SKYLINE CORPORATION
8' WIDE RECREATIONAL
PARK TRAILER OWNER
AND INSTALLATION MANUAL

SKYLINE®

BRINGING AMERICA HOME. BRINGING AMERICA FUN.

SKYLINE CUSTOMER SATISFACTION

Skyline Customer Satisfaction is more than just a promise. We believe you deserve quality in every aspect of ownership. To ensure your continued satisfaction, we're dedicated to providing you with a quality product along with the very best service available in our industry. Skyline's "Commitment of Excellence" will be a source of pride and satisfaction for you.

Contact your Skyline dealer for details.

SAMPLE CARD

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CORPORATE MISSION STATEMENT

Skyline Corporation is a leader in the development, manufacture, and marketing of high quality, innovative manufactured homes and recreational vehicles that meet customer needs for housing and leisure lifestyles.

Our mission is to continually improve the quality of our products and the way we do business in order to meet customers' expectations. By pursuing this mission, we will be able to grow and prosper as a business, provide stable employment and high quality work life for our people, be a responsible community citizen, and return a reasonable profit to our shareholders.

Our mission reflects our deeply held corporate values and principles and its achievement involves these areas:

SAFETY...
We will provide a safe work environment for our people and safe products for our customers.

QUALITY...
We will provide products and services that consistently meet customer needs and exceed expectations for quality.

CONTINUOUS IMPROVEMENT...
We will continually strive for excellence in everything we do. We will constantly seek day-to-day and long-term improvements and not settle for short-term "fixes."

CUSTOMER FOCUS...
Customers are the ultimate reason Skyline is in business and everyone at Skyline must direct his or her efforts to the production of products that exceed customer expectations. Every activity and every job in the Company is part of this process.

PEOPLE...
People are our greatest asset. We will listen to and respect ideas from everyone and will involve our people in the decisions that affect the areas in which they work. We will continually encourage and provide training and educational opportunities for our people, so that they can optimize their performance, their individual development, and their contribution to the Company.

TEAMWORK...
Teamwork is the driving force of the Skyline organization, enabling us to coordinate the Company's resources to achieve the Company's mission. The essence of teamwork is breaking down barriers between departments and treating each person and each job as a customer whose needs must be met if the ultimate customer, the buyer of a Skyline product, is to be satisfied.

INTEGRITY...
We will conduct all of our activities in a manner which is at all times fair, moral, ethical, and legal. We will hire, reward, and promote without discrimination and without regard to age, sex, ethnic origin, physical condition, or religious belief.

DEALERS & SUPPLIERS...
We view our dealers and suppliers as extensions of our Company. We will conduct our business in an atmosphere of trust and work to form mutually beneficial long-term partnerships.

PROFITS...
Profits are the ultimate measure of how efficiently we satisfy our customers' desire for products of superior value. We will strive to achieve the profits required for survival and growth and to provide jobs and security for our people.

INTRODUCTION

We're delighted that you chose to invest in a Skyline-built recreational park trailer.

It is designed and constructed to make recreational park trailer living as safe and carefree as possible. And we won't be satisfied until you're completely happy with every aspect of your new recreational park trailer.

This manual can help assure that happiness. We urge you to read it carefully and follow its instructions and recommendations. We also urge you to read the other manuals and information about the appliances in your new trailer.

This information should be kept where it will be available for easy reference.

To further ensure your satisfaction:

1. Your recreational park trailer is inspected by your dealer after it leaves the factory and before it is delivered to you.

2. Upon taking delivery of your recreational park trailer, have your dealer go over your trailer with you and instruct you concerning the appliances and other functional components.

As we're sure you understand, even the best built trailers occasionally require service. So if service is needed, please see the "How to Obtain Service" instructions on page B of this manual.

CAUTION: Recreational park trailers are not designed to withstand heavy snow loads. Trailers located in mountainous regions or other heavy snow areas should have snow accumulations removed from the roof of the recreational park trailer.

All of us at Skyline join with your dealer in wishing you every happiness in your new recreational park trailer.

IMPORTANT SAFETY MESSAGE

This park trailer is primarily designed to provide temporary living quarters for recreational, camping, or seasonal use. It is not designed or intended to be used as long-term permanent, full-time housing.

FULL ONE-YEAR WARRANTY

Manufacturing defects reported to Skyline within one year after original retail delivery of your new Park Trailer by an authorized dealer will be corrected without charge and within reasonable times. Excluded are misuse (including lack of reasonable maintenance), minor imperfections, alterations, and dealer or owner improper transportation, installation, or hookup.

This warranty gives you specific legal rights. You may have other rights which vary from state to state.

HOW TO OBTAIN SERVICE

Your continued satisfaction with your park trailer is of utmost importance to Skyline. Please follow these steps for fast, efficient warranty service.

1. **Inspect your park trailer thoroughly** to determine exactly what service is required.

2. **Make a list of the required service.** Be sure to sign it.

3. **Call, write, or visit your dealer.**
   If your request is not resolved to your satisfaction, **make sure it is brought to the attention of the owner or general manager of the dealership.** They will obtain factory assistance, if needed.

   NOTE: Your appliances are warranted both by the appliance manufacturer and by Skyline. All appliances furnished with your park trailer are "name brands," and the manufacturer may have a service facility near you. If so, you may be able to obtain even faster service by requesting service directly from the appliance manufacturer.

4. **If your request has not been resolved to your satisfaction within a reasonable time, write and/or call the factory service representative at:**

   Include the complete serial number of your park trailer, and your complete list of required service. The serial number may be found on the UL label on the outside of your trailer near the entrance door, or, stamped into the hitch near the coupler.

5. In those rare cases in which your dealer and the factory service representative have been unable to resolve the problem, write the Director of Consumer Relations, Skyline Corporation, P.O. Box 743, Elkhart, Indiana 46515 or CRELATIONS@SKYLINECORP.COM. Include the complete serial number of your park trailer, your telephone number and a complete list of the required manufacturer's warranty service. Your request will receive prompt attention.

All service under your Skyline warranty will be performed without charge for either parts or labor. Whether service is performed by the dealer, the factory, or others. Skyline accepts final responsibility for fulfillment of all its warranty obligations. Skyline will use its best efforts to see that all manufacturer's warranty service is completed as expeditiously as possible.

Warranty service requests must be made within the warranty period and should ordinarily go to your dealer.

SKYLINE CARES ABOUT YOU

Skyline is a leader in the recreational vehicle industry because Skyline cares about its RV owners. And the proof of the caring is the exclusive six-point program that protects your investment in your Skyline-built trailer.

1. **Research and development.** Skyline-built park trailers are planned by a complete staff of professional engineers and designers.

2. **Code construction.** Every recreational park trailer built by Skyline meets or exceeds code standards and features quality components including name-brand appliances.

3. **Underwriters Laboratories.** The UL label on your park trailer means that America's most respected independent testing agency approved the plans and inspected the park trailer during production.

4. **Full one-year warranty.** It's the no-nonsense guarantee printed in this manual. We urge you to read it.

5. **Full field service.** Skyline and its dealers are pledged to back up the warranty with prompt, effective service that takes care of problems quickly and effectively.

6. **Financial strength.** Skyline is one of America's soundest companies financially. Your can rely on Skyline today and tomorrow.

IMPORTANT SAFETY MESSAGE

The heating, cooking, electrical, and other systems and appliances in your park trailer must be operated and maintained ONLY as specified in this manual and in the other manuals furnished with your park trailer. These manuals must be followed for good performance and to assure your safety, so carefully read these manuals immediately. Obtain qualified help whenever recommended or whenever you are in doubt. Be sure you clearly understand how to operate any system before you try. If you are at all uncertain, contact your dealer, the Skyline factory, the system or appliance manufacturer's local representative, or Skyline's Director of Consumer Relations BEFORE you try to operate any system or appliance. Please read with special care the emergency procedures section of this manual. The section, which begins on page 52, explains important safety features such as emergency exits. Also, please read all instructions, notices, and warnings on the trailer, its systems, and appliances. *FAILURE TO FOLLOW THESE IMPORTANT PRECAUTIONS MAY RESULT IN SERIOUS INJURY OR EVEN DEATH.* If you sell your park trailer, please make certain that this manual and other manuals furnished with your trailer are given to the new owner.

DO'S AND DON'TS FOR EQUIPMENT SELECTION AND PREPARATION FOR TOWING

- Be sure the tow vehicle is large enough for your trailer and has the needed power and heavy duty running gear. It must be rated by its manufacturer to tow the gross weight, and to carry the hitch weight of the fully loaded trailer.
- Use a weight distributing hitch rated not less than the trailer Gross Vehicle Weight Rating (GVWR). Follow the tow vehicle and hitch manufacturer's instructions. Install the hitch ball as close as practical to the rear bumper to minimize rear overhang.
- Do not overtighten the weight distributing hitch spring bars. Follow the instructions of the hitch manufacturer. When in doubt, use the less tight spring bar setting.
- Use a sway control system. Install and adjust according to the instructions of the sway control manufacturer.
- Use a brake controller that automatically applies the brakes in proportion to the tow vehicle brakes and also has a hand control for applying the trailer brakes only.
- Adjust the brake controller so that the brakes of the trailer come on as quickly as possible without sliding the tires of the loaded trailer during strong braking.
- Make sure the wheel lug nuts/bolts on the tow vehicle and trailer are tightened to the correct torque.
- Check that the wiring is properly connected — not touching the road, but loose enough to make turns without disconnecting.
- Make sure all running lights, brake lights, turn signals and hazard lights are working properly.
- Check side and rear-view mirrors to make sure you have good visibility.
- Inflate the rear tires of the tow vehicle to their maximum cold pressure. (See the maximum pressure rating on the rear tire sidewalls.)
- Load heavy objects and goods as close to the trailer axle(s) as possible. Do not place heavy objects on the rear bumper or on the tongue.
- If possible, empty holding tanks to minimize "sloshing" and changes in tongue weight. (Applies to self-contained trailers.)
- Be careful to load the trailer to comply with the specified maximum and minimum tongue weight percentages. Weigh the fully loaded trailer from time to time to verify tongue weight.
- Adjust the hitch ball height so that the fully loaded trailer is level front-to-rear when attached to the fully loaded tow vehicle with hitch spring bars tightened. Do not permit the front to be lower than the rear on trailers with tandem axles.
- Do not exceed the trailer Gross Axle Weight Rating(s) (GAWR) or GVWR. The fully loaded trailer should be weighed from time to time to verify that trailer GAWR(s) and GVWR are not exceeded, and that the loads on the right and left wheels are approximately equal. When weighing to determine axle loading, the trailer must be fully loaded and hitched to the fully loaded tow vehicle, with spring bars tightened.

HITCHING UP

Hitching your trailer to the tow vehicle will become routine with experience. Make it a habit to examine all hitch components before hitching the trailer. If you have a conventional ball hitch, check for cracked or bent parts, cracked welds, deformed or stripped bolts. Inspect the spring bars and chains. Be sure the ball is tight and well lubricated. Check the trailer tongue for cracks. Be sure the ball locking device works freely. Inspect the safety chains. If you find defects in any hitch component, correct it before towing the trailer.

Before attempting to hitch up your trailer, read the instructions provided by the manufacturer of the hitch. Skyline park trailers accept a $2^{5}/_{16}$" ball. The following instructions apply in most cases. If the instructions provided with your hitch are different from these instructions, follow those of the hitch manufacturer.

1. Turn the tongue jack crank clockwise. This will raise the tongue and coupler. Raise the tongue sufficiently to clear the hitch ball on the tow vehicle.

2. Back the tow vehicle until the hitch ball is under the hitch ball socket. If you are working alone, a backing aid mirror may be helpful.

3. The coupler latch locking lever on the tongue should be fully open. Lower the tongue jack until the ball is firmly seated in the socket. Close the coupler latch and secure it with a locking pin or bolt.

4. Raise the tow vehicle and trailer with the tongue jack high enough to allow room to install the hitch spring bars.

5. Attach the spring bars according to the hitch manufacturer's instructions.

   WARNING: FOLLOW THE INSTRUCTIONS OF THE HITCH MANUFACTURER FOR ADJUSTING THE WEIGHT DISTRIBUTING HITCH. OVERTIGHTENING OF HITCH SPRING BARS WILL REDUCE CORNERING AND STOPPING ABILITY AS WELL AS TOWING STABILITY.

6. After adjusting the spring bars, raise the jack to its highest level. Note that the trailer must be relatively level front to back. Downward tilt to the rear of the trailer must be kept to an absolute minimum. Downward tilt to the front reduces towing stability on tandem axle trailers.

7. Install the sway control system according to the manufacturer's instructions.

8. Connect all safety chains.

   WARNING: NEVER ATTACH SAFETY CHAINS TO THE HITCH BALL OR ANY REMOVABLE PART OF THE HITCH.

Safety chains are extremely important, and should be added to your trailer to protect your investment as well as other people's lives and property. As a trailer owner, it is your responsibility to be familiar with these devices and their correct use. The hitch on your tow vehicle must be equipped with two chain attachment eyes, one on each side of the vehicle's centerline. Install the chains by threading each one through its attachment eye and hooking it back on itself. Adjust each chain length so that it is as short as possible, but still permits full "jackknife" turns without becoming tight. Both chains should be the same length and crossed under the trailer's tongue to hold the tongue off the ground if the trailer accidentally becomes uncoupled.

9. Connect the breakaway switch lanyard.

WARNING: DO NOT CONNECT THE BREAKAWAY SWITCH LANYARD TO THE HITCH BALL OR REMOVABLE PART OF THE HITCH.

10. Plug in the 12-volt electrical connector.

11. Check stop lights, turn lights, running lights, and electric brakes before driving off. See "ELECTRICAL SYSTEM" section in this manual for details of the electrical system and wiring.

12. Reverse the procedure for unhitching. Placing blocks at the front and rear of the trailer tires prior to uncoupling the trailer from the tow vehicle to ensure the trailer does not roll away when the coupling is released.

TRAILER DRIVING TECHNIQUES

TOWING SPEED

Reasonable vehicle speed is probably the greatest factor in safe and pleasant towing. Towing stability is increased and emergency stopping distances are reduced with a reduction in speed. Reduce your driving speed substantially while towing. Slow down for grades and turns. Towing stability is reduced downhill and around bends. With experience, you will develop the special driving skills needed for safe trailer towing.

WARNING: TOW AT MODERATE SPEEDS ALLOWING FOR ADVERSE HIGHWAY AND WIND CONDITIONS. INCREASED SPEED REDUCES TRAILER TOWING STABILITY, AND HANDLING AND STOPPING ABILITY.

STABILITY IN TOWING

Speed, cargo weight distribution, and wind conditions are the principal factors affecting trailer towing stability. Trailer stability has been reduced if the trailer sways from side to side after quick course changes, in cross winds, or while being passed by trucks or buses.

If the trailer begins to sway strongly from side to side, make as little steering correction as possible while maintaining vehicle control. Oversteering to counter trailer sway will increase sway and cause loss of control. Reduce speed gradually by using the hand control on the brake controller. Forceful tow vehicle braking may increase trailer sway. Locking tow vehicle wheels will cause loss of control.

WARNING: DO NOT ATTEMPT TO STOP THE TRAILER SWAYING BY MAKING QUICK STEERING CHANGES, OR BY FORCEFULLY APPLYING THE TOW VEHICLE BRAKES.

Stop as soon as possible after a reduction in stability has occurred. Make sure all tires are fully inflated, the sway control is properly adjusted, and the hitch bars are adjusted according to the hitch manufacturer's instructions. Check for mechanical failures. If cargo is not properly loaded, shift some weight forward in the trailer. If you can't stop immediately, reduce speed until control can be maintained.

Heavy cross winds, particularly gusts in canyons or at other exposed locations, can cause excessive trailer swaying or loss of control. Under these conditions, speed should be reduced until control can be maintained.

Small but sudden course changes can occur when a vehicle towing a trailer is passed by a large flat-fronted vehicle such as a truck or bus. These course changes happen when the side wind from the flat front of the truck blows against the side of the trailer. As the truck front passes the rear of the trailer, the tow vehicle will tend to turn away from the truck; as the truck front passes the trailer wheels, the tow vehicle will turn back toward the truck.

When a large flat-fronted vehicle passing from behind causes your vehicle to change course, make as little steering correction as possible. The tow vehicle will be turned back toward its original course as soon as the truck's front passes the trailer wheels. Avoid quick steering corrections that can magnify these course changes and start trailer swaying.

PASSING

When passing another vehicle, remember that acceleration will be slower than usual because of the added weight of the trailer. Allow ample time and distance when passing. Once past the other vehicle, allow for clearance of the trailer before returning to the original lane. Use your outside rear view mirror and proper turn signals to assure safe maneuvering.

STOPPING

The increased weight of the tow vehicle-trailer combination requires greater stopping distances. Maintain at least twice the normal stopping distance while towing your trailer. Avoid strong braking on turns and prolonged braking on downgrades.

TURNING

Make wider turns at curves and corners. Your trailer's wheels are closer to the inside of a turn than the wheels of your tow vehicle, and are more likely to hit or ride up over curbs.

BACKING UP

Place your hand at the bottom of the steering wheel. To turn the trailer to the left, move your hand to the left, turning the steering wheel clockwise. To turn the trailer to the right, move your hand to the right, turning the steering wheel counter-clockwise. Your tow vehicle should go the opposite way that you want the trailer to turn. In time, and with a little practice, you will be able to back your trailer with little effort. Always be aware that you have poor visibility to the rear. Have someone stand outside at the rear of the trailer to guide you.

DOWNGRADES AND UPGRADES

- Downshift to assist with braking on downgrades and to add power for climbing hills.
- On long downgrades, apply brakes at intervals to keep speed in check. Never leave brakes on for extended periods of time or they may overheat.
- Some tow vehicles have specifically calibrated transmission tow-modes. Be sure to use the tow-mode recommended by the manufacturer.

PARKING ON A GRADE

You should not park vehicles with trailers on a grade or hill. However, if you must park on a grade, follow these steps:

1. Apply the regular brakes.
2. Have someone place wheel chocks under the trailer wheels.
3. When the wheel chocks are in place and the assistant is clear, release the brakes until the chocks absorb the load.
4. Apply the parking brake.
5. Shift the transmission to “P” (PARK, with automatic transmission) or low or reverse with manual transmissions.

If the vehicle is parked on a grade, don’t shift the transmission to “P” (PARK) until the trailer wheels are chocked and the parking brake is set. If you do, the weight of the vehicle and trailer may put so much strain on the transmission that it may be hard to shift out of “P” (PARK).

When starting after being parked on a grade:

1. Apply the regular brakes and hold.
2. Start engine in “P” (for automatic transmissions).
3. Shift into gear and release the parking brake.
4. Release the regular brakes and drive until the chocks are free.
5. Apply the regular brakes and have someone remove the chocks.

MIRRORS

There are many types of outside mirrors that can be used on tow vehicles. Most states require mirrors extending on both sides of the tow vehicle to provide the driver a clear view when passing or being passed. Check specific requirements in the states where you will travel. Install mirrors as close to the driver as possible to provide the maximum field of view.

