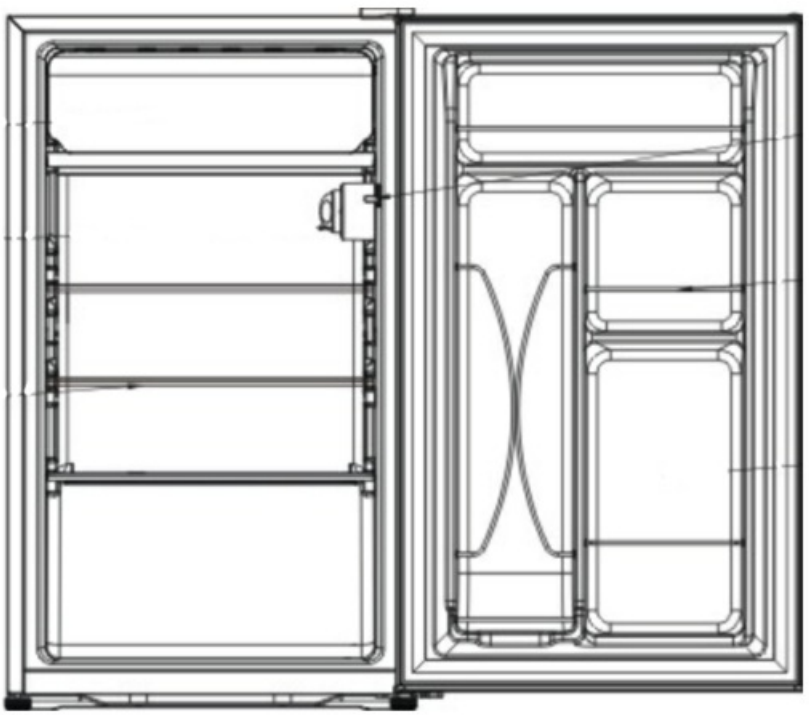
SAFARI TREK 2002 OWNER'S MANUAL



SAFARI MOTORHOME LIMITED WARRANTY

What the Period of Coverage Is:

If you use your Safari motorhome only for recreational travel and family camping purposes, the Limited Warranty provided by Safari ("Warrantor") covers your new motorhome when sold by an authorized dealer, for twelve (12) months from the original retail purchase date or the first 12,000 miles of use, whichever occurs first.

If you use your motorhome for any rental, commercial or business purposes whatsoever, the Limited Warranty provided by Warrantor covers your new motorhome when sold by an authorized dealer for ninety (90) days from the original retail purchase date or the first 12,000 miles of use, whichever occurs first. A conclusive presumption that your motorhome has been used for commercial and/or business purposes arises if you have filed a federal or state tax form claiming any business tax benefit related to your ownership of the motorhome.

The above Limited Warranty coverage applies to all owners, including subsequent owners, of the motorhome. However, a subsequent owner must submit a warranty transfer form by filing the form through an authorized Safari dealer. A subsequent owner's warranty coverage period is the remaining balance of the warranty coverage period the prior owner was entitled to under this Limited Warranty. Warranty transfer forms can be obtained by contacting the Consumer Affairs Department. There is no charge for the transfer.

Limitations of Implied Warranties

ANY IMPLIED WARRANTIES ARISING BY WAY OF STATE LAW, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY AND ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE TERM OF THIS LIMITED WARRANTY AND ARE LIMITED IN SCOPE OF COVERAGE TO THOSE PORTIONS OF THE MOTORHOME COVERED BY THIS LIMITED WARRANTY. There is no warranty of any nature made by Warrantor beyond that contained in this Limited Warranty. No person has authority to enlarge, amend or modify this Limited Warranty. The dealer is not the Warrantor's agent but is an independent entity. Warrantor is not responsible for any undertaking, representation or warranty made by any dealer or other person beyond those expressly set forth in this Limited Warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

What the Warranty Covers:

Warrantor's Limited Warranty covers defects in the manufacture of your motorhome and defects in materials used to manufacture your motorhome. Also see the section "What the Warranty Does Not Cover" set out below.

What We Will Do to Correct the Problems:

Warrantor will repair and/or replace, at its option, any covered defect if: (1) you notify Warrantor or one of its authorized servicing dealers of the defect within the warranty coverage period and within five (5) days of discovering the defect; and (2) you deliver your Motorhome to Warrantor or Warrantor's authorized servicing dealer at your cost and expense. It is reasonable to expect some service items to occur during the warranty period.

Warrantor may use new and/or remanufactured parts and/or components of substantially equal quality to complete any repair.

Defects and/or damage to interior and exterior surfaces, trim, upholstery and other appearance items may occur at the factory during manufacture, during delivery of the motorhome to the selling dealer or on the selling dealer's lot. Normally, any such defect or damage is detected and corrected at the factory or by the selling dealer during the inspection process performed by the Warrantor and the selling dealer. If, however, you discover any such defect or damage when you take delivery of the motorhome, you must notify your dealer or Warrantor within five days of the date of purchase to have repairs performed to the defect at no cost to you as provided by this Limited Warranty.

If two or more unsuccessful repair attempts have been made to correct any covered defect that you believe substantially impairs the value, use or safety of your motorhome, you must, to the extent permitted by law, notify Warrantor directly in writing of the failure to successfully repair the defect so that Warrantor can become directly involved in performing a successful repair to the identified defect.

How to Get Service:

The Warranty Registration form must be returned to Warrantor promptly upon purchase to assure proper part replacement and repair of your motorhome. Failure to return the warranty registration form will not affect your rights under the Limited Warranty so long as you can furnish proof of purchase. For warranty service simply contact one of Warrantor's authorized service centers for an appointment, then deliver your motorhome (at your expense) to the service center. If you need assistance in locating an authorized warranty service facility, contact **Warrantor's Warranty Department (1-800-344-6332)**. The mailing address is:

Warranty Department
91320 Coburg Industrial Way
Coburg, Oregon 97408

In the event the motorhome is inoperative due to malfunction of a warranted part, Warrantor will pay the cost of having the motorhome towed to the nearest authorized repair facility provided you notify Warrantor prior to incurring the towing charges to receive directions to the nearest repair facility.

Because Warrantor does not control the scheduling of service work by its authorized servicing dealers, you may encounter some delay in scheduling and/or in the completion of the repairs.

What the Warranty Does Not Cover:

This Limited Warranty does not cover: any motorhome sold or registered outside of the United States or Canada; items which are added or changed after the motorhome leaves Warrantor's possession; items that are working as designed but which you are unhappy with because of the design; normal wear and usage, such as fading or discoloration of fabrics, or the effects of condensation inside the motorhome; defacing, scratching, dents and chips on any surface or fabric of the motorhome, not caused by Warrantor; routine maintenance, including by way of example wheel alignments; the automotive chassis and power train, including, by way of example the engine, drivetrain, steering and handling, braking, wheel balance, muffler, tires, tubes, batteries and gauges; appliances and components covered by their own manufacturer's warranty including, by way of example the microwave, refrigerator, ice maker, stove, oven, generator, roof air conditioners, hydraulic jacks, VCR,

television(s), water heater, furnace, stereo, radio, compact disc player, washer, dryer, inverter and cellular phone; or flaking, peeling and chips or other defects or damage in or to the exterior or finish caused by rocks or other road hazards, the environment including airborne pollutants, salt, tree sap and hail.

Events Discharging Warrantor From Obligation Under Warranty:

Misuse or neglect, accidents, unauthorized alteration, failure to provide reasonable and necessary maintenance (See Owner's Manual), damage caused by off road use, collision, fire, theft, vandalism, explosions, overloading, and odometer tampering shall discharge Warrantor from any express or implied warranty obligation to repair any resulting defect.

Disclaimer of Consequential and Incidental Damages:

THE ORIGINAL PURCHASER OF THE MOTORHOME AND ANY PERSON TO WHOM THE MOTORHOME IS TRANSFERRED, AND ANY PERSON WHO IS AN INTENDED OR UNINTENDED USER OR BENEFICIARY OF THE MOTORHOME , SHALL NOT BE ENTITLED TO RECOVER FROM WARRANTOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES RESULTING FROM ANY DEFECT IN THE MOTORHOME . THE EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES SHALL BE DEEMED INDEPENDENT OF, AND SHALL SURVIVE, ANY FAILURE OF THE ESSENTIAL PURPOSE OF ANY LIMITED REMEDY. Some states do not allow the exclusion or limitation of consequential or incidental damages, so the above exclusions may not apply to you.

Legal Remedies:

ANY ACTION TO ENFORCE THIS EXPRESS OR ANY IMPLIED WARRANTY SHALL NOT BE COMMENCED MORE THAN ONE (1) YEAR AFTER THE EXPIRATION OF THIS WARRANTY. Some states do not allow the reduction in the statute of limitations, so the above reduction may not apply to you.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

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~ NOTES ~

~ NOTES ~

Revision Date: July 15, 2001

The descriptions and specifications in this manual pertain to the 2002 model year and were in effect at the time of its approval for printing. Safari reserves the right to change specifications or designs without notice or without incurring obligation. This manual includes information on several different model options. Your motorhome may not contain every system described. If you have questions regarding this manual, please feel free to drop us a line.

FOREWORD

To our valued customers:

Congratulations on the purchase of your Trek and welcome to the Safari family of motorhome owners. You have made a substantial investment of time and money in selecting your coach. Now let's take the time to get to know it a little better.

Although we are quite sure this manual will never make the Book of the Month Club, or even the Barnes and Noble Top Ten Beach Reads, it has been designed to offer you a comprehensive overview of your motorhome's operational systems. By familiarizing yourself with this manual and the manufacturer's manuals that came with your coach, hopefully you'll be able to breeze through any minor mishaps.

This is not intended to be a service manual, nor should it be used as such. If you have questions regarding this manual, please drop us a line. If you require service or need warranty assistance, please call Safari Warranty & Service or the number provided by the component manufacturer. And remember…before calling Warranty, it's always a good idea to write down the last seven digits of your Vehicle Identification Number (VIN). This is located on a plaque next to the entry door on the exterior of the coach. This will speed the process of locating your records. It is also helpful to note your coach's mileage.

Thank you - and we hope you enjoy your new Safari Trek!

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CHASSIS & DASH - SECTION 1

Chassis & Dash Overview

Your Safari Trek is built on a P-Series chassis by Workhorse Custom Chassis. It is available with your choice of either a 6.5 liter diesel or a 454 CID Vortec or 8.1 liter Vortec gasoline engine. Included in your warranty packet you will find a complete manual for the chassis, which includes instructions for its use and maintenance. This section of the manual covers modifications made in chassis and dash by Safari. Please consult your chassis manual for general chassis information.

Safari does not modify any components that might affect the safety or performance of the coach. We do not alter the fuel, braking or electrical systems. We strongly recommend that you follow the same policy.

Add-on electrical equipment, fuel tanks, steering stabilizers, anti-sway devices and other after market offerings may sound like wonderful items during the sales presentations, but they can often cause more harm than good.

Remember, just as when you buy any new car, your coach will have that “new coach smell.” That is because fabrics and carpeting have been treated with stain-resistant chemicals and cabinetry has been lacquered.

Check with your service and warranty center before making any modifications to the chassis. Some alterations can void your warranty.

Vehicle Operation

WARNING:	**This manual is meant for reference only. Manuals for other components and equipment are included in your warranty packet. Become familiar with all procedures, cautions and warnings given in this manual and the various manufacturers' manuals provided with your coach before operating your motorhome.**

When starting the engine, first make sure the parking brake is on and the headlights are off. Put the transmission in **PARK** and turn the key to the **ON** position.

WARNING: **If you have a diesel engine, you need to wait the appropriate amount of time after turning the ignition to the ON position before actually starting your coach. (See chassis manual.) Do not crank the starter for more than thirty seconds at a time. If the engine fails to start, wait before cranking again.**

Check the engine oil pressure soon after starting. You should let the engine idle for three to five minutes before moving out, but do not allow the engine to idle for too long. Idling for more than ten minutes can lead to improper fuel consumption and may cause problems with the efficiency of the engine.

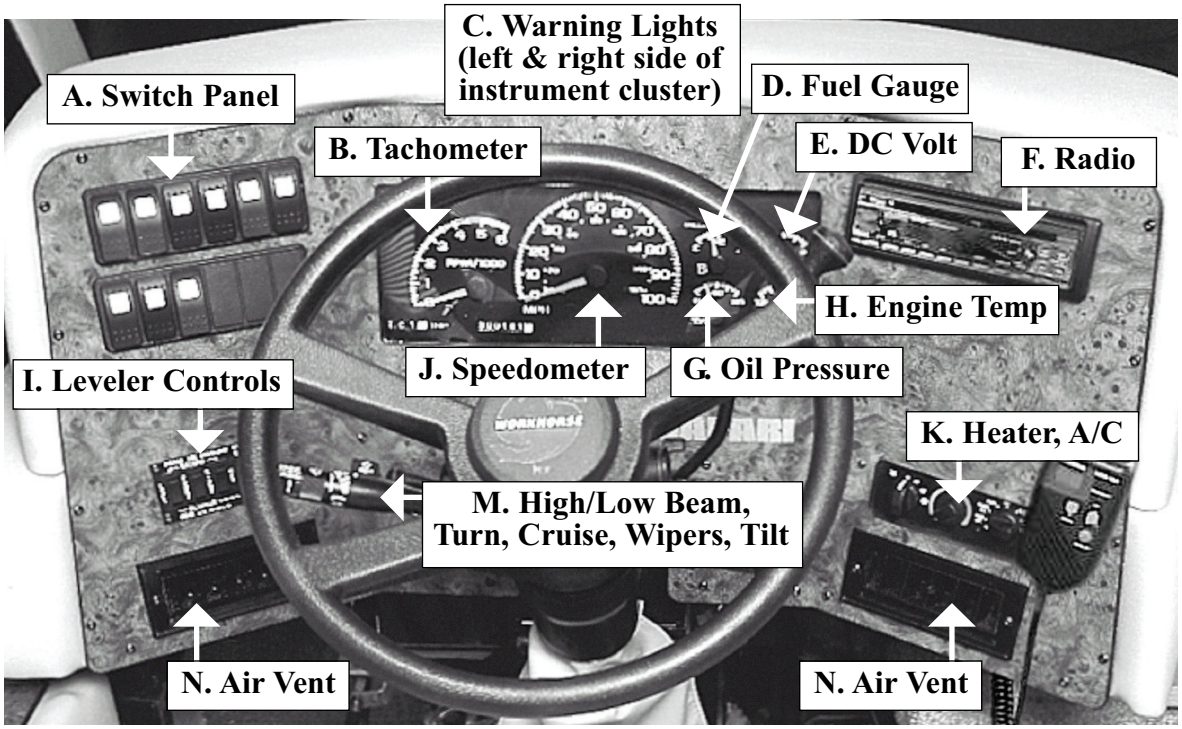
NOTE: **Minimize the load on the chassis batteries by turning off all unnecessary lights and accessories when starting your coach.**

In cold weather the engine may be more difficult to start. Oil becomes thicker, making the engine crank more slowly. If you plan on traveling in cold areas (consistently below 20º Fahrenheit) use oil that is recommended for colder climates.

If the chassis batteries fail to provide enough power to crank the engine fast enough, press the battery boost switch to connect to the house batteries for added power.

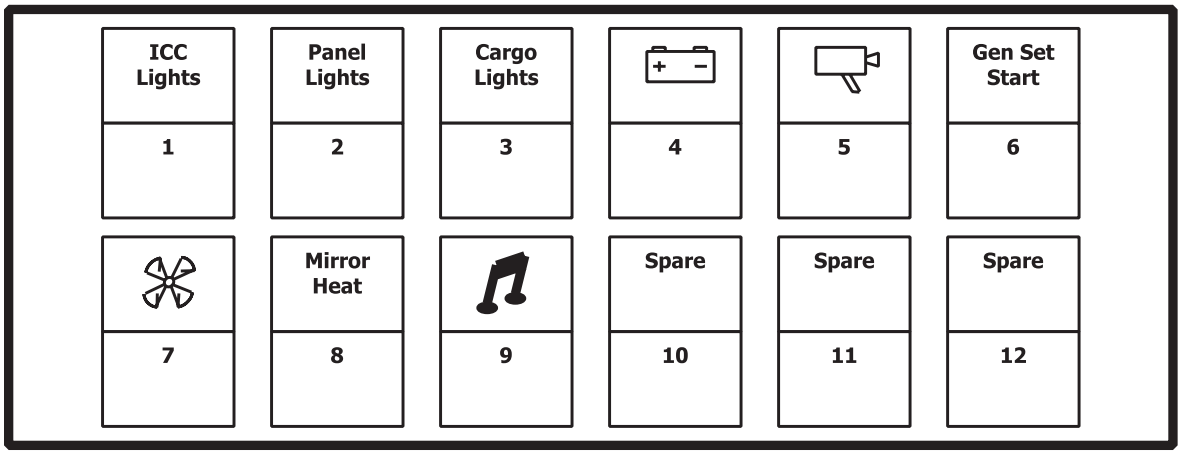
Main Dashboard

The Trek has been designed to enhance your driving and living experience. The controls are arranged around the central instrument cluster and are well marked for quick identification. Most of these items require little explanation, but they are summarized here.



A. Switch Panel

This panel contains control switches for up to twelve different features available on your coach depending on model and floor plan. If you do not have one of these switches, it was not a feature included in your coach. The individual switch features are described herein by number.



SWITCH PANEL DETAIL

1. ICC Lights

PUSH this switch to activate exterior lights along the caps of the coach. This is useful to alert passing motorists when they have safe clearance to return into the lane when passing on two-lane highways.

2. Panel Lights

This switch allows the driver to illuminate the dash lights for nighttime convenience.

3. Cargo Bay Lights

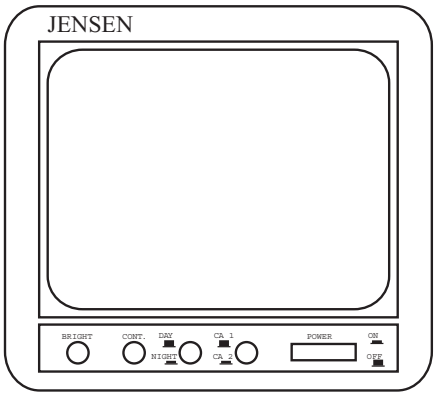
These lights illuminate the interior of the cargo bay storage compartments.

4. Battery Boost

The **Battery Boost** Switch can be used to enlist additional power from the chassis batteries for extra DC power when needed to start the engine. (See Electrical section for more information on this feature.)

5. Rear Camera

The front television and rear view camera are installed at the factory to be ready to monitor the area behind your coach. The camera is mounted on the back of the coach to view the back of the coach and the area behind. This is a very useful feature when backing up and while driving to make sure no vehicles are directly behind the coach.



