires.
Steps for Maintaining Proper Tire Pressure

Step 1: Locate the recommended tire pressure on the vehicle’s tire information placard, certification label, or in the owner’s manual.

Step 2: Record the tire pressure of all tires.

Step 3: If the tire pressure is too high in any of the tires, slowly release air by gently pressing on the tire valve stem with the edge of your tire gauge until you get to the correct tire pressure. These missing pounds of pressure are what you will need to add.

Step 4: If the tire pressure is too low, note the difference between the measured tire pressure and the correct tire pressure. These “missing” pounds of pressure are what you will need to add.

Step 5: At a service station, add the missing pounds of air pressure to each tire that is underinflated.

Step 6: Check all the tires to make sure they have the same air pressure (except in cases in which the front and rear tires are supposed to have different amounts of pressure).

If you have been driving your vehicle and think that a tire is underinflated, fill it to the recommended cold inflation pressure indicated on your vehicle’s tire information placard or certification label. While your tire may still be slightly underinflated due to the extra pounds of pressure in the warm tire, it is safer to drive with air pressure that is slightly lower than the vehicle manufacturer’s recommended cold inflation pressure than to drive with a significantly underinflated tire. Since this is a temporary fix, don’t forget to recheck and adjust the tire’s pressure when you can obtain a cold reading.

Tire Size

To maintain tire safety, purchase new tires that are the same size as the vehicle’s original tires or another size recommended by the manufacturer. Look at the tire information placard, the owner’s manual, or the sidewall of the tire you are replacing to find this information. If you have any doubt about the correct size to choose, consult with the tire dealer.

Tire Tread

The tire tread provides the gripping action and traction that prevent your vehicle from slipping or sliding, especially when the road is wet or icy. In general, tires are not safe and should be replaced when the tread is worn down to 1/16 of an inch. Tires have built-in treadwear indicators that let you know when it is time to replace your tires. These indicators are raised sections spaced intermittently in the bottom of the tread grooves. When they appear “even” with the outside of the tread, it is time to replace your tires. Another method for checking tread depth is to place a penny in the tread with Lincoln’s head upside down and facing you. If you can see the top of Lincoln’s head, you are ready for new tires.

Tire Balance and Wheel Alignment

To avoid vibration or shaking of the vehicle when a tire rotates, the tire must be properly balanced. This balance is achieved by positioning weights on the wheel to counterbalance heavy spots on the wheel-and-tire assembly. A wheel alignment adjusts the angles of the wheels so that they are positioned correctly relative to the vehicle’s frame. This adjustment maximizes the life of your tires. These adjustments require special equipment and should be performed by a qualified technician.

Tire Repair

The proper repair of a punctured tire requires a plug for the hole and a patch for the area inside the tire that surrounds the puncture hole. Punctures through the tread can be repaired if they are not too large, but punctures to the sidewall should not be repaired. Tires must be removed from the rim to be properly inspected before being plugged and patched.

Tire Fundamentals

Federal law requires tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a tire identification number for safety standard certification and in case of a recall.
Information on Passenger Vehicle Tires

P - The “P” indicates the tire is for passenger vehicles.

NOTE: Passenger car tires are not recommended for use on trailers, because the capacity ratings are not marked on the side walls of these tires. In the event a passenger car tire is used, the capacity must be derated by 10%.

Next number (Positions 2, 3 & 4) - This three-digit number gives the width in millimeters of the tire from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

Next number (Positions 5 & 6) - This two-digit number, known as the aspect ratio, gives the tire’s ratio of height to width. Numbers of 70 or lower indicate a short sidewall for improved steering response and better overall handling on dry pavement.

R - The “R” stands for radial. Radial ply construction of tires has been the industry standard for the past 20 years.

Next number (Positions 8 & 9) - This two-digit number is the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

Next number (Position 10, 11 and/or 12) - This two- or three-digit number is the tire’s load index. It is a measurement of how much weight each tire can support. You may find this information in your owner’s manual. If not, contact a local tire dealer. Note: You may not find this information on all tires because it is not required by law.

M+S - The “M+S” or “M/S” indicates the tire has some mud/snow capability. Most radial tires have these markings.

Speed Rating - The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time. The ratings range from 99 miles per hour (mph) to 186 mph. These ratings are listed below. Note: You may not find this information on all tires because it is not required by law.

<table>
<thead>
<tr>
<th>Letter Rating</th>
<th>Speed Rating</th>
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<tbody>
<tr>
<td>Q</td>
<td>99 mph</td>
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<td>R</td>
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<td>S</td>
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<td>W</td>
<td>168* mph</td>
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<tr>
<td>Y</td>
<td>186* mph</td>
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* For tires with a maximum speed capability over 149 mph, tire manufacturers sometimes use the letters ZR. For those with a maximum speed capability over 186 mph, tire manufacturers always use the letters ZR.

U.S. DOT Tire Identification Number - Begins with the letters “DOT” and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code where of manufacture, and the last four numbers represent the week and year the tire was built. For example, the numbers 3197 means the 31st week of 1997. The other numbers are marketing codes used at the manufacturer’s discretion. This information is used to contact consumers if a tire defect requires a recall.

Tire Ply Composition and Materials Used - The number of plies indicates the number of layers of rubber-coated fabric in the tire. In general, the greater the number of plies, the more weight a tire can support. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others.

Maximum Load Rating - Indicates the maximum load in kilograms and pounds that can be carried by the tire.

Maximum Permissible Inflation Pressure - This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.
Tires for light trucks have other markings besides those found on the sidewalls of passenger tires.

**LT** - Indicates the tire is for light trucks or trailers.

**ST** - Indicates the tire is for trailer use only.

**Max. Load Dual kg (lbs) at kPa (psi) Cold** - Indicates the maximum load and tire pressure when the tire is used as a dual; that is, when four tires are put on each rear axle (a total of six or more tires on the vehicle).

**Max. Load Single kg (lbs) at kPa (psi) Cold** - This information indicates the maximum load and tire pressure when the tire is used as a single.

**Load Range** - This information identifies the tire’s load-carrying capabilities and its inflation limits.

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**Vehicle Load Limits**

Determining the load limits of a vehicle includes more than understanding the load limits of the tires alone. A Federal certification label is located on the forward half of the roadside (left) of the unit.

The certification label will indicate the vehicle’s gross vehicle weight rating (GVWR). This is the most weight the fully loaded vehicle can weigh. It will also provide the gross axle weight rating (GAWR). This is the most a particular axle can weigh. If there are multiple axles, the GAWR of each axle will be provided. In the same location as the certification label described above, there is a vehicle placard. This placard provides tire and loading information. In addition, this placard will show a statement regarding maximum cargo capacity.

Cargo can be added to the vehicle, up to the maximum weight specified on the placard. The combined weight the cargo is provided as a single number. In any case, remember: the total weight of a fully loaded vehicle can not exceed the stated GVWR.

The weight of fully filled propane containers is considered part of the weight of the RV before it is loaded with cargo and is not considered part of the disposable cargo load. Water however, is a cargo weight and is treated as such. If there is a fresh water storage tank of 100 gallons, this tank when filled would weigh about 800 pounds. If more cargo is being transported, water can be off-loaded to keep the total amount of cargo added to the vehicle within the limits of the GVWR so as not to overload the vehicle.

Distribute the cargo evenly when loading to prevent overloading front to back and side to side. Heavy items should be placed low and as close to the axle positions as reasonable. Too many items on one side may overload a tire. The best way to know the actual weight of the vehicle is to weigh it at a public scale. Talk to your RV dealer to discuss weighing methods needed to capture the various weights related to the RV. This would include weights for the following: axles, wheels, hitch or pin (in the case of a trailer) and total weight.
Brake Systems

BRAKE SYSTEM COMPONENTS

Tow Vehicle Battery.
The primary power source for the trailer braking system is the tow vehicle battery. The connection is made at the positive post of the battery, or at the tow vehicle starter solenoid battery terminal.