THE BRAKING SYSTEM

The electric brakes on your trailer are operated by 12-volt current from the tow vehicle. The brakes have been factory-calibrated for smooth, positive response. During the break-in period, brakes may squeak. This is normal, and will cease after a few miles.

BRAKE SYSTEM COMPONENTS

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

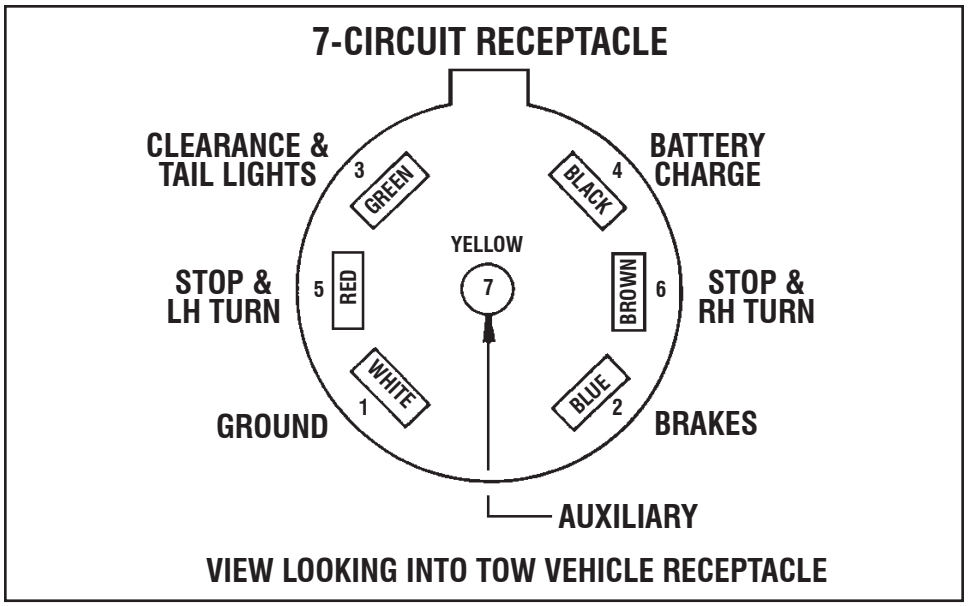
2. **Brake controller.** The electric trailer brakes are automatically applied by the brake controller, which is usually mounted within easy reach of the tow vehicle driver. Some controllers are connected to the tow vehicle's hydraulic brake system, and are actuated when tow vehicle brakes are applied. Most experienced drivers prefer to have the trailer brakes set to engage slightly before those of the tow vehicle.

   This is particularly helpful during rainy weather or slippery 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 according to the instructions provided with the controller. The new setting will be retained until a new adjustment is made. Brake controllers usually have a manual feature, which allow you to apply the trailer brakes independently of the tow vehicle brakes. Consult instructions supplied with the controller for further information. Connect the controller to the brakes with 12-gauge stranded wire.

   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 BOTH AUTOMATICALLY AND MANUALLY, CAUSING LOSS OF TRAILER BRAKING WITH NO ADVANCE WARNING. *PROVIDE CIRCUIT PROTECTION PER INSTRUCTIONS PROVIDED BY MANUFACTURER OF THE BRAKE CONTROLLER.*

3. **Connector Plug.** The 7-pin connector on the trailer hitch transfers electrical power from the tow vehicle battery to the trailer brakes, exterior lighting system, and battery. Keep the plug clean, tight, and protected from the elements. Inspect it carefully every time you hitch up.

   Because the wiring systems of many tow vehicles use separate wires for turn signals and stop lights, you may need to purchase a taillight converter. This converter will combine these wires so that they can be connected to the trailer lighting system. Most factory-installed towing packages include a trailer wire harness that will perform this function if required. If you tow more than one type of trailer, you may also need to purchase an adapter to accommodate differences in the wiring systems.



4. **Breakaway.** The breakaway switch is located on the trailer tongue. It has a steel cable (lanyard) fastened to it which will reach to the frame of the tow vehicle. The device is one of the most vital components on your trailer's braking system. It automatically applies the trailer brakes if the tow vehicle and trailer become uncoupled while in motion. The breakaway switch operates when a pull pin linked by the cable to the tow vehicle is separated from the switch. When the switch closes, power for brake application is supplied by the trailer battery. The steel lanyard must be anchored to the tow vehicle when the trailer is hitched up. Secure this cable loop to the permanent frame of the tow vehicle, or a part of the hitch that is non-removable. DO NOT FASTEN THE BREAKAWAY SWITCH LANYARD TO THE HITCH BALL OR ANY OTHER REMOVABLE PART OF THE HITCH. 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:

   a. Hitch the trailer to the tow vehicle

   b. Pull out the breakaway switch actuating pin.

   c. Test the breakaway by attempting to drive away. If the breakaway switch is functioning properly, the trailer brakes will be activated.

   d. 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.

   e. If the trailer brakes to do not operate after making these checks, see your dealer for repair.

   f. Reinsert the breakaway switch actuating pin before towing the trailer.

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.

5. **Trailer Brakes.** Your trailer's brakes are actuated by electrical energy which is converted to mechanical energy to provide the braking power for smooth, safe, stops. The greater the electrical current from the brake controller, the greater the braking force applied to the trailer brake drums.

6. **Grounding.** The electrical circuit that operates your trailer brakes can be completed only by proper grounding back to the tow vehicle. 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 AND ADJUSTMENT

Inspect all external braking system components before moving your trailer. Also, inspect all wiring connections, and test the breakaway switch as outlined above.

TIRES

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-carry in 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 before each trip and at least once a month during travel periods for the following reasons:

- Most tires may naturally lose air over time, up to several PSI per month in some conditions.

- 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 us usually not possible to determine underinflating 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 or certification label.
- 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 pressure.
- 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 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 temporary fix, don't forget to recheck and adjust the tire's pressure when you can obtain a cold reading.

Many Skyline Recreational Vehicles are equipped with Goodyear Marathon Radial Tires. For additional helpful information concerning the care and use of these tires visit http://www.goodyear.com/rv/.

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 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 Repair

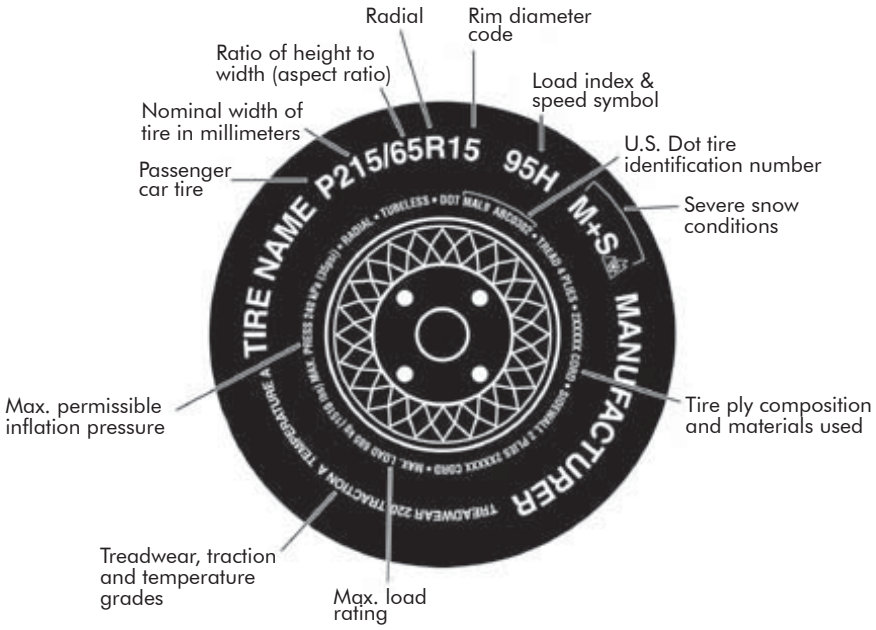
The proper repair of a punctured tire requires a plug for the hole and a patch for the area inside the tire that surrounds the puncture hole. Punctures through the tread can be repaired if they are not too large, but punctures to the sidewall should not be repaired. Tires must be removed from the rim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

Please refer to the diagram below.



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 sidewalls of these tires. In the event a passenger car tire is used, the capacity must be derated by 10%.

Next number - 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 - 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 - 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 - This two- or three-digit number is the tire's load index. It is a measurement of how much weight each tire can support. 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 that the tire has some mud and snow capability. Most radial tires have these markings.

U.S. DOT Tire Identification Number - This 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 it was manufactured, 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.

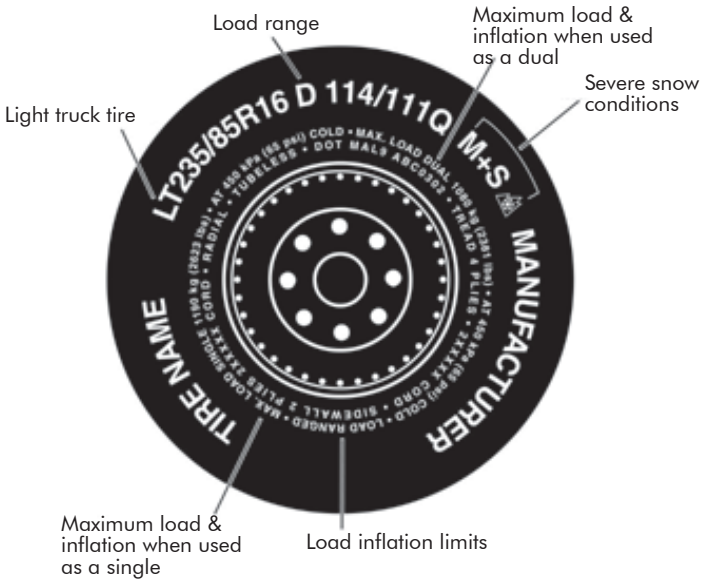
Tire Ply Composition and Materials Used - The number of plies indicates the number of layers of rubber-coated fabric in the tire. In general, the greater the number of plies, the more weight a tire can support. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon,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

Maximum Load Rating - This number 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.

Additional Information on Light Truck Tires

Please refer to the following diagram.



Tires for light trucks have other marking besides those found on the sidewalls of passenger tires.

LT - the "LT" indicates the tire is for light trucks or trailers.

ST - An "ST" is an indication the tire is for trailer use only. Industry standards indicate that tires with the ST designation are speed restricted to 65 MPH under normal inflation and load conditions unless a different speed restriction is indicated on the sidewall of the tire.

According to Goodyear, the Goodyear Marathon Radial tires may be used at speeds between 66 MPH and 75 MPH if certain conditions are met.* Principle requirements include:

- The cold inflation pressure must be at least 10 PSI greater than the pressure required to carry the actual load on the tire.
- The cold inflation pressure must not exceed 10 PSI beyond the inflation specified for the maximum load of the tire.
- The cold inflation pressure must not exceed the maximum pressure for the wheel. (50 PSI for 14" wheels, 75 PSI for 15" wheels, and 80 PSI for 16" wheels)

* This information applies only if your recreational vehicle is equipped with Goodyear Marathon Radial tires. There may be additional requirements or changes

in the above information — please consult the Goodyear website at http://www.goodyear.com/rv/ or see your Goodyear retailer for current information if you plan to tow your vehicle at speeds in excess of 65 MPH.

NEVER EXCEED POSTED SPEED LIMITS.

Max. Load Dual kg (lbs) at kPa (PSI) Cold - This information 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.

Vehicle Load Limits

Determining the load limits of a vehicle includes more than understanding the load limits of the tires alone.

On a trailer, there is a Federal certification label that is located on the forward half of the left (road) side 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 weight a particular axle can carry. 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 on trailers with a GVWR of 10,000 lbs. or less. This placard provides tire and loading information. In addition, this placard will show a statement regarding maximum cargo capacity.

Cargo Capacities

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

Water and propane also need to be considered. 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. Understanding this flexibility will allow you, the owner, to make choices that fit your travel and camping needs.

When loading your cargo, be sure it is distributed evenly 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 the 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.

STEPS FOR DETERMINING CORRECT LOAD LIMIT

1. Locate the statement. The weight of cargo should never exceed XXX kg or XXX lbs on your vehicle's placard.

2. This figure equals the available amount of cargo and luggage load capacity.

3. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity.

NOTE: The steps for determining the correct load limit are only applicable to trailers with a GVWR of 10,000 lbs. or less. Trailers with a GVWR over 10,000 lbs. do not have a vehicle placard. For trailers with a GVWR over 10,000 lbs. cargo may be added until the total weight of the trailer is equal to or less than the GVWR of the trailer.

How Overloading Affects Your RV and Tires

The results of overloading can have serious consequences for passenger safety. Too much weight on your vehicle's suspension system can cause spring, shock absorber, or brake failure, handling or steering problems, irregular tire wear, tire failure or other damage.

An overloaded vehicle is hard to drive and hard to stop. In cases of serious overloading, brakes can fail completely, particularly on steep hills. The load a tire will carry safely is a combination of the size of tire, its load range, and corresponding inflation pressure.

Excessive loads and/or underinflation cause tire overloading and, as a result, abnormal tire flexing occurs. This situation can generate an excessive amount of heat may lead to tire failure.

It is the air pressure that enables a tire to support the load, so proper inflation is critical. To illustrate the importance of proper tire inflation and how inflation affects load limits, a trailer with four 225/75-D tires with 65 PSI of cold inflation pressure can carry a total of 10,160 pounds assuming the weight is evenly distributed between the four tires. The same four tires at 55 PSI of cold inflation pressure can carry only 9,080 pounds. A reduction of 1,080 pounds! If the actual load on the tires is 9,500 pounds the need for full inflation pressure is obvious. Under-inflated tires can show excessive signs of wear, cause reduced handling capability, overheat, suffer belt separation or fail completely.

Since RVs can be configured and loaded in many ways, air pressures must be determined from actual loads (determined by weighing) and taken from the load and inflation tables provided by the tire manufacturer. These air pressures may differ from those found on the certification label. However, they should never exceed the tire limitation for load or air pressure. If you discover that your tires cannot support the actual weights, the load will need to be lightened.

Tire Safety Tips

Preventing Tire Damage

- Slow down if you have to go over a pothole or other object in the road.
- do not run over curbs or other foreign objects in the roadway, and try not to strike the curb when parking.

Tire Safety Checklist

- Check tire pressure regularly (at least once a month), including the spare.
- Inspect tires for uneven wear patterns on the tread, cracks, foreign objects, or other signs of wear or trauma.
- Remove bits of glass and foreign objects wedged in the tread.
- Make sure your tire valves have valve caps.
- Check tire pressure before going on a long trip.
- Do not overload your vehicle. Check the Tire Information and Loading Placard or User's Manual for the maximum recommended load for the vehicle.

General Tire Safety Information

"ST" (Special Trailer) tires are widely used in a variety of towable trailer applications.

- Industry standards dictate that tires with the ST designation are speed restricted to 65 MPH under normal inflation and load conditions unless a different speed restriction is indicated on the sidewall of the tire.
- Based on industry standards, if tires with the ST designation are used at speeds between 66 and 75 MPH, it is necessary to increase the cold inflation pressures by 10 PSI above the recommended pressure for the load.
    - Do not exceed the maximum pressure for the wheel.
    - If the maximum pressure for the wheel prohibits the increase of air pressure, then the maximum speed must be restricted to 65 MPH.
    - The cold inflation pressure must not exceed 10 PSI beyond the inflation specified for the maximum load of the tire.
- Drivers should always obey posted speed limits and reduce speeds when necessary based on vehicle, road, weather and/or traffic conditions.
- Vehicle speed, load and inflation pressures, all of which are within the control of the driver, are critical factors for the safe and enjoyable operation of any vehicle.

GLOSSARY OF TIRE TERMINOLOGY

Accessory weight - The combined weight (in excess of those standard items which may be replaced) of automatic transmission, power steering, power brakes,

power windows, power seats, radio and heater, to the extent that these items are available as factory-installed equipment (whether installed or not).

Bead - the part of the tire that is made of steel wires, wrapped or reinforced by ply cords and that is shaped to fit the rim.

Bead Separation - This is the breakdown of the bond between components in the bead.

Bias Ply Tire - A pneumatic tire in which the ply cords that extend to the beads are laid at alternate angles substantially less than 90 degrees to the centerline of the tread.

Carcass - The tire structure, except tread and sidewall rubber which, when inflated, bears the load.

Chunking - The breaking away of pieces of the tread or sidewall.

Cold Inflation Pressure - The pressure in the tire before you drive.

Cord - The strands forming the plies in the tire.

Cord Separation - The parting of cords from adjacent rubber compounds.

Cracking - Any parting within the tread, sidewall, or inner liner of the tire extending to cord material.

CT - A pneumatic tire with an inverted flange tire and rim system in which the rim is designed with rim flanges pointed radially inward and the tire is designed to fit on the underside of the rim in a manner that encloses the rim flanges inside the air cavity of the tire.

Curb Weight - The weight of a motor vehicle with standard equipment including the maximum capacity of fuel, oil, and coolant, and, if so equipped, air conditioning and additional weight optional engine.

Extra Load Tire - A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.

Groove - The space between two adjacent treads ribs.

Gross Vehicle Weight Rating (GVWR) - The maximum permissible weight of this fully loaded trailer.

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

Hitch Weight - The vertical trailer load supported by the hitch ball.

Innerliner - The layer(s) forming the inside surface of a tubeless tire that contains the inflating medium within the tire.

Innerliner Separation - The parting of the innerliner from cord material in the carcass.

Intended Outboard Sidewall - The sidewall that contains a white-wall, bears white lettering or bears manufacturer, brand, and/or model name molding that

is higher or deeper than the same molding on the other sidewall of the tire or the outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle.

Light Truck (LT) Tire - A tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles.

Load Rating - The maximum load that a tire is rated to carry for a given inflation pressure.

Maximum Load Rating - The load rating for a tire at the maximum permissible inflation pressure for that tire.

Maximum Permissible Inflation Pressure - The maximum cold inflation pressure to which a tire may be inflated.

Maximum Loaded Vehicle Weight - The sum of curb weight, accessory weight, vehicle capacity weight, and production options weight.

Measuring Rim - The rim on which a tire is fitted for physical dimension requirements.

Non-Pnuematic Rim - A mechanical device which, when a non-pneumatic tire assembly incorporates a wheel, supports the tire, and attaches, either integrally or separably, to the wheel center member and upon which the tire is attached.

Non-Pneumatic Spare Tire Assembly - A non-pneumatic tire assembly intended for temporary use in place of one of the pneumatic tires and rims that are fitted to a passenger car in compliance with the requirements of this standard.

Non-Pneumatic Tire - A mechanical device which transmits, either directly or through a wheel or wheel center member, the vertical load and tractive forces from the roadway to the vehicle, generates the tractive forces that provide the directional control of the vehicle and does not rely on the containment of any gas or fluid for providing those functions.