The rear view system is designed to provide the driver with a view of the rear of the motorhome. The field of view is 140° in the diagonal plane, 121° in the horizontal plane, and 90° in the vertical plane. Power is supplied to the system when the ignition key is turned to the Accessory or **ON** position. The **green** LED illuminates. The display on the monitor is controlled by the position of the power switch. When in the **ON** position, the display is present. When placed in the **S/B** (Standby) position, the display is off until the gear shift lever is set to **Reverse**.

Power Switch:
The switch, when **ON** (in) position, turns on the monitor for viewing. The **green** LED indicator illuminates. When the switch is **OFF** (out), the monitor is in a **STANDBY** mode of operation. The **green** LED remains illuminated when the ignition is on. The monitor displays rear viewing when the transmission is shifted to **REVERSE**.

Camera Selector:
This switch should be left in the **CA1** (out) position. **CA2** (in) position is not used in the motorhome.

Day/Night Switch:
This switch should be left in the **DAY** (out) position for normal viewing. When set in **NIGHT** (in), picture brightness is reduced. **NIGHT** should be used for night viewing and driving through tunnels.

Bright Control:
Clockwise rotation increases the picture brightness. Counterclockwise rotation decreases the picture brightness.

Contrast Control:
Clockwise rotation increases the picture contrast. Counterclockwise rotation decreases the picture contrast.

Audio Control:
Clockwise rotation increases the volume level. Counterclockwise rotation decreases the volume level.

The camera angle may be adjusted to display a suitable rear view. The camera housing cover will need to be removed to gain access to the hexagon mounting bolts. The mounting bolts can be repositioned to the desired angle. Refasten the camera housing cover and seal using an appropriate sealant.

Refer to the manufacturer's manual for details on how to operate the camera.

6. Gen Set Start

This switch allows you to remotely start the generator.

7. Overhead Defrost Blowers

This switch controls the cabin circulation fan located in the overhead cabinet. The switch has two speeds. The first stop is low and the second stop is high speed.

8. Mirror Heaters

The remote mirrors will be heated when this switch is activated. Use this feature when mirrors are frosted or fogged during cold weather conditions.

9. Dash Radio Power

This switch powers up the in-dash radio.

10. Spare (Undesignated)

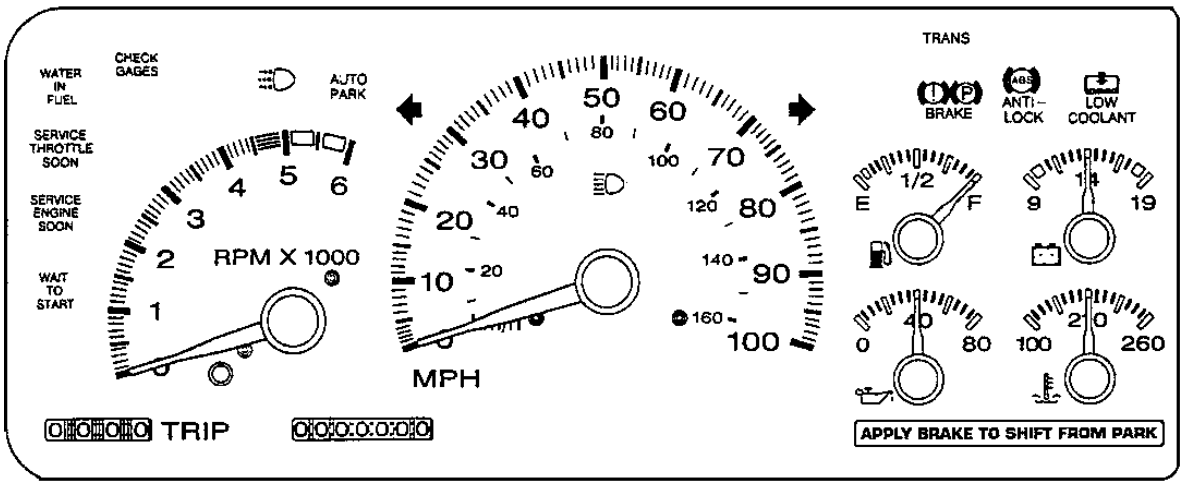
11. Spare (Undesignated)

B. Tachometer

The tachometer displays the engine rpm (revolutions per minute). The reading must be multiplied by 100. The engine should not be run at less than 1000 rpm for extended periods of time.

C. Warning Lights

Your instrument panel is designed to let you know at a glance how your vehicle is running. Some warning lights come on briefly when you start the engine just to let you know they are working. When a warning light comes on, and stays on while you are driving, or when one of the gauges shows there is a potential problem, please consult your chassis manual for more details.



INSTRUMENT PANEL CLUSTER (TYPICAL)

Located above the speedometer/tachometer instrument cluster are various warning lights. These warning lights will activate when the ignition is in the **ON** position or under certain conditions to warn you of potential problems. These lights are arranged as follows:

On the left-hand side of your instrument cluster there are warning lights for auto park, high beams, check gauges, water in fuel (diesel only), service throttle soon, service engine soon, and wait to start (diesel only).

On the right hand side of the instrument cluster there are warning lights for brakes, transmission (diesel only), anti-lock brakes, low engine coolant, and apply brakes to shift from **PARK**. If you have any questions, please consult your Workhorse Custom Chassis manual for warning indications or check the "Where To Call" section at the back of this manual for customer service and information numbers.

Carefully monitor all gauges while running the engine. The normal operating ranges are discussed herein and in the engine and chassis manuals.

Before shutting the engine down, allow it to idle for a few minutes to cool the combustion chamber, bearings, turbo charger and crankshaft.

WARNING: Monitor your gauges closely while driving. If any readings are not in their normal operating range, take appropriate action immediately.

D. Engine Fuel Level Gauge

The fuel reading will vary when cornering, accelerating, braking, and climbing or descending hills. The fuel tank has a capacity of 60 gallons.

E. DC Voltmeter Gauge

This gauge displays the performance of the chassis DC system, especially the batteries and alternator. With the engine off and the key switch **ON** it should read approximately 12 Volts. It should read approximately 13 Volts with the engine running.

F. Radio

Your AM/FM/CD radio works similarly to the system in your automobile. Please refer to the manufacturer's manual for detailed radio operations.

G. Oil Pressure Gauge

When the engine is running, the oil pressure gauge shows the engine oil pressure in psi* (pounds per square inch).

Oil pressure may vary with engine speed, outside temperature, oil viscosity, etc. Readings above the low pressure zone indicate the normal operating range. A reading in the low pressure zone may be caused by a dangerously low level of oil or other problems. When the engine is idling, a lower reading is normal. Please consult your Workhorse owner's manual for more details.
*Canadian vehicles are measured in kPa (kiloPascals).

WARNING:	**If the oil pressure drops significantly below 35 PSI while driving or 10 PSI while idling, stop the engine immediately and check the oil level.**

H. Engine Coolant Temperature

The normal operating temperature for the engine is 180º to 210º Fahrenheit. Overheating can occur because of insufficient coolant or a problem in the cooling system. It can also occur in hot weather with slow or stop-and-go driving. If the needle registers in the red area on the gauge, pull over, stop the vehicle, shift into **PARK**, and turn off the engine as soon as possible. If problems persist, check the coolant level.

WARNING: **Do not operate the engine at temperatures above 230º. If the temperature reading exceeds this level, pull over promptly and allow the engine to cool. Extended or frequent operation at this temperature will void your engine warranty.**

I. Leveler Controls

These controls operate your hydraulic levelers. Please refer to the instructions in the RVA manual included in your warranty package before operating your system.

J. Speedometer/Odometer/Trip Odometer

The speedometer indicates the speed of the vehicle in miles/kilometers per hour. The odometer indicates the total distance, in miles/kilometers, that the vehicle has traveled.

Before each trip you may reset the trip odometer to zero. This meter will then record the distance (in miles) the coach has traveled.

K. Dash Heat and A/C Controls

The cabin heater and air conditioning controls operate similarly to those in most automobiles. The left knob controls fan speed, the center controls amount of heat or cooling and the right controls air flow.

L. Ignition

Turn the key **clockwise** to turn on the ignition or use accessory power.

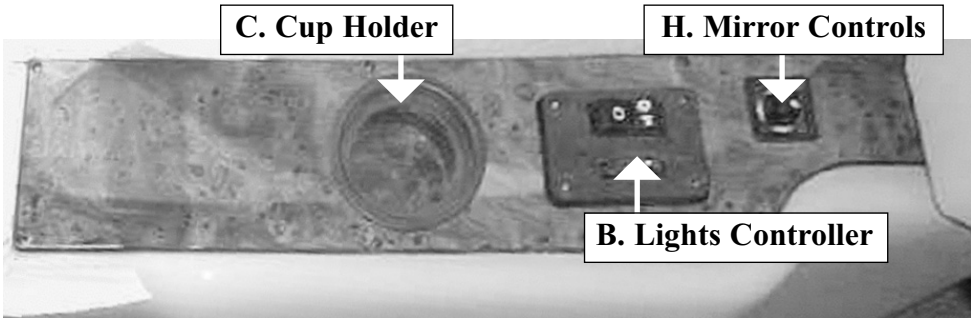
M. Steering Wheel Lever Controls

Located on the steering wheel column are a set of levers to control the high/low beams, cruise control, windshield wiper/washer, turn signals and steering wheel tilt adjustment. Hazard lights are located on the steering column.

N. Air Vents

These vents distribute air from the heating, air conditioning and fresh air systems. Controls allow you to choose whether air is vented from outside the coach or if it is to be recirculated from within the coach interior.

Side Console



A. Remote Mirror Controls

One control operates both mirrors. The switch in the center of the knob determines which mirror is being adjusted. Around the center switch are arrows that point in which direction the mirror is being adjusted: up, down, left or right.

B. Headlight/Parking Light/Dimmer Switch

The Trek's Side Console light controller allows you to drive with headlights, parking lights or both. Turn on the headlights by pushing the **TOP LEFT** switch.

Turn **ON** the parking lights by pushing the top right switch. Turn **OFF** the headlights/parking lights with the bottom switch. Rotate the dial up or down to adjust the console dimmer lights for your comfort.

C. Cup Holder

Other Controls And Accessories

Electric Step

The electric step is controlled by two methods: the activation of the ignition switch and by an **ON/OFF** switch near the doorway. The **ON/OFF** switch controls the 12 VDC power to the step. If the switch is on, then the step will extend and retract when the door is opened and closed. If the switch is **OFF**, the step will not move. Therefore, to lock the step in its extended position when parked, turn the switch **ON**, open the door, and allow the step to extend, then turn off the switch.

The ignition switch overrides the **ON/OFF** switch. When the ignition is switched to the **ON** position and the door is opened the step will extend. It will automatically retract when the door is closed.

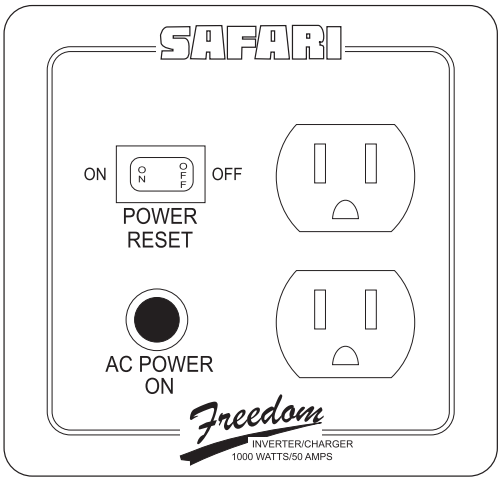
Some coaches are equipped with other safety features that help to prevent damage to the step or motor.

WARNING:	**The step mechanism requires regular lubrication and removal of road grime.**

WARNING:	**Always make sure the step is retracted before moving the coach.**

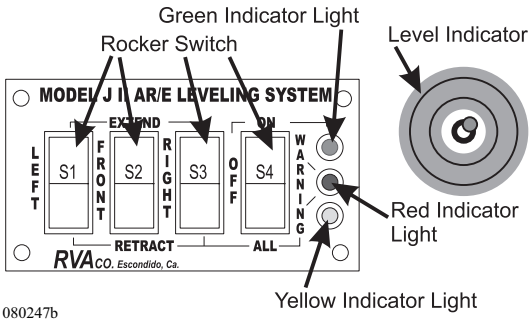
Refer to the manufacturer's manual for details on step operation and maintenance.

Inverter Remote Panel



This panel has a remote **ON/OFF** switch for the inverter and is located to the left of the galley sink or on the forward end of the galley lower cabinet (2480 floor plan). See the inverter section of the Electrical chapter for details of operation.

Levelers



NOTE: Please make sure the wheels are straight BEFORE extending the jacks or leveling the coach.

Keep all persons away from the leveling system mechanism when operating the leveling system, driving the vehicle, and/or when the vehicle is parked. Before using the leveling system it is important to read this entire section of the manual, as well as the leveling system manufacturer's manual included in your warranty packet.

The coach should be leveled at least once a month to keep the system in optimum operating condition.

The levelers operate hydraulically, with the power coming from a 12 VDC hydraulic pump. To operate, the system must be in the **ON** position.

Before starting the leveling process, be sure to go outside the coach and check to ensure the jacks have a clear path to the ground. Block the front tires.

If leveling on asphalt or soft ground, place pads under the jacks. Pads should be made of a sturdy material such as wood or plastic and be at least 2x8x8 inches in size.

NOTE: The front tires should always be blocked when leveling the coach.

NOTE: If leveling on asphalt or soft ground, use pads under the jacks to increase stability.

WARNING: Never move the coach with the leveling jacks extended. This will cause serious damage to the leveling system as well as the coach itself.

Extending the Three-Point Leveling System	
Step 1	Park the coach in a level spot. Make sure the wheels are as close to straight as possible. Place transmission in **PARK**. Set the parking brake. Turn the ignition to the **ACCESSORY** position.
Step 2	Go outside the coach and check to ensure the jacks have a clear path to the ground. Block the front tires. If leveling on asphalt or soft ground, place pads under the jacks. Pads should be made of a sturdy material such as wood or plastic and be at least 2x8x8 inches in size.
Step 3	Press the leveling system switch to the **ON** position. The **green** light will appear to indicate the system is ready.
Step 4	Extend the jacks by pressing the rocker switches to **EXTEND**. Always extend the rear jacks first and level the coach from side to side. Then extend the front jack and level the coach lengthwise. As the jacks extend, a **red** light will flash and a beeping alarm will sound. (This will also happen if the ignition key is turned on while the jacks are extended.)
Step 5	Turn **OFF** the leveling system and the ignition. All lights on the leveling system panel should be off

WARNING: Do not attempt to use the jacks on unstable ground. Do not stack objects under the jacks except for the wood or plastic blocks mentioned in Step 2 of the leveling process. Never raise the tires off the ground. If the ground is too uneven for the jacks to adequately level the coach, the coach should be moved to a different location.

WARNING: Do not use leveling system for changing tires or working under the vehicle. There is a possibility that the vehicle may move and cause injury or damage if the system is not used properly. Use of the leveling system for any purpose other than intended may void the warranty.

Before activating the leveling system, inspect each of the jacks and clean any debris from the cylinders.

WARNING: Do not rely solely on the warning light and alarm. Visually inspect the jacks to ensure they are fully retracted.

Retracting the Three-Point Leveling System	
Step 1	Be sure that the coach is in **PARK** and the parking brake is set. Turn **ON** the coach ignition and leveling system switches. Clean any debris off the jack cylinders.
Step 2	While it is possible to use the **RETRACT ALL** switch to retract all the jacks at once, Safari recommends retracting the jacks using the individual jack switches. First, retract the front jack. Next, retract both rear jacks simultaneously by pressing the rocker switches to **RETRACT**. This method will provide the smoothest possible retraction. The flashing **red** light and beeping alarm will deactivate when the jacks are within six inches of full retraction.
Step 3	Turn **OFF** the leveling system and the ignition. All lights on the leveling system panel should be off.
Step 4	Remove the tire blocks and jack pads. Inspect the jacks to be sure they are fully retracted.

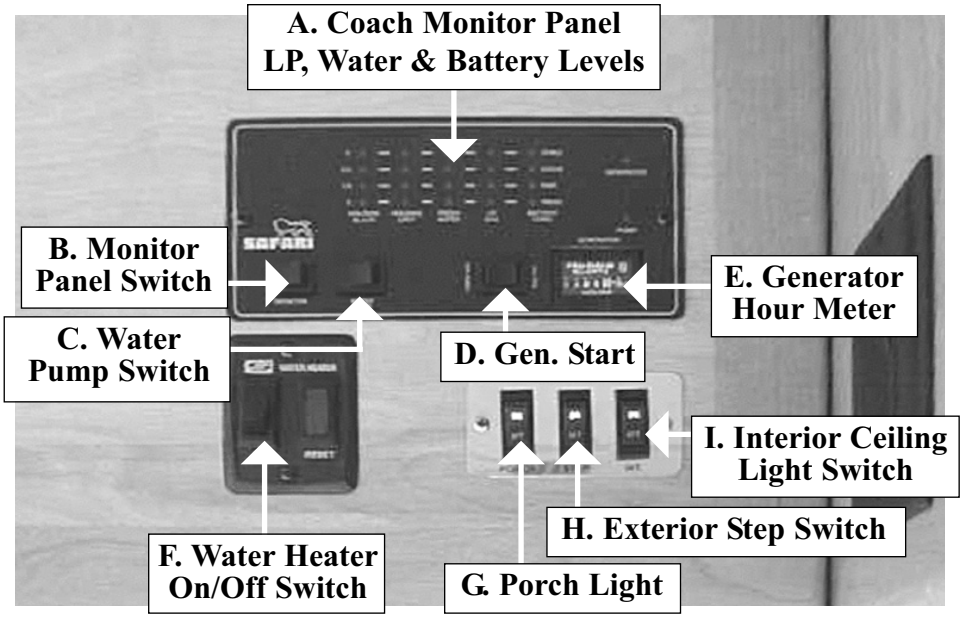
To ensure the smooth operation, the leveling system should be operated at least once a month, or each trip, to keep the system in working condition. Check each hydraulic unit to prevent problems. This is especially true under the following conditions:

If driving conditions are unusually muddy, the units can become clogged or caked with mud. This can hamper the proper operation of the leveling system.

In wet, icy weather the units can be encrusted with ice. This may cause the leveling system to function improperly. To eliminate this problem, periodically check each unit and remove any accumulation of ice that hinders proper operation.

For maintenance instructions and detailed operating procedures, consult the manufacturer's instructions included with your manual package.

Coach Monitor Panel



Located in a compartment above the entry door in your Safari Trek is the Coach Monitor panel. This panel has a monitor switch for inverter power, battery levels, LP-Gas, water and holding tank level. There are also switches to start the water pump and generator. Depending on floor plan and optional equipment, there are also switches for the porch light and entry step. Some of these switches may be located over the entry.