Brake Controller.
Electric trailer brakes are automatically applied by the brake controller, which is usually mounted within easy reach of the driver. Connect an electric brake controller to the brakes with 12 gauge, stranded wire. Some controllers are connected to the tow vehicle’s hydraulic brake system, and are actuated when tow vehicle brakes are applied. Other information about brake controllers:

- Most experienced drivers prefer the trailer brakes to be set to engage slightly before the tow vehicle brakes.
- During rainy weather or slippery road conditions, if the tow vehicle brakes first, the trailer will have a tendency to push the tow vehicle or possibly “jackknife.”
- Lag time can be adjusted by turning the brake controller knob. The new setting will be retained until a new adjustment is made.
- Brake controllers usually have a manual feature, allowing the trailer brakes to be applied independently of the tow vehicle brakes.
- Consult instructions supplied with the controller for further information.

WARNING: DO NOT INSTALL A FUSE IN THE CIRCUIT BETWEEN THE TOW VEHICLE BATTERY AND AN ELECTRIC OR ELECTRONIC BRAKE CONTROLLER. A BLOWN FUSE WOULD CAUSE THE CONTROLLER TO CEASE FUNCTIONING, CAUSING TRAILER BRAKING LOSS WITH NO ADVANCE WARNING. CIRCUIT PROTECTION SHOULD BE INSTALLED PER THE BRAKE CONTROLLER MANUFACTURER’S INSTRUCTIONS.

Connector Plug.
The 7-pin connector on the trailer hitch transfers 12 Volt DC electrical power from the tow vehicle battery to the trailer brakes, exterior lighting system, and battery. After hitch connections have been made the 7-pin connector must be longer than the extended safety chains. extended connector life:

- Keep the plug clean, tight and protected from the elements.
- Inspect the plug carefully every time you hitch up.
- Always connect a 10 gauge, stranded, insulated copper “charge line” from the alternator on the tow vehicle to the trailer’s 12-volt connector. The “charge line” will keep the trailer battery charged while traveling.

A 30-amp circuit protector should be installed near the alternator connection.

Breakaway Switch.
This device is a vital component of the trailer’s braking system. The breakaway switch is located on the trailer tongue. The basic concept of a breakaway switch is:

1. A steel cable (lanyard) is fastened to the switch, which should connect to the frame of the tow vehicle.
2. When connected to the tow vehicle frame, the lanyard cable should be longer than the extended safety chains.
3. It automatically applies the trailer brakes if the tow vehicle and trailer become uncoupled while in motion.
4. The breakaway switch operates when a pull pin linked by a cable to the tow vehicle separates from the switch.
5. As the switch closes, the trailer battery supplies power to apply the brakes.
6. The steel lanyard must be anchored to the tow vehicle when the trailer is hitched. Secure this cable loop to the permanent frame of the tow vehicle, or a non-removable part of the hitch.
7. Do not fasten the breakaway switch lanyard to the hitch ball or any other removable part of the hitch.

WARNING: DO NOT TOW A TRAILER WITH A MALFUNCTIONING BREAKAWAY SWITCH.

DO NOT LEAVE THE PULL PIN OUT OF THE BREAKAWAY SWITCH FOR MORE THAN A FEW MINUTES, OR THE BATTERY WILL BE DRAINED.

DO NOT USE THE BREAKAWAY SWITCH FOR A PARKING BRAKE.

Remove the pull pin every three months and lubricate it with light oil. Before reinserting the pin, spray the inside of the switch with an electrical contact cleaner to prevent corrosion. Test breakaway switch operation before each trip, as follows:

1. Hitch the trailer to the tow vehicle.
2. Pull out the pull pin.
3. Test the breaker by attempting to drive away. If the breakaway switch is functioning properly, the trailer brakes will be activated.
4. If the brakes are not activated, check to make sure that the trailer battery is connected and fully charged, and the trailer brakes are properly adjusted.
5. If the trailer brakes do not operate after making these checks, contact your dealer for repair.
6. Reinsert the pull pin before towing the trailer.
**Trailer Brakes.**
Travel trailer and fifth wheel brakes are actuated by 12V electrical energy, converted to mechanical energy, providing power for smooth, safe stops. Greater electrical current from the brake controller will provide greater braking force applied to the trailer brake drums.

**Grounding.**
Only proper grounding back to the tow vehicle can complete the 12V electrical circuit within a travel trailer or fifth wheel brake system. A poor ground circuit from the brakes to the tow vehicle battery can be as detrimental to efficient braking as a poor primary circuit from the battery to the brakes. Do not rely on the hitch ball/coupler for a good ground. Run a ground in the 12-volt connector to the tow vehicle battery negative post, or the tow vehicle frame. The ground conductor must be the same wire size as the “charge line”.

**BRAKE INSPECTION & ADJUSTMENT**
Complete the following inspections before using the travel trailer or fifth wheel:

- Inspect all external braking system components.
- Inspect all wiring connections and test the breakaway switch as outlined previously.
- Inspect the brake drums and internal components each time the wheel bearings are repacked. (See manufacturer’s Maintenance Schedule provided with your Owner’s Packet).
- The magnets and linings should not show excessive or uneven wear.
- The magnets should move freely on their mounts.
- After replacing the hubs on the axle, adjust the brakes as follows, using a standard automotive brake tool:
  1. Remove the rubber plug from the adjustment hole at the base of the brake drum backing plate.
  2. Raise the wheel off the ground. Place the jack under the axle only.
  3. With the adjusting tool, turn the adjusting screw while spinning the wheel. When the wheel begins to drag heavily, back off the screw just enough for the wheel to spin freely.
  4. Replace the adjustment hole plug. Lower the wheel, remove the jack and repeat the sequence for the other wheels.

**BRAKING TIPS**
Never use the trailer brakes alone for extended periods.
- They were designed to stop the trailer, not the tow vehicle.
- Such use places excessive loads on the brakes, causing overheating, fading, and premature wear of magnets, brake shoe linings and drums.

**Never use the tow vehicle brakes alone.**
- The weight of a loaded travel trailer or fifth wheel will more than double the load placed on the vehicle’s brakes.
- Driving control is adversely affected when tow vehicle brakes are used alone, due to the force of the trailer pushing against the tow vehicle. This is especially true on slippery pavement or loose gravel, and jackknifing can occur.

**Always use the automatic brake controller.**
- The synchronized braking system enables safe driving with both hands on the steering wheel.
- If the brake controller is properly adjusted, there will be a slight “lead” on the trailer brakes. This braking resistance, combined with the tow vehicle’s engine pulling power, helps keep the two vehicles correctly aligned and help bring them to a safe, straight stop.

**PARKING & LEVELING**
Park on a wide, level spot whenever possible, never on a steep slope. Leveling is necessary for comfort and for correct operation of your refrigerator and monitor panel.

**SIDE TO SIDE SITE LEVELING**
To level the trailer from side to side:
- Use a step ramp, which can be constructed from several lengths of 2x6 lumber.
- Place under the wheels on the low side of the trailer.
- Use a bubble level to determine when the trailer is level.

**FRONT TO REAR LEVELING**
To level the trailer from front to rear:
- Block the wheels so that the trailer cannot roll.
- Uncouple the trailer from the tow vehicle.
- Level the trailer front-to rear, with the dolly wheel jack (Travel Trailers) or landing gear (Fifth Wheel).
- Stabilizer jacks should be placed under the frame after the trailer has been leveled. Front and rear for travel trailers. Rear only for fifth wheels.
- Some models will require stabilizer jack placement in slightly different locations.
- Stabilizer jacks are not intended to support the entire weight of the trailer, but to steady it while the weight is supported by the dolly wheel jack and running gear (Travel Trailer) or landing gear (Fifth Wheel).
Electrical Systems

12VOLT CHASSIS ELECTRICAL SYSTEM
A trailer chassis electrical system includes:

- Trailer battery
- Charging system
- Brake system
- Tail lights
- Turn signals
- 12 volt convenience outlets
- 12-volt power vents
- Fans
- Motors
- Fresh water pump
- Any 12-volt entertainment equipment
- All 12-volt interior lighting fixtures
- Other vehicle lights and accessories.