Non-Pneumatic Tire Assembly - A non-pneumatic tire, alone or in combination with a wheel or wheel center member, which can be mounted on a vehicle.

Normal Occupant Weight - This means 68 kilograms (150 lbs.) times the number of occupants specified in the second column of Table I of 49 CFR 571.110.

Occupant Distribution - The distribution of occupants in a vehicle as specified in the third column of Table I of 49 CFR 571.110.

Open Splice - Any parting at any junction of tread, sidewall, or innerliner that extends to cord material.

Outer Diameter - The overall diameter of an inflated new tire.

Overall Width - The linear distance between the exteriors of the sidewalls of an inflated tire, including elevations due to labeling, decorations, or protective bands or ribs.

Pin Weight - The vertical trailer load supported by the king pin of a fifth wheel hitch.

Ply - A layer of rubber-coated parallel cords.

Ply Separation - A parting of rubber compound between adjacent plies.

Pneumatic Tire - A mechanical device made of rubber, chemicals, fabric and steel or other materials, that when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load.

Production Options Weight - The combined weight of those installed regular production options weighing over 2.3 kilograms (5 lbs.) in excess of those standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim.

Radial Ply Tire - A pneumatic tire in which the ply cords that extend to the beads are laid at substantially 90 degrees to the centerline of the tread.

Recommended Inflation Pressure - This is the inflation pressure provided by the vehicle manufacturer on the tire Information label and on the Certification / VIN tag.

Reinforced Tire - A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.

Rim - A metal support for a tire or a tire and tube assembly upon which the tire beads are seated.

Rim Diameter - This means the nominal diameter of the bead seat.

Rim Size Designation - This means the rim diameter and width.

Rim Type Designation - This means the industry or manufacturer's designation for a rim by style or code.

Rim Width - This means the nominal distance between rim flanges.

Section Width - The linear distance between the exteriors of the sidewalls of an inflated tire, excluding elevations due to labeling, decoration, or protective bands.

Sidewall - That portion of a tire between the tread and bead.

Sidewall Separation - That parting of the rubber compound from the cord material in the sidewall.

Test Rim - The rim on which a tire is fitted for testing, and may be any rim listed as appropriate for use with that tire.

Tread - That portion of a tire that comes into contact with the road.

Tread Rib - A tread section running circumferentially around a tire.

Tread Separation - Pulling away of the tread from the tire carcass.

Treadwear Indicators (TWI) - The projections within the principal grooves designed to give a visual indication of the degrees of wear of the tread.

Vehicle Capacity Weight - The rated cargo and luggage load plus 68 kilograms (150 lbs.) times the vehicle's designated seating capacity.

CHANGING A TIRE

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 reduce 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.
5. DO NOT use a bumper jack; it may damage the sidewalls or floorboard of the trailer.
6. Raise the jack to take some of the weight off the tire.
7. Loosen the lug nuts.
8. Raise the jack until the tire clears the ground.
9. Remove the lug nuts, pull off the old tire and put the spare on the hub.
10. Replace and tighten the nuts.
11. Lower the jack until the tire just touches the ground.
12. Tighten the lug nuts to a torque of 120 ft-lbs.

    WARNING: WHEEL LUGS MUST BE PROPERLY TORQUED. Tighten all lug nuts before first movement and at 10, 25, and 50 miles. **CAUTION: UNDERTIGHTENING OR OVERTIGHTENING MAY CAUSE LOSS OR DAMAGE TO WHEELS, HUBS, OR BRAKING CAPABILITY, WHICH COULD RESULT IN SERIOUS PERSONAL INJURY OR DEATH.** Please refer to the instruction and maintenance manual for running gear.

13. Lower and remove the jack.
14. BE SURE TO STOP AT THE NEAREST SERVICE FACILITY AND HAVE THE TORQUE CHECKED.

STABILIZATION

SETUP

Leveling your trailer can greatly enhance your comfort. More importantly, the unit must be level for proper operation of various components including the sliding glass door, entry door, interior passage doors, slide-outs, and plumbing systems.

NOTE: AFTER THE TRAILER HAS BEEN LEVELED SIDE-TO-SIDE AND FRONT-TO-BACK, YOU MAY WISH TO PERMANENTLY ATTACH LEVELS ON THE FRONT AND/OR BACK AND SIDES OF THE TRAILER. THIS WILL ALLOW YOU TO TELL AT A GLANCE IF YOU HAVE PARKED ON A LEVEL SITE AND WILL HELP SPEED UP THE LEVELING PROCESS.

If side-to-side leveling is required, dig a shallow hole under the tire(s) on the high side, or make a step leveling ramp using 1" x 6" or 2" x 6" boards of varying lengths. Pull forward or back onto the leveling ramp until the tire(s) on the low side are level.

If front-to-back leveling is required, unhitch the unit from the tow vehicle, install the Jack Foot and crank or run the front jack down. The front jack should always rest on the Jack Foot or a board. A Jack Foot is not recommended for use with a power jack. If the ground or surface is soft, place a board under the Jack Foot or jack. Disconnect the safety chains, the pigtail and breakaway cable from the tow vehicle. Move the front jack up or down until the unit is level.

If the unit is not equipped with stabilizing jacks, jack stands (available from your dealer) may be placed under the frame to eliminate sway when persons move about inside the unit. When using jack stands, lower the front jack about 2" below level. Place a jack stand under both main frame members—NEVER AGAINST THE FLOOR—at the rear of the trailer. Raise each jack until it touches the frame. Raise the front jack about 2" above level and place jack stands under the main frame members near the front of the unit. Raise the jacks until they touch the frame, then lower the front jack to level.

If your unit is equipped with a power front jack, you may have to run the jack up or down. The switch is spring-loaded and will return to the OFF position when released. If your power jack has a switch cover, be certain to replace it when not using the switch. Familiarize yourself with the direction of travel of the jack post and the corresponding switch direction.

If the unit has permanently-mounted stabilizing jacks, (See Figures 1 and 2) unhitch the unit, then level the unit by using the front jack. Check front-to-back level for low side of trailer (some parking areas will require the use of a leveling ramp on the low side of the trailer). Lower the stabilizing position. Lower the stabilizers on the opposite side of the trailer to the ground and FIRM UP. Before moving your trailer, crank stabilizers to the FULLY CLOSED position, then give another quarter turn to snug up.

CAUTION: Stabilizer jacks are designed for FINE LEVELING AND STABILIZING ONLY. Do not attempt to use them for jacking purposes or to support the full weight of the trailer.

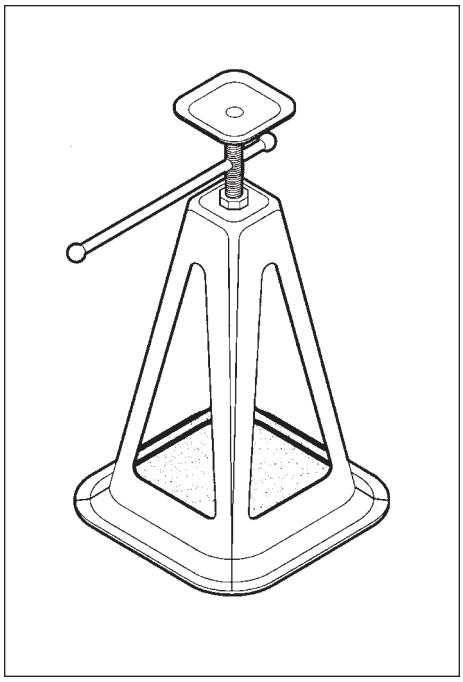


FIGURE 1 TYPICAL JACK STAND

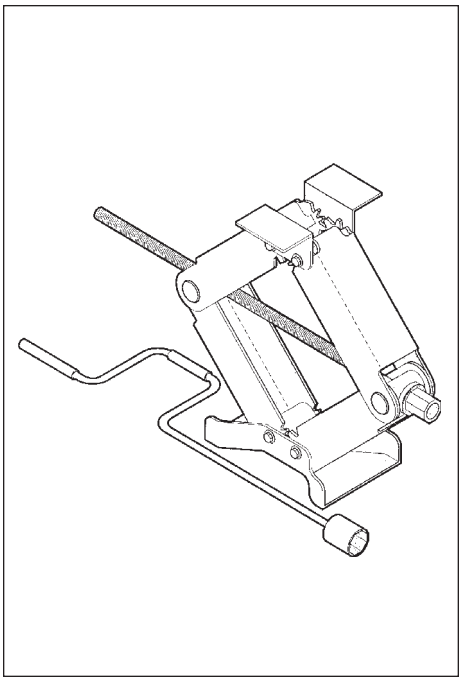


FIGURE 2 TYPICAL STABILIZING JACK

SETUP PROCEDURE—SITE PREPARATION

The park trailer site must be properly graded and sloped to provide for storm drainage run-off. In particular, the area beneath the unit must be graded to prevent water accumulation.

Proper support for the park trailer must allow for soil conditions in the immediate area. Pier footings must be placed on firm undisturbed soil (not loose fill) or soil which has been compacted to at least 90 percent of its maximum relative density. Support piers may also be placed directly on concrete slabs designed for the pier loads.

Climatic conditions must also be taken into account. If footings are placed on a frost-susceptible soil such as clay or silt, heaving or settling may occur. Therefore, in areas where temperatures go below freezing, the following should be considered when the unit is anchored with a tie-down system:

1. Construct the tie-down system with adjustable devices in order that the strap tension may be periodically adjusted to compensate for heaving or settling, or

2. Place the unit on a properly designed raft foundation (slab), or

3. Have the foundation designed so that it is not susceptible to frost action, and

4. Consult with the building officials in your area to determine location of the frost line.

INSTALLATION INSPECTION CHECKLIST

To ensure proper park trailer installation to owner satisfaction the following items should be checked during or promptly after the installation and before the owner takes possession:

INSTALLATION/ PLACEMENT
- ☐ Level
- ☐ Foundation
- ☐ Tie Downs

UTILITY CONNECTIONS
- ☐ Fuel
- ☐ Water
- ☐ Electric
- ☐ Sewage

EXTERIOR
- ☐ Doors
- ☐ Windows
- ☐ Roof
- ☐ Siding/Trim

INTERIOR
- ☐ Ceiling
- ☐ Trim
- ☐ Electrical Systems/ Fixtures
- ☐ Cabinets
- ☐ Furniture
- ☐ Keys
- ☐ All Warranties
- ☐ Paneling
- ☐ Floor Covering/ Drapes
- ☐ Doors
- ☐ Plumbing
- ☐ Appliances
- ☐ All Manuals

UTILITY SYSTEMS HOOKUP AND TESTING

Many local jurisdictions have special requirements for utility connections and on-site inspection of these connections. Consult with the proper authorities prior to utility connection.

The drainage and water systems were tested for leaks prior to shipment from the factory. It is essential that they be rechecked by qualified personnel for leaks that may have been caused by vibration during transportation.

WATER

The water system has been designed for an inlet water pressure of 80 PSI. When the unit is installed in areas where the water pressure exceeds 80 PSI, a pressure reducing valve should be installed. The water system may be connected to any safe, potable water source. The connection is via a single ¾ inch inlet beneath the trailer. After removing the aerators from all the faucets, open all the faucet valves and allow the water to run for 15 minutes. This should remove any foreign particles left in the line that might cause an unpleasant taste or become lodged at faucet washers and cause dripping faucets. All exposed water piping subject to freezing should be protected by insulation and listed electric heat tapes. It is recommended that only UL listed heat tapes be used and installed in accordance with their installation instructions.

DRAINAGE

The drainage connection is made at the 3-inch main drain outlet. Care should be exercised to slope and support the drain line from the unit to the site sewage system (¼ inch per foot slope).

DRAINAGE SYSTEM OPERATION (Self-Contained Models)

The key to the entire drainage system is the valve(s) located under the trailer on the traffic side. This valve(s) has its own attached cap closure which should be kept in place whenever your recreational park trailer is moving or not attached to a sewer drain or container.

The holding tank should not be allowed to drain directly into the sewer drain continuously. Otherwise, only liquid waste may drain out, while solids collect and harden in the bottom of the tank. The surging movement of normal travel usually prevents this if the holding tank valve is kept closed and opened only for dumping and cleaning. The slide valve should be locked closed to prevent accidental opening.

An adapter is used to connect the sewer hose to the drain opening.

The holding tank should be emptied every two or three days when in use and cleaned well before storage to avoid solidification of waste. Antifreeze should be added to the tank if temperatures are expected to go below freezing (See Winterizing Procedures).

The following is a helpful procedure for dumping: To completely evacuate the tank be sure the unit is level. Drain the solid waste first and proceed with the liquid waste tank(s). After draining, close the gates and partially refill the solid waste holding tank with water. Do this simply by going into the bathroom and depressing the toilet foot pedal, allowing enough water to run into the tank to fill it to one-quarter to one-half full. Then go back outside to reopen the gate. This not only flushes the tank, but cleans the hose and the outlet nozzle, making them less objectionable to handle.

To locate the most convenient dumping station, consult your copy of Woodall's Travel Directory or a nearby recreational vehicle dealer or campground.

TROUBLESHOOTING TIPS FOR THE DRAINAGE SYSTEM

If the toilet will not flush:

1. Holding tank may be full and need dumping, or toilet needs mechanical servicing.

2. Drains may be clogged. Use a good plunger or remove and clean the drain trap.

If holding tank will not dump or only partially dumps (Self-Contained Models):

1. Be sure unit is level before dumping.

2. Waste may have solidified and clogged drain valve. Partially fill tank with water and soap and tow unit for about 10 miles. Surging motion of soapy water in tank should loosen the solid matter and allow dumping. Always rinse tank thoroughly after dumping.

3. Check handle on slide dump valve to be sure it is operative.

For problems with marine toilet, consult manufacturer's manual.

GAS

The gas piping system was designed for a range of 10" to 14" of water column for propane. The park trailer gas supply pressure must be within this range for safe and efficient operation of the gas piping system.

The gas piping system was pressure tested for leaks prior to shipment; however it is essential that the system be retested by qualified personnel for leaks prior to use. (Many utility companies require this on-site test). The instructions printed on the tag near the gas supply connection must be followed. (See Figure 3).

LABELS

PROPANE SYSTEM

This gas piping system is designed for use
of liquefied propane gas only.

DO NOT CONNECT NATURAL GAS TO THIS SYSTEM.

CONTAINER SHUT-OFF VALVES SHALL BE CLOSED DURING TRANSIT.

When connecting to site outlet, use a listed gas supply connector rated at
❒ 100,000 BTUH or more
❒ 250,000 BTUH

Before turning on gas, make certain all gas connections have been made tight, all appliance valves are turned off, and any unconnected outlets are capped.

After turning on gas, test gas piping and connections to appliances for leakage with soapy water or bubble solution which does not contain ammonia or chlorine, and light all pilots.

FIGURE 3

In some localities, utility companies and/or building inspectors may require additional tests as follows:

1. Isolate all appliances with appliance shut-off valves. PRESSURE SHALL BE MEASURED WITH A MERCURY MANOMETER OR SLOPE GAUGE CALIBRATED IN INCREMENTS OF NOT GREATER THAN $^{1}/_{10}$ POUND.

2. Pressurize the system to 3 PSI and isolate the source of pressure from the gas piping.

3. Check the gauge after 10 minutes; there should be no drop in pressure.

4. Check the piping to appliances by pressurizing to at least 10 inches but not more than 14 inches water column and applying a bubble solution which does not contain ammonia or chlorine to all joints and flexible connectors.

CAUTION: DO NOT PRESSURIZE THE SYSTEM MORE THAN THE PRESSURES STATED ABOVE.

The connection to the gas supply should be made only by authorized representatives of the utility.

NOTE: BEFORE A TEST IS BEGUN, THE TEMPERATURE OF THE AMBIENT AIR AND OF THE PIPING SHOULD BE APPROXIMATELY THE SAME—CONDUCT THE TEST AT SUCH A TIME DURING THE DAY WHEN AIR TEMPERATURES WILL REMAIN CONSTANT.

PROPANE SYSTEMS (SELF-CONTAINED MODELS)

The furnace, oven, range, and water heater all operate on propane gas. Propane is stored in your tank under very high pressure. Before it is used in the appliances it passes through a regulator which reduces it to less than one pound of pressure.

Propane burns readily and yields a great deal of energy. Under proper conditions and careful handling it is safe, economical, and ideally suited for use where conventional fuels are not easily utilized. A strong odor has been added to the gas for safety.

PLAY SAFE AT ALL TIMES. Know the distinctive odor of gas. The following warning label has been in the vehicle near the range area:

WARNING
IF YOU SMELL GAS:

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

FAILURE TO COMPLY COULD RESULT IN FIRE OR PERSONAL INJURY

Make sure your propane tanks are NOT FILLED WITH STRAIGHT BUTANE, which has a higher boiling point than propane. Butane will convert to a gas only at temperatures above 32 degrees F and will not function as a fuel below that. On the other hand, propane can be used as a fuel at temperatures down to -44 degrees F.

Both butane and propane are heavier than air. When released they flow downhill like water and will tend to fill depressions. Both diffuse readily and will dissipate quickly into the atmosphere if not allowed to be trapped in a depression or closed chamber.

CAUTION: PROPANE IS HIGHLY FLAMMABLE AND DANGEROUS. It is not poisonous, BUT WILL INDUCE DROWSINESS AND MAY CAUSE SUFFOCATION. Under ordinary circumstances, breathing small amounts should not be harmful. Use extreme caution—and see that others do—when filling the storage tank(s). There should be no flame or spark or anything which might induce a spark within at least 25 feet of the filling operation.

WARNING:

Propane cylinders shall not be placed or stored inside the vehicle. Propane cylinders are equipped with safety devices that relieve excessive pressure by discharging gas to the atmosphere.

FAILURE TO COMPLY COULD RESULT IN DEATH OR SERIOUS INJURY.

WARNING:

Do not bring or store propane containers, gasoline, or other flammable liquids inside the recreational park trailer because a fire or explosion may result.

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

WARNING
DO NOT FILL PROPANE CONTAINER(S) TO MORE THAN 80 PERCENT OF CAPACITY
FAILURE TO COMPLY COULD RESULT IN FIRE OR PERSONAL INJURY

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

CAUTION: CLOSE THE GAS SHUT-OFF VALVE ON YOUR PROPANE TANK WHEN TRAVELING. THIS IS REQUIRED BY LAW IN SOME STATES AND IS A GOOD SAFETY PRACTICE. FAILURE TO SHUT OFF THE VALVE WHILE TRAVELING MAY RESULT IN EXPLOSION OR ACCIDENT AND SERIOUS INJURY OR DEATH.

DANGER: WHEN FILLING GASOLINE TANK(S), MAKE CERTAIN THAT THE PROPANE TANK VALVE IS SHUT OFF TO REDUCE THE POSSIBILITY OF OPEN FLAME IGNITING GASOLINE VAPOR WHICH COULD RESULT IN AN ACCIDENT OR EXPLOSION THAT COULD CAUSE SERIOUS INJURY OR DEATH.