A description of these switches and their functions follow.

A. LP-Gas, Water and Battery Monitor Panel

This panel monitors the levels of LP-Gas, battery power and fresh, black and grey water tanks. Simply press the switch to illuminate the panel. The panel displays either EMPTY, 1/3 FULL, 2/3 Full or FULL for the LP-Gas, fresh water and holding tanks. For the battery levels, the panel displays whether the house batteries are WEAK, FAIR, GOOD and CHG (charged).

The panel also has a remote starting switch for the water pump. Press the switch **UPWARD** and the pump will automatically start itself. See the LP-Gas, Electrical, Plumbing and Waste Water chapters for details on readings.

B. Monitor Switch

Turns **ON/OFF** the power to the LP-Gas, Water monitoring panel.

C. Water Pump Switch

Remote power switch for the water pump.

D. Generator Stop/Start Switch

Use this switch to start and stop the generator. Simply press and hold it until the generator starts. To stop the generator, press the lower portion of the switch until the motor comes to a complete halt.

E. Generator Hour Meter

This meter displays the total hourly usage of the generator.

NOTE: If the generator does not start within five seconds, release the button and try again. Continuous cranking can damage the generator starter.

F. Water Heater Switch

Remote power switch for water heater.

G. Porch Light

ON/OFF switch for the porch light.

H. Exterior Step Switch

Extends and retracts the exterior entry step.

I. Interior Ceiling Light Switch

Power switch for interior ceiling lights.

TRAVELING - SECTION 2

TRAVELING OVERVIEW

To get the full enjoyment of traveling in your new Trek, careful preparation is necessary. Good planning and preparation will lead to less potential trouble while traveling and when you reach your destination.

This chapter gives some general guidelines for traveling in your coach. It includes checklists to help you avoid forgetting those important details, tips for getting the most from your equipment and other helpful ideas. The information is very general. For more specific descriptions of your coach and its systems please read the appropriate sections elsewhere in this manual and the manufacturer's manuals.

TRIP PREPARATION

Your First Trip

The front end of your coach was aligned prior to your house portion being built. Once the house is added to the frame, the geometry of the suspension changes.

NOTE: Before your first trip we recommend that you load the coach complete with fuel, holding tank fluids and your stored belongings. Then have the coach realigned. This will maximize the potential handling characteristics of the coach.

Ideally, your first trip should be a weekend trip, close to your dealer. This will allow you to return for answers to any questions and for minor repairs or adjustments that may be needed.

Leaving Home

Before you leave your home for a trip in your coach, make sure that your home is prepared for your absence. You will want to be confident that your belongings will be cared for and that your house is protected against dangers such as burglary and fire.

The following checklist highlights many of the most important precautions.

- Arrange for deliveries, such as the newspaper, to be discontinued.
- Ask the post office to hold your mail.
- Arrange care for your animals and plants.
- Have the house periodically checked.
- Notify the police that you will be absent.
- Inspect your house for fire hazards.
- Burglarproof your home as effectively as possible.
- Place valuables and important papers in a safe deposit box or fireproof safe.
- Make arrangements for your lawn to be mowed, snow shoveled and other outside maintenance to be performed.
- Always make sure that someone knows where you are and that you check in regularly.

For long-term travel you may wish to arrange for an efficient mail drop service. Organizations such as the FMCA (Family Motor Coaching Association) provide this service for a reasonable fee.

Coach Preparation

The following list highlights items that need to be checked before you travel. By doing so before you leave, you have a better chance of avoiding problems during the trip. For chassis maintenance details, please refer to the chassis manufacturer's manual and the appropriate chapter in this manual.

WARNING:	**Before your first trip, load your coach - complete with all the fluids, fuel, LP-Gas, food and gear you will need - and then have the coach realigned. GVWR (Gross Vehicle Weight Rating) and GCWR (Gross Combined Weight Rating), plus the distribution of the load make a difference in the alignment of your coach.**

Coach items to check before traveling:

- Check the battery fluid levels - both house and chassis batteries. If low, attach a shore line to provide 120 VAC power to the coach and recharge. (See Electrical chapter for details.)
- Check tires for cuts, punctures, weather damage or cracks in the sidewall and tread areas.
- Check for foreign objects between dual tires.
- Check the tire pressures.
- Ensure that all lug nuts are tight. This check should be performed by an approved repair facility.
- Check all fluid levels on the chassis and generator. (See chassis or generator manual for details.)

- If you have a diesel engine, clean the fuel/water separator.
- Make sure that all scheduled maintenance for your chassis has been performed.
- Check that all lights, including the driving lights, are operational.
- Adjust the mirrors.
- Check the windshield washer fluid reservoir and make sure wiper blades are clean, grease-free, and that the rubber is intact.
- Fill the water tank and make sure the waste tanks are empty. After the tank has been filled, purge the water lines, then open all faucets - both hot and cold. Allow time for the water heater to fill and then shut off each faucet as the flow becomes steady and free from air. After the last faucet is shut off the pump should then shut down.
- Fill the LP-Gas tank. Test the appliances before leaving home.
- Test the generator.
- Make sure you have the following items in your coach: sewer connection hose, water fill hose, shore line power cable and awning rod
- Fill the fuel tank if necessary.

In addition to these items, read the Before Leaving section at the end of this chapter for an additional list of items to check before driving your coach.

Storing Cargo

It is important to remember there is a limit to your coach's storage capacity. You may want to pack as lightly as possible to allow for additional storage during your trip. It is often easier to buy things at your destination rather than to discard items to make room for other things.

While packing your coach, keep two things in mind: turning and braking. For optimum handling, the load will need to be evenly distributed side-to-side and front-to-back.

When loading your coach, please follow these guidelines:

- Be sure to distribute the cargo weight evenly from side-to-side and front-to-back. This practice will prevent both handling problems and uneven stress on the components throughout the life of the coach.
- Heavy items should be stored near the rear axle, lighter items stored toward the front.
- In order to maintain a low center of gravity and to prevent the coach from being top heavy, store light items in the overhead cabinets and heavier items near the floor. This practice will also reduce sway
- Secure loose items to prevent weight shifting that could affect the balance of your vehicle. Make sure all items are fastened down - safe from quick turns, bumps, and sudden stops.

Helpful Hint:

• Multi-purpose items, versatile clothing and periodic removal of unused cargo enables you to store more of what you usually use.

WARNING:	**Avoid towing vehicles with a hitch weight in excess of 5000 lbs. It will place undue stress on components and cause unusual handling characteristics in your coach. It could also void your warranty. Refer to your chassis manual to find its towing capacity. If there are any questions, call a factory technician.**

At Your Destination

Once you have arrived, it is time to enjoy the comfort your coach can provide. Local conditions, the length of time you plan to stay and type of campground determine which of the following items apply to you. (See the appropriate chapter of this manual or manufacturer's manual for details.)

• Block the tires and level the coach using the hydraulic levelers.
• Make sure the LP-Gas flow valves are open and ready for use.
• If in a full-service campground, hook up the shore line, sewer connection, water line, and if available, the TV cable and phone extension.
• Extend the awnings, especially if hot and sunny.

Conserving Coach Resources

You can enjoy all the amenities your coach provides while camping. At the same time, you should monitor the limited resources your coach can carry. Check the levels of your water, waste tanks, LP-Gas, and battery charge on a regular basis, and act accordingly.

Power

If you have shore line access, electricity will not be a concern for you, but LP-Gas or gasoline still may be an issue. Since the generator is powered by either LP-Gas (diesel units) or gasoline (Vortec units), the most effective way to conserve fuel is to avoid running the generator. This requires the careful management of your 120 VAC appliances.

LP-Gas Conservation

Your LP-Gas tank holds 35 gallons of fuel. For maximum efficiency, follow these guidelines:

- Keep the refrigerator in automatic mode to take advantage of the 120 VAC power.
- Use the micro/convection oven rather than the gas stove whenever you are able.
- Limit use of large appliances.
- Utilize the inverter to use house batteries for a portion of your 120 VAC power.

Water Management

If you do not have a water connection you must be much more careful with your resource. Your fresh water tank will hold 80 gallons of water. Most water is used to bathe, clean items and flush waste.

The following are some ways you can conserve water.

- Use only a small amount of water in the toilet bowl unless solid waste must be flushed.
- The toilet valve should not be left open for more than a moment.
- When showering or washing, run the water only when soaping or rinsing.

The Plumbing chapter details use of the water system.

Sewer

If you use your water supply wisely it will also maximize the usage of your waste water holding tanks. Periodically check the holding tank levels and empty them only when there is a significant amount of waste, even if you have a sewer connection. Black and grey tanks each have a 40 gallon capacity.

Before Leaving

Before leaving the camping area there are certain procedures that should be followed.

These are summarized in this list:

- Make sure that all awnings are retracted and locked - both on the arms and on the roller.
- Make sure that all levelers are completely retracted. Make sure all tires are unblocked.
- Make sure that the electric step is retracted.
- Unhook and stow the shore line, sewer and water lines, TV hookup and any other connections.
- Check the refrigerator, all cupboard and appliance doors, and make sure they are latched.
- Inspect the coach and storage bays for items that are not secured or stable.
- Make sure the door is latched.
- Make sure the roof TV antenna is cranked down.
- Follow the checklist in the Coach Preparation section of this chapter.

HEATING & COOLING - SECTION 3

Heating & Cooling Overview

Your coach contains several systems to maintain a comfortable living temperature, including powerful furnace and air conditioning units. While these units will maintain your comfort in most climates, do not underestimate the importance of the simplest systems - windows, vents, awnings and fans. Proper circulation is crucial to maintaining a comfortable environment.

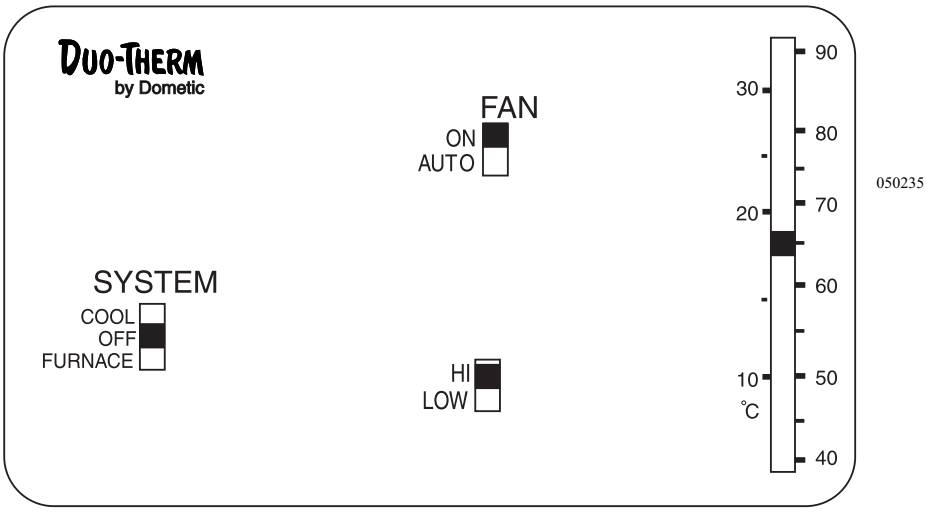
Temperature is not the only factor that affects your comfort. Humidity is just as important. In fact, humidity causes condensation and can damage your coach. Bathing, cooking, and even breathing increase the moisture in the atmosphere. That moisture must be released through windows and vents. Therefore, even when you are running the furnace or air conditioning, you should keep some vents or windows open. Use the fans when cooking, bathing or any time the humidity starts to rise.

Trek Heating Sytems

The following is general information on your furnace. For specific information related to the appliance that is installed in your coach, please read the manufacturer's manual before operating. Failure to follow the instructions may result in damage to the unit.

40,000 BTU LP-Gas Furnace

This type of furnace utilizes LP-Gas to generate heat to warm your coach. A fan distributes the heat. The air is drawn into the furnace, heated, then ducted to all parts of the coach. Thermostats control room temperature.



A thermostat located in the living room controls the furnace. Turn the furnace switch on the thermostat to the **ON** position. Set the thermostat to the desired temperature. The fan will come on and the burner should light within thirty seconds. If the burner does not ignite, repeat the start up process. Occasionally, the furnace may not start on the first try. There is often air trapped in the gas line that will be removed through the start up process.

After the initial start up, the furnace will operate automatically. You can control the temperature using the thermostat. To shut the furnace off, set the thermostat to the **OFF** position. After about two minutes the fan will stop. Keep the furnace compartment clean at all times. Periodically check the interior and exterior vents. Do not allow them to become clogged with debris. Avoid spraying water into the vents when washing the vehicle. Do not obstruct the vented furnace access door.

Make sure you are familiar with the safety guidelines for all LP-Gas appliances before using the furnace. Read through the owner's manual before operating your furnace.

Water Heater

The water heater uses LP-Gas to provide the energy to heat your water. An LP unit does not use a pilot light. Like the furnace, it has an electronic ignition, which uses a small amount of 12 VDC power.

The tank has a 6 gallon capacity. Before starting the water heater, fill the unit completely with water and open the hot water tap in any location and allow the water to flow freely for a few minutes to remove any trapped air. The LP-Gas unit has two controls - an **ON/OFF** switch and a **RESET** light. The switch is located near the Coach Monitor Panel above the entry. The heater has an internal thermostat that is not adjustable.

It also has a safety cutoff. If the heat in the unit exceeds 180º, it automatically shuts off, and will not start again until it has cooled down and the **RESET** button is pressed.

WARNING:	**The water heater must never be started without a full tank of water. Make sure the water pump is on and no longer pumping before starting the water heater.**

To start the water heater, turn **ON** the switch. There will be a 15-second purging cycle, after which the burner should light. The heater will automatically try three times. If the **red** light appears, the unit did not ignite.

If it does not start after approximately one minute, turn **OFF** the heater and then turn it **ON** again. Several attempts may be necessary if there is air in the gas lines.

If water is left in the hot water heater during periods of storage, hydrogen gases may build-up in the tank. It is important to relieve the gases before use. To do this, open a hot water faucet and allow the water to run long enough to clear the air out of the tank. Be cautious when doing this, hydrogen is explosive - extinguish all open flames before beginning this process.

WARNING:	**If water has been in the hot water heater during periods of storage, run the hot water to clear the tank of a possible build-up of hydrogen gas. This gas can cause an explosion if it comes in contact with a spark. Extinguish all flames before beginning this process.**

Please refer to the manufacturer's manual for operating details, and maintenance and troubleshooting instructions.

TREK COOLING SYSTEMS

Safari has installed an air conditioning unit and an attic fan that will keep you comfortable in climates as varied as Death Valley National Park in California or Everglades National Park in Florida. Use these systems to their maximum efficiency.

Roof Air Conditioning

The 13,500 BTU air conditioning system is 120 VAC powered and thermostatically controlled. In addition to its cooling power, you can also use it as a forceful circulation fan. The airflow is ducted through registers on the ceiling.

The system requires little maintenance. One filter protects the cooling coils from debris and should be changed regularly. To change the filter, remove the shroud on the bottom of the intake vent, insert the new filter and replace the shroud. Do not run the unit without filters. Check the manufacturer's manual for maintenance details and specifications.

NOTE: If the air conditioning units freeze outside due to colder temperatures, do not run the air conditioning until the unit has thawed out.

NOTE: In hot or humid weather, if the unit is set too low, the compressor may also freeze due to condensation build-up.

Attic Fan

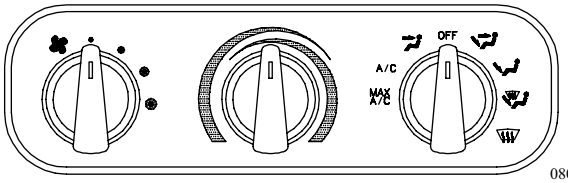
One of the most overlooked features in your coach is also one of the most important for keeping it comfortable. Powered by the 12 VDC house batteries, the attic fan is essential for controlling temperature, humidity and odors. Properly used, it can reduce your reliance on heating and air conditioning and save considerable energy in the process.

You should always run the attic fan while cooking, bathing, or sleeping to reduce humidity. It will also assist in exhausting odors from the coach.

It should be run while the furnace is on to control condensation. The fan uses much less power than the air conditioner and should be used to cool the coach. In addition, it can boost the effectiveness of your air conditioning unit by removing warm air from the ceiling.

You should also use the attic fan when heating your coach in cold weather. The coach is likely to be closed up, causing moisture to build. Moisture and high humidity can damage the wood interior and furniture in the coach. As a result, it is very important to keep the humidity level low.

Dash Air Conditioning & Heater



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The dash of your motorhome contains an automobile-style heater and air conditioning unit. This is designed to keep the front cab area comfortable while driving, without using the main appliances. These units are intended to reduce the reliance on the main appliances, and to utilize the extra heat and power your engine produces. **The system is not intended to heat or cool the living areas.**

~ NOTES ~

APPLIANCES & EQUIPMENT - SECTION 4

Appliances & Equipment Overview

Your coach contains a variety of appliances and equipment, ranging from the awnings to the TV. The manufacturer's manuals for all of these items are included in the warranty package. This manual contains general information for quick reference to help you to use your appliances and equipment; however, please take the time to read the manufacturer's documentation to become more familiar with the proper use and maintenance of these components.

Galley Features

The galley in your coach contains a full suite of cooking and cleaning appliances and equipment. There is a three-burner stove top, micro/convection oven and refrigerator. The appliances are all very similar to models found in site-built homes, but there are some things to consider when using them on the road.

Unless you are camping with full hookups - sewer, water, and electricity - your coach is limited by its capacity to provide power and store water and waste. Regularly check these resources and the LP-Gas tank at the Coach Monitor Panel. It can be very difficult to cook and clean without LP-Gas or if you have a full wastewater holding tank!

Stove Top

Your motorhome is equipped with a 3-burner LP-Gas stove top. Before using, acquaint yourself with the safety precautions described in the LP-Gas chapter. LP-Gas has a distinctive garlic-like odor. If you smell gas in your coach, you should open the doors and windows, exit the coach and shut off the main gas supply valves from the tank.

Before attempting to light or operate your stove top, please refer to the manufacturer's instructions and warranty manual for information more specific to your appliance.

WARNING:	**Do not use the stove top without turning on the ceiling exhaust fan. To ensure against possible ignition of clothing or any other combustible materials, the user should always adjust the flame size so that it does not extend beyond the edge of the cooking utensil. Flammable liquids or materials should not be stored in cabinet areas around the cooking appliance.**

WARNING: A gas stove top is not, nor should it ever be used, as a space heater.

WARNING: Do not leave the burners or pilot lights lit while traveling or refueling your vehicle at a service station.