The tow vehicle’s 12-volt battery, the trailer’s 12-volt battery or the AC/DC power converter may provide twelve-volt power. The battery’s charge is maintained by the tow vehicle alternator, or by the charging circuit included in the power converter.

12-VOLT FUSE BLOCK PANEL
The 12-volt fuse block panel for DC circuits is located in a cabinet in various locations by model. Fuses are automotive type and should always be replaced with the same type and amperage rating. Replace bulbs with same type or equivalent.

The fuse block panel may also includes a 12-volt power cutoff switch. The cutoff switch when disconnected will avoid constant drain on the trailer battery when not in use.

WARNING: DO NOT INSTALL 12-VOLT FUSES WITH AMPERAGE RATINGS GREATER THAN THAT SPECIFIED ON FUSE BOX LABEL.

12-VOLT CIRCUIT BREAKER & RESET
In all units, 30-amp circuit breakers have been installed to protect the trailer’s 12-volt electrical system.

Travel trailers circuit breakers with reset switches will be located inside a covered junction box attached inside the front cross member of the A-frame. Additional circuit breakers may be used for slide-out switch protection. Those circuit breakers will be located inside a plastic junction box in a cabinet near the slide-out wall switch.

Fifth wheel circuit breakers with reset switches will be located inside a covered fuse box attached inside the off-door side baggage compartment with additional 30-amp breakers for slide-out protection and other 12-volt circuits.

NOTE: Not all 30-amp circuit breakers are equipped with the reset switch. Resets on 30-amp circuit breakers for slide-out motors are automatic reset switches.

120 VOLT AC SYSTEM
The 120-volt AC system provides grounded electrical service for the refrigerator and optional appliances such as air conditioners, microwave ovens, water heaters, TV, etc. Other appliances such as toasters, lamps, etc. may also operate on the 120-volt system.

The 120-volt system also provides a power source for the power converter. The trailer is equipped with a heavy-duty power cord to connect to an external 120-volt, 30-amp rated AC service.

- The cord and connector are molded together to form a weatherproof cable assembly.
- Do not cut or alter the cable in any way.
- Do not remove the cable connector ground pin or bypass the ground circuit of the trailer.
- Be sure the ground is maintained if an adapter is used to plug into an electrical service.
- Do not use a two-conductor extension cord, or any cord or cable that does not assure appropriate and adequate ground continuity.
- NEVER plug the 120-volt cord into an ungrounded receptacle.

WARNING: DO NOT OPERATE THE 120-VOLT ELECTRICAL SYSTEM WITHOUT A PROPER GROUND.

THE POWER CONVERTER
The power converter is the nerve center of the 12-volt DC and the 120-volt AC system.

- The power center will supply 12-volt requirements when operating on 120 AC volts.
- The onboard battery will gradually be brought to a full charge and maintained by the 6-amp battery charger as long as 120-volt power is available.
- The propane leak detector and other 12-volt components continually consume small amounts of current even when switched “OFF”. The trailer’s battery will fully discharge within 72 hours if not recharged during that period or if the power center is not connected to a 120-volt AC source.

DISCONNECT THE BATTERY IF YOU ARE NOT USING YOUR TRAILER.
GROUND FAULT INTERRUPTER
Kitchen, bathroom and patio 120V electrical outlets are protected by a Ground Fault Interrupter (GFI). This device is provided in compliance with ANSI A119.2/NFPA 501C requirements, and is intended to protect against hazards of line to ground electric faults and electrical leakage shocks possible when using electrical appliances in the bathroom or damp areas.

1. Insulation materials for appliances and devices can deteriorate over time or develop cracks allowing electric current to “leak” through insulation.
2. Should a circuit or appliance (electric shaver, hair dryer, etc.) develop shock hazard of this type, the GFI device will disconnect the outlet (and other outlets on the same circuit), limiting exposure to current leakage to ground.
3. The GFI device does not prevent electric shock, nor does it protect a person who touches both “hot” and neutral sides of the circuit. It does not protect against electrical circuit overloads.

Test the GFI at least once a month while operating on 120 volts AC. To test the GFI:
1. Push the “TEST” button. The “RESET” button should pop out, indicating that the protected circuit has been disconnected.
2. 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.
3. HAVE THE TRAILER ELECTRICAL SYSTEM CHECKED AT AN AUTHORIZED SERVICE CENTER OR BY A QUALIFIED ELECTRICIAN.
4. DO NOT USE THE SYSTEM UNTIL THE PROBLEM HAS BEEN CORRECTED.
5. To restore power, push the “RESET” button.

FRESH WATER STORAGE TANK
Water is stored in an on-board storage tank and is distributed to the various faucets by an automatic, self-priming pump which is operated by the 12V electrical system. This pump will function when power is available and the pump switch is “ON”.

This water storage tank is filled through a special filler cap outside the vehicle.
1. Before filling the tank, turn the pump switch to “OFF”.
2. Open the filler cap on the outside of the trailer.
3. Pour the water in from a bucket, or use a hose.
4. When the tank is full, close the cap before turning the pump switch to “ON”

CAUTION: Overfilling the fresh water tank from a pressurized source may cause serious damage to the water tank or structural components. Monitor water tank filling continuously.

CITY WATER
Water, under pressure, is provided when the trailer is connected to a park or city water supply. Connect the trailer as follows:
1. Turn the 12V water pump to “OFF”.
2. Remove the protective cap on the city water fill, and connect a hose between the city water supply and the city water fill on the trailer.
3. An in-line 60 psi pressure regulator is recommended to protect the trailer’s water system.
4. Open the city water supply valve.
5. Open the faucets in the trailer and let the water run a few minutes to clear the lines.

NOTE: As long as the water system is hooked up to a city water supply, the on-board storage tank and the 12V pump are isolated from the system. Do not turn the pump to “ON” until the city water supply is disconnected in order to avoid damage to the pump.

FRESH WATER SYSTEM SANITIZING
Sanitize the fresh water tank and piping at least once a year or whenever the trailer sits for a prolonged period. This will discourage the growth of bacteria and other organisms that can contaminate the water supply. Use a chlorine/fresh water rinse as follows:
1. Prepare a solution of ¼ cup liquid chlorine bleach (5% sodium hypochlorite) to one gallon of water for each 15 gallons of tank capacity.
2. Close drain valves and faucets, pour chlorine solutions into the fresh water tank filler, and complete filling with fresh water.
3. Turn water pump switch “ON”. (Be sure you have 12-volt DC power.) Open all faucets individually until water flows steadily, then turn off. This will purge any air from the lines.
4. Fill water tank with fresh water and wait three hours.
5. Drain the entire system by opening all fresh water tank valves, faucets, and plumbing line drain valves.
6. Flush the system with drinking quality water. Let the fresh water flow through the system for several minutes to flush out the chlorine solution.
7. Stop the flow of water, close the tank valve, the faucets, and drain valves.
8. Fill with fresh water and the system is ready to use.

WARNING: DO NOT use a contaminated system until it has been cleaned and thoroughly flushed (4-6 flushes), with water. Keep children away from unit until the water is safe to drink.

CAUTION: DO NOT run the pump without water in the system. Always keep the pump switch “OFF” when the system is empty or when connected to city water. Running the pump dry can damage it and void the warranty.

DRAINING THE WATER SYSTEM
If the trailer is to be stored in temperatures below freezing, the fresh water system and the waste water system should be drained as follows:
1. Empty the fresh water storage tank by opening the drain valve located on the tank.
2. Turn the pump to “ON” and open cold water faucets.
3. Open the drain petcocks on the hot and cold water pipes located in various locations depending on the model.
4. Open the drain valve on the bottom of the water heater (7/8” wrench required) as well as the water heater safety valve.
5. Open all the faucets and depress the flush pedal on the toilet to promote drainage.
6. Drain the holding tanks using the outlined procedures in the following section.