INSTALLATION OF MANUAL REGULATOR

Propane regulators must always be installed with the regulator vent facing downward. Regulators that are 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.

This regulator is factory adjusted to give proper line pressure for operating appliances.

NEW PROPANE SAFETY IMPROVEMENT FEATURES

Propane cylinders fabricated after September 30, 1998 are equipped with overfilling prevention devices (OPD) and fixed maximum liquid level gauges. These devices are part of the propane container assembly. The OPD and the liquid level gauge are designed to help prevent overfilling of propane cylinders. *They have been found to be very reliable when used as a backup device for correct cylinder filling procedures.*

The new cylinders also are equipped with a "Type 1 Acme Cylinder Valve" connection which permits the connecting nut to be installed and tightened without the use of tools. The new valve also features an internal spring-loaded module which will not allow gas to flow until a positive seal has been made with the flexible pigtail connecting hose. The flexible hose connector assembly contains a device designed to limit the rate of gas flow escaping from the cylinder should the cylinder be involved in a fire.

BLEEDING AIR FROM PROPANE LINES

If the tank is completely emptied, it is possible that air has gotten into the gas lines. If this happens, you will probably find it difficult to light the pilots on the appliances. Air can be forced from the lines by lighting the appliance closest to the propane cylinders, and then the next closest, etc. This will cause propane pressure to force the air out of the lines completely. You will find that pilots will not light as readily when air is escaping through them—be patient and they will light.

PURGING AND MOISTURE REMOVAL

All new containers (and in some cases used containers) may contain water, air or other contaminants, and it is essential that these be removed before filling the container and placing it into service. Water vapor present in the gas vapor may cause regulator freeze-up at the inlet orifice and interrupt the gas service. Also, it may have an effect on the ability of the odorant to meet the present standards, as water can cause oxidation (rusting) on the inside of the container and result in "odorant fade." Air in the container will cause abnormally high pressure, with the result that the pressure relief valve may open. Air in the system is also likely to cause pilot flames to go out and result in a service call. Additionally, air in the container carries moisture, which can cause service problems. If a container is suspected of being depressurized or open to the atmosphere for a period of time, it must be re-purged as if it were a new container.

DANGER: IMPROPER OR INADEQUATE TESTING, CONNECTION OR MODIFICATION OF ANY PART OF GAS OR ELECTRICAL SYSTEMS, ESPECIALLY BY UNQUALIFIED PERSONNEL, MAY BE EXTREMELY DANGEROUS AND MAY RESULT IN SERIOUS INJURY OR DEATH.

ELECTRICAL

The electrical supply connection to the park trailer may be made by any of the following methods depending on the electrical service as indicated on the tag at the electrical outlet.

A listed power supply cord up to 50 amps maximum.

NOTE: ONLY A POWER SUPPLY CORD WITH AN EQUAL OR HIGHER RATING THAN THAT INDICATED ON THE POWER OUTLET MAY BE USED.

USE ELECTRICITY SAFELY

The following is a list of "do's" and "don'ts" about your electrical system:

1. Any changes or repairs to your electrical system must be done by qualified personnel.

2. Should you frequently blow fuses or trip circuit breakers, call a qualified service person. Do not change to larger capacity fuses or breakers.

3. Each permanently mounted lighting fixture is marked with maximum allowable light bulb size. Do not install higher wattage bulbs than indicated on the fixture as overheating can occur.

4. Your trailer contains a factory installed special circuit breaker or a special receptacle outlet located in the bathroom and kitchen called a "ground fault interrupter" (GFI). The GFI protects the bathroom and outside receptacles. Periodically check the operation of the GFI in accordance with the instructions supplied.

5. Your trailer contains a smoke alarm. Instructions are contained in the instruction booklet provided by the manufacturer for periodically testing and maintaining the detector.

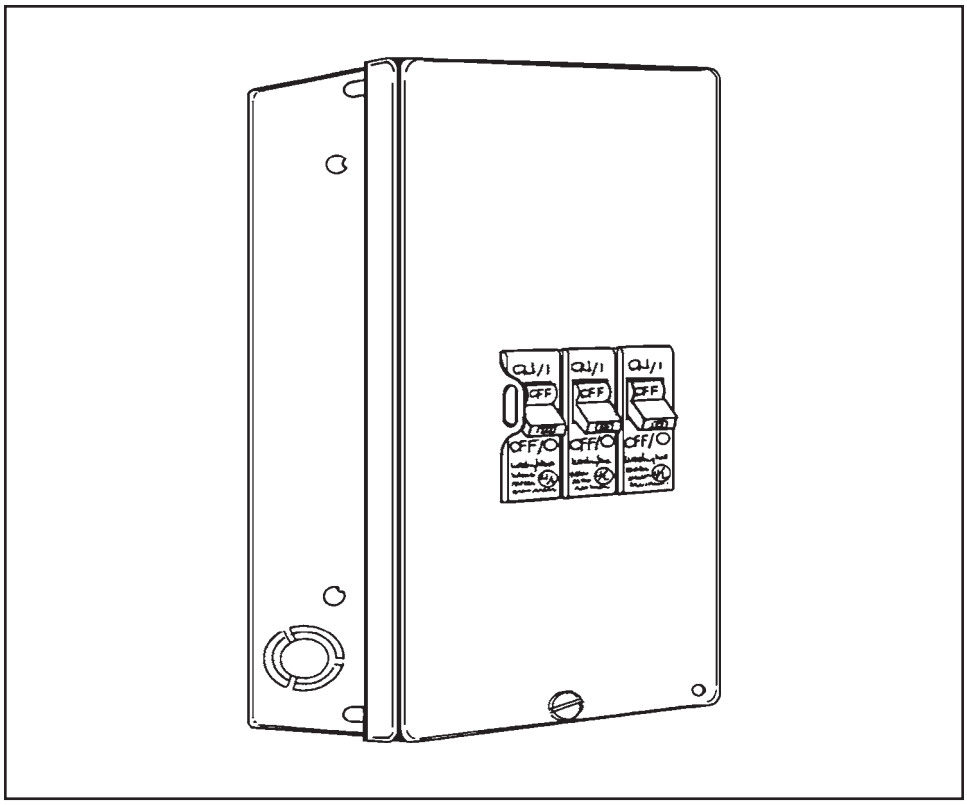
6. Outdoor lights are UL listed for wet locations. If replacement fixtures are installed, they should be of the same type.

7. Patio lights are to be installed by the dealer.

WARNING

CARELESS INSTALLATION OF TELEPHONE AND CABLE TELEVISION LINES MAY BE HAZARDOUS. The park trailer walls contain electrical circuits and the floor section may contain electrical circuits, plumbing or duct work. Extreme care must be exercised during drilling through and placing of communication cables within these cavities, to avoid contact with these installed systems. Such work should be performed only by qualified personnel. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.

CAUTION: FAILURE TO PROPERLY INSTALL, CONNECT, AND TEST ELECTRICITY TO YOUR PARK TRAILER MAY RESULT IN SERIOUS INJURY OR DEATH, AS MAY AN ELECTRICAL PROBLEM AFTER YOUR TRAILER IS INSTALLED (SUCH AS A CIRCUIT BREAKER CONTINUALLY TRIPPING OR AN APPLIANCE OR LIGHT MALFUNCTIONING). IF IN DOUBT, GET QUALIFIED HELP IMMEDIATELY.



TYPICAL ELECTRICAL PANEL BOX

120-VOLT/12-VOLT DUAL VOLTAGE ELECTRICAL SYSTEM

Some park trailers employ a dual voltage electrical system. It can be operated directly from battery power for 12-volt current or connected to "city power" which is available in most campgrounds. This section applies to park trailers equipped with this combination 120-volt/12-volt system.

Your park trailer connects to an outside power source through a heavy duty cable coiled in the storage compartment. This cable can be extended through an opening in the wall of the trailer. This cable is designed to ground the electrical system.

CAUTION: EXTREME CARE SHOULD BE USED IF ADAPTER PLUGS ARE ADDED. POLARITY MUST BE CHECKED BEFORE CONNECTING THE PLUG. NEVER USE A "CHEATER" ADAPTER UNLESS AN ADDITIONAL GROUND IS PROVIDED, PARK MANAGEMENT IS CONSULTED, AND POLARIZATION IS DETERMINED.

The 120-volt electrical system is protected by circuit breakers located in the 120-volt/12-volt load center located inside your park trailer. If you own a park trailer

equipped with the optional 240-volt electrical service, there is a main electrical box with breakers in addition to the 120-volt/12-volt load center. In the event a circuit breaker opens a circuit (the same effect as a fuse blowing out) HAVE A QUALIFIED PERSON LOCATE THE TROUBLE (either an overloaded system or electrical short) AND CORRECT IT before restoring the circuit breaker to normal position. Failure to do so may result in SERIOUS INJURY OR DEATH. All outlet receptacles are wired for 120-volt power. They conform to NFPA Standard 501C and the National Electrical Code.

Protection against ground fault is provided on lavatory, kitchen, and outside receptacle circuits with a special GFCI receptacle, or by a GFI circuit breaker. These devices are designed to break the circuit when it detects an imbalance in the current flow. The imbalance can be due to an appliance failure which could result in serious injury or death to the user.

Familiarize yourself with the operation and testing of the GFCI. It is an important device which could save your life. If the GFCI breaks the circuit, be sure to have the appliance you were using serviced prior to using it again.

CAUTION: THERE IS NO KNOWN DEVICE THAT OFFERS COMPLETE PROTECTION AGAINST THE HAZARD OF ELECTRICAL ACCIDENTS UNDER ALL CONCEIVABLE CONDITIONS. FOR EXAMPLE, THE GFCI DOES NOT PROTECT A PERSON WHO SIMULTANEOUSLY CONTACTS BOTH THE "HOT" WIRE AND THE NEUTRAL WIRE.

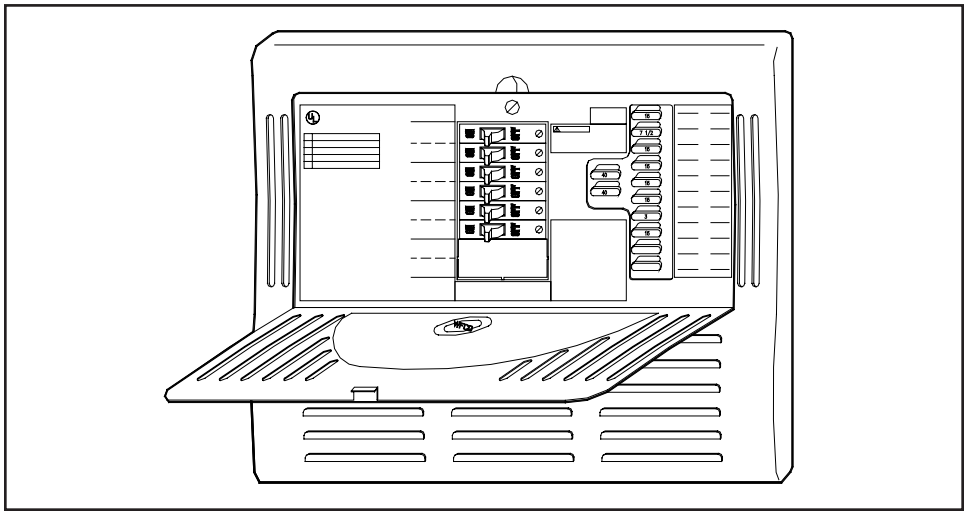
Even with the protection of a GFCI, electrical shock may be felt but will usually be of less than normally dangerous duration, except for persons with heart problems or other conditions that may make them particularly susceptible to serious injury or death from electrical shock. While the GFCI affords a degree of protection not previously available, there is no substitute for remembering that **ELECTRICITY CAN BE DANGEROUS WHEN HANDLED CARELESSLY OR MISUSED AND CAN CAUSE SERIOUS INJURY OR DEATH.**

This system offers the user maximum lighting efficiency under all conditions. Most lights operate on 12-volt current.

When equipped with this system most lights, furnace fans, exhaust fans, and 12-volt refrigerators (if provided) are operated by 12-volt and are protected by fuses located in the electrical compartment.

At the heart of this system is a load center battery charger. The load center has a built-in converter that automatically converts 120-volt current to 12-volt current for use by those circuits which require it and also recharges your battery. No switching is necessary. If an exterior source of power is connected, the converter automatically switches to this source rather than the park trailer battery. If the converter is not connected to a 120-volt power source your 12-volt system will draw power from the battery.

Whenever city power (120V) is available it should be used to avoid discharging the park trailer battery. When the power cord between the park trailer and the vehicle is connected, the park trailer and vehicle electrical systems operate as one. The park trailer battery is recharged by the vehicle's alternator and when parked, the vehicle battery can be discharged by prolonged power usage in the park trailer. Consequently, when parked and operating from the park trailer batteries, the cord between the vehicle and park trailer should be disconnected to avoid running down your vehicle battery.



ELECTRICAL PANEL/CONVERTER

PARK TRAILER OWNER GENERAL INFORMATION

APPLIANCE OWNERSHIP REGISTRATION

Complete and mail ownership registration cards attached to appliances (see instructions on cards) to register them.

UTILITY SHUT-OFF LOCATIONS AND OPERATIONS

You should become familiar with the gas, electric, and water shut-off locations and operations. Your dealer will be glad to go over them with you.

ALTERATION OR EXPANSION OF SYSTEMS

Any addition or change to the structural, electrical, plumbing, heating, cooling or transportation system of your trailer should be made only by a qualified contractor. The correct interfacing of new work with the factory built trailer is extremely

important and requires special skill. Normally a qualified contractor will make all necessary determinations and complete the work without assistance. Other information about the trailer structure and systems may be obtained from, and on terms specified by, the manufacturer.

OWNER INSURANCE

Contact an insurance company of your choice to discuss coverage options and obtain adequate insurance protection.

MOVING YOUR TRAILER

There are certain procedures and information that you should know and follow in preparation for moving your park model trailer.

1. Fragile and loose furnishings, i.e. pictures, clocks, dishes, radios, etc., should be packed in boxes and the boxes secured to prevent transit damage.

2. Refrigerator doors, drawers, and all swinging or sliding doors should be secured.

3. Refrigerators, ranges, etc., should be secured to the floor to prevent sliding and at the top to prevent overturning.

4. Heavier and breakable items should be evenly distributed over the axles.

It is very important that you do not overload your trailer. Overloading will result in extra costs due to blowouts and can cause serious structural damage. A good rule of thumb: Except for normal clothing, bedding, hand towels, dish towels, etc., remove all equipment which was not on the original factory invoice. The following are examples of items which should not be shipped inside the trailer:

- Freezers
- Concrete blocks used for setup
- Steps and storage sheds
- Lawn mowers or lawn equipment
- Large trunks
- Boats

Skyline cannot be responsible for damage to a trailer or its contents due to shipment of such items. The trailer owner may be subject to penalties or overweight charges.

5. Inspect the brakes, tires, and undercarriage. Worn and damaged components should be replaced. Also, check the brake linings and replace if required. The wheel bearings should be checked and repacked with grease if necessary. Check the hitch and lubricate as required. All electrical connections should be clean and tight. Wheel lugs should be tightened.

6. Cap the water inlet and the drain outlet. Disconnect electrical supply lines.

7. Close and lock all doors and windows.

SKIRTING OR CRAWL SPACE ENCLOSURE

Skirting is usually either metal or vinyl and is used to enclose the space between the park trailer and the ground. Skirting not only adds to the beauty of the trailer, but also provides important benefits in the reduction of heat loss as does a foundation with crawl space. Enclosure also aids in reducing the danger and inconvenience of damaged plumbing through freeze-up. Thus, enclosure of the trailer underside can lower fuel bills and prevent problems and inconvenience due to frozen plumbing. SKYLINE CORPORATION RECOMMENDS THE ENCLOSURE OF THE UNDERSIDE OF TRAILERS: HOWEVER, ANY ENCLOSURE MUST BE ADEQUATELY VENTILATED. The recommended ventilator area is .67% of floor area, (1 sq. ft. of ventilator area per 150 sq. ft. of floor area).

AIR QUALITY, VENTILATION AND CONDENSATION

Your park trailer is designed as a tight, well-insulated structure to maximize comfort and energy efficiency. However, unless proper ventilation is provided, indoor contaminants and odors may accumulate to objectionable levels. Everyday living habits can have an important effect on indoor air quality. For example, if your park trailer is usually kept tightly closed or there is a heavy smoker in the family, potentially irritating indoor air contamination may occur. A persistent odor can usually be reduced or virtually eliminated by frequent and regular ventilation. Open the windows a little each day to allow outside fresh air to circulate, while operating your kitchen and bath exhaust fans. Periodic ventilation should not only improve indoor air quality but can also avoid excessive condensation especially in cold or damp weather. If you have health concerns after you adequately ventilate your park trailer, consult your doctor. If you have a question about your park trailer, please contact the Skyline Consumer Relations Department in Elkhart, Indiana.

The following may be done to reduce visible condensation:

Interior Care of Your Park Trailer

Signs of excessive moisture can be obvious, such as water droplets forming on surfaces of wet carpet. Conversely, signs of excess moisture can be subtle, such as condensation forming on metal surfaces. When symptoms appear it is important to timely determine the cause of the excess moisture and take appropriate corrective action to prevent moisture related damage.

Ventilate your trailer regularly by opening doors and windows; use power vent fans when using the range or bathroom.

Exterior Care of Your Park Trailer

If you have skirted your park trailer or located it over a crawl space foundation, ventilate the enclosed space beneath it.

The shell should be inspected periodically for tears, gaps, and condition of sealants in accordance with your owner's manual. Areas that require maintenance should be resealed utilizing a similar, high quality sealant used by the manufacturer.

Particular attention should be devoted to ensure the slide out or push out seals are functioning properly. Each time a slide out or push out is used it should be inspected to ensure proper operation and sealing. The slide out gaskets should also be inspected to ensure proper sealing when the slide out is operated.

Unless your park trailer is installed on a concrete pad, a plastic vapor barrier should be installed over the ground beneath the park trailer—many owners use a 6-mil polyethylene vapor barrier over the ground surface.

Control Relative Humidity

Under severe cold or unusual moisture conditions, remove the excess moisture from the air by mechanical dehumidification. If your bathroom is equipped with a power vent, use it when taking a bath or shower.

Monitoring and controlling relative humidity within the park trailer is one of the most important steps to minimize the risk for moisture-related damage. Ideally, relative humidity should be at 60% or less. Relative humidity can be monitored utilizing a portable hygrometer, a small device that measures temperature and relative humidity. Hygrometers are available at electronics or building supply stores for approximately thirty dollars ($30).

Use exhaust fans, the air conditioner, and/or a portable dehumidifier to manage moisture inside the park trailer to maintain relative humidity at 60% or less. In cold climates, relative humidity may need to be at 35% or less to avoid window condensation issues.