To ignite the burners, push **IN** the knob and turn **counterclockwise** to the **IGNITE** position. Hold the knob **IN** until the spark ignites the gas and until the thermocoupler is heated (5-10 seconds). This will activate the safety magnet and keep the burner lit. Release the knob and set to the desired setting. Turn the knob **clockwise** to turn it off.

Each LP-Gas cylinder has a manually operated shut-off valve threaded directly into the cylinder outlet and a safety device to prevent unburned gas from escaping. If a leak is ever detected, make sure that a qualified technician fixes the system before operating again.

Regular cleaning with a soft cloth and a warm detergent solution is generally enough to keep the top of your range clean. A non-abrasive cleanser may be used - never use abrasive or corrosive chemicals. If a spill occurs on the stainless steel, clean it promptly or the metal will become discolored and the stain difficult to remove.

To avoid burns, allow time for it to cool before cleaning. For detailed information and maintenance, refer to your Atwood manual.

WARNING: Do not operate the stove top if you suspect there might be a gas leak. Have it serviced immediately by an authorized repair center.

Refrigerator

Before attempting to operate the refrigerator in your coach, please refer to the instruction and warranty manual in the warranty pack.

Your refrigerator is capable of running on either 120 VAC power or LP-Gas. It can be manually set or run in an automatic mode. In automatic mode, it will use 120 VAC power when available; otherwise it will automatically switch to LP-Gas. It will not draw power from the batteries. Using AC power when connected to a shore line will save LP-Gas for other purposes.

Three switches control the refrigerator. One switch controls the thermostat, another the humidity, and a third controls the mode of operation. To start the refrigerator, turn the thermostat to its coldest setting. Then push the mode switch to **GAS**. The **red X** will appear. The **X** should disappear within ten seconds. If there is air in the gas lines it may take up to twenty seconds. If the **X** is still displayed after twenty seconds, turn the switch off and try again. After starting, set the thermostat to the desired temperature.

If the burner does not light after a few tries, let the unit sit for several minutes. Gas may have built up in the unit, presenting a safety hazard. See the LP-Gas chapter of this manual for explanations as to why the gas system may malfunction.

If you have trouble operating the refrigerator with LP-Gas, check to make sure that the main supply has been turned on and that the valve on the refrigerator is in the ON position.

NOTE: If the system has not been used for some time or if the supply tanks have just been refilled, air may be trapped in the LP-Gas supply line. To purge this air, reset the ON/OFF switch three or four times with the mode switch selecting GAS.

Keep your refrigerator clean using mild soap. Defrost the freezer occasionally to remove accumulated frost. Use baking soda to control odors. Check the condition of the burner regularly, even if you rarely use the gas mode. Full instructions are given in the manual.

WARNING: Do not store anything in the refrigerator vent/access area. Restricted airflow may damage components and void the warranty.

Micro/Convection Oven

The oven in your coach combines the power and convenience of microwave and convection ovens. It acts as an 850 watt microwave oven or a 1400 watt conventional electric oven and operates on 120 VAC power. It operates in the same manner as a household microwave or electric oven.

The oven has safety interlocks to prevent its use with the door open, and screens to prevent microwave leakage. These safety features should be kept in good condition - never attempt to bypass the safety interlocks or allow debris or residue to accumulate on the door or oven face. If the oven is damaged, do not use it.

An owner's manual is included in the warranty package. Be sure to read all of the instructions and precautions supplied with the oven before using it. The manual also contains an excellent summary guide.

The oven should only be adjusted or repaired by qualified service personnel. Check your owner's manual for maintenance tips and service locations. As with all appliances or electronic components, be sure to register your oven with the manufacturer.

Sinks

Your galley features beautiful Genovese solid-surface countertops with integrated sinks.

To maintain your Genovese solid-surface sink:

Genovese surfaces are nonporous so they can be easily cleaned with a damp cloth and ordinary soap or household ammonia. Genovese is not only very easy to care for, but it looks great. Minor scratches and scrapes are also simple to repair.

To maintain your (optional) stainless steel sink:

- After each use, rinse and wipe the sink dry.
- Never use steel wool. The steel particles left in the sink can rust and become unsightly.
- Clean the sink with a mild, non-abrasive cleanser. Rub the sink along the grain of the metal. Do not use caustic or corrosive cleansers.
- The manufacturer does not recommend using a rubber mat in the sink. These mats can cause cleaning problems.

To maintain your Genovese Countertops:

- After use, wipe off all countertops.
- Use non-abrasive, non-corrosive cleaners.
- Do not put hot pots or pans directly on the countertop.
- Scratches can easily be buffed out with a wet scouring pad. (Specifically for countertops and sinks, refer to the brochure for details.)

SAFETY FEATURES

Engines, generators, and water heaters all emit exhausts that could possibly enter your coach. While unlikely, these systems may also develop leaks of diesel or propane gas. For your safety, the following items are standard on every Safari coach:

Smoke Alarms

Your coach is equipped with a smoke alarm that has been mounted on the ceiling of the galley area. The smoke alarm, like in your home, should be tested weekly and at the beginning of a trip to make sure it is operating properly. Refer to the manufacturer's manual for details and maintenance.

WARNING: Alarms should be tested weekly in order to assure proper operation. Test smoke detector operation before each trip, and at least once a week during use. Please refer to the manufacturer's manual for battery replacement and maintenance.

Propane Detector

The propane detector is mounted near the floor in the galley. Its purpose is to detect propane gas leaks, but it is sensitive to other gases, such as those found in hair spray, perfumes, alcohol, or odors produced by some cooking spices.

The propane detector is operating at all times. When first turned on the detector will beep while in its warm-up mode. It will then begin monitoring the immediate environment for combustible vapors. The detector is operational when the green light is on.

WARNING: If LP-Gas is detected, the red indicator light will flash and a pulsating alarm will sound until the gas has dissipated or until the mute button is pressed. If the alarm sounds, you should open the door and windows and evacuate the coach until the alarm stops. After the alarm has stopped, be sure to check the LP-Gas tank, lines, and appliances for leaks.

Carbon Monoxide Detector

Carbon monoxide (CO) is an odorless, invisible gas that is an exhaust product from the engine, heaters, or furnace. It can be lethal. Your coach is designed to keep all exhausts from entering the interior.

However, if CO exhausts do enter your coach, the detector will alert you of a potential problem.

The CO detector is mounted near the dining room area. There are no switches to allow the unit to be accidentally turned off, so the CO detector will provide reliable protection by alerting you of the build up of potentially dangerous levels of gas on a continuous basis.

NOTE: As with the LP-Gas detector, you should check the CO detector weekly and at the beginning and end of each trip.

NOTE: The CO detector is also sensitive to other gases such as those found in hair spray, perfumes, alcohol, or odors produced by some cooking spices.

WARNING: If there is constant beeping and the green and red lights are flashing, CO gas has been detected. Shut off appliances, coach engine, and water heater. Evacuate the coach and call the fire department. Have any problems corrected before restarting any appliances or the coach.

CO DETECTOR OPERATION			
Green light	**Red light**	**Sound**	**Operation**
ON	OFF	None	Normal operation.
ON	Flashing	2 beeps per second	CO gas detected. Shut off engine and appliances. Evacuate the coach.
ON	Flashing	1 beep per 16-seconds	Test mode. Wait one minute then press test button to end test cycle.
OFF	OFF	None	No power. Check the power source.
OFF	ON	None	Detector failure. See manual.

Fire Extinguisher

Each coach is equipped with a fire extinguisher located near the entry door. Be sure to learn correct operation of the fire extinguisher before an emergency arises. In order to keep the fire extinguisher in a safe and operable condition, inspect it regularly, having it recharged as needed. Please refer to the manufacturer's manual for details.

ENTERTAINMENT

Your coach may contain several entertainment features. They are the same kind of video and audio equipment found in many homes and basic operation should be familiar to most everyone. The manuals for this equipment are contained in the warranty package. Please refer to the manufacturer's manuals for detailed operation, maintenance and repair information.

Television

The Trek has a TV in the front living area. The television can use either an antenna or a cable hookup. Broadcast signals are picked up using a power-boosted antenna.

There is a cable hookup located in the service center on the driver side of the coach. An adapter provided with your coach allows either a coaxial cable or a two-conductor wire to be attached.

TV Antenna System

Turn **ON** the power boost. It is located in the front overhead cabinet. The boost draws 12 VDC power to amplify the antenna signal. A small switch in the overhead cabinetry in the front of the coach controls it. Since this does draw a small amount of house battery power, remember to turn it off when not in use.

The path from the antenna can be followed down to the antenna booster switch. The antenna booster switch will light **GREEN**, indicating that the booster is in operation.

NOTE: If you are using the cable hookup, you must leave the antenna boost switch in the OFF position. Remember to lower the TV antenna before driving.

This switch also controls whether the system is sending signals to the VCR from the antenna or a cable connection. When the switch is on, the antenna is being selected. A shore cable is in use when the switch is off.

The output of the booster switch is wired to the input of the VCR, then from the output of the VCR to the TV splitter, which supplies the signal. This system allows you to view from antenna, cable, or VCR.

NOTE: Turn off the antenna boost switch when not in use. It will continue to draw power from the batteries even when the television is off.

Satellite Dish (Optional)

Your coach may be equipped with a Sony Digital Satellite Receiver and Datron Mobile Satellite Television System. Together, these components allow you to access up to 200 different video and audio channels.

The receiver and satellite antenna control units are located in the overhead cabinet in front of the passenger seat. The signal from the receiver is sent to the VCR and from the VCR to the television for video and the stereo receiver for audio. No adjustments need to be made to the VCR to view programs. The system is preset and the television should be tuned to channel three as with normal VCR use.

To maximize your reception, park in a location that has an unobstructed view of the southern sky. Level your coach before "peaking" (locating the strongest signal from the satellite) your receiver. This will expedite the process and you will not have to re-peak the receiver after leveling.

For details on how to operate your satellite system and receiver, refer to the Sony and Datron operating guides.

NOTE: Before you can use the Sony Digital Satellite Receiver, you must first activate your programming service. You will need to remove the access card from the backside of the receiver. You should also write down the model and serial numbers that are located on the bottom of the receiver.

The receiver can be pulled out of its location by hand without the use of tools. There is extra cable attached so the unit can be pulled out enough for access. When you have the card and numbers, call the number listed in the Sony operating instructions.

Video Cassette Recorder (Optional)

A VCR can be installed at the factory. The VCR is set for viewing on channel three of the television. This switch is on the back of the VCR. Make sure that both the VCR and TV are powered on for use.

Please refer to the manufacturer's manual for detailed instructions and maintenance.

MISCELLANEOUS

Phone Jack

The phone jack in your coach is a standard extension jack, compatible with almost all phone equipment. It is located either on the galley bar cabinet or on the forward end of the lower galley cabinet.

Patio Awning

A patio awning comes standard with your Trek.

NOTE: The manufacturer has enclosed their product manual complete with detailed illustrated operating instructions. You will find this in your warranty packet.

To open the patio awning:

1. Loosen the black adjustment lock knob behind each main arm. Flip travel lock latches up.
2. Using the provided pull rod, reach up and pull the locking lever forward to release the awning.
3. Hook the rod into the loop of the pull strap and pull the awning all the way out.
4. Slide one rafter arm up until it snaps into place. Push **DOWN** on the main arm to remove slack from the fabric. Tighten the black adjustment knob. Repeat process for other side.

NOTE: It may be necessary in some installations to pull awning approximately halfway open, raise the main arms approximately halfway to the desired height and then finish unrolling the awning. This procedure should be reversed for closing the awning

5. Slide the pull strap to the right end of the roller and wrap it around the main arm.
6. **PULL UP** on the lift handle and raise the arm assembly to the desired height. Swing handle in, and allow the lock button to snap into one of the holes. Repeat for the other side.
7. **PRESS** the release lever at the bottom of the main arm, pull the arm assembly outward to a vertical position and readjust height. Repeat for other side. Drive provided stakes through holes of each patio foot into the ground.
8. During rain, it is advisable to lower one end of the awning to allow water to flow off.

WARNING: Whenever heavy or prolonged rain or wind is anticipated, it is best to close the awning. Damage as a result of weather is not covered by warranty.

To close the patio awning:

1. Pull stakes from the ground. Swing the arm toward the vehicle and snap the patio foot into the bracket. Repeat for the other side.
2. Raise the lift handle to release the lock button. Lower the main arm to the stop plug. Swing the handle in to engage the lock button in a hole. Repeat for the other side.
3. Loosen black adjustment knob and lift slider catch. Slide the rafter arm down to the bottom of the main arm. Leave the black adjustment knob loose. Repeat for the other side.
4. Grasp the pull strap, pull toward you, and flip the locking lever up to the roll up position.

CAUTION: Do not release the awning now. It is under tension and could snap back against the vehicle side.

5. Slide the pull strap to the center and use it to control speed. Allow the awning to return to the vehicle side.

NOTE: Allow the strap to wind diagonally to prevent a bulge in the fabric.

6. Tighten the black adjustment knob and flip the travel lock latch down. Repeat for the other side. The awning is now ready for travel.

Window Awnings (Optional)

Window awnings are a very popular option on the Safari Trek. A manufacturer's manual with detailed installation and operation instructions has been provided in your warranty package. Please familiarize yourself with these instructions before operating awnings.

To open the window awning:

1. Grasp the loop on the pull strap and pull it **DOWN** to extend the awning.
2. Hook the loop onto the window strap hanger when in place.

To close the window awning:

3. Remove the loop from the window strap hanger.
4. Slowly allow the awning to roll up by feeding the pull strap upward and diagonally. This will prevent the strap from binding up and creating a bulge in the fabric. The awning is now ready for travel with no locking required.

WARNING: Do not release strap when closing the awning. The awning is under tension and may snap back against the vehicle.

Awning Maintenance

Washing your awnings will help keep them in their best condition and ensure that they will last for as long as you own your coach.

On a monthly basis, loosen hardened dirt and dust with a medium-bristled brush and then thoroughly rinse both the top and bottom with a hose. Wash both sides of the awning with a mild soap solution, scrubbing with the brush. Rinse thoroughly and allow them to dry.

WARNING: Never use strong detergents or stain removers on your awning. They can destroy the water-repellent properties of the fabric.

The acrylic fabric of your awning is synthetic and mildew does not form on the fabric itself, but on the accumulated dust, dirt and grime.

Refer to the awning manufacturer's operating instructions for detailed cleaning instructions and maintenance.

NOTE: Your awning can be rolled up wet, if necessary, but be sure to open and dry it as soon as possible. This will help prevent mildew and rotting.

The awnings have moving parts guiding the fabric. These parts should be periodically lubricated to resist corrosion and ensure ease of operation. Refer to the manufacturer's operating instructions for details.

WARNING: Your coach patio awning is designed as a sun shade and not made for use as rain protection. It may be used in light rain, but do not allow water to pool in the center of the awning. It can cause severe damage to the awning.

WARNING: Do not use the awnings in windy weather or where gusts of wind over 25 mph can suddenly occur. A strong, gusty wind can destroy the awnings and damage your coach.

ElectroMajic™ Bed

Your Trek is equipped with a space-saving ElectroMajic™ overhead bed. During the day, the bed is hidden in the ceiling of the coach. At night, it lowers down to make a comfortable bed. It is quick and easy to move while using 120 Volt power from the shore line connection, generator, or inverter.

Use of the ElectroMajic™ bed allows the full galley, bathroom and living area normally associated with a Safari coach into Trek's compact, economical size.

Lowering the Bed

1. Turn the **LOCK OUT** switch to the **ON** position. It is a rocker switch located in the galley overhead cabinet.
2. Remove the four safety locks (pins) located on the tracks under each corner of the bed.
3. Make sure the driver and passenger seats are in their full forward positions and reclined forward to allow clearance for the bed to be lowered. If you have a recliner, extend the footrest to lower the top below the bed's stopping place.
4. Push the ElectroMajic™ bed rocker switch on the front side of the refrigerator or the galley overhead cabinet to the down arrow side to lower the bed. Depress the switch until the bed automatically stops in its lowered position.

Raising the Bed

1. Push the **ElectroMajic™ bed rocker** switch on the front side of the refrigerator or the galley overhead cabinet to the up arrow side to raise the bed. **DEPRESS** the switch until the bed automatically stops in its ceiling location.
2. Replace all four safety locks (pins) in position on the bed tracks.
3. Push the **Lock Out** switch to the **OFF** position.

NOTE: When traveling or occupying the sofa, the ElectroMajic™ bed should be in its ceiling location. The safety locks (pins) should be in the bed gear tracks and the Lock Out switch should be in the OFF position.

The ElectroMajic™ bed can be adjusted to raise or lower the height of the stopping locations and level of the bed. If your bed needs this adjustment contact the Service Center.

~ NOTES ~

WASTEWATER SYSTEMS - SECTION 5

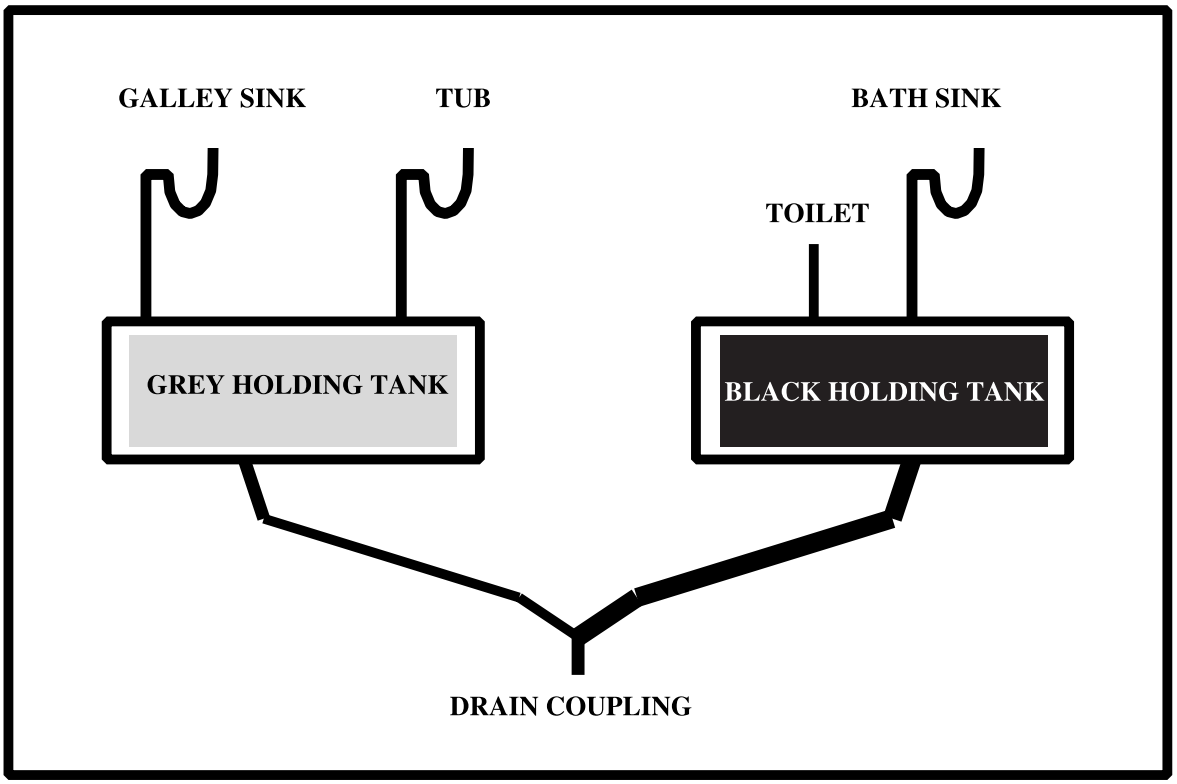
Waste Water Systems Overview

The waste water holding system makes your coach a completely self-contained camping unit. You can use appliances and fixtures without a sewer hook-up while storing the waste until it is convenient to dispose of it. The system is designed to be trouble-free and to minimize odors.