FRESH WATER SYSTEM WINTERIZING
Winterizing the fresh water system in temperatures below freezing, will provide a measure of protection for system plumbing components. After draining the fresh water system using the procedures listed above, complete the winterizing with the following steps:

SYSTEMS WITHOUT WATER HEATER BYPASS
1. Pour anti-freeze approved for RV fresh water systems in the fresh water holding tank. Depending on the capacity of the water heater in the trailer, the amount of antifreeze used should be 7-12 gallons.
2. Turn the pump to “ON” and pump fluid through the entire fresh water system.
3. Low point petcock drains may be opened briefly to ensure that the entire system contains antifreeze.
4. Open all faucets and remove drain stops.
5. Be certain to complete the fresh water sanitizing procedures before using the fresh water system for cooking, drinking, etc.

SYSTEMS WITH WATER HEATER BYPASS
1. Close the hot and cold water valves entering and exiting the hot water heater.
2. Open the crossover valve connecting the cold and hot water lines.
3. Close the valve between the fresh water tank and the water pump.
4. Open the valve on the other side of the water pump connected to a siphon hose.
5. Insert the siphon hose into the container of RV fresh water approved anti-freeze.
6. Turn the pump to “ON” and pump fluid through entire fresh water system lines. This procedure will bypass the hot water heater conserving anti-freeze.
7. Turn on faucets in kitchen and bath.
8. Keep pump running until antifreeze flows from faucets and turn water pump “OFF”.
9. Leave all faucets open and remove drain stops.
10. Close the valve at the siphon hose.
11. Be certain to complete fresh water sanitizing steps before using the fresh water system to cook, for drinking, etc.

WARNING: Automotive or windshield washer type antifreeze can be fatal if swallowed. DO NOT use them in the fresh water system to protect the drains in your trailer from freezing.
Holding Tanks & Drainage System

Travel trailers and fifth wheels are equipped with two or three separate holding tanks to accommodate waste. One holding tank accommodates toilet drainage. The tub/shower, and sinks have a separate drainage system. Both systems terminate at the waste valves outside the trailer.

TOILET & TOILET HOLDING TANK
Proper toilet instruction and maintenance is explained in the manufacturer’s manual supplied with the toilet.

- The toilet operation is designed to minimize the use of water needed to flush it.
- It is advisable to instruct children and strangers of proper toilet use because of the unusual operation of this type of toilet.

Before using the toilet’s holding tank, prime the tank with five (5) gallons of water to discourage waste solids from settling directly under the flush valve. Add a holding tank chemical (available from your local RV supplier). Follow instructions on the package. If required, an anti-freeze solution can be added at this time. It will not harm the plastic holding tank material.

The holding tanks will more effectively drain solids when the tank is relatively full of fluids. When the toilet’s holding tank is ready to be emptied, locate a proper disposal station to prepare for drainage.

1. To empty or dump the toilet holding tank, remove the cap at the 3” drain connection.
2. Securely attach a 3” hose adapter and hose.
3. Connect the hose to a sewer connection at the disposal station and pull the toilet holding tank drain valve handle out in a straight line.
4. After draining, close the valve handle, rinse the tank with several gallons of water, and drain again.

NOTE: After draining the holding tank, a false reading may sometimes occur on your monitor panel due to debris or tissue hanging on the sensor probes in the tank. Most debris clinging to the monitor probes will dislodge during travel by maintaining holding tank fluid levels of at least 1/3 capacity.

GRAY WATER HOLDING TANK
The sinks and tub/shower wastewater will drain to a separate holding tank. This holding tank will be referred to as the gray water holding tank.

- Drain unheated, gray water holding tank(s) after the toilet holding tank. This will help flush the drainpipe and valve. Simply pull the 1 1/2” pipe valve handle to empty the gray tank(s).
- Drain gray water holding tank(s) by pulling the valve handle labeled “WASTE” to empty the gray tank(s).
- Continuous draining for the galley, tub & sinks is possible without draining the toilet holding tank. NEVER leave the drain valve open continuously on the toilet holding tank. Instead, use it as on self-contained operation, and then drain it periodically as required.
- Add all necessary chemicals after draining the tank.
- The tank must contain fluid to operate and drain properly.
- Dumping stations are found at most RV campgrounds, RV parks, and some automobile service stations. Lists of these stations can obtained through sources such as Camping World, Woodall’s, etc., and other recreational/camping publications.
- Whenever possible, dump the holding tanks before traveling. Wastewater and sewage in the holding tanks reduce the carrying capacity of the trailer. See “WEIGHING AND LOADING” section.
- Dump holding tanks only when they are at least ¾ full. If necessary, fill the tanks with water to ¾ full. This provides sufficient water to ensure complete flushing of waste material into the sewer line.

CAUTION: Do not use any chemical additive that is not approved for recreational vehicle use. Consult your dealer for any clarification.

WARNING: Holding tanks are enclosed sewer systems and must be drained into an approved dump station. All holding tanks must be drained and thoroughly rinsed regularly to prevent accumulation of harmful toxic material.

HOLDING TANK DO’S AND DON’TS

- DO clean holding tanks with an approved cleaner
- DO add a special chemical additive to sanitize and improve tank action.
- DO guard the tank against freeze up.
- DO keep the dump valves closed to allow the tanks to fill to facilitate drainage.
- DO keep dump valves closed and drain caps in place to allow use of the system while traveling.
- DO use any soft, single-ply toilet tissue.
- DO open the bathroom vent to dispel condensation.
- DON’T put facial tissues, paper, automotive type antifreeze, sanitary napkins, household toilet cleaners, or any other foreign objects in your holding tank which may clog or damage the system.
Propane Gas System
Propane gas operates your range, oven, furnace, and water heater, and as an alternate energy source for some refrigerators. With proper handling precautions, propane gas is safe and provides modern conveniences. It is stored as a liquid under pressure and vaporizes under the control of a pressure regulator.

PROPANE GAS SAFETY PRECAUTIONS
Historically, propane gas is a safe and reliable fuel. As with any other volatile and flammable material, common sense dictates that propane gas be handled and used with respect and caution. If the system is maintained regularly, you can expect almost trouble-free operation.

WARNING: Propane gas is flammable and potentially explosive. Use proper handling, lighting and ventilation procedures.

1. The distinctive odor of propane gas indicates a leak. IF YOU SMELL GAS:
   • Extinguish all open flames, pilot lights and all smoking materials.
   • Do not touch electrical switches.
   • Shut off the gas supply at the tank valve(s) or gas supply connection.
   • Open all doors, windows and vents.
   • Leave the area until the odor clears.
   • Have the gas system checked and the cause of the leak corrected before using the system again.

2. Inspect the entire propane gas system for leaks or damaged parts before each trip.
3. Always be careful when drilling holes or fastening objects to the trailer. The gas supply lines could be punctured by a nail or screw.
4. Do not restrict access to propane tanks. The tank service valve must be accessible in an emergency.
5. Do not carry or store filled or empty propane gas containers inside a trailer.
   • Propane gas containers are equipped with a safety device that relieves excessive pressure by discharging gas to the atmosphere.
   • Leaks can occur at valves and fittings.
   • Always store propane tanks with the valves closed.

6. Do not use any propane gas tanks other than those furnished with the trailer without being sure that all connecting components are compatible.

7. WARNING: Turn off propane gas main valve and individually turn off all gas appliances or disconnect electric automatic ignition appliances before entering a propane gas bulk plant or motor fuel service station.

8. WARNING: Do not fill propane gas containers to more than 80% capacity. Overfilling can result in uncontrolled gas flow which can cause fire or explosion. A properly filled container holds about 80% of its volume as liquid.

9. 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, take the unit to an propane gas service representative.

10. Propane gas regulators must always be installed with the diaphragm vent facing downward. Make sure that the regulator vent faces downward and that the cover is kept in place to minimize vent blockage, which could result in excessive gas pressure causing fire or explosion.

11. 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 needs repair or replacement. Contact your dealer.

12. Use a proper wrench to tighten the fitting. Don’t force, jam or cross-thread the fitting. Always check this fitting for leaks after tightening.