If the park trailer is used the majority of the time in a hot-humid climate, it may be difficult to keep relative humidity below 60%. A dehumidifier will help, but it is important to check the condensation (water) collection bucket regularly or discharge the condensation (water) directly to a drain.

Manage Window Condensation

Window condensation issues can be identified by water or ice guild-up, usually at the base of the window. The majority of these problems can be addressed by managing moisture generated inside the park trailer. Minor condensation issues

are not unusual, especially the park trailers used in colder climates. The key is to manage this small amount of moisture if evident by wiping the surface, and as discussed in 1.1 above, maintaining a reasonable relative humidity within the unit.

Storm windows are available from your Skyline dealer. The interior of the storm windows will be at least 20 degrees warmer, reducing moisture and condensation. DO NOT COVER EMERGENCY EXIT WINDOWS.

Use of Your Park Trailer

It is important to remember that the square footage of a park trailer is significantly less than that of a single family residence. This fact alone will elevate the relative humidity because there is less volume of air to help absorb or dissipate the humidity. For example, showering and cooking create a lot of humidity in a small area. In these instances, use of an exhaust fan and opening windows should reduce the relative humidity, particularly when living in the park trailer for an extended period.

Avoid Drastic Thermostat Setbacks

Cooler surface temperatures increase the potential for condensation and surface mold growth. To minimize the opportunity for condensation to form on interior surfaces, maintain a comfortable temperature in your park trailer, and avoid nighttime setbacks of 10 degrees or more. Drastic setbacks that reduce the indoor air temperature quickly can increase the chance for airborne moisture to condense on cool surfaces such as windows. If you are away from your park trailer for an extended number of days, we recommend that you do not set the temperature back without taking other measures to manage relative humidity, including operating a dehumidifier with a continuous drain.

Severe Environments

Prolonged use of your park trailer in severe environments — for example in extremely cold or hot-humid climates, will require extra care and maintenance to avoid moisture-related issues.

In both extremely cold and hot-humid climates, more attention needs to be focused on controlling relative humidity within the park trailer. It also may require the use of a portable dehumidifier to manage relative humidity within an acceptable range.

Storage of Your Park Trailer

During those periods when your park trailer is not in use, care must be taken to ensure moisture sources are addressed. The following steps should be taken to ensure moisture is controlled:

a. Turn off all water sources;
b. Turn off all combustion appliances;
c. Drain the water tank(s);
d. Drain the water heater;
e. Open all closets, cabinet doors and drawers;
f. Close all windows and entrance doors;
g. Open a vent or a window enough to allow for some limited ventilation air flow, but not so far as to allow snow or rain to enter;
h. When storing the park trailer in high humidity climates (ambient relative humidity is greater than 60% year round), add a dehumidifier drained to exterior to control humidity inside the park trailer during storage;

Wet Areas

Areas that are exposed to water spills or leaks should be dried as soon as possible and definitely within 24-48 hours. Drying areas quickly minimizes the chance for moisture damage and possible mold growth, which can begin to form colonies in 48 hours. A variety of methods can be used to help the drying process:

- Remove excess water with an extraction vacuum
- Use a dehumidifier to aid drying
- Use portable fans to move air across the surface
- Because moisture is key to mold issues, treat all signs of condensation and spills seriously and deal with promptly. Failure to deal with a moisture issue promptly may cause more severe issues where none initially existed, or may make a small problem much worse.
- Be sure to understand and eliminate the source of moisture accumulation as a part of the clean-up. Otherwise, the same issues will simply recur; and
- Small amounts of mold should be cleaned as soon as it appears. Small areas of mold should be cleaned using a detergent/soapy solution or an appropriate household cleaner. Gloves should be worn during cleaning. The cleaned area should then be thoroughly dried. Dispose of any sponges or rags used to clean mold.
- Also see separate section on mold in this manual

Open a vent or window while operating the dryer. Insufficient ventilation may deplete oxygen or cause asphyxiation. The following label is located on or near the dryer:

CAUTION:
OPEN A WINDOW OR VENT WHILE OPERATING DRYER. IT IS DANGEROUS TO CREATE A NEGATIVE AIR PRESSURE INSIDE A TRAILER CONTAINING FUEL-BURNING APPLIANCES.

WARNING

Use of kerosene or other aftermarket space heaters is NOT recommended and is at your own risk. Such heaters may discharge moisture and gases from combustion into your park trailer or cause excessive indoor humidity. SUCH HEATERS MAY ALSO CAUSE A FIRE, DEPLETE OXYGEN, OR RELEASE CARBON MONOXIDE OR OTHER HARMFUL GASES WHICH CAN CAUSE SERIOUS INJURY OR DEATH.

- **Also avoid drying overcoats or other clothes inside the trailer.**

WARNING: DO NOT HEAT THE TRAILER WITH RANGE OR OVEN. In addition to the dangers of toxic fumes and oxygen depletion which makes heating with the range or oven very dangerous, open flames add moisture to the interior air, increasing condensation. Do not use an air humidifier inside the trailer.

MOLD

Mold is a fungus that occurs naturally in the environment, and it is necessary for the natural decomposition of plant and other organic material. It spreads by means of microscopic spores borne on the wind and is found everywhere life can be supported. Park trailer construction is not, and cannot be, designed to exclude mold spores. If the growing conditions are right, mold can grow in your park trailer. Most people are familiar with mold growth in the form of bread and cheese mold, and the mold that may grow on bathroom tile.

In order to grow, mold requires a food source. These food sources might be supplied by items found in the park trailer, such as fabric, carpet, wallpaper, or building materials (i.e., drywall, wood, and insulation). Also, most mold growth requires a temperate climate. The best growth occurs at temperatures between 40°F and 100°F. Finally, mold growth requires moisture. Moisture is the only growth factor that can be controlled. By minimizing moisture, an owner can reduce or prevent mold growth.

Moisture can stem from a variety of sources such as spills, leaks, overflows, condensation, damp or standing water and human activity such as showering or cooking. Good housekeeping and maintenance practices are essential in the effort to prevent or reduce mold growth. You should keep the humidity in your unit below 35%-60%. Generally the lower the outside temperature the lower the inside humidity must be. If optimal growth conditions persist, mold can develop within 24 to 48 hours.

CONSEQUENCES OF MOLD

Experts disagree about the level of mold exposure that may cause health problems, as well as the exact nature and extent of the health problems that may be caused by mold. Some people are allergic to mold and may suffer hayfever like allergic symptoms. Other, more serious health effects have also been attributed

to exposure to mold. The immunocompromised (people with immune deficiencies or on chemotherapy), elderly, children and persons with asthma or other chronic respiratory disease may be at greater risk of adverse health effects. If you have any of these conditions or are concerned that you may be exposed to mold which could cause adverse health conditions you should consult with a qualified health care provider.

WHAT YOU CAN DO

Take positive steps to reduce the occurrence of mold growth, and thereby minimize any possible adverse effects that may be caused by mold. These steps include the following:

1. Before bringing items into the park trailer, check for signs of mold. Potted plants (roots and soil), furnishings, or stored clothing and bedding material, as well as many other household goods, could already contain mold growth.

2. Regular vacuuming and cleaning will help reduce levels of settled mold spores. Detergent solutions and most tile cleaners are effective in controlling mold growth on surfaces. If other biocides or mild bleach solution are used, care must be taken in handling these solutions.

3. Keep the humidity below 40%. Do not hang clothes to dry indoors. Ventilate kitchens and bathrooms by opening windows, using exhaust fans, or running the air conditioning if so equipped to remove excess moisture in the air and to facilitate evaporation of water from wet surfaces. In general, windows or doors throughout the unit should be opened periodically to provide ventilation.

4. Promptly clean up spills, condensation, and other sources of moisture. Thoroughly dry any wet surfaces or material. Do not let water pool or stand in your unit. Promptly replace any materials that cannot be thoroughly dried, such as drywall or insulation.

5. Inspect for leaks on a regular basis. Look for discolorations or wet spots. Repair any leaks promptly. Take notice of musty odors and any visible signs of mold growth.

6. In many cases, mold growth that develops on surfaces can be thoroughly cleaned with a mild detergent solution (other biocides and bleach solutions can be used, but should be handled with caution) and dried completely. Porous materials with mold growth such as fabric, upholstery, or carpet should be discarded. Avoid exposing yourself or others to mold. A professional should be consulted if mold growth is extensive, a persistent musty odor is present, or evidence of ongoing water intrusion and dampness, leaks, unusual discoloration on walls or ceilings, or other concerns persist.

The information provided herein is merely a general guide to basic background information about mold and is not intended to be a complete discussion of possible problems relating to mold, methods for determining if a problem exists or of correcting mold problems. If you believe mold is present in your park trailer you should immediately consult a qualified expert who will advise you on the proper steps for your specific situation.

USE A DEHUMIDIFIER

During prolonged and continuous usage of the park trailer, a dehumidifying appliance may be more comfortable and effective in removing excess moisture from interior air. While use of a dehumidifier is not a cure-all, operation of a dehumidifier will reduce the amount of outside air needed for ventilation. Thus, the heating load on the furnace will be reduced and the interior will be less drafty.

WARNING: Use of kerosene or other aftermarket space heaters is NOT recommended and is at your own risk. Such heaters may discharge moisture and gases from combustion into your trailer or cause excessive indoor humidity. SUCH HEATERS MAY ALSO CAUSE A FIRE, DEPLETE OXYGEN, OR RELEASE CARBON MONOXIDE OR OTHER HARMFUL GASES WHICH CAN CAUSE SERIOUS INJURY OR DEATH.

THE EXTERIOR OF YOUR PARK TRAILER

THE ROCKGUARD (optional)

The rockguard installed over the front window of your trailer is designed to protect the window from objects thrown up by the wheels of your tow vehicle. It also serves as a sunshade for the front window.

To open the rockguard:

- Pull out on the spring-loaded pins at the bottom outside corners of the rockguard cover.
- Lift the rockguard to the desired angle.
- Tighten the wing nuts on the support arms.
- Reverse the procedure to lower. Be sure the retainer pins snap into slots in the rockguard rim. They do not automatically catch when the rockguard is lowered. Wind entering under the rockguard could cause it to blow open, damaging the rockguard, the window, and the trailer front.

Always lower the rockguard before traveling.

TYPICAL ROCKGUARD

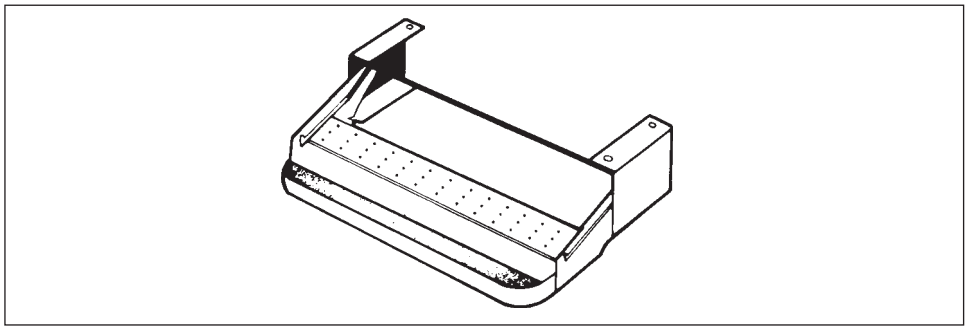
DOORS, WINDOWS, AND SLIDING STEP

Door catches—The main entrance door is built of heavy gauge material and is fully insulated. The door lock design reflects the latest safety regulations. It is very important that the door be completely closed and locked during travel. If you find it is difficult to lock the door, push in to release pressure on the door latch while turning the key. The door is locked from the inside by pushing or turning a button near the door handle.

Windows and window glass meet or exceed all federal safety standards. They require only normal care and may be cleaned with any good glass cleaner.

Window screens are made of plastic for longer wear and ease of maintenance. They can be easily cleaned with a mild cleaning solution. They will not rust and, in case of damage, can be replaced by your dealer.

The sliding step may be extended by grasping firmly, lifting, and pulling all the way out. The runners on the edge of the step should be lubricated periodically. Be sure the step is fully retracted while in transit.



SLIDING STEP

RUBBER ROOFS - MAINTAINING AND CLEANING

Periodic cleaning is the primary maintenance required. Household cleaners such as Spic-N-Span, Ajax, etc. are recommended as granulated cleaners do a little better job. It is also recommended the use of a bristled scrub brush in place of a sponge. For more stubborn stains, i.e. oak leaves, pine sap, the use of a kitchen cleanser with bleach can help remove the stain. Remember to rinse the roof completely to remove any soap residue and also rinse the sidewalls completely to remove any streaking.

DO NOT USE ACETONE OR ANY PRODUCTS CONTAINING PETROLEUM DISTILLATES ON THE RUBBER ROOF.

Annual inspection of the roof is suggested. Check the membrane for possible damage and check the caulk/lap sealant used in all termination areas and around all accessories and fasteners.

Rubber roofing material is quite inert and will resist weathering well. However, it can be cut or punctured by sharp objects. Caution should be used when placing any articles on the roof and care should be exercised when working on top of the vehicle. The rubber roofs may become slippery when wet. If damage does occur, the rubber membrane can easily be patched.

EPDM rubber roofing does not require periodic application of any product to protect it from ultraviolet light or ozone. These products may cause damage to the rubber roof membrane. If you have any questions, please contact Skyline Corporation for verification.

EXTERIOR FINISH

Aluminum exteriors have a polyvinyl baked finish to provide for low maintenance. The finish can be make to last longer by keeping the exterior cleaned and waxed. Clean with a mild soap solution followed by a clear water rinse.

FRAME

The steel frame under your trailer has been factory protected with rust inhibitive coating. Under some conditions, corrosion can form on the steel surfaces, so the frame should be inspected yearly. If rust is found, remove it and touch up the area with asphaltic base, zinc chromate base or other paint or equivalent protection.

THE INTERIOR OF YOUR PARK TRAILER

The care and general maintenance of a park trailer are among the important responsibilities of ownership. The following guide should prove useful in establishing a routine of good care, upkeep and general maintenance.

INTERIOR SURFACES

PORCELAIN ENAMEL

Kitchen sinks, bathtubs, and working surfaces finished with porcelain enamel baked onto steel may become pitted or porous if not cared for properly. Soap

or a suitable liquid household cleanser will keep them sparkling clean. Chlorine bleach will probably remove any stains or discoloration that may occur.

Porcelain enamel should also be protected from extreme heat which may crack it. A protective pad or wire rack should be placed between the hot utensil and the porcelain surface.

If the enamel becomes chipped or broken, patching materials are available at your local hardware or paint store.

FIBERGLASS FIXTURES

Fiberglass sinks, bathtubs, or showers should be cleaned only with warm water and a mild detergent. Avoid abrasive cleansers which may dull the surface or ammonia which may discolor the surface. Should a fiberglass surface get chipped or scratched, it can be repaired successfully by your local service person, or you may wish to purchase a repair kit from your local hardware or paint store.

COUNTERTOPS

All kitchen countertops are high-pressure laminates and have been chosen for their clean design and easy care. Clean them with warm water and liquid detergents. It is recommended that acrylic fiberglass molded lavatory tops be cleaned in the same manner. Avoid abrasive cleaners and cleansers with ammonia as they may discolor or scratch the surface. Waxing will help preserve the luster. Never use these surfaces for cutting or slicing.

Bedroom furniture tops are of synthetic woodgrains in vinyl. Occasional cleaning with spray cleaner suitable for vinyl and a soft cloth is all that is required. Dry detergents or abrasive cleaners should not be used.

FURNITURE

The furniture in your trailer has either a wood or synthetic laminate surface. Both require only simple care to maintain their original beauty. Use a good quality furniture polish following instructions on the label.

CURTAINS, DRAPES AND BEDSPREADS

The curtains, drapes and bedspreads in your trailer should be dry cleaned. They should not be washed.

The upholstery fabrics are treated with a moisture and stain repellent. Therefore, most dirt stains can be easily removed with a damp cloth. If and when they become badly soiled, use a good quality upholstery cleaner. The drapes should be dry cleaned. When storing the trailer, it is a good idea to protect the upholstery and interior from fading sunlight by putting aluminum foil between the window and the drapes.

CABINET DOORS AND DRAWERS

Cabinet doors and drawers should require little attention. Only an occasional waxing with a product designed for preserving wood surfaces should be necessary. Any cabinet drawer tending to stick will glide easier if a light coating of wax or bar soap is applied to the running edges of the drawer and center guide.

CEILINGS

The attractive appearance of your ceiling will generally require little care or maintenance. Here are some tips on general care and remedies to problems which sometimes occur.

Dirt Smudges: Soft art gum will probably remove dirt and fingerprints. If a portion remains after art gum has been used, the area should be wiped with soft white chalk and rubbed over the spot to conceal as much as possible.

DECORATIVE GLASS

Decorative glass should be cleaned with a mild glass cleaner. The decorative material is a polymer, and will be damaged by ketones, alcohols, lacquer thinners, abrasives, or strong detergents. Never use these substances to clean the decorative glass. Dampen a clean, soft cloth with the glass cleaner. Avoid spraying the glass directly with the cleaner solution. Wipe the surface dry with a second clean cloth. Do not leave the cleaner on the glass surface for more than five minutes. The etched or frosted effect will disappear temporarily when wet, and will reappear when dry.

FLOOR COVERINGS

Vinyl flooring requires only washing and periodic waxing. Vacuum carpeting regularly, and clean it with a quality carpet cleaner.

INTERIOR TABLES AND BEDS

A variety of tables and sofas, some of which can be made into sleeping accommodations, are installed in Skyline park trailers. Some of these are stored in enclosures at the sidewalls (exterior type), while others are a part of a dinette arrangement. The following explanations and illustrations explain the operation of these accommodations.

EXTENSION TYPE—To operate this type of table, swing the table top up and pull the leg down. If the table has an extension leg, push the release and allow the inner leg to drop to the length necessary to make the top level. Let the lock pin seat in the hole to hold the leg at the proper length. Some extension tables have leaves provided. To add leaves, pull the latch on the underneath side of the table top and pull out the sliding portion of the table. Insert the desired leaf (or leaves) and push the table together (See Figures 4 and 5).