Two 40 gallon holding tanks have been installed - a "black water" tank for toilet waste, and a "grey water" tank for appliances and drains. Both tanks drain through the same coupling. Your coach also includes a flexible hose and adapter for draining.

Holding Tanks

The holding tanks in your coach are made of high-density polyethylene. They will not rust and are resistant to most forms of corrosion. The tanks are designed to last as long as your coach does.



The "grey water" tank is used to hold waste water from the galley sink and shower. Those drains should not be used to dispose of solid waste, although small amounts of food or similar debris will not harm the system. You should not use the drains to dispose of any caustic or corrosive liquids.

WARNING:	**Do not dispose of any petroleum products, ammonia, alcohol, or acetone through your drains. These liquids may harm the tank, valve parts, tank fittings or drain hoses.**

It is a good idea to use a grease-cutting soap in your galley sink. This will help prevent grease build-up in the grey water tank, and will also help to keep the sensor probes clean. A build-up on the sensor probes could cause the tank monitor to read improperly.

The "black water" or solid wastes tank stores the output of the toilet and bathroom sink. It has a larger drain and is located closer to the dump valve to facilitate dumping solid waste. A certain amount of liquid must be in the black water tank for it to drain properly. That is why water from the bathroom sink has been designed to drain into it. Never introduce anything into the system that will not dissolve and could prevent the black water tank from draining.

The tank levels can be viewed using the Coach Monitor Panel. Check the levels frequently to avoid an overflowing tank. Monitor readings can be altered by the chemical contents of the tanks, movement, or the coach not being level.

WARNING:	**Never dispose of standard household facial tissue or toilet paper through your toilet. They are often dyed, embossed or otherwise treated and will not dissolve. Always use soluble RV tissue available from most RV supply stores.**

Odor Control

Odor can be a problem with your tanks. Be sure to clean your tanks regularly and use an approved tank deodorizer to help keep odors under control.

Before each trip, and after draining, add approximately one gallon of water to your black water tank through the toilet. The water helps liquify any remaining solids and reduces odor build-up. Then flush an approved chemical solution or liquid tank deodorant into the tank. These products are available at most RV supply stores.

Clean the tanks after every trip. The grey water tank generally requires only an occasional rinsing. Do this by running clean water from the shower or galley sink to fill and then drain the tank. If an odor develops in the grey water system, fill the tank with a solution of water and baking soda. Let the solution sit for at least an hour and then drain it.

The black tank requires more attention. Each time your tanks are dumped, flush the black tank for three to five minutes with the holding tank valves open. For details on flushing your holding tanks, please see page 5-5 in this section of the manual. After every trip, fill the tank with clean water and drive the coach for several miles. The driving agitates the water and helps dissolve the remaining solids. Then drain the tank again.

If your tanks or plumbing lines ever sustain damage, take your coach to an approved service center. It is possible to repair tanks and lines without removing the tanks from the coach.

SEWER CONNECTION

The tanks are drained through a single fitting located below the service center. The operation requires a flex hose that is supplied with your coach. Cover the drain coupling with the cap when the hose is not in place.

There are many publications that list dumping stations where you can empty your tanks. Most state and commercial campgrounds and many service stations have a dumping station.

Draining The Tanks

Empty the tanks, as you would normally, at a dump station. The grey water holding tanks can be flushed by turning on your faucets. One method to rinse both black and grey holding tanks is to fill them at least 1/2 full with clean water and one cup Trisodium Phosphate. Drive the vehicle a few miles to agitate and dissolve any residual solids and then drain the tanks completely. The black water holding tank should be cleaned by flushing it out with a garden hose attached to a rinsing wand, which may be purchased through most RV accessory or service facilities. (Do not use your fresh water supply hose for this purpose.) For best results, remain connected to a sewer dump station, as you may need to drain the tank during this process, and once the tank and sensors are clean. Care should be taken to thoroughly wash down the sides of the tank, as the fluid level senders must free of build up and debris, to offer optimum performance.

Once the tanks have been cleaned, rinsed, and drained, the fluid levels should read empty at the monitor panel. If not, repeat the processes previously mentioned until both tanks read empty when drained.

NOTE: Always drain the black tank first and follow with the grey tank. This will help to flush any solids left in the line after draining the black tank.

WARNING: Never empty the waste water holding tanks directly on the ground. It is illegal and can be punishable by fines or imprisonment.

Using A Sewer Line

When you are parked at a campground with sewer facilities, you can keep the system hooked up to the sewer continuously. While you can keep the hose in place, it is better to keep the valves closed and dump the tanks every few days after a substantial amount of waste has accumulated.

ELECTRICAL SYSTEMS - SECTION 6

Electrical Systems Overview

The electrical system in your Safari Trek provides maximum power with a minimum amount of effort and maintenance from the owner. Any appliance you would use in your home can be used in your coach within the amperage limits of the system. There are also features in place to prevent such problems as battery drain and circuit overload.

Electrical System Operations

Your coach has five main sources of electrical power: the generator, the shore line connection, inverter, chassis batteries and coach batteries. All sources are independent of each other, but can be combined in a variety of ways to provide the most efficient electrical supply to the coach and to charge the batteries.

Your coach uses two types of power: 12 Volt direct current (VDC) and 120 Volt alternating current (VAC). Homes in North America use 120 VAC, while 12 VDC is most commonly used in automobiles.

Engine starting and control, dash lights, pumps, fans and some coach lighting as well as chassis functions use 12 VDC power. Batteries similar to those used in automobiles supply this. The alternator charges these batteries while the engine is running. Your coach is also equipped with an inverter/converter that will invert 12 VDC power into 120 VAC power for use when the two primary power sources (shore power or generator) are not available. The inverter/converter will also convert 120 VAC power to charge the batteries when plugged into shore power or if the generator is running.

More information on operation of the generator, inverter, and the 12 VDC system is detailed later in this chapter. Please become familiar with your electrical system for your safety and to maximize its efficiency. Detailed manuals from the manufacturers of the generator and inverter are included with your manual package.

In your coach, most of the appliances are similar to those found in your home and operate on 120 VAC power. This is distributed through a main circuit breaker box located either under the bathroom sink or in the lower bar cabinet. This power is separated into two main paths.

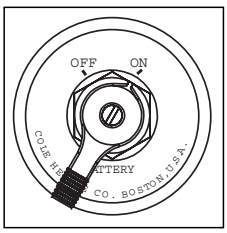
WARNING: **Do not connect the shore line to any source other than a RV approved outlet. Connecting your shore line to 30 amp outlets such as dryer or welder outlets in the home or well pumps on a farm will cause extreme damage to the electrical system of your coach and may cause severe injury.**

120 VAC System

The 120 VAC system consists of the shore power, generator and inverter. The shore line connection is the primary source for power. The shore line or the generator powers all 120 VAC items in your coach. In the event no power is available from the shore line or generator, the inverter will provide power to the system for such items as the television, VCR, or sound system. The system is protected from overloads by a set of system breakers and fuses.

The 120 VAC shore line system works via a power transfer switch. From this transfer switch, power is routed to the entire 120 VAC system. The inverter circuit is powered up through relays in the inverter itself, which then furnish 120 VAC power to the two circuits.

The system will take power from the most appropriate source automatically. The inverter remote switch must be on for the inverter to furnish power to the 120 VAC system. When dry camping, it is wise to only turn on the inverter when it is needed. Leaving the inverter on at all times will result in drained batteries.



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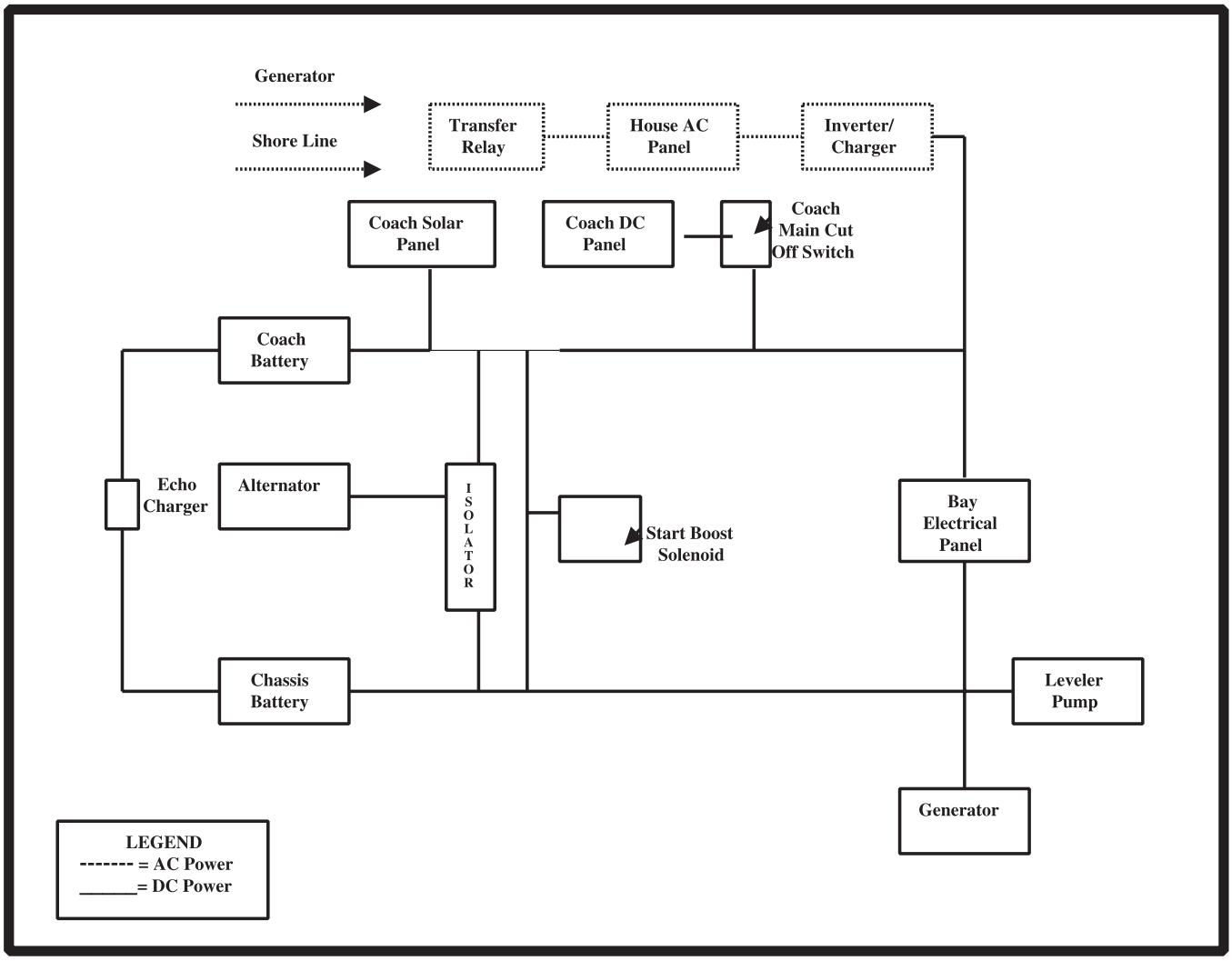
NOTE: There is a 12 VDC disconnect switch located in the entry well.

WARNING: **Modifying the circuitry in your motorhome may void the warranties of the coach and any appliances on that circuit. Never work on a live circuit. Never bypass breakers or fuses.**



SIMPLIFIED ELECTRICAL SYSTEM

Circuit Breakers And GFCI

The 120 VAC system has two important safety mechanisms. First, a set of circuit breakers prevents any circuit from being overloaded. A breaker can be tripped as the result of a short circuit, a faulty appliance, or too many appliances being run on the same circuit. The system is divided into several separate circuits which decrease the load on each and allow other circuits to operate in the event one becomes inoperable.

WARNING: **A circuit without a breaker presents a serious safety hazard. Never attempt to bypass the circuit breakers for any reason. Doing so will void the warranty both of your coach and any appliance on the circuit.**

The main breaker panel is labeled with the appliances and outlets on each circuit. The inverter contains its own circuit breaker, so power from it is not channeled through the main panel. The **RESET** switches are located on the inverter in the same bay with the 50 Amp shore line. If the inverter is not producing power, check the breaker on the inverter.

GFCI refers to Ground Fault Circuit Interrupt. This is a safety feature that halts power through a circuit if a short or other malfunction is detected. This is an important mechanism, designed to help prevent electrocution or injuries. The GFCI works in a manner similar to a circuit breaker. If a fault is detected in the circuit, a switch inside the GFCI is tripped, halting power flow. The circuit will not operate again until the switch is manually reset in the GFCI receptacle.

WARNING: **GFCI circuits are designed to prevent electrical shock, not overloads. They do not replace circuit breakers.**

NOTE: **Several outlets, as well as coach lighting, may be connected to the GFCI circuit. Therefore, if a set of interior lights are not working, or if an appliance is not operating, check the nearest GFCI RESET switch to see if it has been tripped.**

Generator

WARNING: **Before turning on generator, be sure that you have unplugged the shore line. A power surge could damage the Power Transfer Switch along with any appliances connected to 120 VAC power.**

The generator runs on either LP-Gas or gasoline. Both types of generator provide a very efficient source of 120 VAC power.

The following section contains only an overview - please refer to the manufacturer's manual in the warranty pack for full specifications, instructions, and maintenance requirements on the generator.

You can start your generator by using one of two generator switches. One is located on the Coach Monitor Panel. The other switch is located on the generator itself. Press the **START** button and hold it until the generator starts. A delay of up to five seconds is normal. To stop the generator, press the lower portion of the switch until the motor comes to a complete halt.

NOTE: If the generator does not start, release the button and try again. Continuous cranking can damage the generator starter.

Do not neglect maintenance of the generator. A full schedule is provided in the generator manual. An hour meter is mounted on the Coach Monitor Panel for your convenience.

If you are operating in dirty or dusty conditions you should accelerate the schedule accordingly. Monitor the generator for signs of problems, such as odd noises, power loss, and overheating. If any such signs appear, have the generator serviced promptly.

WARNING: Never use your generator as an emergency power source for a residence, or any other facility connected to an electric utility service. Using the coach generator to provide power to any building on an electric utility energy grid may allow electricity to flow back to the utility lines. This would present an extreme hazard to any technician working to restore power.

WARNING: Never store anything in the generator compartment. Using this area for storage presents a fire hazard, and may prevent the correct operation of the generator.

Power Transfer Switch

An automatic power transfer switch connects the coach to available external power.

In most models, this switch is located in the bay with the inverter and the 50 Amp shore line. If 120 VAC power is not present from the external power source, the transfer switch will select generator power approximately 40 seconds after the generator starts producing electricity. Generator power will always have priority over shore power when it is present.

Inverter

WARNING: The coach batteries will drain much faster when not using external shore line or generator power. It is wise to conserve energy when your motor coach is using only inverter power.

The inverter is located in the compartment in front of the driver's side rear wheel. It transforms 12 VDC into 120 VAC power usable by the major appliances. With the inverter, appliances can utilize power stored in the house batteries without using power from the generator or shore line.

The remote inverter panel is located in either the corner or on the front of the lower galley cabinet (2480 floor plan). Not all circuits are connected to the inverter and not all appliances can be run without the generator or shore line.

The inverter has its own internal breakers; therefore, power from the inverter is not channeled through the circuit breaker panel. If power is not reaching appliances served by the inverter, reset the inverter by pressing the **RESET** button fully turning the unit off and on three times.

Power for the inverter comes from the house batteries. Keep an eye on the battery level as you use your appliances. The battery level can be checked using the Coach Monitor Panel.

Your coach is equipped with a 1000 watt inverter. This is ample for most purposes. The microwave oven requires either shore line or generator power to operate.

NOTE: Power provided by the inverter is intended for your convenience. It should be used sparingly so it doesn't drain the batteries.

WARNING: Never store liquids or flammable material near the Automatic Transfer switch or the inverter.

12 VDC System

NOTE: If you experience an interruption in 12 VDC power, please check the 12 VDC Disconnect switch located in the entry well.

The 12 VDC coach system provides power for a variety of applications. Many coach lights, fans, the water pump, and other coach accessories use 12 VDC. In addition, 12 VDC power is used to ignite the furnace, power its fans, and run the indicator lights in the refrigerator and the Coach Monitor Panel. The 12 VDC system also can provide temporary power for the 120 VAC appliances with use of the inverter.

The 12 VDC system is divided into two sections. The "chassis" section powers the engine, running lights, and dash accessories. It includes the "chassis" batteries and alternator.

The "house" section powers the 12 VDC interior lighting, ceiling fans, refrigerator, furnace, water heater, Coach Monitor Panel, radio, generator, and water pump.

This section includes the set of "house" batteries. It also provides power to the inverter.

A boost switch connects the two systems. This allows the house system to supplement the chassis system and also prevents the chassis battery from being drained by house demands. This is more fully discussed in the next section.

Chassis System

The chassis electrical system is enhanced by Safari in several ways. The system provides power for starting the engine and also powers the leveler pump and generator. It is recharged by the 30 Amp alternator and a 20 watt solar panel and protected by a 250 Amp fuse.

Solar Panel

The solar panel provides up to 20 watts of power during the daytime to assist in charging the chassis and coach batteries. This helps to maintain the battery charge even when parked for extended periods. This panel will produce a slight drain during the night. In your coach, the drain is virtually immeasurable.

NOTE: Solar Panel will not be immediately operational following extended periods of inside storage. After exposure to the sun, the trickle-charge process will begin.