13. Be sure the tanks are securely fastened in their rack whenever they are mounted on the trailer.

14. If you do not have the special tools and training necessary, do not attempt to repair propane gas system components.

15. WARNING: Screened enclosures or enclosed porches attached to the side of trailers, which have appliance PROPANE gas vents, present a threat of CARBON MONOXIDE poisoning unless properly vented by opening windows or venting in the enclosure.

16. ALWAYS THINK SAFETY.

FILLING PROPANE GAS TANKS

WARNING: Turn off all pilot lights and appliances individually before fueling fuel tanks and/or permanently mounted propane gas containers. When not individually turned off, automatic ignition appliances may continue to spark when propane gas is turned off at the container.

Propane gas tanks must be removed from the trailer and taken to an propane gas supplier or a service station, which sells propane gas to be filled.
QCC1 COUPLER
The QCC1 coupler and hose assembly connects the propane gas tanks to the propane gas regulator.

- It has a right-hand thread.
- Turn it to the right to tighten, turn left to loosen.
- The mating surfaces are brass and do not require any type of pipe sealant.
- If it ever leaks or cannot be reasonably tightened without excessive force, replace the complete hose assembly and/or have the tank valve checked and serviced.
- The QCC1 coupler contains an excess flow control to help restrict gas flow if the hose is cut or the regulator is broken.
- It is not designed to detect a leak or totally shut off the system if a leak or regulator failure occurs.
- The excess flow control can inadvertently restrict gas flow to the appliances. To reduce or eliminate this problem, try the following whenever restricted gas flow is evident:
  1. Be sure all appliances (including pilot lights, if equipped) are off and no gas is flowing in the system.
  2. Be sure the system is leak free. Test the fittings as outlined later in this section.
  3. Open the gas tank valve slowly. DO NOT SNAP IT OPEN. The sudden pressure fluctuation could confuse the excess flow control into thinking that the system was damaged.
  4. Wait at least 15 seconds before lighting any pilot or appliance.

This procedure will allow the excess flow control to settle and supply a normal flow of gas.

PROpane GAS REGULATOR
The regulator is the heart of the PROPANE gas system. It works continuously and requires more care and attention than any other part of the system.

WARNING: DO NOT ATTEMPT TO ADJUST THE REGULATOR. IT HAS BEEN PRESET BY THE REGULATOR MANUFACTURER. IF ANY ADJUSTMENT IS REQUIRED, IT MUST BE MADE BY A QUALIFIED LPG SERVICE TECHNICIAN USING SPECIAL EQUIPMENT.

LIGHTING PROPANE GAS APPLIANCES
Detailed operating information, for propane appliances, can be found in the Owner’s Information Package. Please read and follow these instructions.
SAFETY REGULATION REGARDING PROPANE GAS SYSTEMS AND PROPANE GAS APPLIANCES

The manufacturer of this recreational vehicle is required to furnish the following consumer information as provided by the National Fire Prevention Association and the American National Standards Institute. The information and warnings found here may also be found in other sections of this Owner’s Manual.

**WARNING!**

PROPANE GAS CONTAINERS SHALL NOT BE PLACED OR STORED INSIDE THE VEHICLE.

PROPANE GAS CONTAINERS ARE EQUIPPED WITH SAFETY DEVICES WHICH RELIEVE EXCESSIVE PRESSURE BY DISCHARGING GAS TO THE ATMOSPHERE.

This warning label has been located in the cooking area to remind you to provide an adequate supply of fresh air for combustion:

![Warning Label 1](image1)

A warning label has been located near the propane gas container. This label reads:

![Warning Label 2](image2)

The tank manufacturer has affixed the following labels to the propane tanks and valves of this trailer:

**NOTICE:**

THIS IS A NEW CYLINDER THAT SHOULD BE PURGED BY AN AUTHORIZED PROPANE FILLER BEFORE IT IS FILLED FOR THE FIRST TIME. THE FILLER WILL REMOVE THIS LABEL AFTER PURGING AND FILLING. **DO NOT OVERFILL.**

**WARNING!**

THIS CYLINDER IS EQUIPPED WITH AN OVERFILL PREVENTION DEVICE

- Only qualified persons are permitted to fill this cylinder
- Read and understand the cylinder warning label before attempting to fill
- The Overfill Prevention Device (OPD) will only operate if the cylinder is overfilled (greater than 80% level). Do not attempt to calibrate or tamper with the OPD.
- Before filling, inspect the cylinder in accordance with CGA C-6 or CGA C-6.3
- Cylinder must be level, stable and vertical at all times.
- This cylinder must be filled in accordance with US DOT, NFPA-58, State and Local regulations.
- Failure to properly fill the cylinder can result in injury or death.

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

![Warning Label 3](image3)

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

SELF-CONTAINED vs. UTILITY HOOKUP
Travel trailers and fifth wheels are designed to be self-sufficient in remote campsites. Carefully watch water reserves, propane gas, battery power, holding tank capacity (and more important, tow vehicle battery power and gasoline).

The following chart shows the source of power or supply for various trailer components depending on whether you are setup for self-contained operation or at a RV park hookup.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>SELF-CONTAINED (REMOTE) OPERATION</th>
<th>CITY HOOK-UP (RV PARK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range/Oven</td>
<td>LPG Tanks</td>
<td>LPG Tanks</td>
</tr>
<tr>
<td>Water Heater</td>
<td>LPG Tanks</td>
<td>LPG Tanks/120V*</td>
</tr>
<tr>
<td>Furnace</td>
<td>LPG Tanks</td>
<td>LPG Tanks/120V Input Line</td>
</tr>
<tr>
<td>Refrigerator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furnace Blower Motor</td>
<td>12V Trailer Battery</td>
<td>12V (Converter and 120V Input)</td>
</tr>
<tr>
<td>Vent Hood</td>
<td>12V Trailer Battery</td>
<td>12V (Converter and 120V Input)</td>
</tr>
<tr>
<td>Wall Electrical Outlets</td>
<td>(Not Available)</td>
<td>120V Input Line</td>
</tr>
<tr>
<td>Interior Lights</td>
<td>12V Trailer Battery</td>
<td>12V (Converter and 120V Input)</td>
</tr>
<tr>
<td>Air Conditioning (Optional)</td>
<td>(Not Available)</td>
<td>120V Input Line</td>
</tr>
<tr>
<td>Water Supply Water Pressure</td>
<td>Trailer Water Tank 12V Pump on Demand</td>
<td>City/Park Hook-Up</td>
</tr>
<tr>
<td>Drainage-Kit &amp; Lav Sinks, Tub/Shower Drainage-Toilet</td>
<td>Gray Holding Tank</td>
<td>Gray Holding Tank</td>
</tr>
<tr>
<td>Trailer Battery Recharge</td>
<td>Tow Vehicle Alternator</td>
<td>Battery Charger in Power Center - 120V Input Line</td>
</tr>
<tr>
<td>Lights - Brake Signal, Backup</td>
<td>12V Tow Vehicle Batt.</td>
<td></td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

SLIDE-OUT ROOM
SUNSET CREEK trailer slide-out rooms operate using an “On/Off” switch for power and a toggle switch, which controls the movement of the room in and out.

OPENING THE SLIDE-OUT
1. Level the trailer and put stabilizer jacks down.
2. Allow sufficient space for room movement.
3. Check for obstructions on the roof and at the ends of the slide-out room (i.e., open cabinet doors).
4. Press and hold the lower rocker switch to open.
5. As the room reaches the wall stop pressing the switch
6. Check the perimeter seal behind the wood trim. If the perimeter seal is not in contact with the room, very briefly press the rocker switch to further open the room until the seal make contact.

CAUTION! Continuing to press the slide-out room rocker switch will cause the top of the room to run past the perimeter seal. Damage to the wood trim around the slide-out room and damage to the interior walls may occur if the room is run out beyond the perimeter seal.