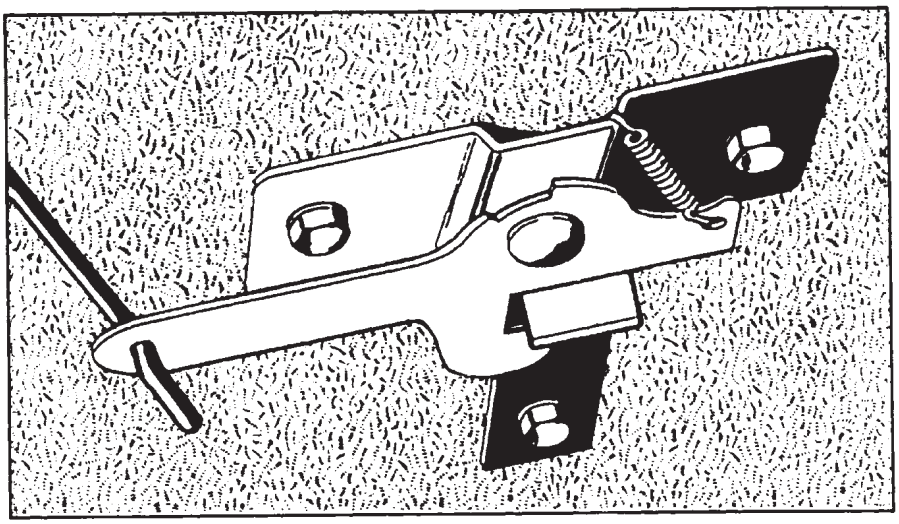


FIGURE 4 TYPICAL TABLE LATCH

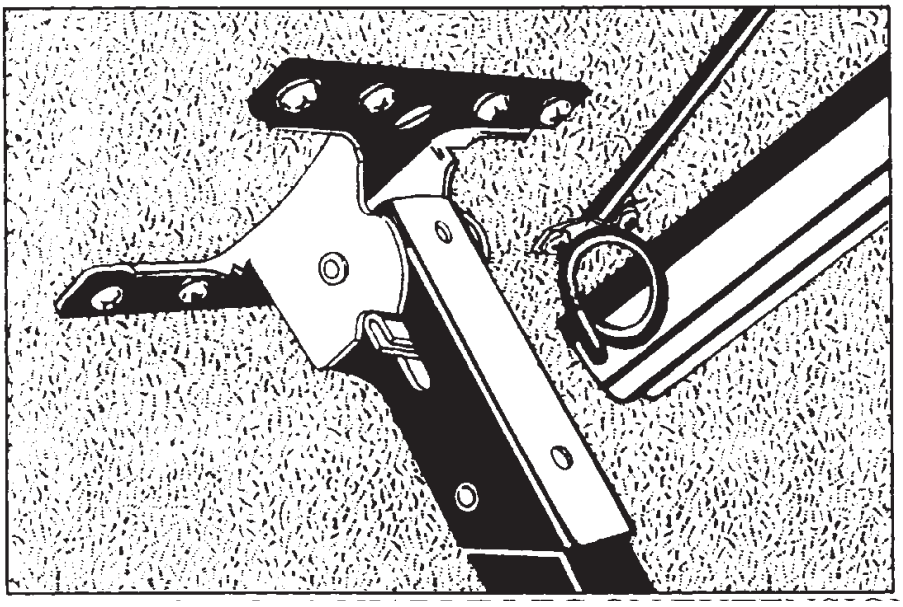


FIGURE 5 SWING DOWN TABLE LEG ON EXTENSION TABLE

SWING DOWN TABLE—Pull the table towards you and up, then push it toward the wall. Insert the brackets (tabs) at the back of the table into the wall support brackets. Pull the leg down into place (See Figure 6).

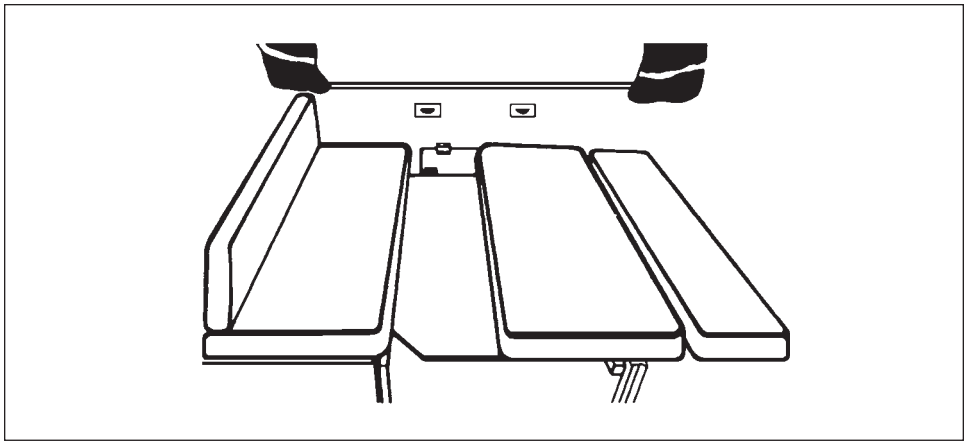


FIGURE 6 SWING DOWN TABLE

DINETTE TYPE—Drop the table top to the level of seats. Place seat-back cushions over table top to form bed.

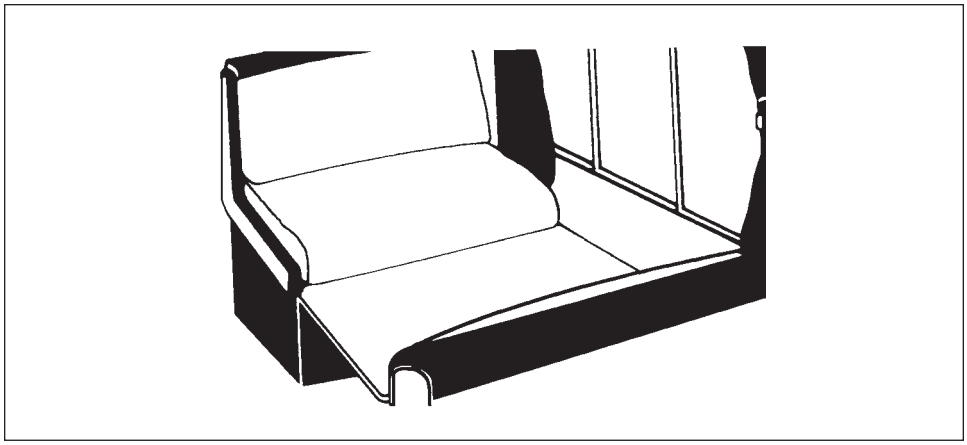


FIGURE 7 PEDESTAL TABLE

PEDESTAL TYPE—Simply insert the table leg (or legs) into the base plate or plates. Lower the table support bracket into the legs (See Figure 7).

LOVESEAT SLEEPER & QUEEN SLEEPER—To adapt these into a bed, remove the seat cushions, lift the mechanism and pull forward. The mattress, which is folded and stored under the cushions will unfold to form a bed.

INTERIOR MISCELLANEOUS

BATHROOM DOOR LOCK

The bathroom door may be locked or unlocked by pushing in or pulling out the knob on the inside of the door. If the lockset should be accidentally locked and there is a need to unlock from the outside of the room, simply insert a sharp point (paper clip point, nail point, etc.) into the small hole in the center of the knob and push inward to disengage the lockset (See Figure 8).

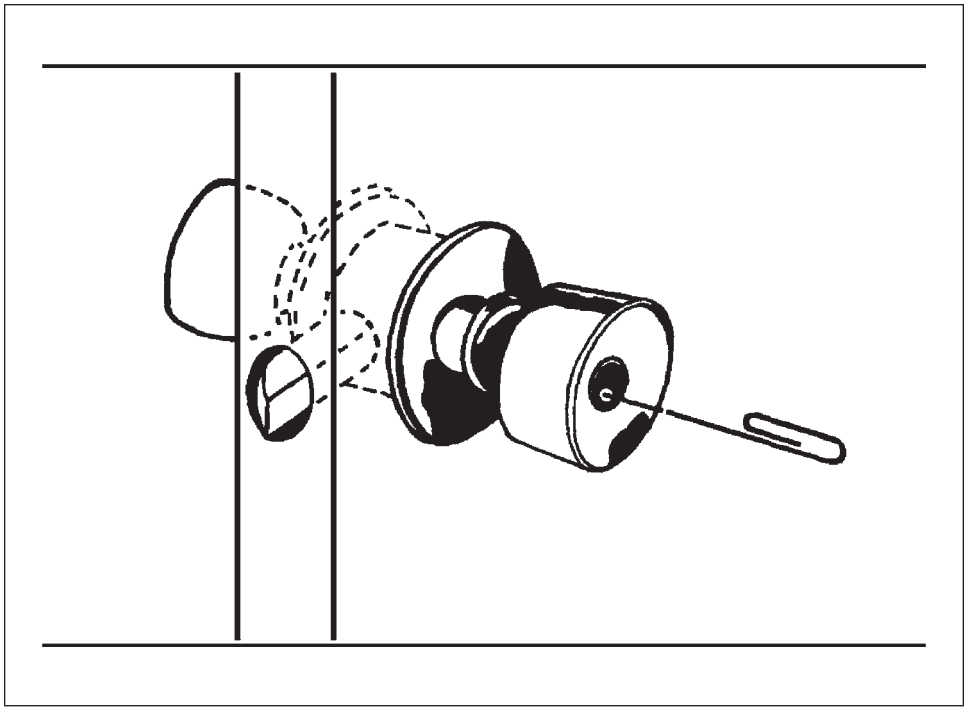


FIGURE 8 TYPICAL BATHROOM DOOR LOCK

KITCHEN RANGE AND OVEN

The gas oven and burners are operated with propane. The basic operation is similar to the range in your home. For additional information refer to the operating manual in your Owner's Information Kit.

FAILURE TO COMPLY COULD RESULT IN SERIOUS INJURY OR DEATH

The following warning label has been located in the cooking area to remind the user to provide a supply of fresh air for combustion:

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

Cooking appliances need fresh air for safe operation. Before operation:

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

FAILURE TO COMPLY COULD RESULT IN DEATH OR SERIOUS INJURY

Unlike homes, the amount of oxygen supply is limited due to the size of the recreational park trailer, and proper ventilation when using the cooking appliances(s) will avoid dangers of asphyxiation. It is especially important that cooking appliances not be used for comfort heating as the danger of asphyxiation is greater when the appliance is used for long periods of time.

Portable fuel-burning equipment, including wood and charcoal grills and stoves, shall not be used inside the recreational park trailer. The use of this equipment inside the recreational park trailer can cause fires or asphyxiation which COULD RESULT IN SERIOUS INJURY OR DEATH.

RANGE EXHAUST HOOD

The exhaust hood allows vapors and cooking odors to escape, and serves as a vent for the galley area. The hood has a grease filter screen which will require periodic cleaning.

To clean the screen, remove and wash in soapy water. Rinse with water and let the screen drain dry. Replace the cleaned filter in the exhaust hood. Be sure the vent damper at the exterior of the trailer is not latched in the closed position.

AIR CONDITIONER

The optional roof-mounted air conditioning unit can operate only when the trailer is connected to a 120-volt AC power source. Be sure that the air conditioner's circuit breaker is turned ON. For best performance, park the trailer in the shade and keep curtains closed. Before operating any model of roof A/C, close all doors and windows.

(The optional heat unit on some models is not a substitute for a primary heating system. It is designed to warm the air during moderately cool days or nights.)

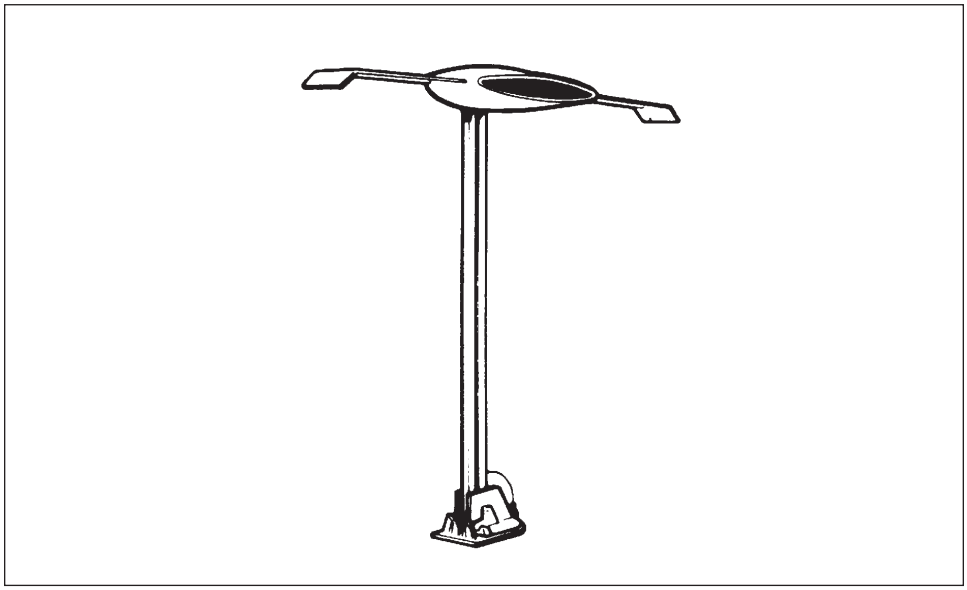
Refer to the air conditioner manufacturer's instructions for detailed operation and preventive maintenance requirements. REMEMBER THAT THIS APPLIANCE REQUIRES A LARGE PORTION OF YOUR AVAILABLE ELECTRIC POWER.

The shroud is lightweight A.B.S. plastic that can't rust or dent. Color is moulded in to reduce fading. Dampers permit adjustment of air flow to the front, rear, and sides of the vehicle. The air is continuously filtered to insure cleanliness. The special filter is washable and easily accessible from inside. Consult the service centers listed in your kit for services or repairs.

NOTE: Many trailers include dealer installed air conditioning units rather than factory installation. Check carefully to make sure there are no leaks around the air conditioning unit.

TV ANTENNA

In many areas, television reception can be improved with an optional TV antenna. The TV antenna hookup includes an amplifying system, a coaxial connection for the antenna cable to your TV set and, an antenna crank for inside control.



TYPICAL TV ANTENNA

The cable connection, amplifying system switch and power ON indicator light are on a wall plate. Several different types of wall plates are used, so refer to the manufacturer's instructions for details.

TYPICAL TV ANTENNA CRANK

The antenna crank handle should be turned in the UP direction until some resistance is felt. Pull down the rotating knob to disengage it from the ceiling plate and rotate it until you have located the best sound and picture.

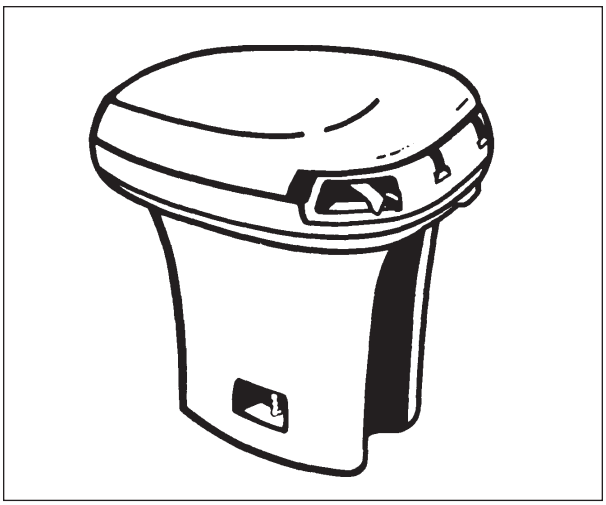
Always lower the antenna before moving your unit. Turn the rotating portion so that its pointer lines up with the ceiling plate pointer. Turn the crank handle in the DOWN direction until some resistance is felt. Always turn the amplifier power switch off.

AM/FM RADIO AND CASSETTE TAPE OR CD PLAYER

Refer to your radio/tape player manufacturer's instruction manual for specific operating and cleaning instructions.

TOILET (W/OPTIONAL HOLDING TANKS)

Your trailer is equipped with either a hand control lever or foot pedal operated marine-type toilet.



TYPICAL HAND CONTROL MARINE-TYPE TOILET

FIGURE 9

To operate the hand lever control model:

- To flush, pull the black lever located on the right side of the toilet forward until rinse water clears the bowl, then slowly release the lever.
- The water fill lever (white lever) can be operated independently of the flush to adjust the level of water in the bowl (See Figures 9, 10, 11).

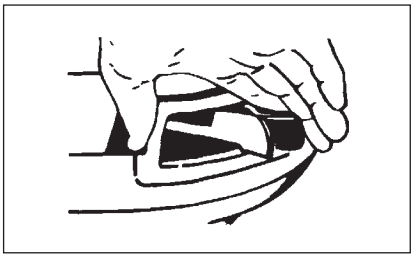


FIGURE 10 FLUSH LEVER

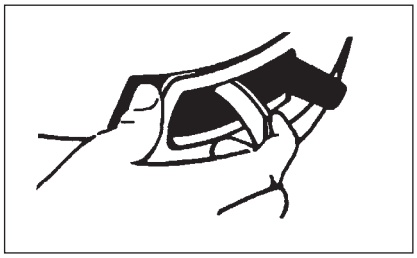


FIGURE 11 WATER LEVER

To operate the foot pedal model:

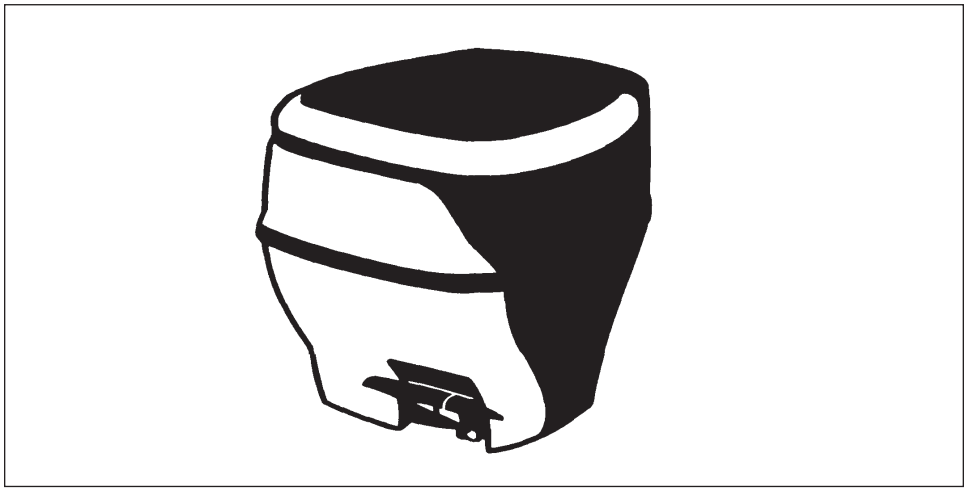


FIGURE 12 TYPICAL FOOT PEDAL MARINE-TYPE TOILET

- Depress the small pedal to add water to the desired level, then slowly release the pedal.
- To flush, depress the large pedal until the rinse water clears the bowls, then slowly release the pedal (See Figures 12, 13, 14).

If your trailer is equipped with a toilet other than these models, please follow the operating instructions provided.

FIGURE 13 WATER PEDAL

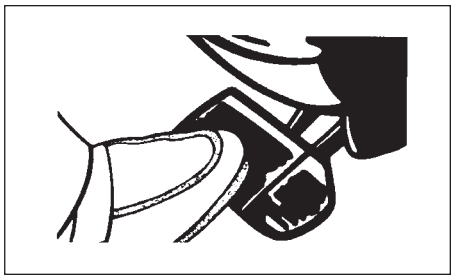


FIGURE 14 FLUSH PEDAL

TOILET MAINTENANCE

The toilet does not require any routine maintenance. Clean the unit with a high grade, nonabrasive cleaner. DO NOT use highly concentrated or high acid or alkaline household or toilet bowl cleaners. These products can damage the finish and valve components in the flush seal.