Isolator

Power from the alternator is channeled through an isolator. This device allows the alternator to simultaneously charge the chassis and house system, while still keeping the two systems separate. When the isolator is used, draining the house batteries will not affect the chassis batteries, and vice-versa. The solar isolator feeds power from the solar panel to the main isolator. With a small amount of care, at least one battery system will always be charged.

Boost Switch

If the chassis batteries lose their charge and become unable to start the engine, it is possible to apply the house system to the task. A boost switch, located on the driver's console, connects the two systems. By activating the switch, the starter can get power from the house batteries and converter. The boost switch should only be activated for the time that the power is needed.

NOTE: To start the engine when both the chassis and house batteries have lost their charge, connect the shore line to an approved RV outlet and activate the boost switch. Do not start your coach until there is enough charge in the battery system. This will be indicated on the remote panel when the amp charge has dropped from its starting level.

House System

The house 12 VDC system provides the power for all 12 VDC accessories with the exception of the engine starter, leveler pump, generator, and automotive functions.

The system includes two batteries that are designed to preserve their power, even after repeated drains and charges, as long as the battery is properly maintained. This battery type is known as a "deep cycle" battery. The system is routed through the fuse panel located under the bathroom sink or in the lower galley cabinet.

The house system is charged by several sources. The alternator charges the system through the isolator when the engine is running. As mentioned above, the isolator keeps the house system separate from the chassis system, preventing the chassis battery from being drained by the house appliances. The Freedom 10 inverter/converter provides power from a 120 VAC source, either the generator or shore line. It operates automatically according to the presence of 120 VAC power.

The 20 watt solar panel located on the roof of the coach assists in charging the house batteries during the day, when direct sunlight is present, via a solar isolator.

The house battery system provides power directly to the inverter. It serves the circuits that connect to the interior and lighting. These include the ceiling fans, furnace, water heater, water pump, cargo lights, and refrigerator. They are connected directly to the house batteries through a 105 amp breaker located under the entry step on the frame rail. A fuse panel is located next to the 120 VAC breaker located either under the bathroom sink or in the lower galley bar cabinet. The house battery system is also connected to the chassis system through the boost switch.

The fuse panel is separated from the batteries by a breaker and a relay. The switch to control the relay is mounted on the firewall near the coach entry. The breaker is located under the entry step on the frame rail.

The strength of the batteries can be checked using the Coach Monitor Panel. The monitor can only give a general indication of the charge level of the battery, but is an important tool for your power management.

You have plenty of options to assist your power management. There are three ways to recharge your batteries:

1. Engine Alternator (while engine is running)
2. Freedom 10 Inverter/Converter (shore line or generator)
3. 20 watt Solar Panel (trickle only)

NOTE: One factor to remember is that recharging time is greatly affected by the load. The less drain from lighting and accessories, the faster the batteries will recover.

Fuses

Fuses offer a simple and effective method of protecting the 12 VDC lines from overloads. By burning out during an overload, they stop the current and end the hazard the overloaded circuit might present to the appliances and to the coach. Fuses are an important safety feature and should never be bypassed.

If power no longer flows to a particular 12 VDC appliance or circuit, the fuse should be one of the first items to check. A fuse can be checked visually, but an ohmmeter will detect whether the fuse still conducts electricity if you are in doubt. If the fuse is blown there may be a problem in the system. Check the appliances on the circuit for signs of damage or defects and check the wiring for possible shorts.

NOTE: When replacing a fuse always use a fuse of the same amperage rating - never higher.

PLUMBING SYSTEMS - SECTION 7

PLUMBING SYSTEMS OVERVIEW

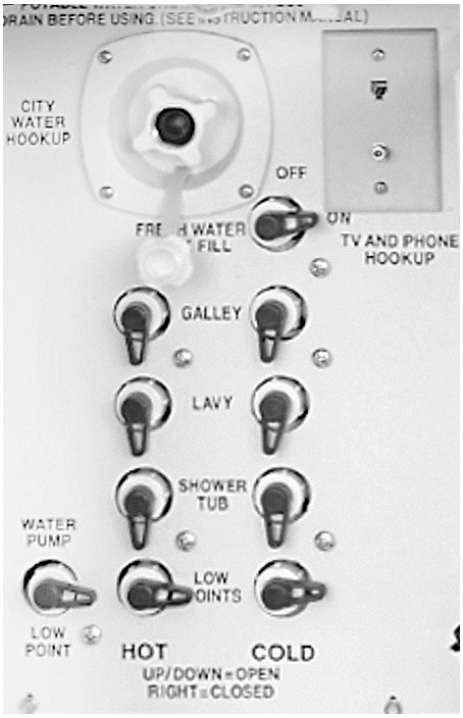
Your Trek contains a full freshwater plumbing system capable of operating as a self-contained unit or for making use of a pressurized water source. For camping away from amenities, the system has a specially designed pump system that provides constant flow even at low volumes. When a pressurized water source is available, the pump and tank can be bypassed and the system will draw from the source.

OPERATION

Your Trek has an outer compartment where all of the water flow is controlled. This system includes several manifold valves, black tank flush, City Water Inlet, and many other features. Figure 10 shows components of the system. The Fresh Water Fill selector valve, near the fill connection, controls whether the outside water source is filling the tank or going directly into the system. When the tank has been filled, the switch should be set to the **OFF** position to prevent overflow. Regardless of the connection the water heater supplies all hot water.

Using A Connection

To use an outside water source you must first switch the Fresh Water Fill selector valve located below and to the right of the City Water hook-up to the **OFF** position. When the valve is closed water flows directly into the coach system. The selector should be on only to fill the water tank or when using the water tank to provide water. (See next section for details.)



Remove the plug from the fill spout and screw on the hose from the water source. The hose should be clean and rated "for potable water" (fit for drinking). Avoid cheap plastic hoses - they often taint the water with an unpleasant taste. Once the outside water source is applied, the water system is pressurized and is ready for use without any other pump. Water pressure in the system is regulated to a maximum pressure of 50 pounds per square inch (PSI). The regulator is located in the City Water hook-up connection.

NOTE: In some rare instances, the water pressure of a locality may be very high. Inquire locally before using the connection. Pressure over 125 PSI may damage the regulator and the plumbing system.

NOTE: Periodically check the City Water tap plug for tightness. This plug protects your water system from particles and contamination. It should be replaced immediately if lost.

Using While Disconnected

Your coach is not dependent on an outside water source. The system is fully capable of self-contained use for extended periods of time. Two things make this possible: the large fresh water tank and the automatic water pump.

Filling The Tank

Filling the tank requires a pressurized source of drinking water.

The following is a step-by-step description of the process:

1. Connect to an outside water source. Use only a clean hose labeled "for potable water" only.
2. Open the Fresh Water Fill selector switch.
3. Turn on the outside water source.
4. Open all faucets, both the hot and cold.
5. Allow time for the water heater tank to fill and then shut off each faucet as the flow becomes steady and free of air. With the water heater tank filled and all air expelled from the system, close off the last faucet. The pump will automatically shut down.
6. Shut off the outside water source.
7. Close the Fresh Water Fill selector switch.
8. Disconnect the outside water source.

The tank has an overflow spill. When water is emerging from this spill the tank is full. The water system will hold little or no pressure if the selector valve is left open. Keep the overflow vent pipes from the water tank free from mud and other debris.

You can determine water level via the monitor inside your coach. You must hold the panel switch on to get an **LED** reading on the water level. The angle of the coach can directly affect this reading.

NOTE: Always use clean, potable water. The water system contains a pre-filter to prevent damage to the pump and heater; however, this filter cannot make potable drinking water from an inadequate source. This filter should be cleaned periodically.

NOTE: Using the external water connection will not fill the freshwater tank unless the Fresh Water Fill selector valve is open. To allow external water directly into the coach water system, the selector valve must be closed.

The Water Pump

Your coach features an automatic, self-priming water pump. It is specifically designed to provide consistent pressure even at the low volumes common in a motorhome. The pump uses 12 VDC power.

The pump automatically starts and stops to provide constant pressure as faucets are opened and closed and appliances are used. The manufacturer determines pump settings. Do not change these settings - doing so will void the pump warranty.

The power switch for the pump is located in the panel with the generator and water heater controls inside your coach above the entry door. The pump should be turned off when storing the coach and when using an outside water source through the City Water Inlet.

Water Pump Usage	
Use	Switch should be:
Outside, pressurized water source	Off
Coach storage	Off
Camping without outside water source	On

If the system has not been used for a period of time, air collects in the pipes and prevents pressurizing. The air must be expelled.

Turn on the pump and open every faucet. Close each faucet as water flow becomes steady. Allow time for the water heater tank to fill as well.

Do not close the last faucet until the heater is full and the flow is free of air. The pump should then shut off automatically until you again open a faucet.

Turn off the pump if you are going to be away from your coach for an extended period of time Remember to turn it on again when you return. You will not need to prime the pump or perform any other action to restart the system.

Cold Weather Use

The entire freshwater system, including the tank and lines directly from the tank, is located within the insulated and heated areas of your coach. Freezing should not be a factor under normal conditions. However, there are some guidelines that should be followed when operating your coach in extremely cold weather.

The water lines are hidden in closets and cupboards. Make sure that warm air can get to those areas.

Keep the doors ajar, let the faucets drip a little to prevent the freezing of pipes and keep the air in the coach circulating adequately. Do not put anything in those cabinet areas that will prevent warm air from reaching the pipes. Keep the interior of the coach warm.

The tank and some plumbing lines are located in the basement, which is insulated and heated. The forced air furnace supplies heat to the basement when the temperature nears the freezing level.

The furnace has an adjustable slide-gate located at the end of the ducting on the bottom of the plenum. In the closed position, heat will not circulate to the basement and freezing can easily occur in cold weather.

WARNING:	**In extremely cold weather (below 32°F) open the kitchen cabinets to allow warm air to circulate and keep the pipes from overheating. Also, leave a small drip going in at least one of your faucets.**

Toilet

The toilet in your coach is a self-flushing marine model. It is designed to use as little water as possible, while flushing cleanly and controlling odors. It differs from a home toilet in several ways and there are guidelines to follow for best results.

The inlet to the toilet is connected directly to the fresh water system. A valve behind the toilet allows the water supply to be cut off if necessary. Normally, the flush lever controls water flow. Raising the lever allows water to flow into the bowl.

When flushing liquids, the small amount of water released on flushing is generally enough to rinse the bowl. When flushing solid waste, raise the lever sufficiently to allow enough water to enter the bowl to carry the solids. After flushing, a small amount of water should remain in the bowl.

Pushing the flush lever down opens the ball valve and flushes the toilet. Don't hold the lever down any longer than necessary - it wastes water and allows odors to escape from the holding tank.

WARNING: Only items that will dissolve should be disposed of through the holding tanks. Do not flush paper towels, facial tissue, sanitary napkins, or any similar product. Always use soluble toilet tissue, available at RV supply stores

Clean the toilet regularly with a mild bathroom cleaner. Do not use scouring powder, highly concentrated or acidic cleansers. These chemicals may damage the seals and the finish of the bowl. Do not dispose of anything through the toilet that might be abrasive, caustic, or corrosive.

The toilet is generally a simple and trouble-free device. Some of the more common problems that can occur and possible solutions are listed in the Troubleshooting section. Consult the manufacturers' operation manual for detailed instructions.

Shower

NOTE: Water pressure in a motorhome is considerably less than you would find in a site-built home. This is necessary to protect the plumbing.

NOTE: Do not use any showerhead other than the one installed at the factory.

The Trek allows you to use the showerhead in the fixed position by leaving it on its holder or detaching it from the clip for use as a personal hand shower.

The shower is a gel-coated fiberglass similar to the type found in many homes. It should be cleaned with a non-abrasive tub and tile cleaner. Use of scouring powder will damage the surface.

WARNING: After using the shower, always turn off the water at the faucet. Keep the shower drain plug locked when traveling.

MAINTENANCE

The water system uses roto-molded plastic water tanks and vinyl tubing which deliver non-toxic, non-metallic, pleasant tasting drinking water. It is immune to corrosion and rust. To keep your water in drinkable condition the components must be kept pure and clean. Never introduce anything into the system but clean, potable water (except as noted in this section for cleaning.)

Flush the freshwater tank as often as possible. The tank has a drain valve located in the basement. Fill the tank partially. Open the valve and let drain. Continue running water into the tank for a time with the drain open. Close the drain.

At least once per year, fill the tank completely with a solution of baking soda and water, After fifteen or more minutes drain the tank. Follow this by flushing the tank with clean water.

The pump and pipes require no maintenance, but they should be periodically inspected for leaks or other problems.

Never store the coach with water in the tank. Always drain completely. The tank, lines, pump, and water heater all need to be drained. To drain the lines open all the faucets, the shower flow valve, and the low-point drain valve. Give the system plenty of time to drain. Close all valves and faucets when draining has completed to keep debris out of the system.

The water heater must be drained manually. This appliance is accessible through an exterior access door. Remove the plug and open the pop-off valve. Allow the tank plenty of time to drain.

We recommend blowing the lines dry with compressed air. First make sure that all the valves are open, and apply the air pressure to the water fill spout using an air chuck. Do this twice, with the selector valve both open and closed. Make sure that the air pressure is not over 35 PSI. Use a water trap or similar device on the air compressor to prevent the water tank from receiving air tank contaminants such as compressor oil or polluted, condensed water.

NOTE: Periodically check the overflow pipe of the water tank to ensure it is not clogged with debris. Mud, road materials and even insects can close the vent and may over-pressurize the tank when it is filled.

TROUBLESHOOTING

Occasional problems can occur to prevent the water system from functioning properly. For each problem a number of possible solutions are offered here:

Water Pump

Problem: The pump does not activate.

Check the power switch on the Coach Monitor Panel.

Check the house battery power level, and the availability of 12 VDC power.

Check the pump fuse in the 12 VDC fuse panel located at the load center.

If in cold weather, inspect the pump head to see if it is frozen. If so, thaw with a light bulb or other safe heat source.

Problem: Pump runs, but water does not appear.

Check the water level in the tank using the Coach Monitor Panel.

Check the "Fresh Water Fill" valve near the City Water Inlet. It should be closed.

Check for air leaks near the pump inlet.

Check for a plugged inlet line. Remove the output line from the pump. If no water appears there, the problem is in the inlet -otherwise the problem is deeper in the output lines.

Problem: Pump runs, but water sputters.

Check the water level in the tank.

Check for an air leak in the input lines to the pump.

Check the in-line filter for evidence of leakage.

Problem: Pump "cycles" - turns rapidly on and off when a faucet is opened.

Nothing is wrong. The pump is designed to cycle in order to maintain even pressure.

Problem: Pump cycles, but all faucets are closed.

Check for leaky faucets.

Check the toilet valve for leakage.

Check the low-point drain valves to make sure they are closed.

Make sure the Fresh Water Fill selector valve is closed.

Check the water lines for leaks. Fix any leak promptly, no matter how small.

Check the water tank level. If the water supply reaches a low level, the pump will run until the switch is turned off or water is added to the tank.

Place a plug in the output line near the pump. Turn the pump on. It should stop after a few seconds. If not, there is an internal leak in the pump and it must be replaced.

If the problem cannot be resolved, use the pump switch to manually control the system until repairs are possible.

Toilet

Problem: Water will not stay in the bowl.

Tighten the clamp ring-adjusting nut.

Check the ball valve and underside of the seal for dirt and foreign materials. If necessary, replace seals, flush ball, and half-clamps.

Problem: Water does not shut off after flushing. Toilet overflows.

Disassemble and clean the water valve.

If the valve is defective, replace it.

If the spring is defective, replace the spring, cam, and plate with a new spring cartridge.

Problem: Water leaks from the water valve.

Tighten the bottom cap, inlet fitting, and outlet hose clamp.

If necessary, replace the water valve.

Problem: Water leaks from bottom of toilet base.

Tighten the toilet mounting bolts.

Replace the rubber seal between floor flange and the base.

Replace the base assembly or floor flange.

Problem: Water leaks from the rear of toilet bowl.

Tighten the hose connections.

Tighten the vacuum breaker-to-bowl connection.

Replace the vacuum breaker assembly.

Replace the toilet bowl.

Problem: Foot pedal is difficult to operate or rotating hemisphere sticks.

Apply light film of silicone spray to the blade of the rotating hemisphere.

Care & Cleaning

The sinks, counter tops, and tub/shower fixtures are simple to care for. Use a mild soap/water combination to clean their surfaces. A commercial glass cleaner can be used on the glass shower door.

The shower stall is constructed of a gel-coated fiberglass similar to the type found in many homes. It should be cleaned with a non-abrasive tub and tile cleaner. Use of scouring powder will damage the surface.

Clean the toilet regularly with a mild bathroom cleaner. Do not use scouring powder, highly concentrated or acidic cleansers.

These chemicals may damage the seals and the finish of the bowl. Do not dispose of anything through the toilet that might be abrasive, caustic, or corrosive.

LP-GAS - SECTION 8

LP-Gas Overview

Liquid Propane Gas, or "LP-Gas", is an extremely clean and efficient fuel. It is safe, economical, and provides modern living conveniences no matter where you travel. It burns cleanly and packs a tremendous amount of energy in a small container. It is an ideal fuel for RV appliances and is often used in cooking, heating, generator power, and refrigeration.

LP-Gas is an invisible, odorless gas. For storage, it is compressed until it becomes liquid. It can be purchased at many service stations and from dealers in residential fuels. It is comparatively inexpensive and easy to find. It is not the same as natural gas, and natural gas should never be used as a substitute.

Since LP-Gas is normally odorless and invisible, a chemical is added to give it a distinctive garlic-like smell. Learn this odor and make sure every person staying in the coach is familiar with it.