CLOSING SLIDE-OUTS
1. Clear the roof of any debris (i.e., leaves branches, etc.).
2. Check for obstructions inside (i.e., open doors/drawers, rugs, furniture, etc.).
3. Press and hold the upper rocker switch to close the room. Block stops have been placed on the gear rails to stop the slide-out room at the proper closed position.
4. As the gear mechanism begin straining to close further, remove pressure from the rocker switch and inspect the outside bulb seal. The outside bulb seal will be compressed to half it’s open thickness when closed properly.

SLIDE-OUT ROOM MAINTENANCE
- Keep the battery at full charge. A low battery will affect slide-out room operation.
- At least twice a year, open the slide-out room and inspect the drive rams. Remove any dirt and grime accumulations. Apply a light coating of white lithium grease to the drive rams if needed.
- Check all bolts attaching the rams to the bottom of the slide-out room.
- Spray rubber seals with silicone to maintain flexibility.

MANUAL OPENING / CLOSING SLIDE-OUTS
MAIN SLIDE ROOMS
Access to the manual drive shaft for flush floor and non flush floor slides is located on opposite side of slide room between skirt metal and main rail of frame. 3/4” socket is required to operate manual drive shaft. Caution before manually operating slide, be sure power switch is turned off.

BEDROOM SLIDES
Access to manual drive for bedroom slide is located at foot end of bed opposite of motor. Requires a 1/2” socket to operate. Caution before manually operating slide, be sure power switch is turned off.
All Slide Rooms

Always turn slide power switch to on when towing unit.

Traveling

1. Make certain the slide-out room is properly closed.
2. Leave the power supply switch on. This powers an electric brake within the slide-out motor and prevents the bottom of the room from creeping outward.

Interior Care

1. Interior wood paneling. All paneling is prefinished plywood, laminated with a film. It may be cleaned with a furniture polish. CAUTION: Avoid use of solvent-based cleaners containing kerosene, naphtha, carbon tetrachloride, butane or abrasives. Unprotected surfaces will be harmed.
2. Drapes, bedspreads, upholstery and carpets. All fabrics have been carefully selected by interior decorators to provide a pleasing, stylish interior. Most dirt can be easily removed with a damp cloth. If badly soiled, use good quality upholstery cleaner. For drapery and bedspread cleaning, refer to the chart on page 28. When storing the trailer, protect upholstery and interior from fading by putting aluminum foil between windows and drapes.
3. Work Surfaces. The work surfaces are plastic laminate and will resist alcohol, fruit stains, scratches, acid, household alkali and heat up to 275 degrees Fahrenheit. Waxing helps preserve the luster. Never use these surfaces for cutting or slicing, and protect them from hot vessels.
4. Bathroom. The bathroom fixtures should only be cleaned with a mild solution of soap and water. Never use scouring pads or powder.
5. Appliances. Manufacturer’s instructions for cleaning (if provided) are enclosed in the Owner’s Information Package.
6. Floors. Vinyl floors require only washing and periodic waxing. Vacuum carpeting regularly, and clean it with a quality carpet cleaner.
7. Decorative Glass. Decorative glass should be cleaned with a mild glass cleaner. The decorative material is a polymer, and will be damaged by solvents, abrasives, or strong detergents. Never use these substances to clean the decorative glass.
(a) Dampen a clean, soft cloth with glass cleaner.
(b) Avoid spraying the glass directly with the cleaner solution.
(c) Wipe the surface dry with a second clean cloth.
(d) Do not leave the cleaner on the glass surface for more than five minutes.
(e) The frosted effect will disappear temporarily when wet, and will reappear when dry.

Exterior Care

Most exterior parts are made of ABS, fiberglass, aluminum and rubber materials. The finish on these parts is durable, but not indestructible. Any material and finish will deteriorate in 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. Weathering can take several forms:

- Chalking. The surface finish has broken down into a fine powder. It usually will wash off.
- Fading. The color of the finish has changed. This can be caused by chemicals spilled on the surface, staining it, or by changes in the pigments used in the finish.
- Yellowing. Usually caused by chemical changes in the material and pigments.

Outside Sidewall/Endcap Care

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 maintenance guidelines can help you reduce these effects:

1. Wash the exterior of the trailer at least monthly. Wash with a mild soap. Avoid strong alkaline cleaners and abrasives.
2. Wax the exterior at least once or preferably twice a year. Aluminum surfaces can be waxed with a good automotive wax.
   - When waxing, always read and follow the instructions and precautions on the container.
   - Some cleaners and waxes are recommended for use on only certain types of surfaces.
3. Occasionally, one part may weather more rapidly than a similar part may weather. In those cases, a light rubbing compound may be required. Always follow rubbing compound with a high quality wax.

Rubber Roof

E.P.D.M. roofs may be installed on SUNSET CREEK trailers. Periodic cleaning is the primary maintenance required for rubber roof surfaces. The recommended maintenance includes:

- At least semi-annually, inspect the roof surface for damage, breaks in caulks or sealant and seals around fasteners and accessories.
- Wash the surface with granulated household cleaner mixed in a solution with water.
- Using a soft-bristled brush will work more effectively than sponges or cloth.
- Stubborn stains caused by oak leaves or pinesap can usually be removed with a kitchen cleanser containing bleach.
- Always completely rinse soap residue from both the roof and sidewall surfaces to prevent streaks.
- Rubber roofs may become slippery when wet.
- Do not use acetone or any products containing petroleum distillates on an E.P.D.M. surface.
- Rubber roof material can be punctured or cut by sharp objects. Exercise caution when placing articles on an E.P.D.M. roof surface.
- This rubber roof material does not require coatings to protect the surface from ultra-violet light or ozone. Protective coatings may damage the rubber roof membrane.

**WINDOWS, DOORS, VENTS & LOCKS**
- Keep moving parts of windows and latches adjusted and maintained.
- Lubricate the windows with a light oil or powdered graphite at least once a year.
- Check and tighten the screws holding the windows in place periodically.
- Check the weather sealant.
- Clean screens by gently wiping with a damp cloth or soft flat brush.
- Inspect the seals around doors and windows every three months.
- Lubricate locksets, latches and hinges in entry doors and exterior storage compartments at least annually with powdered graphite.
- If the trailer is located at a beach or is exposed to salt air, frequent lubrication may be required.
- Record and safely store the identification number of the keys. The lock manufacturer will need this information for duplicate keys in case of loss.

**DOOR AND WINDOW RE-SEALING**
*Inspect the sealant around windows and doors at least every three months.* If any of the following defects are evident during inspection, the affected areas must be resealed:
- Excessive amount of sealant protruding from joints.
- Sealant cracked or peeling
- Voids in sealant.

*Consult your dealer for type of sealant.

**NOTE:** Do not seal the bottom flanges of windows and doors. Two sealant voids have been intentionally left in the bottom flange sealant to provide exterior drainage in case of leakage.

If you find any of the above defects:
1. Use a plastic scraper to remove excess sealant.
2. Clean all areas to be resealed with mineral spirits and clean rags.

**WARNING:** MINERAL SPIRITS IS A FLAMMABLE LIQUID. USE EXTREME CARE WHEN HANDLING AND USING. DO NOT EXPOSE TO OPEN FLAME, SPARKS, OR SMOKING MATERIALS. DO NOT USE IN UNVENTILATED AREAS.

Make sure that all areas to be resealed are dry before new sealant is applied.
Storage

COLD WEATHER STORAGE

The fresh water system and holding tanks are greatly affected by cold weather. Proper winterizing will protect pipes, tanks and other components from freezing and/or cracking. The following procedures are recommended for storage during cold weather:

1. Follow the Fresh Water System Draining and Winterizing Procedures in section titled “FRESH WATER SYSTEM”.

   CAUTION: DRAINING THE WATER SYSTEM ALONE WILL NOT PROVIDE ADEQUATE COLD WEATHER PROTECTION. IF THE TRAILER IS TO BE UNHEATED DURING FREEZING TEMPERATURES, YOUR DEALER CAN WINTERIZE YOUR TRAILER OR CAN SUPPLY SPECIAL ANTIFREEZE, WHICH IS SAFE AND APPROVED FOR USE IN RV WATER SYSTEMS. FOLLOW THE INSTRUCTIONS FURNISHED WITH THE ANTIFREEZE.