TOILET TROUBLESHOOTING

Water Keeps Running Into The Bowl

- On the hand lever models, be sure the levers return all the way. If they do not, there may be foreign matter on the waste blade valve or the seal in the bottom of the bowl preventing the bowl from fully closing.

- On the foot pedal models, clean out any foreign material in the groove where the valve blade seats in the bottom of the bowl.

Foot Pedal Hard To Operate or Blade Sticks

- Spray light film of silicone on blade.

Poor Flush

- The lever or pedal must be held fully open during the flushing for two or three seconds.

- Be sure a sufficient quantity of water is in the bowl to carry waste into the holding tank.

Toilet Leaks, Water On Floor

- Check the water inlet connection. Tighten, or clean and tighten if necessary.

- Refer other toilet leaking conditions to an authorized Skyline dealer.

WATER HEATER

The water heater holds between 10 and 20 gallons of water, depending on the model. It operates on either propane, 120-volt electricity, or a combination of both. For proper operation and adjustment, study the manufacturer's instructions enclosed in your owner's kit and those on the heater itself.

When the recreational park trailer is to be stored for long periods without use, the water heater should be drained. There is a drain-cock on the heater for this purpose. Before draining, the circuit breaker in the panelbox must be put in the OFF position. Take care to avoid contact with the discharged hot water.

CAUTION: Hydrogen can be produced in the water heater system served by a heater that has not been used for a long period of time, generally two weeks or more. This is especially true if the water heater has been drained. Hydrogen gas is extremely flammable; due to risk of SERIOUS INJURY OR DEATH under these conditions, it is recommended that the hot water faucet be opened for several minutes at the kitchen sink before using any electrical appliances connected to the hot water system. If hydrogen is present there will probably be an unusual sound such as air escaping through the pipe as the water begins to flow. There should be no smoking or open flames near the faucet at the time it is opened.

When reoccupying your park model, the water heater circuit breaker should not be turned on until the water heater tank is completely filled. Dry operation may overheat or damage the heater elements.

GAS FURNACE

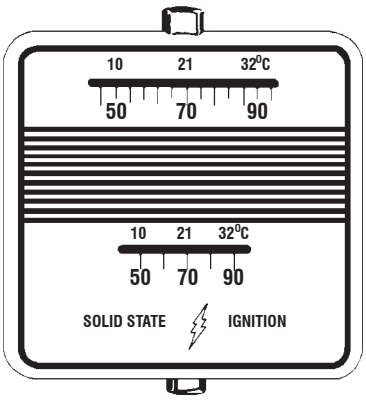
The gas furnace operates on propane. It is controlled by a thermostat, as in a home. If the temperature setting knob is pushed to the lowest temperature setting, the heater will not come on at all; this is the OFF position.

Consult your Heater Instruction Manual and the instructions on the furnace for lighting procedures.

Once the heater is on, its operation may be controlled entirely with the thermostat. You will not need to touch any of the other heater switches or valves.

The furnace is a forced air system which pushes warm air throughout your park trailer. The blower is wired to operate directly from your 120-volt system.

Your furnace is a closed unit and vented to protect against dangerous gas leaks and combustion exhaust. It is wired for automatic cut-off in case of overheating and is fuse-protected against electrical failure. IN CASE OF TROUBLE: Consult your furnace manufacturer's operation and service manual in your Owner's Kit for troubleshooting tips and information and location of nearest authorized service center.



TYPICAL FURNACE THERMOSTAT

WARNING: Use of kerosene or other aftermarket space heaters is NOT recommended and is at your own risk. Such heaters may discharge moisture and gases from combustion into your park trailer and cause excessive indoor humidity. SUCH HEATERS MAY ALSO CAUSE A FIRE, DEPLETE OXYGEN, OR RELEASE CARBON MONOXIDE OR OTHER HARMFUL GASES WHICH CAN CAUSE SERIOUS INJURY OR DEATH.

IMPORTANT SAFETY MESSAGE

Don't take chances with safety. The heating, cooking, electrical, and other systems and appliances in your park trailer must be operated and maintained ONLY as specified in this manual and in other manuals furnished with it. Check your manual and be sure you clearly understand how to operate any system before you try it. If you are at all uncertain, contact your dealer, the Skyline factory, the system or appliance manufacturer's local representative, or Skyline's Director of Consumer Relations BEFORE you operate any system or appliance. Please read with special care the "FIRE SAFETY" section beginning on page 57 of this manual. It explains important safety features such as emergency exits and fire precautions.

Also please read all instructions, notices and warnings on the park trailer, its systems, and appliances. FAILURE TO FOLLOW THESE IMPORTANT PRECAUTIONS MAY RESULT IN SERIOUS INJURY OR DEATH. If you sell your park trailer, please make certain that this manual and the other manuals furnished with your park trailer are given to the new owner. NOTE: Please refer to label on the front of your Skyline trailer in the area of the propane tanks which refers to safety as pertains to the propane system.

FIRE SAFETY

SMOKE ALARMS, PROPANE & CARBON MONOXIDE DETECTORS

Your park trailer was designed and built to meet all applicable standards for normal recreational use. For the safety of you and your family a propane detector, carbon monoxide detector and a smoke detector have been installed in the kitchen / hall / living area.

Since propane is heavier than air, the propane detector has been mounted near the floor. Test the detector after the trailer has been in storage, before each trip, and once a week during use. Follow the test procedure recommended in the manufacturer's operating instructions. (See figure 15)

The carbon monoxide detector warns of excessive levels of carbon monoxide given off by internal combustion engines and some other fossil fuel burning appliances. Test the carbon monoxide detector after the trailer has been in storage, before each trip, and once a week during use. Note, the carbon monoxide detector requires a ten (10) minute warm up period once it is energized. See the manufacturer's operating instructions for operating and testing procedures. If the detector does not operate properly, have the detector repaired or replaced. (See figure 17)

Both the propane detector and the CO detector are wired to the 12 volt system of your trailer. They will function properly whenever 12 volt power is available from the tow vehicle through the 7-way power cord, the RV battery, or when the converter is energized through the 120 volt shoreline. **For protection in all circumstances (i.e. dry camping) a fully charged RV battery must be properly installed.**

A battery-powered smoke alarm complying with ANSI/A119.5 is mounted on the wall in the living / cooking area of your trailer. Please read the smoke alarm's Owner's Manual for details on testing and caring for this important safety device. Test the smoke alarm after the trailer has been in storage, before each trip, and once a week during use. Depress and hold the test button on the cover for up to 20 seconds. The horn should sound a loud alarm. If the horn does not sound, check that the battery is inserted properly and is fresh. If the battery is dead, replace it promptly and retest the alarm. The alarm still does not sound, have it replaced. (See figure 16)

WARNING: Actuation of your CO alarm indicates the presence of carbon monoxide (CO) which can KILL YOU.

If the alarm sounds; 1) Operate the reset/silence button; 2) Call your emergency services (Phone Number _____) (fire department or 911); 3) Immediately move to fresh air - outdoors or by an open door/window. Do a head count to check that all persons are accounted for. Do not reenter the premises nor move away from the open door/window until the emergency responders have

arrived, the premises have been aired out, and your alarm remains in its normal operation. 4) After following steps 1-3, if your alarm reactivates within a 24 hour period, repeat steps 1-3 and call a qualified appliance technician (Phone Number _____) to investigate for sources of CO from fuel burning equipment and appliances, and inspect for proper operation of this equipment. If problems are identified during this inspection have the equipment serviced immediately. Note any combustion equipment not inspected by the technician and consult the manufacturers' instructions, or contact the manufacturer directly, for more information about CO safety and this equipment.

The following label has been placed next to the detector.

WARNING
TEST SMOKE ALARM OPERATION AFTER
VEHICLE HAS BEEN IN STORAGE,
BEFORE EACH TRIP, AND
AT LEAST ONCE PER WEEK DURING USE

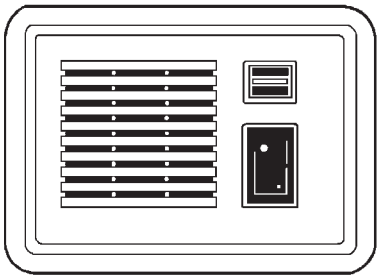


FIGURE 15 PROPANE DETECTOR

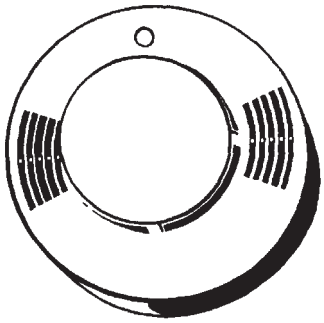


FIGURE 16 SMOKE ALARM

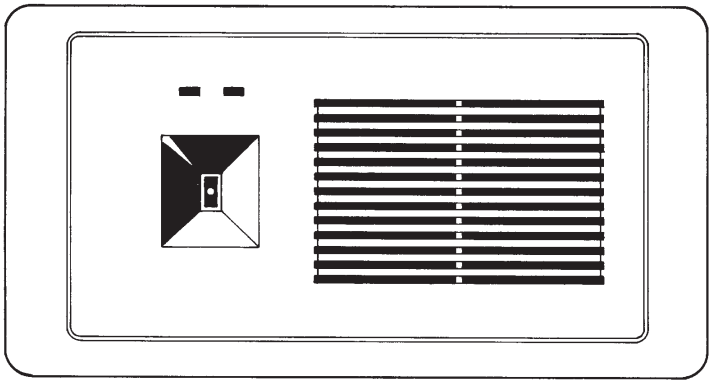


FIGURE 17 CARBON MONOXIDE DETECTOR

EMERGENCY EXITS

Every trailer is designed to the Standard for Park Trailers—ANSI A119.5, with a minimum of two exits which are remote from one another. They are either two doors or a door and a window, which is marked as an exit. Be sure that these exits are openable and left free for exit. Be certain that you and your family know the location of the "egress" window and understand its operation as described on the window label. "Egress" windows are specially designed to make escape faster and easier in an emergency. Do not place furniture in front of this window so that it might become blocked.

FIRE PRECAUTIONS

The safety features built into your new trailer will be of little value, however, if fire should strike, and you and your family are not prepared. Every member of your family should know how to prevent fires and how to escape if a fire occurs.

Before a Fire Starts*

- Remove trash and stored items of outlived usefulness, particularly from the vicinity of furnaces and heaters and from hallways and exit areas.

- Exercise care in the use of electricity. Do not overload electrical outlets with many appliances, use only appropriate fuses, and do not hang electrical cords over nails or run under carpets. Have cords replaced when they begin to fray or crack, and have electrical work done by competent electricians.

- Do not store gasoline or flammable cleaners inside the trailer. Most cleaning jobs can be done with readily available non-flammable cleaners that are safer to use and store. Also any type of gasoline powered equipment must not be stored inside your park trailer unless the fuel tank and carburetor have both been completely drained.

- To avoid the danger of spontaneous ignition, dispose of rags wet with oil, polishes, or other flammable liquids in outdoor garbage cans.

- Inspect your trailer often for these and other hazards.

- Plan for escape from every area of the trailer; discuss escape routes with your family, and actually rehearse escape. You might have to find your way out in a thick smoke or darkness.

- Learn how to extinguish common fires in early stages. Roll a person whose clothing is on fire; use a proper portable extinguisher or even a handful of baking soda to extinguish a fire on your stove.

- Clothing afire is a prelude to tragedy. Do not wear (or permit children to wear) loose, frilly garments if there is any chance at all of accidental contact with a stove burner or other source of fire.

- Exercise extreme care with smoking materials and matches, major causes of destructive fire. Do not leave these where children can reach them.

*From the report of the President's National Commission of Fire Prevention and Control, May 4, 1973.

IF A FIRE STARTS AND YOU HAVE **ANY** DOUBT ABOUT WHETHER YOU CAN EXTINGUISH IT, **IMMEDIATELY** GET EVERYONE OUT OF THE TRAILER AND A SAFE DISTANCE AWAY TO REDUCE THE RISK OF SERIOUS INJURY OR DEATH. **NEVER** REENTER A BURNING TRAILER.

- If you see, smell, or hear any hint of fire, evacuate everyone immediately, but don't compound tragedy by attempting a rescue through a gauntlet of flames or thick smoke. Call the fire department as soon as possible. Don't attempt to extinguish a fire unless it is confined to a small area and your extinguishing equipment is equal to the task.

- If your clothing ignites, roll over and over on the ground or the floor. Running will just fan the flames. Teach the proper procedure to your children.

- Before opening a door if you suspect fire in another part of the trailer, feel the inside of the door with the palm of your hand. If it's hot, don't open it. If smoke is pouring into the room under the door, stuff bedding or clothing into the crack and get out of the trailer quickly. Identify egress windows and familiarize yourself with how to open all windows in your trailer. You may need to exit from a window if a fire or other emergency occurs.

- In smoke, keep low. Gases, smoke, and air heated by fire rise, and the safest area is at the floor. Cover mouth and nose with a damp cloth, if possible. Don't assume that clear air in a fire situation is safe. It could contain carbon monoxide, which, before it kills you affects judgment, hampering escape.

FIRE SAFETY REMINDERS

Fire is an unexpected event even with the best of housekeeping, safety features, and fire prevention procedures. In addition, remember these helpful hints when faced with a fire:

- When reporting a fire, speak calmly, don't panic, and give all the needed information.

- Remember to feel the door before you exit. If it is hot, don't open it. The smoke and heat may knock you out. Look for another route of escape.

- If the door seems to be cool enough, open the door cautiously, ready to slam it shut if flames should burst in. If path is clear, then escape.

- Remember to close the door after you—this will slow down the spread of the fire.

- Whenever you are in a smoke filled room, keep down close to the floor—the air will be easier to breathe.

- Never re-enter a burning trailer.

- Above all, don't panic.

If you have small children, you should also consider the following:

- Make sure children are never left unattended.

- Teach your children how to dial the emergency number "911" and ask for assistance.

- Instruct the baby-sitter to follow the evacuation plan and rendezvous point which you have established for your family if a fire should occur.

In general, plan ahead for safer living:

- Know your new trailer.

- Learn the "do's" and "don'ts" of safer living as outlined in this manual.

- Follow the instructions provided with your trailer and the equipment in it.

- Be sure that all members of your family are safety conscious.

- Finally, take a few minutes with your family to read and understand the safety tips we have given you.

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

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 Skyline Corporation.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-888-327-4326 (or 366-0123 in Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the hotline.

CHECKLIST TO WINTERIZE YOUR PARK TRAILER

The main concern in winter operation or storage is to guard against freezing damage to the hot and cold water systems including water tanks, water lines, water heater, drain lines, holding tanks, traps, and battery. When using your park trailer at or below freezing levels, put NON-TOXIC antifreeze in the holding tank.

DO NOT use alcohol or alcohol-base solutions. See your dealer for permanent-type antifreeze recommended for your area.

To completely winterize your trailer for storage follow this procedure to drain the water system:

1. Be sure the trailer is level. Use blocks or stabilizing jacks.

2. Open all faucets, including the water heater, and leave them open. After opening the hot and cold water faucets, open the drain valves on the HOT and COLD water pipes. These caps are located under interior cabinets at floor level and drain through the floor (See Figure 18).

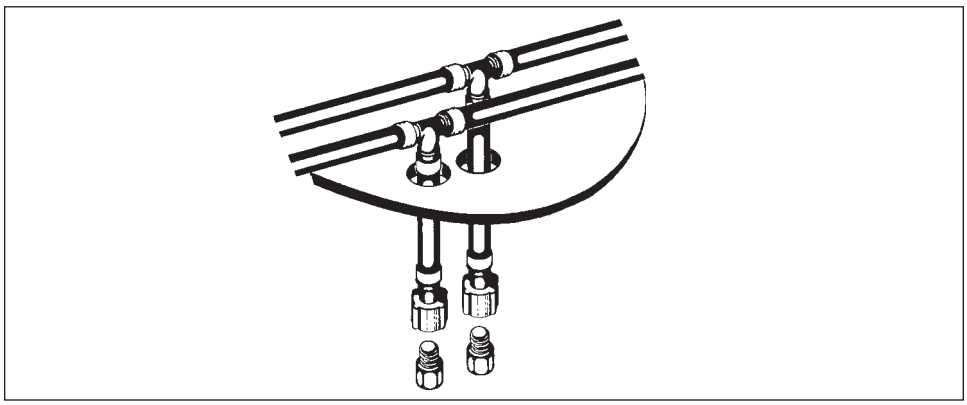


FIGURE 18 TYPICAL DRAIN CAPS

3. Pour about a cup of NON-TOXIC antifreeze in each drain, including the toilet, to prevent freezing.

4. Be sure all water is drained from the toilet; check and follow the manufacturer's recommendations.

5. Close all windows, vents, and doors.

6. Clean the refrigerator and block the door open.

7. Check to see that the propane valves are shut off at the tanks.

SELF-CONTAINED TRAILERS

1. Be sure your waste holding tank has been drained and flushed clean with soapy water.

2. Drain all water from the tank by opening the drain on the side of the trailer.

INSTALLATION INSTRUCTIONS FOR TIP-OUT ROOMS, SLIDE-OUT ROOMS AND MANUAL PUSH-OUT ROOMS

This section covers the recommended set-up procedure for tip-out rooms which are available in Skyline Park Trailers, and is intended primarily for use by trained or qualified installers. If you do not have adequate training or experience in setting up tip-out rooms, consult your dealer or someone who has experience and ask them to set up your tip-out room for you.

CAUTION: THESE UNITS WERE NOT DESIGNED TO WITHSTAND HEAVY SNOW LOADS.

These rooms are additions to the basic park trailer. Your park trailer chassis cannot fully support these structures when erected unless additional jack supports are properly located under these additions. **FAILURE TO CAREFULLY FOLLOW THESE INSTRUCTIONS COULD CAUSE AN UNSAFE CONDITION THAT COULD RESULT IN SERIOUS INJURY OR DEATH**. Read these instructions carefully before setting up your tip-out room. If you have any doubt, contact your dealer, the factory, or Skyline's Director of Consumer Relations as outlined in this manual before trying to set up your tip-out room.

Before setting up a tip-out room your park trailer must be leveled and blocked. The trailer site should be properly graded and sloped to provide for storm drainage runoff. Proper support for your park trailer requires that the leveling jacks should be placed on firm undisturbed soil or soil that has been firmly compacted.

Reminders for leveling your park trailer:

1. Use only jacks in good condition of proper design for this purpose. We recommend a screw type jack with a substantial size base to reduce the possibility of it tipping. One jack particularly well suited is Tidie stabilizing jack available at many camping supply stores.

2. Use a steel plate (3/8" x 3" x 5") or a hardwood block (2" x 4" x 12") between each jack and the main steel beam, and tip-out floor of park trailer to distribute the concentrated loads.