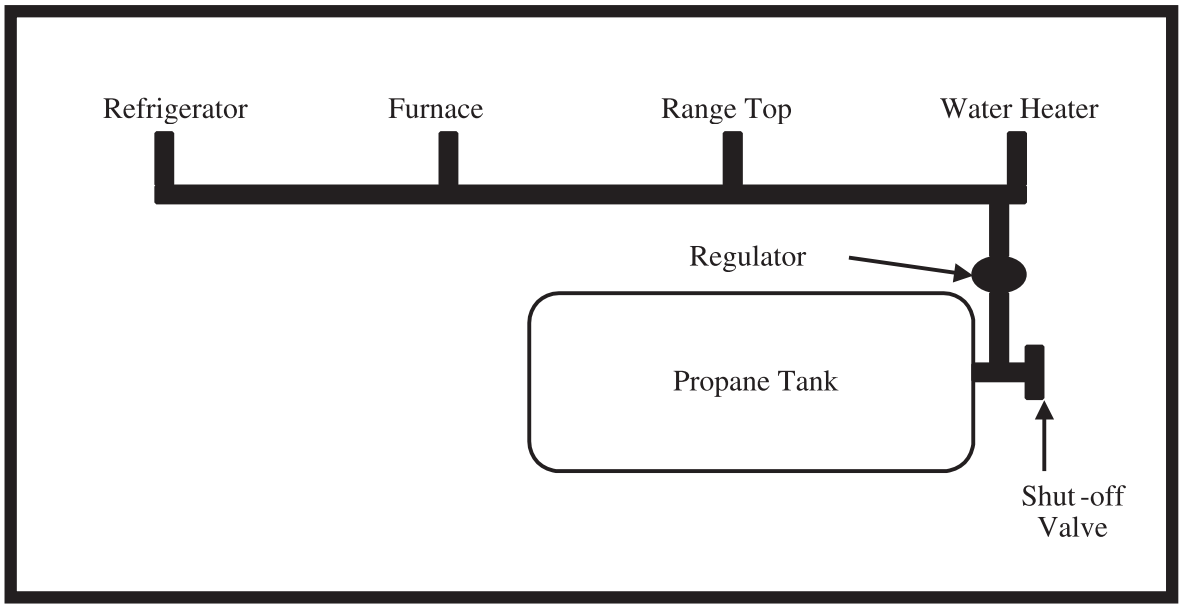
LP-Gas is heavier than air. Thus, if it is released into the atmosphere it will settle to the ground. In a closed area it can linger for hours, rather than dissipate. It burns readily and yields a great deal of energy. The improper use and handling of LP-Gas always presents a hazard.

WARNING:	**Avoid inhaling LP-Gas. It is potentially lethal.**

WARNING:	**LP-Gas is extremely flammable. If you smell LP-Gas, do not strike a match or start a flame. Extinguish cigarettes or any open flames. Ventilate the area thoroughly, until no odor remains. Identify the source of the gas as quickly as possible.**

Coach Use

LP-Gas is stored as pressurized liquid in your tank. This pressure ranges from 40-200 lbs. per square inch, depending on external temperature. Before it can be used as a fuel it has to return to its gaseous state. In your coach, special valve systems called regulators serve to supply gaseous fuel to the appliances, while the tank supply remains a compressed liquid. The regulator reduces the pressure to less than one pound. When the liquid gas hits the atmosphere, it expands to many times its original volume and turns into a gas vapor. This vapor is used for cooking, heating, and refrigerating goods.



(PICTURED ABOVE GASOLINE POWERED MODELS)

Not all LP-Gas is the same. There are two main components of LP-Gas, propane and butane, and they can be blended in any proportion. Butane is the less volatile, and cannot be used in temperatures below freezing. Propane can be used in temperatures well below zero degrees Fahrenheit.

If you plan on camping in cold weather, be sure to use gas containing a high proportion of propane.

NOTE: Diesel models add another feed line to the LP generator.

SAFETY PRECAUTIONS

If LP-Gas is mishandled, or if the system is not maintained properly, the results can be disastrous.

Always follow the safety precautions listed herein and keep your system in perfect working order. Do not tamper with the LP-Gas system, pressure regulators or appliances.

Check with the factory before drilling holes or attaching objects to walls or floors as gas lines may be seriously damaged. A qualified technician should do any repairs, alterations, modifications, or additions. Whenever the piping has been opened, it must be checked for leaks.

Periodically have the LP-Gas supplier check the system for possible gas leaks or missing/damaged parts. Practice safety at all times. If you have questions about the operation of your appliances or LP-Gas system, contact your local LP-Gas dealer or RV service center.

WARNING: If you smell the garlic-like odor of LP-Gas in your coach, immediately do the following:

- **Extinguish any open flames.**
- **Open all windows.**
- **Do not operate any electrical switches - including the fan.**
- **Turn off the vapor valves on the LP-Gas tank.**
- **Leave the coach. Do not return until the gas has dissipated. Remember that the gas will linger near the ground.**
- **Call a service center, dealer, or gas supplier. Have the system checked and the leak corrected before using again.**
- **If the odor is outside the coach, most of the same procedures apply. Shut off the gas supply at the tank and get assistance.**

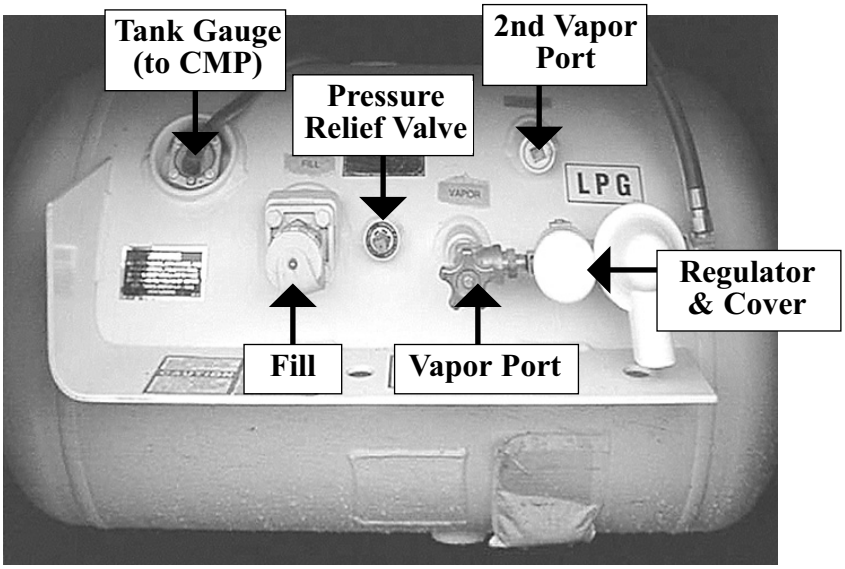
NOTE: Whenever using the gas range, turn on the exhaust fan or open the overhead vent to allow fumes to escape, and open nearby windows.

Never use portable cooking equipment, such as wood or charcoal grills or gas camping stoves, in your coach. Such equipment is a fire and safety hazard.

THE LP-GAS TANK

The LP-Gas tank is located in a compartment behind the front tires on the passenger side of your coach. There are two kinds of LP tanks - one for gas-powered and one for diesel-powered Treks.

The tank has four valves - a fill valve, a pressure-relief valve, a vapor valve and a liquid valve that connect to the generator. It also has a gauge that indicates the current amount of fuel in the tank.



(PICTURED: VORTEC GASOLINE POWERED)

The fill and pressure-relief valves are used only when filling the tank, and should not be handled any other time. The vapor valve controls the supply of gas to the appliances.

WARNING:	**Never store LP-Gas tanks inside your coach or in storage compartments. All tanks have a pressure-relief valve that may release gas into the atmosphere. Tanks should be kept only in well-vented areas and only be used by the person filling the tank.**

110 - LP-Gas Tank

NOTE: On diesel models the Liquid Port has a valve and hose that feeds the LP Generator.

NOTE: Do not replace the tank furnished with your unit without first checking with the factory.

Filling Procedure

Before filling the tank, make sure that all pilot lights are off, and that the engine and generator are not running. The vehicle should be level. The technician filling your tank should be trained in the full procedure.

To allow for heat expansion, the tank can only be filled to 80% of its 35 gallon capacity. Manufacturers of LP-Gas tanks are required to install a relief valve that will stop flow into the tank at 80% capacity. A tank that is overfilled can cause system freeze-ups, uncontrolled gas flow, and possibly fire or explosion.

WARNING: Before filling the tank, make sure that all pilot lights are off and the engine and generator are not running. The LP-Gas tank can only be filled to 80% of its capacity. A tank that is overfilled can cause system freeze-ups, uncontrolled gas flow, and possibly fire or explosion.

NOTE: The fill valve is spring-loaded and will close automatically. Do not disconnect any of the LP-Gas hoses as moisture can enter the system and cause it to malfunction.

Vapor Valve

The vapor valve controls the flow of gas to the appliances. A regulator is mounted on the main line to the appliances. The second vapor valve controls the flow to the generator and is absent from coaches with gasoline-powered generators. Both valves should be closed when filling the tank. They should also be closed when the appliances are not going to be used for an extended period of time to prevent moisture from collecting inside.

When opening the vapor valves always follow this procedure: slowly open the valve until vapor fills the line. Open completely, then close it one-quarter turn. There is an excess flow check valve that stops the flow if you open the valve too quickly. By closing the valve slightly it is easier to tell whether the valve is open or closed.

If only a small amount of gas flows into the line close the valve completely and try the procedure again.

WARNING: **Never use a wrench or pliers on any of the LP-Gas tank valves. They are designed to close completely by hand. If tools are necessary to stop the flow, the valve needs to be repaired or replaced.**

Regulator

The regulator controls the flow of gaseous fuel to the appliances. It is mounted by the vapor valve on the tank. You should inspect it every time the tank is filled.

The regulator has a protective cover. Make sure that the cover is in place and that the regulator vent is not blocked. The regulator vent should face downward and should be free of mud, ice, insects, or other debris.

WARNING: **Only trained service personnel should install or service LP-Gas equipment. Replacement equipment must meet specifications set by the factory. Consult with the Service and Warranty department before installing new equipment.**

Moisture in the system can cause the regulators to "freeze up" and block the gas flow. Therefore, it is important that moisture never be allowed to enter the system - even in minute quantities. If moisture does enter the tank the system must be purged.

Other problems can cause the flow to cease as well. If the 80% valve malfunctions, overfilling the tank will cause liquid fuel to pass through the regulator. The pressure will become irregular and the appliances will function improperly or not at all. It can also cause the regulator and gas lines to become frosty. If any of these conditions exist have the system serviced immediately.

MAINTENANCE & TROUBLESHOOTING

Proper maintenance is essential for the safe operation of your system. Do not allow the system to fall into disrepair.

LP-Gas is not corrosive, so you generally don't need to worry about the inside of your tank and gas lines. However, the exterior of these components should be maintained.

The following procedures will help keep your system functioning properly:

- Inspect the lines and fittings regularly for signs of corrosion or dents.
- Periodically check for leaks. To check a fitting, apply very soapy water and look for bubbles. Make sure to do this before and after long or rough trips.
- Do not use any product with ammonia, chlorine, or other corrosive chemicals.
- The tank should be protected from rust by a periodic application of good paint.

WARNING: DO NOT USE A MATCH WHEN CHECKING FOR LEAKS IN THE LP-Gas SYSTEM.

Many common problems have simple solutions. Some of these are listed herein. If you are unable to solve a problem, take your coach to a service center, dealer, or fuel supplier to be inspected by trained personnel. The LP-Gas system should only be serviced by qualified, trained technicians.

The following problems and solutions are some of the more common ones that may be encountered. Practice safety at all times. If you have questions about the operation of your appliances, or LP-Gas system, contact your local LP-Gas dealer or an approved service center.

Problem: Gas flow is very slight.

Close the vapor valve and slowly reopen. The excess flow check valve constricts gas flow if it is opened too quickly.

Problem: Gas does not seem to reach appliances. Generator will not run; pilot lights will not light.

Check the gas level in the tank.

Check to make sure LP detector is on.

Check to make sure that the vapor valves are open. Close them and open again, following the procedure above.

Check for debris or corrosion on the regulators. If any is apparent, take the coach to a service center for repair.

The problem may require a trained technician. Moisture in the tank may have "frozen" the regulator, and requires purging. Take your coach to a service center.

Problem: Gas flow is inconsistent.

Check for debris or corrosion on the regulators. If any is apparent, take the coach to a service center for repair.

Although unlikely, an overfilled tank could cause this problem.

Moisture or a faulty regulator can cause this problem. Take your system to a service center.

WARNING:	**Do not attempt repairs on your own. A trained technician should complete all repairs.**

MAINTENANCE - SECTION 9

MAINTENANCE OVERVIEW

Every Safari Trek is designed to be the highest quality, most durable product of its kind on the market. Your coach will provide years of superior use with proper maintenance. Regular attention is essential to the enjoyment of your investment.

In addition to the information presented in this manual, all appliances and equipment have manufacturer's manuals in your warranty package. Engine and chassis maintenance is detailed in the chassis manual. Please refer to these manuals to learn operating details, troubleshooting and maintenance procedures.

EXTERIOR MAINTENANCE

The exterior of your coach is designed and constructed to be a durable, protective shield for the interior. It protects your coach from the environment and prevents water from entering your coach and damaging its contents. It is attractive, easy to maintain and time spent cleaning and inspecting is minimal.

After every trip you should wash the exterior of your coach. Use mild soap and water - never an abrasive cleanser. Be careful not to spray water directly into louvers and vents. While washing the coach check for damage to the skin, caps, skirts, and moldings.

If you use a tar or road oil remover, make sure that the product is safe for painted surfaces.

WARNING:	**In the first thirty days that you own your coach do not use an automatic wash. Stiff brushes or sponges may damage the surface. Do not wax or polish the coach for the first sixty days.**

The Trek is coated with a very durable polyurethane paint and acrylic urethane clear coat. No wax is necessary. For the first six months to a year all that the coach will need is to be washed occasionally. After that, you may wish to polish the coach every other year to keep it looking its best. Use a good polishing compound, not a wax.

When cleaning the exterior do not neglect the exposed metal. Usually all that is necessary is the same soap and water solution used on the rest of the coach.

Do not use chrome polish on any metal except chrome, and never use steam, caustic soap, or auto polish on the aluminum parts. On aluminum you may use a tire sidewall cleaner, but rinse thoroughly with clean water.

Moisture enters locks, hinges and crank handles and then may freeze. As the temperature drops, oil and grease begin to thicken, making operation difficult. Eliminate such problems by using powdered graphite for lubrication instead of a petroleum lubricant. Squirt the powder into locks, hinges and cranks. Wipe away the excess.

The window tracks should be inspected and cleaned along with the rest of the coach. If windows do not open easily, clean the tracks with water and a small stiff brush. You can lubricate the tracks with a silicone lubricant.

INSPECTION

While cleaning your coach you should also inspect the exterior for damage and leaks. Any flaw that might allow moisture to penetrate the exterior should be repaired promptly. Fixing a leak is generally much cheaper than fixing the damage the leak can cause.

Almost all leaks occur at seams, such as around the windows, skirts, or caps. All of these must be carefully inspected for signs of problems. Look for bent moldings and flanges, missing or loose screws and rivets, and sealant that have cracked, peeled, or separated.

WARNING:	**To prevent water from leaking into the interior of the coach, the sealant around vents along the front, rear, and roof caps should be checked every six months and replaced at least once a year.**

Check each of the following areas for problems:

- On the roof, where the caps meet the roof skin, and around vents and air conditioners.
- On the walls, where wall skin meets the skirts, roof, cap, and other skin pieces.
- Around every window, vent, utility door, and entry door.
- Inspect the waste holding tank piping and termination.
- The cargo areas. (Designed to resist water, but they are not waterproof.)

INTERIOR MAINTENANCE

The interior of your coach will benefit from regular care. For the most part, maintaining the interior of your coach is much like maintaining a home. Most products needed for cleaning can be purchased at a grocery store. When using stain removers, always test an inconspicuous area first.

Cabinetry

Wooden surfaces should be cleaned with non-abrasive wood cleaners. Occasionally, you may wish to apply a liquid spray wax. Humidity is the greatest enemy of wood. Your coach has cabinets made of solid hardwoods that are resistant to humidity damage. However, when storing your coach in a humid climate, use a dehumidifier to help safeguard the wood.

Countertops

Genovese and Fountainhead (optional) counters are built to be durable and beautiful. To prevent scratching, all counter tops should be cleaned with a non-abrasive cleanser.

Do not put hot pots or pans directly on any counter top.

Scratches in the countertops can be removed by careful buffing. The proper buffing materials can be purchased in home centers and cabinet supplies shops.

Your upholstery can usually be cleaned with mild soap and water. Vinyl can be cleaned with vinyl cleaner.

When using a stain or spot remover, place a cloth on the underside of the fabric wherever possible. This way, if color bleeds, it will bleed into the cloth rather than into the fabric. For stubborn stains, consult a professional cleaning service.

For UltraLeather, daily care requires only wiping off the dust and dirt with a soft, dry cloth. This synthetic material is durable, stain-resistant and requires very little care. Spots are easily lifted with a mild detergent - for tough spots a mild cleaning fluid may be necessary. For information on specific types of stains and their removal, see the manufacturer's instructions.

Bathroom Fixtures

The shower, sink, and toilet in the bathroom have either a gel coat or a Genovese finish. Countertops are made of either Genovese or Fountainhead. These can be cleaned with a liquid cleanser. Do not use scouring powder, it will scratch the surface. Brass fixtures can be wiped with a clean, dry cloth to prevent water spotting. Shower glass enclosures can be cleaned with glass cleaner when needed.

Dash & Plastics

Your dash is covered with vinyl. Vinyl should be wiped down with a damp sponge and if needed, a diluted household cleaner.

Plastic surfaces need special care to prevent scratching. Use a good quality plastic polish. Follow the instructions on the container. For everyday dusting, wipe with a clean, dry cloth. Never use paper towels to wipe the surface, as they are abrasive and will scratch the finish.

Walls & Ceilings

The wall and ceiling coverings should be wiped down with a sponge dampened with a mild soap/water solution. Use only a minimum amount of water to avoid water spotting. Never apply or spray full strength cleaner directly onto the surface. It could damage the wall coverings.

Doors & Hinges

If the door panel becomes hard to slide, lubricate the track using a silicon auto wax or lubricant that will not leave a residue. You can use furniture polish as well.

If the cabinet doors are out of adjustment, realign them by adjusting the hinges. The special Euro-style hinges are not screwed into the wood of the cabinetry; instead they are more like a clamp that can be adjusted by loosening the hinge with the single screw, aligning the door as necessary and tightening the screw.

Carpet

Top-quality, residential, stain-resistant carpet is used in all Safari coaches. Clean them as you would carpets in your own home. Normal vacuuming is sufficient day-to-day. Consult a professional carpet cleaner to shampoo the carpets.

If stains occur, clean immediately by blotting the area with soap and water. If the stain persists, consult a professional carpet service or your carpet manufacturer listed in Appendix A.

Wood Floors (OPTIONAL)

Clean the wood floors in your coach by vacuuming or sweeping when dirty. Use a damp sponge mop to wipe away dust and spills. Once or twice per year, use a non-abrasive floor cleaner with a damp sponge mop to dress coat the floor and return its natural luster.

WARNING:	**Always make sure to ventilate the coach by running the roof fans or opening doors or windows when using any cleaners, polish or lubricants inside the coach.**

CHASSIS MAINTENANCE

A Workhorse Custom P-series chassis manual is included in your warranty package. This section outlines the enhancements Safari has provided and highlights important topics from the chassis manufacturer's manual. It is not a replacement. Keep your chassis manual handy for reference and for service information.

Daily Inspections:

- Check fuel/water separator.
- Check coolant level.
- Check transmission fluid level.
- Check engine oil level.
- Check tires for pressure and unusual damage.