   WARNING: DO NOT USE AUTOMOTIVE OR WINDSHIELD WASHER ANTIFREEZE IN THE TRAILER FRESH WATER SYSTEM. THESE COULD BE HARMFUL IF SWALLOWED.

2. Flush toilet several times to insure that water does not remain in the lines.
3. Drain waste system by opening all knife valves on holding tank system.
4. Remove and store battery(s) in an area with a similar climate to room temperature to help preserve the charge.
5. Do not allow snow to accumulate on the roof. In addition to possible damage from the excess weight, freezing and thawing of snow or ice may cause leakage through the roof seams along the top edge of the sidewalls.

EXTENDED STORAGE

In addition to “COLD WEATHER STORAGE” procedures listed, the following procedures are recommended when a trailer will be stored for extended periods:

1. Remove all food and materials from the refrigerator and leave the door open.
2. Close all windows, vents and doors. It is a good idea to cover the windows to protect the interior from sun damage.
3. Lift the weight of the trailer off the tires using blocks or other safe devices of this type.
4. Cover tires to protect from weather damage.
5. Check the sealant on the roof, windows, doors and vents to verify proper protection.
6. Make sure the valves are closed at the LPG tanks.
7. If convenient during the storage period, periodically circulate air throughout the trailer and inspect the interior.
8. Lock all doors.
9. If the trailer is covered with plastic or canvas, provide ventilation from a vent, door and/or window to prevent mildew, etc. on the interior.
## Maintenance

<table>
<thead>
<tr>
<th>SERVICE TO BE PERFORMED</th>
<th>SERVICE INTERVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weekly</td>
</tr>
<tr>
<td></td>
<td>Or</td>
</tr>
<tr>
<td>Pack Wheel Bearings</td>
<td>X</td>
</tr>
<tr>
<td>Inspect Brakes</td>
<td>X</td>
</tr>
<tr>
<td>Inspect Safety Chains</td>
<td>X</td>
</tr>
<tr>
<td>Inspect Brake Wiring</td>
<td>X</td>
</tr>
<tr>
<td>Inspect Tires</td>
<td>X</td>
</tr>
<tr>
<td>Inspect Hitch Components</td>
<td>X</td>
</tr>
<tr>
<td>Lubricate Locks</td>
<td>X</td>
</tr>
<tr>
<td>Lubricate Coupler Latch and Socket</td>
<td>X</td>
</tr>
<tr>
<td>Lubricate Hinges</td>
<td>X</td>
</tr>
<tr>
<td>Inspect and Clean Vents</td>
<td>X</td>
</tr>
<tr>
<td>Torque Lug Nuts*</td>
<td>X</td>
</tr>
<tr>
<td>Sanitize Water Tank (if trailer has been stored)</td>
<td>X</td>
</tr>
<tr>
<td>Clean Drapes and Interior Fabrics</td>
<td>X</td>
</tr>
<tr>
<td>Clean Battery Cables and Terminals, Check Fluid Levels</td>
<td>X</td>
</tr>
<tr>
<td>Inspect Suspension</td>
<td>X</td>
</tr>
<tr>
<td>Check All Top Sealed Seams (including Baggage Doors, Slide-Out Windows, Patio Lights, Vents, Awning Rails, Gutter Rails, Corner Moldings, Roof Extrusions and Rack/Ladder Brackets). Re-seal as Needed**</td>
<td>X</td>
</tr>
<tr>
<td>Check Water System Components</td>
<td>X</td>
</tr>
<tr>
<td>Balance Tires (After 1st 1,000 Miles; as Required Thereafter)</td>
<td>X</td>
</tr>
<tr>
<td>Complete LPG System Check and Pressure Check</td>
<td>X</td>
</tr>
<tr>
<td>Visually Inspect Exposed LPG System Components</td>
<td>X</td>
</tr>
<tr>
<td>Visually Inspect Slide-Out Room Tubes</td>
<td>X</td>
</tr>
</tbody>
</table>

* From the factory, lug nuts should be tightened every 50 miles for the first 200 miles to between 90 to 95 ft.-lbs.
** Leaks or water damage resulting from failure to perform normal maintenance may void the warranty as detailed in Section 2C of the Limited Warranty.
Keeping a clean, well-maintained trailer will result in many years of camping fun. Following the recommended cleaning procedures will eliminate many of the problems associated with poorly maintained units. A poorly maintained unit can result in the voiding of the warranty, as will negligence, misuse, or the installation of equipment not authorized by Winnebago of Indiana, LLC. Become familiar with the information in this manual, and in the appliance manufacturer’s instruction

<table>
<thead>
<tr>
<th>ITEM</th>
<th>MAINTENANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Countertops</td>
<td>Clean with damp, soapy cloth and dry immediately.</td>
</tr>
<tr>
<td>Refrigerator</td>
<td>Clean and remove food after each trip.</td>
</tr>
<tr>
<td>Stove and Sinks</td>
<td>Clean with appropriate cleaners.</td>
</tr>
<tr>
<td>Cushions</td>
<td>Use foam type cleaners or warm, soapy water.</td>
</tr>
<tr>
<td>Vinyl</td>
<td>Use vinyl cleaner or soapy water.</td>
</tr>
<tr>
<td>Living Room Drapes</td>
<td>Dry clean only.</td>
</tr>
<tr>
<td>Bedroom Curtains</td>
<td>Hand wash with mild detergent and drip dry. <strong>DO NOT DRY IN DRYER.</strong></td>
</tr>
<tr>
<td>Bedspread</td>
<td>Dry clean only. <strong>DO NOT DRY IN DRYER.</strong></td>
</tr>
<tr>
<td>Carpet</td>
<td>Use recommended carpet cleaner, vacuum.</td>
</tr>
<tr>
<td>Vinyl Floor Covering</td>
<td>Wash with soapy water, rinse and wax.</td>
</tr>
<tr>
<td>Prefinished Paneling</td>
<td>Use furniture wax or polish.</td>
</tr>
<tr>
<td>Stained Wood</td>
<td>Sand and re-stain if needed.</td>
</tr>
<tr>
<td>Propane Gas System</td>
<td>Check for crimped tubing or other damage. Test for leaks with soapy water or leak tester. Paint LP bottle when needed. Have pressure regulator checked regularly.</td>
</tr>
<tr>
<td>Water System</td>
<td>Check all hoses, fittings and connections for leaks. Clean tank discharge filter and sanitize system when necessary.</td>
</tr>
<tr>
<td>Electrical</td>
<td>Examine all wiring and connections.</td>
</tr>
<tr>
<td>Fire Extinguisher</td>
<td>Check pressure regularly and note on inspection tag.</td>
</tr>
<tr>
<td>Side Metal</td>
<td>Clean with soapy water and wax with a non-abrasive wax.</td>
</tr>
<tr>
<td>Air Conditioner</td>
<td>Clean evaporator and condenser coils, filter and pan. Cover outside when not in use.</td>
</tr>
</tbody>
</table>
Additional Precautions

If you believe that your SUNSET CREEK travel trailer or fifth wheel has a defect, which could cause a crash or could cause injury or death, immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Winnebago of Indiana, LLC.

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

To contact NHTSA, either call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); or write to: NHTSA, 1200 New Jersey Ave., Washington, D.C. 20590 or go to http://www.safercar.gov. Information may be obtained about motor vehicle safety from the hotline.

CAUTION: Always check to be certain that the hitch is locked properly before towing. Be sure hitch bars are adjusted for proper load equalization.

CAUTION: It’s also important to load personal cargo so that Gross Axle Weight Rating are never exceeded. For safety’s sake, you should weigh your family camping vehicle frequently as loaded for travel. We cannot emphasize too strongly that the Gross Vehicle Weight and Axle Rating must not be exceeded. Overloading is a safety hazard.

WARNING: IT IS NOT SAFE TO USE COOKING APPLIANCES FOR COMFORT HEATING.