3. Use a firm support under the jack base, such as a 2" x 8" x 12" treated lumber (or Redwood block), a cement patio block (1 1/2" x 6" x 12"), or a 5/8" x 16" x 19" plywood pier pad (APA rated sheathing exposure 1, marked PS 1) to prevent tipping or settling of the jack.

PARK TRAILER LEVELING PROCEDURE

The leveling procedure is as follows:

1. After your trailer is located in its final position, preliminarily level it by using the hitch jack.

2. Next, view your trailer first from the front and then the rear to determine whether it is level from side to side.

3. Determine which side of your trailer is low and place jacks at the front and rear of this side. Locate jacks under the main beam, approximately two feet from each end of the main beam. Use these jacks to level your trailer from side to side by adjusting both jacks the same amount so as not to change the front-to-rear level position.

4. Once your trailer is leveled from side to side (step 3), place jacks on the other side directly opposite the jacks used in step 3. Raise these jacks to just fit snugly under the main rail to stabilize all side-to-side motion. Then place additional jacks on each side of the axles to support the center section of your trailer. These jacks should be snugged up to the leveled frame.

5. In leveling your trailer, use a 6 foot carpenter's level, water level or similar equipment. The leveling process is important for appearance and is essential for proper operating of appliances, doors, windows, and the drainage system.

After your park trailer is leveled and blocked per the above instructions proceed to the instructions appropriate for the type of room installed in your park trailer. See page 56 of this manual for the frame tie down procedure.

TIP-OUT ROOM SET UP

Your park trailer and factory tip-out assembly was designed as a unit; thus, satisfactory performance of both is contingent on correct set-up procedure as follows: YOUR PARK TRAILER ITSELF MUST BE IN ITS **FINAL** LEVEL POSITION WITH ALL LEVELING JACKS IN PLACE PRIOR TO TIP-OUT SET UP. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN PERSONAL INJURY OR DEATH.

1. Remove the exterior shipping supports from the tip-out side wall opening.

2. Position and install 2 leveling jacks with support under the jack bases as shown in Figure 19.

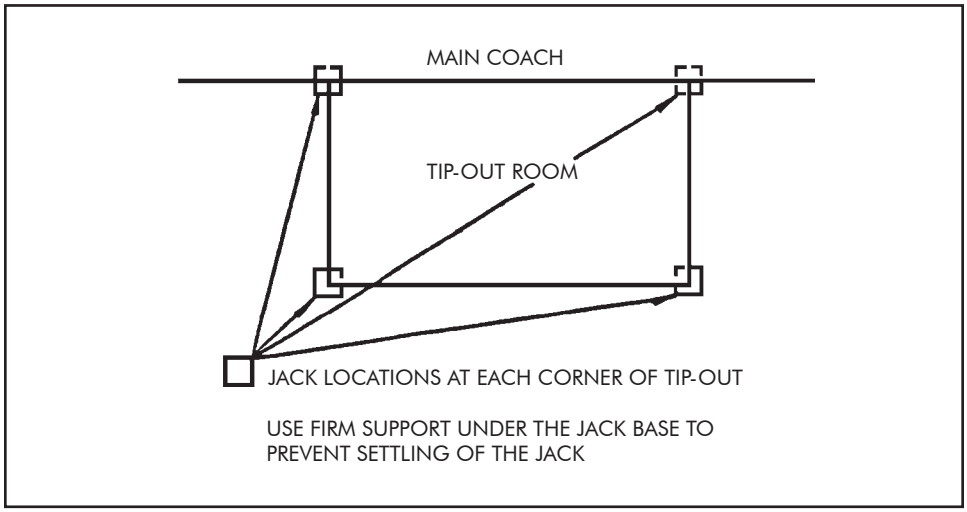


FIGURE 19

3. Carefully lower tip-out onto jacks and level unit by adjusting the height of the jacks.

NOTE: SINCE YOUR PARK TRAILER FLOOR HAS BEEN LEVELED, DO NOT ATTEMPT TO LEVEL TIP-OUT FLOOR BY JACKING UP THE MAIN PARK TRAILER.

4. Secure inside prefinished facia to exterior wall of main unit with three threaded bolts protruding from sidewall through holes in tip-out flange. These are to be secured by snugging up nut and washer provided.

NOTE: STEPS 5 - 8 APPLY ONLY TO MODELS EQUIPPED WITH OPTIONAL TOP AND SIDE SEALING FLANGES, REPLACING THE STANDARD RUBBER SEALS.

5. Place the 3" x 2" x 84" aluminum side flange into place with the bottom edge lined up with the bottom of the tip-out room floor. Trim away portion of corner that extends above tip-out roof line (See Figure 20).

6. Apply a continuous piece of 3/4" wide caulking tape on the back of each leg of inside corner and fasten each leg through caulking and into backer plate located in the walls with #8 x 1" hexhead screws at 4" o.c.

NOTE: CAULKING AND SCREWS TO BE CENTERED ON 1" HEM AREA OF SIDE FLANGE.

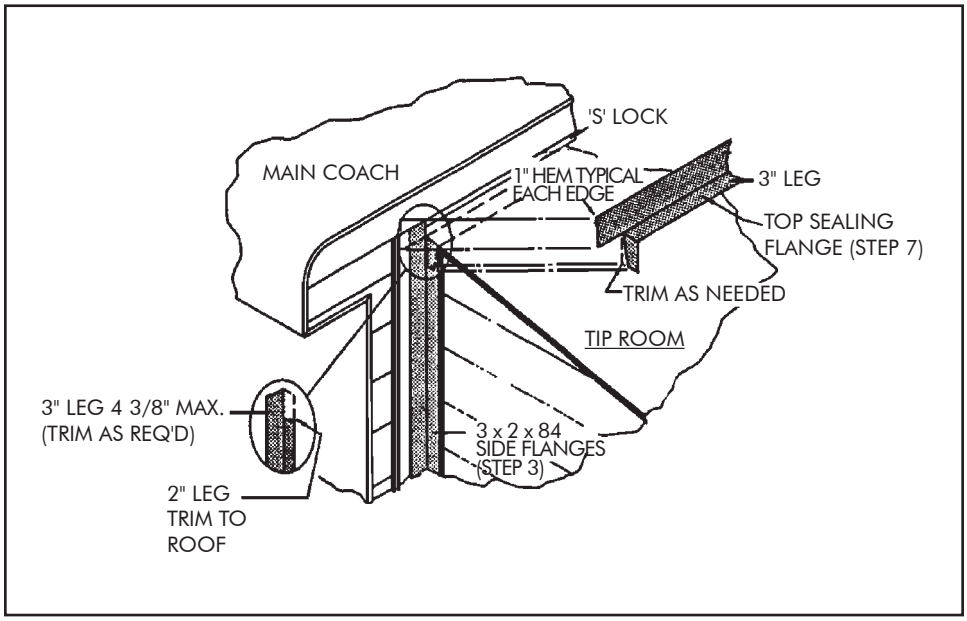


FIGURE 20 *OPTIONAL TOP & SIDE SEALING FLANGES (For Permanent Set-Up)*

7. Place close-off top starter on the tip-out roof with 3" leg against tip-out roof. Mark the 3" leg at both ends where it extends beyond the tip-out room. Starting at each end, slit along bend line to the point marked on 3" leg (See Figure 21).

8. Remove close-off top starter and apply a continuous piece of 3/4" caulking tape on the back side of 3" leg and at each end of the other leg. Bend tab at each end of 3" over leg of inside corner against the tip-out, insert other leg into 'S' lock above the sidewall opening and secure in place. Fasten 3" leg through caulking and into backer plate below metal with #8 x 1" hexhead screws at 4" o.c.

NOTE: CAULKING AND SCREWS TO BE CENTERED ON 1" HEM AREA OF TOP SEALING FLANGE. IT IS VITAL THAT THE FLASHING AND CAULKING BE APPLIED PROPERLY TO AVOID LEAK PROBLEMS.

9. Connect tip-out room electric circuit into main electrical system simply by plugging in the special cord (located in the tip-out room) to the main unit receptacle.

10. Connect tip-out room electric circuit into main electrical system simply by plugging in the special cord inside your park trailer.

SLIDE-OUT ROOM ADJUSTMENT AND OPERATION

SLIDE-OUT ROOM SETUP AND OPERATION

This section covers the recommended setup procedure and operation of slide-out rooms which are available in Skyline trailers. FAILURE TO CAREFULLY FOLLOW THESE INSTRUCTIONS COULD CAUSE AN UNSAFE CONDITION THAT MAY RESULT IN SERIOUS INJURY OR DEATH. Your trailer and factory slide-out assembly was designed as a unit; thus, satisfactory performance of both is contingent on the correct setup procedure as follows:

Prior to extending the slide-out room, the trailer must be unhitched from the tow vehicle and the trailer must be in its final level position. (See STABILIZATION on Pages 21 and 22.) It is highly recommended to use stabilizing jacks or jack stands as mentioned in the section STABILIZATION. Travel locks are installed either on the top or sides of the slide-out room to stabilize the room during transit. They must be removed prior to operation. Be sure that nothing will interfere with the room movement and that all people are kept clear.

The slide-out rooms operate by a ratchet with a 15/16" socket. To operate, first locate the shaft for the socket wrench. It can be found on the exterior of the unit near the bottom center of the slide-out room. Place the socket wrench over the shaft and turn clockwise to retract or counter-clockwise to extend the slide-out room. (See Figure 21, Detail 2).

SLIDE-OUT ROOM ADJUSTMENT

Height

To adjust the height of the slide-out room find the height adjustment assemblies. They are located under the slide-out room along the outermost wall. (See Figure 21). Loosen bolts "C" (two per assembly) shown in Detail 1 of Figure "A." Turn the height adjustment bolts "D" as needed; clockwise to raise the room, counterclockwise to lower the room. After making the adjustments, retighten bolts "C." To adjust the height of the optional front bedroom slide-out, refer to the slide-out room section in the owner's manual. When adjusting the height of the room, blocks and/or jacks to help support the room may prove helpful.

Side-To-Side

The slide-out room has been adjusted side-to-side at the factory and should not require readjustment. However, if adjustment is needed contact the dealer, the factory, or Skyline's Director of Consumer Relations as outlined in this manual.

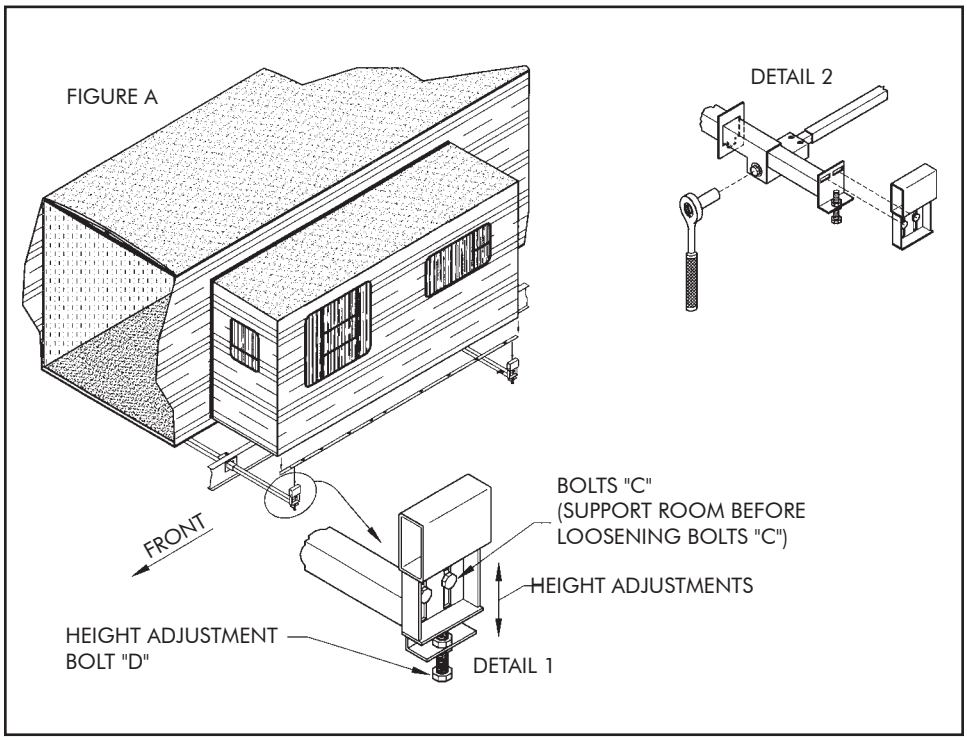


FIGURE 21

SET-UP INSTRUCTIONS FOR MANUAL PUSH-OUT ROOMS

1. Level the trailer side-to-side and front-to-back as outlined in the owner's manual under "stabilization."

2. Unsnap the ends of the vinyl push-out room seals and carefully slide them out of their 'tracks," noting the position of each piece (the seals will need to be reinstalled later in the same position).

3. Remove the (2) "shipment" screws that attach the push-out room floor to the main trailer floor.

4. With several assistants, (both inside and outside the trailer) carefully push the room out of the trailer, while keeping it as straight and level as possible to avoid damage to the exterior metal.

5. Before the room is completely out of the trailer, have all of the assistants move to the outside of the trailer, supporting the room as it comes out. The room will need to "drop" approximately 1 1/2", resting on the aluminum angle bracket which is attached to the side of the floor, just below the push-out room.

6. Center the room as close as possible, by comparing the distance between the sidewall opening and the push-out room at both ends.

7. Support the corners of the push-out room with suitable jack stands, and level the room by adjusting the height of the jacks. Rooms wider than 8' should also be supported near the center, along the outer edge of the floor. Make certain that the jacks are placed below a framing member, using a firm support below the jack base to prevent settling of the jack.

8. Secure the inside pre-finished facia to the exterior wall of the main unit using the pre-drilled holes and fasteners provided.

9. Attach the push-out room floor to the aluminum angle (which is attached to the side of the main unit floor) with #8 x 1 1/2" screws, approximately 12" on center, from below the trailer.

10. Carefully reinsert the vinyl push-out room seals in the same positions as they were removed, this time using the tracks provided at the end of the room adjacent to the main unit sidewall. Snap the ends in place, overlapping the vertical seals with the top (horizontal) seal.

11. Roll the carpet out from the main unit floor onto the push-out room floor; trim carpet and staple at perimeter as necessary, keeping in mind that carpet will need to be removed if room is to be retracted at a later date.

12. To retract the room for transport, reverse steps 1 thru 11, making certain to use the carpet as a "pad" for the room, so as not to damage the main unit floor vinyl or belly material of the push-out room.

FRAME TIE-DOWN PROCEDURE

All park models are equipped with tie-down attachment provisions on the main I-beams.

NOTE: IN THE TIE-DOWN SYSTEM, IT IS IMPORTANT TO USE MATERIALS OF PROPER DESIGN AND OF ADEQUATE QUALITY. THE MATERIAL SPECIFICATIONS CONTAINED HEREIN SHOULD BE CONSIDERED AS MINIMUM REQUIREMENTS.

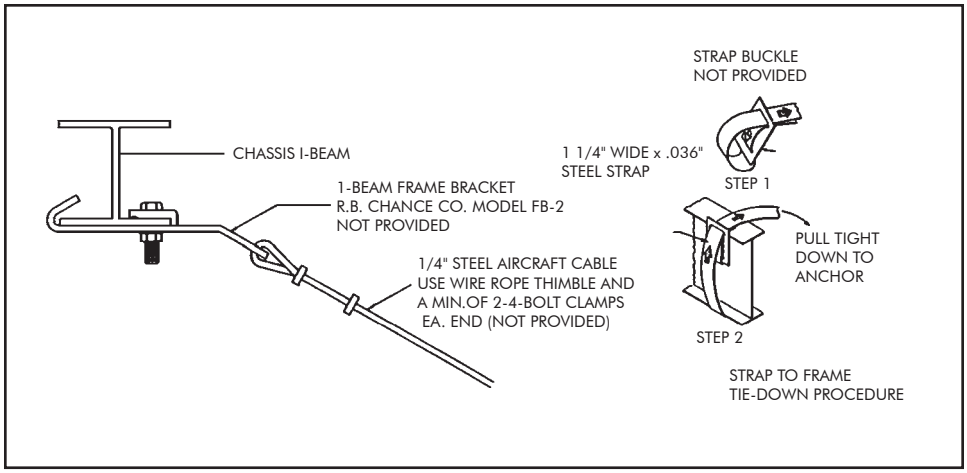


FIGURE 22 *FRAME TIE-DOWN*

Check any state or local anchoring requirements to insure conformity. Materials not furnished with the unit which will be necessary to complete the tie-down system must meet the requirements set forth below. Such materials would include:

1. I-beam frame bracket model FB-2 (min. of 6 required) from A.B. Chance Co., 210 North Allen Street, Centralia, Missouri 65240, www.abchance.com. The frame brackets must be installed as specified by the manufacturer's installation instructions. As an alternate to installing a frame bracket, the anchor strap may be looped over the top of the main beam by using a strap buckle as indicated in Figure 22.

2. Cable or steel strap with a breaking strength of at least 4,725 pounds, e.g. galvanized aircraft cable at least $^1/_4$" in diameter or Type 1, finish B grade 1 steel strapping, $1^1/_4$" wide and 0.035" thick conforming with F.S. QQ-S-781H.

3. Galvanized connection devices such as turnbuckles, eyebolts, strap buckles, and cable clamps should be rated at 3,150 working load minimum.

4. Ground anchors - capable of withstanding at least a 4,725 pound pull. Anchors must be installed as specified by the anchor manufacturer.

5. All park model trailers should be secured to the ground with 6 tie-downs and ground anchors minimum (3 per side), to resist the sliding and overturning effects of high winds. When sidewall tie-down straps are provided at least six (6) shall be installed and provisions made for them to be securely attached to the chassis.

   Where tie-downs are required, it will be necessary to follow the instructions herein.

   THE UNIT MUST BE IN ITS FINAL LEVEL POSITION PRIOR TO TYING IT DOWN. WHEN TIGHTENING STRAPS, USE CAUTION. AVOID OVER-TENSIONING THE STRAPS, WHICH MIGHT PULL THE TRAILER OFF THE STABILIZING JACKS. IT IS RECOMMENDED THAT ALL STRAPS BE TIGHTENED ONLY ENOUGH TO REMOVE THE SLACK. THEN AFTER ALL STRAPS ARE INSTALLED AND THE SLACK REMOVED, TENSION THE STRAPS.

PARTS LIST

TIP-OUT MODELS W/OPTIONAL TOP AND SIDE SEALING FLANGES FOR "PERMANENT" SET-UP:

1. #8X1 White Hex head screws — approx. 300

2. 3/4" x 1/4" x 18' Putty Tape — 3 rolls

3. Close off Flashing — Hem Edges

   4 pieces - 3 x 2

   2 pieces - 3 x 5¼

Note: Parts list does not apply to tip-out models ordered with optional vinyl exterior covers.

INDEX

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Of course, you love the RV lifestyle. And your Skyline-built RV. But you still need a home base. A place you can head for when your holiday is history.

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