Weekly Inspections:

- Check belts for proper tension.
- Check power steering fluid.
- Check engine fan.
- Check batteries.
- Check brake master cylinder fluid level.

Every 6,000 miles:

- Check air intake system for damage.
- Check steering box for leakage.
- Check hydraulic fluid reservoir level, and inspect lines.
- Check air filter minder. If red, replace air cleaner.
- Check rear axle lubricant level.
- Lubricate front axle king pins, steering linkage, drive shaft, U-joints, and slip yoke.

Regularly scheduled maintenance should be followed as noted in your chassis manual.

Generator

Whether LP-Gas or gasoline-powered, your generator contains a complete engine, which has the same kind of maintenance requirements as any engine. This includes lubrication, inspection of coolant level and other procedures listed in the generator manual. The Coach Monitor Panel includes a clock that displays the hours of usage for the generator. Monitor the clock and perform the maintenance operations required by the schedule in the manual.

LP-Gas

Never neglect your LP-Gas system. Regularly trace the lines and look for flat or kinked spots. It is wise to inspect and test the system before and after long or rough trips. Make sure that cargo cannot crush or damage the lines. Finally, turn the gas on and check each fitting for leaks. Wipe each fitting with soapy water and look for bubbles. Read the chapter on LP-Gas for further instruction.

Battery Care

Batteries also require maintenance on a regular basis. Your coach has two sets of batteries - one set for the house 120 VAC requirements, and one set for the engine. Remember to check both sets regularly. Identify each battery cable to be positive or negative before making any connection. Always connect the negative ground cable last.

Make sure that each battery is clean and dry, and that all connections are tight and free from corrosion and oxidation. You should remove the cables from the terminals and clean both the cables and the posts with a battery brush on a monthly basis. Check that each battery has the proper electrolyte level, and if necessary add distilled water.

Never add sulfuric acid or other electrolyte to the battery - it is the water that evaporates not the electrolyte. Finally, make sure that the batteries are charged, especially before storing the unit.

Fuel

The Vortec engine is designed to run on regular unleaded gasoline. The diesel engine runs on Grade 2 or 2-D climatized diesel fuel. Diesel fuel is rated by 'cetane' number. This should be no less than 40. In cold climates or high elevations this rating should be 45 or higher.

Tires

While you are inspecting the rest of the exterior, you should also pay attention to the tires. Tires are crucial for safe and comfortable driving, and also can indicate problems with the suspension. At least monthly, and certainly before any long trip, tires should be inspected.

WARNING: The most common cause of tire failure is improper inflation. A plate in the interior of your coach lists the correct pressures. Tire pressure should be checked while the tires are cold.

Check the tread of each tire. If the tread has worn to less than 1/16", have the tire replaced promptly. Check for abnormal wear patterns. The tire should wear evenly across. If the wear is not even it can indicate improper balancing, alignment, inflation, or bearing wear. Take your coach to a service center for maintenance.

If there is any damage to the tire, such as cuts, bulges, or peeling tread, replace the tire immediately. Remove any rocks lodged in the tread. Check for loose lug bolts.

Even standing still, tires can age and wear. Tires have two major enemies: sunlight and unchanging weight. The ultraviolet rays in sunlight age the tire and cause dry rot of the tire walls. Unchanging weight creates weakened flat spots.

If your coach will sit for any length of time, cover the tires with cloth or cardboard. Use jacks or levelers to reduce the load on the tires when practical. Rotating the tires to a different position periodically is also recommended to avoid a flat condition on the tires. When replacing tires, always select a tire of the same size and specifications.

The front end of your coach was professionally aligned prior to leaving the factory. Remember, cargo loaded into your coach affects wheel alignment. Therefore, before your first trip, you should load your coach - complete with all the fluids, diesel, propane, food and gear you will need - and then have the coach realigned. GVWR (gross vehicle weight rating) and GCWR (gross combined weight rating), plus the distribution of the load, make a difference in the alignment of your coach.

Uneven tread wear indicates realignment needs. Do not ignore these signs. Have an approved service center check your vehicle once each season for alignment and tire balance.

WARNING:	**Special equipment is required to change the tires on your coach. Only a qualified professional should change tires. The lug nuts are tightened to over 450 ft-lb. of torque - far more than any standard torque wrench provides. After a tire has been installed, have the lug torque checked at approximately fifty miles and again after 500 miles.**

Coolant

Your coach has a coolant expansion tank mounted above the engine. Access the coolant tank through the rear grill. It is through this tank that you should check the coolant level and add more liquid if necessary. A sight glass on the tank lets you determine whether the level is sufficient without opening the tank. If no liquid appears in the window, should add coolant.

To add coolant, first open the tank and add the coolant to nearly fill the tank. Replace the cap on the tank and close the bleeder valves.

WARNING: **Do not add coolant through the fill on the radiator. Hot liquid or vapor can escape and cause severe burns or injury when opening the radiator. Always add coolant through the expansion tank above the engine.**

~ NOTES ~

STORAGE - SECTION 10

Storage Overview

To keep your coach in proper condition while it is stored, you must make preparations. The first thing to consider is the storage area itself. Obviously an inside area is preferable to outside storage.

A heat source is also valuable since it will help control condensation and prevent mildew.

Make sure that you inspect the coach regularly. Many of the problems that occur during storage are easily fixed if caught early. Follow the same inspection routine you use when on the road. Be sure to be alert for leaks, water damage, and mildew. You will also want to run the engine briefly, along with the dash and roof air conditioners, and generator.

WARNING:	**Your warranty does not cover damage due to neglect or natural causes during storage. You are responsible for maintenance of your coach during storage.**

Storage Preparation

The following sections detail, by system, the procedures needed to prepare your coach for long-term storage.

Plumbing

The most important system to prepare is your plumbing. Even if freezing temperatures are not expected, we still strongly recommend you prepare for the worst.

There are two ways to winterize your plumbing: draining the system or adding potable antifreeze. Safari recommends that you drain the system completely before storing for an extended length of time.

WARNING:	**Use only potable anti-freeze approved for use in RV water systems. Never use automotive, windshield, or any other non-potable anti-freeze.**

To drain your system, start with the water tank. Open the tank drain valve and leave it open. When empty, start the water pump and open several faucets. Run the pump until no more water comes out. Be sure to shut off the water heater. The switch is located above the entry door.

Open the low-point drain valves and all hot and cold faucets in the water system service bay. Open the shower flow valve (on the showerhead) and place the showerhead on the shower floor to drain.

Drain the water heater by removing the drain plug. Allow the water to drain completely with all hot water faucets open. Care must be taken to avoid hot water burns. Make sure to open the flush valve on the toilet and leave it open. See the manufacturers' manuals for details.

Finally, if possible, blow the lines out with compressed air. Insert a compressed air source - no more than 35 PSI - into the city fills connection. Be sure to use a water trap or similar device to prevent entry of contaminants from the air tank into the water system. Make sure that all faucets and valves, including the toilet, are open. No special adapter is necessary. However, you may wish to purchase an air chuck for this purpose, available from most RV stores.

Waste Water System

Preparing the waste systems will prevent damage and also control odors. Empty the tanks, as outlined on page 5-5 of this manual.

Every sink, shower, and equipment drain should be flushed with a hot soapy water solution, then rinsed. A cup of potable RV anti-freeze should be added to each "P" trap in each sink and shower. The tanks should be rinsed. If possible, add a chemical deodorant to the black waste tank and allow it to stand for several days. Completely drain and rinse each tank.

The sewer termination assembly should be cleaned. The knife valves should be lubricated with light oil. The toilet valve should also be lubricated.

Other Systems

Before storing your coach for extended periods of time, add an algaecide to the diesel fuel system.

Your LP gas system requires virtually no maintenance. Simply turn the flow valves off. Do not attempt to drain the system.

The generator requires the same type of attention as any engine. A full schedule of maintenance requirements is given in the generator manual.

Your roof air conditioners should be operated occasionally to ensure the compressor seals remain lubricated. The dash air should be turned on for a few minutes while the engine is running.

There is a 12 VDC power switch on your stairwell that shuts off 12 VDC power from the house batteries. By setting this switch to the OFF position, you can avoid draining these batteries. Be sure all batteries are fully charged before long-term storage.

If the coach is stored for a short period (two weeks or less) plug it into external power. This will retain a full charge on the coach batteries. For extended periods, disconnect the cables on the batteries.

WARNING: Be sure all batteries are fully charged before long-term storage.

MOISTURE PROBLEMS

One of the most common and expensive problems that can arise during storage is moisture damage. When in storage, leaks can go undetected, condensation can collect, and temperature extremes can increase moisture damage. Your entire coach is vulnerable. Fabrics can become mildewed. Cabinetry can swell and split. Walls, if penetrated, can rot and warp. Any of these problems can be expensive to repair and are not covered by your warranty. Fortunately, moisture problems can easily be prevented with just a little foresight. There are three factors that cause or contribute to moisture problems. All of these are best controlled if you keep your coach indoors.

WARNING: Outdoor storage of a coach is not recommended for long-periods of time.

Water's first path of entry is a leak. Leaks obviously open the walls and interior to penetration by rain, snow, or dew. Therefore, inspect the coach for leaks before storing it, and check it periodically during storage.

Temperature fluctuations increase the amount of condensation and make wood more vulnerable to damage. Below freezing temperatures are particularly hard on your coach. Therefore, strive to maintain a constant temperature in your coach. Do not attempt to use the coach furnace for this purpose.

Humidity is the source of condensation. The primary defense against humidity is circulation. If you are storing your coach in a climate-controlled area, open all the doors, cabinets, closets and drawers to allow air to move freely through these confined spaces. Slightly open at least two windows so air can move through the coach. Inspect the coach regularly for signs of condensation.

SERVICE - SECTION 11

Service Overview

We want to make sure you receive a quality unit that will serve you with a minimum of problems; however, your coach contains thousands of components, assembled by hundreds of technicians, with countless procedures. These components are subjected to conditions far harsher than any found in stationary housing. Our Quality Assurance department puts each coach to the test with procedures that check vibration, dust, and extremes in temperature and humidity. Occasionally, some problems will arise.

We have a full service program designed to take care of you and your coach. The cornerstone is the Service and Warranty department, and its fully equipped service center. In addition to working on your coach, our technicians can give technical advice over the phone and arrange for service by other centers across the country. We take pride in serving you.

To get the most from our service system, there are a number of things you should know. This chapter outlines our procedures and gives many recommendations for you to follow when something happens to you on the road.

Obtaining Service

If your coach needs service when you are home or on the road, there are Authorized Service Centers located across North America. If an appliance in your coach needs service, the service center will also act in your behalf to make or arrange for repairs on most of the appliances under warranty. See the Appliances section of this chapter for details. There is a listing at the end of this chapter of the manufacturers' service and warranty phone numbers in case you wish to contact the manufacturer directly.

Service Centers

We support three fully equipped Factory Service Centers for both warranty and non-warranty service. One is located near corporate headquarters in Harrisburg, Oregon. There is another on the west coast in Bend, Oregon, and the east coast in Brandon, Florida. These centers work by appointment only. You can make an appointment by calling the numbers listed at the end of this chapter.

The Factory Service Center is very popular, especially during the summer months. Please call well in advance for service. Drop-ins cannot be accommodated.

The Service Center also provides service at major rallies across the country. Crews from the factory provide as much service as possible in the limited time allowed. This service is free, but there is a charge for parts out of warranty.

Technical Support

Technical Support is a valuable source of advice and information for you and for technicians working on your coach. If another service center needs specific information on a product, they can obtain it by calling our factory technicians. The technicians are not a replacement for your manuals, but they will answer any questions not covered in these books.

Owners that are considering modifications to their coaches should consult Technical Support prior to making any changes as this may result in a loss of warranty coverage.

Road Service

If you have problems with your coach during the warranty period, your first contact should be your dealer. However, your dealer is not the only service center available to you. Any authorized service center can work on your coach during the warranty period as long as it is prearranged.

WARNING: **If your coach requires service somewhere other than at your dealer, call Technical Support before work commences. They will make arrangements with the service center for reimbursement of the cost and exchange of parts, if necessary. Work that is not prearranged may be denied coverage under your warranty.**

Most defective parts must be returned to the Warranty Department to be reimbursed. The part should be shipped with a copy of the invoice for the new part. Warranty needs the part to determine the nature of the problem. Without it, we cannot reimburse you or the service center. Please consult with Technical Support before discarding any part.

Most service centers require appointments for maintenance and most repairs. Plan service in advance whenever possible in order to encounter fewer problems.

Appliances

Each of the appliances in your coach, including the generator, water heater, furnace, air conditioners and galley appliances, has a warranty provided by its manufacturer. The first step in ensuring quality warranty service for these items is to fill out every warranty card in your pack and send them to the manufacturers.

Please note that warranty does not warrant the various appliances in our coaches. These are each covered by their own manufacturers' warranties. However, if the warranty for an appliance that requires repair is in effect, the service center will act in your behalf to repair or replace it with no cost to you. Claims on items not covered by warranty should be handled through the appropriate manufacturer. This includes labor for replacement.

While Technical Support will assist you with warranty work, the following standard or optional items must be handled through the manufacturer: generator, tires, batteries, stereo components, televisions, VCRs and microwaves.

Many manufacturers have authorized service centers located across North America and these generally offer the easiest and best service. To find one of these centers, consult the literature provided or call the manufacturer directly. A listing of manufacturer's phone numbers is located at the end of this chapter.

A second option is to employ a reputable service center. The key to efficient service is to contact the manufacturer before having the service performed. In most cases, the manufacturer will work with the service center to take care of your problem.

WHERE TO CALL

The following chart lists the service numbers of many of the companies with products in your coach. This is the best place to start for support on their products.

Make sure that you call the correct manufacturer. Look for the manufacturer's label on the appliance and look up the correct company on the list. A toll-free number is listed where available. If you are unable to find the number for the correct manufacturer, call Technical Support.

Service Centers		
Bend Service Center @ 62955 Boyd Acres Rd., Suite B Bend, OR 97701	Service appointments	800-344-6332 541-317-3653 (fax)
Harrisburg Service Annex.@ & Magnum Manufacturing 455 Peoria Road Harrisburg, OR 97446	Service appointments Technical Advisors & Warranty Claims	800-283-0869 800-344-6332
Tampa Service Center 10333 Woodberry Tampa, FL 33619	Service appointments	813-657-0678 813-657-8308 (fax)

Manufacturers Customer Service Numbers		
Product	Manufacturer	Service Numbers
Air Conditioner - Dash	Acme	800-552-2263
Air Conditioner - Roof	Duo-Therm	800-544-4881
Antenna (TV)	Winegard	319-754-0600 or (800)288-8094
Awnings	Carefree	800-621-2617
Camera	Jensen	800-732-6866
Carpet	Catalina	800-421-6723 or 760-772-2986
CD Player	Kenwood	800-536-9663
Chassis/Engine	Workhorse Custom Chassis	877-946-7731 (toll free)
Dash Radio	Kenwood	800-536-966
DSS (Satellite) Receiver	Datron	800-287-5052
Electric Step	KwikeeSCS	800-736-9961 or 817-293-5313
Fuel Filter	Workhorse Custom Chassis	877-946-7731 (toll free)
Fire Extinguisher	BRK	800-392-1395
Furnace	Suburban	423-775-2131
Furniture	Homestyle	800-574-0574
Generator	Onan	800-888-6626
Inverter	Heart (Xantrex)	800-446-6180
Levelers	RVA	760-746-5732
LP Gas Tank	Brunner Engineering	800-753-8265
Microwave Oven	Sharp	800-237-4277 or 800-526-0264
Power Train	Workhorse Custom Chassis	877-946-7731 (toll free)
Range	Atwood	800-873-4328
Refrigerator	Dometic	800-544-4881
Roof Vents (Galley)(Bathroom)	Fantastic FanVentline	800-521-0298 or 800-349-6321

Manufacturers Customer Service Numbers		
Product	Manufacturer	Service Numbers
Satellite System	Datron Sony Receiver	800-287-5052 or 800-222-7669
Solar Panel	Photowatt	877-262-8749 (toll free)
Television	RCA	877-266-2728
Tires	Michelin	800-847-3435 (M-F 8:30a.m. - 6:00 p.m. EST)
Toilet	Thetford	800-521-3032
Transmission	Workhorse Custom Chassis	877-946-7731 (toll free)
VCR	Sony	800-222-7669
Water Heater	Suburban	423-775-2131

LOCATION REFERENCE GUIDE - APPENDIX A

Appendix A
Location Reference Guide

This appendix provides charts and tables giving reference information. This information was correct at the time of printing, but is subject to change without notice. The presence of certain options may also cause changes affecting these tables. The following abbreviations are used in this appendix:

PS = Passenger Side
DS = Driver's Side

Reference Guides

The following tables are designed to help you locate various items in your Trek. The location of some items may vary depending upon the floor plan.

Plumbing & Waste

Function	Location
Fresh water tank	Behind rear wheels
Black waste tank	Under toilet
Grey waste tank	Under floor between rails
Water tank drain valve	Fresh water tank DS & PS
Low point drain valves	Water service center
Water pump	Behind Water service center
Water heater	Lower galley cabinet or wardrobe, under cover
Water filter	@ water pump

APPLIANCES AND CONNECTIONS

Function	Location
Water service center	DS; behind rear wheels
LP gas tank	PS; behind front wheels
LP furnace	Under refrigerator
Generator	DS; behind front wheels

ELECTRICAL

Function	Location
Transfer switch	DS; front of rear wheels (in basement)
House batteries	PS; behind rear wheels (under entry step)
Chassis batteries	DS; behind front wheels
Coach 12 VDC power switch	Stepwell near entry door
Inverter remote switch	Galley corner (or back of galley lower cabinet on 2480)
AC breaker panel	Bathroom lower cabinet
Fuse panel - house	Bathroom lower cabinet
Chassis & dash 12 VDC fuse panel	DS; Front hood access

MISCELLANEOUS

Function	Location
Coach monitor panel	Above entry door
Front thermostat	Above sofa
Generator switch	Above entry door
Entry step switch	Above entry door
Water pump switch	Above entry door

ENGINE AND CHASSIS

Function	Location
Fuel tank	Between rails, near rear
Fuel fill	DS; behind rear wheels
Oil fill	Front hood access
Oil dipstick	Front hood access
Transmission fill & dipstick	Front hood access
Hydraulic fluid reservoir	Front hood access
Fuel/water separator	Engine
Coolant fill	Front hood access
Oil filter	DS; rear best reached from below
Air filter	DS; in front of front tire, best reached from below
Secondary fuel filter (Diesel only)	Top rear of engine, best reached from below

Safari
91320 Coburg Industrial Way
Coburg, OR 97408

FAX: 541-335-8213
http://www.safarimotorcoaches.com