WARNING: The water heater and furnace combustion air exhaust ports may be extremely HOT during water heater and furnace operation. DO NOT touch these outlets or allow any material to come in contact with or cover either the air intake or exhaust ports while operating the water heater and/or furnace.

WARNING: DO NOT use the breakaway switch as a parking brake. The current needed to operate the brakes will drain the battery in a short time and the brakes will release when the voltage fails.

WARNING: DO NOT mix different types of tires on the same vehicle such as radial, bias, and bias-belted tires except in emergencies, because vehicle handling and tire life may be seriously affected and may result in loss of control or tire failure.

WARNING: DO NOT replace a blown fuse with one that has a higher amperage rating. If a fuse continues to blow (or circuit breaker to pop) DO NOT attempt to bypass it with a piece of wire. Determine the reason for the overload and have it repaired before using the circuit again. DO NOT attempt wiring repairs on a “live” circuit. Turn off all appliances and disconnect the trailer from all sources of 120V and 12V electricity.

WARNING: DO NOT use a cheater plug (one with the ground wire pin removed) to hook up your trailer to a 120V plug-in. DO NOT use an extension cord with a lower circuit rating to plug into an electrical hook-up that is beyond the reach of your trailer’s power cable.

WARNING: Test the smoke detector’s operation after your camping vehicle has been in storage, before each trip and at least once per week during use.

WARNING: Use only antifreeze made especially for potable water systems. Automotive antifreeze, if ingested, can cause blindness, deafness or death.
STATEMENT OF FORMALDEHYDE FROM BUILDING MATERIALS

Certain building products such as particleboard, fiberboard, and hardwood plywood are manufactured with an adhesive containing urea-formaldehyde. The products emit a small quantity of formaldehyde into the air.

Other products contain formaldehyde or urea-formaldehyde resins, such as some carpets, draperies, upholstery, fabrics deodorizers, cosmetics, and permanent press fabrics. Formaldehyde is also a by-product of combustion and is produced by cigarettes and gas appliances.

The concentration of formaldehyde in the indoor air depends on the quantity and emission rates of all emission rates of all emitting products in the structure compared to the volume of indoor air and the fresh air ventilation rate. As with other indoor pollutants, ventilation should reduce formaldehyde levels.

WARNING: FORMALDEHYDE LEVELS IN THE INDOOR AIR CAN CAUSE TEMPORARY EYE AND RESPIRATORY IRRITATION AND MAY AGGRAVATE RESPIRATORY CONDITIONS OR ALLERGIES.
SUNSET CREEK by SunnyBrook

Limited ONE-year warranty for Travel and Fifth Wheel Trailers (the Product).
For SUNSET CREEK Travel and Fifth Wheel Trailers (Product).
Manufactured by Winnebago of Indiana, LLC (the Factory) sold in the United States and Canada.

Coverage Provided:
Winnebago of Indiana, LLC warrants to the ORIGINAL CONSUMER PURCHASER ONLY, when purchased from an authorized Winnebago of Indiana, LLC dealer, for a period of ONE (1) year from date of purchase (Warranty Period), that the body structure of this recreational vehicle shall be free of substantial defects in materials and workmanship attributable to the WARRANTOR. This warranty does not cover or include:
1) Equipment and appliances: such as tires, wheels, brakes, axles, stoves, water heaters, furnaces, power jacks, microwaves, refrigerators, awnings, washers, dryers, air conditioners, radio/cassette players, TV’s, satellite receivers, stereo tuners, CD players, VCR’s, 12V/110V power converters, antennas, and any other item which are warranted directly by their respective manufacturer. Copies of those written warranties are to be provided to the owner by selling dealer at time of retail sale.
2) Damage caused by or related to:
a) Rust and/or environmental conditions (salt, hail, chemicals in the atmosphere, etc.)
b) Accidents, misuse, or negligence.
c) Failure to perform normal maintenance.
d) Alteration or modification of the product.
3) Normal deterioration due to wear or exposure, such as fading of furniture fabrics or drapes, carpet wear, etc.
4) Normal service items such as light bulbs, fuses, lubricants, etc.
5) Any Product used as a commercial unit or used as a leased or rental unit. Commercial unit means used for business for profit or income purposes at any time.
6) Condensation on any window or other parts, or any results of condensation.

Damage Limitations and Oral and Implied Warranty Limitations:
Implied warranties such as the warranty of merchantability or fitness for particular purpose cover only the original purchaser. Coverage terminates 365 days from the date of purchase by the original purchaser or on the date the original purchaser sells or transfers his interest in the Product to a subsequent owner. It is the intent of Winnebago of Indiana, LLC to comply with Magnuson-Moss Warranty Act and the Federal Trade Commission’s prescribed rulings. Winnebago of Indiana, LLC is not liable for and will not recognize any warranty other than the implied warranties under state law and the written warranty contained in this document. In other words, no other warranty, written or oral, is given by Winnebago of Indiana, LLC.

Please note, however, some states do not allow the exclusion of limitation of incidental or consequential damages, so the above limitation on damages may not apply to you. Some States also do not allow limitations on how long an implied warranty lasts, so the above limitation on the term of the implied warranty may also not apply to you.

This warranty extends to the first retail purchaser and begins on the date of first retail purchase. This warranty lasts for a period of 365 days from such date. Written notice of defects subject to warranty coverage must be given to the selling dealer or Winnebago of Indiana, LLC, 201 14th Avenue, Middlebury, Indiana 46540 within 30 days after the defect is discovered by the retail purchaser. Notice must be received by the selling dealer or the Factory during warranty period or no later than 30 days after its expiration. If repairs are required, they will be made without charge, excluding any freight, after the SUNSET CREEK Product is taken to the selling dealer or the Factory.

Non-Amendable or Transferable:
This warranty is not assignable or transferable. This warranty may be altered only in writing by Winnebago of Indiana, LLC and not by any Winnebago of Indiana, LLC dealer. Any modification or additional statement concerning warranty by persons other than Winnebago of Indiana, LLC factory personnel are not the responsibility of the Factory and should not be relied upon.

Owner’s Obligation:
The owner is responsible for normal maintenance. However, minor adjustments (such as adjustments to the interior passage doors, cabinet doors, cabinet latches, exterior entrance door, screen doors, compartment/baggage doors, LP regulator pressure, cabinet latches, etc.) will be performed by the selling dealer during the first 90 days of warranty coverage. Thereafter, such adjustments are the responsibility of the owner as normal maintenance.

The owner shall contact the selling dealer or the Factory if a problem occurs which may be covered by this warranty with sufficient information to resolve the matter. The owner shall be responsible for the freight costs to the selling dealer or the Factory for warranty service.

Dealer’s Obligations:
The selling dealer is obligated to maintain the SUNSET CREEK Product prior to retail sale, to perform a detailed pre-delivery inspection, and to provide warranty service.

If the selling dealer is unwilling to resolve a problem which the owner is convinced is covered by this warranty, the owner should write to the Factory at the address listed above with a description of the problem and attempts made to resolve it. The Factory will review the problem to determine if this warranty is applicable, and will provide written notice to the owner and the selling dealer.

Within 60 days of authorization, all warrantable repairs must be completed and paperwork submitted to Winnebago of Indiana, LLC for reimbursement.

Owner Registration:
The owner should complete and mail “Warranty Registration” form at the time of the pre-delivery inspection by the owner and the selling dealer or within 30 days from and after that date.

WARNING: RETURN OF WARRANTY REGISTRATION IS A CONDITION PRECEDENT TO WARRANTY COVERAGE AND PERFORMANCE. IF THE FORM IS NOT RECEIVED COMPLETED AS DIRECTED, YOU WILL NOT HAVE A WARRANTY.

Legal Rights:
This warranty gives you the specific legal rights and you may also have other rights, including but not limited to those provided by the Magnuson-Moss Warranty Act, 15U.S.C. 2301 et seq. as well as other rights, which may vary from state to state.

Winnebago of Indiana, LLC
201 14th Street · Middlebury, IN 46540 · Telephone: (574) 825-5250 · FAX: (574) 825-5433