MOTORHOME AND MINI - MOTORHOME

OWNERS MANUAL

Effective January 15, 2002 Our area code has changed 574-264-2900 Ext. 300

by DAMON CORPORATION





WINTERIZE PROCEDURE

- 1) Open gate valves to drain all black, gray tanks. **DO NOT** close gate valves.
- 2) Open low-point drains.
- 3) Turn water pump on and drain all fresh water in system.
- 4) Open all faucets in unit: kitchen sink, bathroom sink, toilet, tub and or shower, exterior shower. When air is coming out of the faucets turn water pump off.

 Then close all faucets.
- 5) Hook up pressure regulator with valve closed to city water connection.
- 6) Remove water heater plug (relieve pressure first).
- 7) Open valve on pressure regulator to pressurize water lines.
- 8) Re-open all faucets until only air comes out, then close faucet. Do one (1) faucet at a time.
- 9) Hold toilet valve open until only air comes out, then close toilet valve.
- 10) Plug low point drain to increase pressure to blow out water heater.
- 11) Continue to blow out system for five (5) to ten (10) minutes.
- 12) Close air valve and remove air pressure regulator
- Pour one (1) cup of anti-freeze down all drains: sinks, tub, and shower. Wipe excess anti-freeze out of sinks, tub and shower.
- 14) Leave low-point drains open and leave fresh water tank drain open. Close all faucets and gate valves.
- 15) Add winterized sticker.

LIMITED WARRANTY

SUMMARY

Damon Corporation, 52570 Paul Drive, Elkhart, Indiana 46514 ("Warrantor") warrants to the ORIGINAL CONSUMER PURCHASER and any subsequent purchaser for a period of ONE (1) year from the date of purchase by the original purchaser, or for the first Twelve Thousand(12,000) miles of operation, whichever occurs first (Warranty Period), that this motor home shall be free of DEFECTS in materials and workmanship attributable to Warrantor in BODY STRUCTURE ONLY. This Warranty only covers material components and parts of the body structure manufactured and assembled by Warrantor.

TYPES OF THINGS EXCLUDED FROM WARRANTY

By way of illustration, Warrantor is not responsible for claims relating, but not limited to the following: (1) defacing: scratches, dents, chips and defacing on any surface or fabric of this motor home, not caused by Warrantor; (2) routine maintenance: including recaulking the body of the motor home, tightening screws, adjusting doors, and maintaining the air conditioning; (3) the chassis and mechanical parts of this motor home: including any parts of the engine, drive train, steering mechanism, brake system, wheel balance, muffler, tires, tubes, batteries and gauges; (4) all appliances: including air conditioners, water heaters, ovens and ranges, refrigerators and furnaces; (5) radio, tape deck, VCP, TV, and speakers.

WARRANTOR'S OBLIGATIONS - HOW TO GET WARRANTY SERVICE

Warrantor will remedy defects in materials and workmanship caused by Warrantor in the BODY STRUCTURE ONLY of this motor home. Warranty performance can only be obtained at Warrantor's authorized dealers and service centers and from Warrantor. All costs incurred in transporting this motor home for warranty services shall be borne by Purchaser. Warrantor shall remedy the defects within a reasonable time, not to exceed sixty (60) days after delivery by Purchaser. All Warrantor's expenses in remedying the defect shall be borne by Warrantor.

PURCHASER OBLIGATIONS

The purchaser shall give written notice to the Warrantor at the above address of any defect within fifteen (15) days after it is or should have been discovered, and any action to enforce it shall be commenced more than six (6) months thereafter or after expiration of the warranty period.

EVENTS DISCHARGING WARRANTOR FROM OBLIGATION UNDER THIS WARRANTY

Misuse or neglect, including accident, unauthorized alteration, failure to provide reasonable and necessary maintenance including six-month inspections of the motor home body, use of the motor home for rental or commercial uses or any other use other than to drive the motor home only for personal use, shall discharge the Warrantor from any obligation under this warranty.

DISCLAIMER OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

THE ORIGINAL PURCHASER OF THIS MOTOR HOME AND ANY PERSON TO WHOM THIS MOTOR HOME IS TRANSFERRED, AND ANY PERSON WHO IS AN INTENDED OR UNINTENDED USER OR BENEFICIARY OF THIS MOTOR HOME, SHALL NOT BE ENTITLED TO RECOVER FROM WARRANTOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES RESULTING FROM ANY DEFECT IN THE MOTOR HOME.

Some states do not allow the exclusion or limitation of consequential or incidental damages, so the limitation or exclusion may

not apply to you.

LIMITATION AND DISCLAIMER OF IMPLIED WARRANTIES

THE WARRANTOR EXPRESSLY LIMITS ALL IMPLIED WARRANTIES OF MECHANTABILITIES FITNESS FOR A PARTICULAR PURPOSE AND OTHER IMPLIED WARRANTIES TO THE WARRANTY PERIOD OF ONE (1) YEAR OR TWELVE THOUSAND (12,000) MILES. THE WARRANTOR EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND ALL IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AFTER EXPIRATION OF THE WARRANTY PERIOD.

There is no warranty made by us beyond that contained in this warranty. No person has the authority to enlarge, amend, or modify

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

DESIGN CHANGES

Warrantor reserves the right to change the design of its motor home from time to time without notice and without obligation to make corresponding changes in its products previously manufactured.

LEGAL REMEDIES OF PURCHASER

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. No action to enforce this Warranty shall be commenced later than six (6) months after discovery of any defect or after expiration of the warranty period.

REGISTRATION CARD

The purchaser of such motor home, as well as any person to whom such motor home is transferred, should complete and return to warrantor the attached registration card, but this is not necessary in order to obtain warranty performance. A purchase receipt or other proof of date of original consumer purchase will be required before warranty performance is rendered. Additional registration cards will be provided free of charge by Warrantor or any of its authorized dealers upon request. Federal law requires that Warrantor maintain records of the names and addresses of the owners of its motor homes and the respective identification numbers, of such motor homes. Warrantor's possession of the information contained in such cards will also assist Warrantor in the prompt servicing of such motor home.

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Your motorhome has been designed to provide you with many years of carefree, pleasant traveling and vacationing. This manual describes many features of your motor home and provides a guide to operating procedures so that you can obtain the best performance from those features. Your motor home has been designed to conform with, or exceed, the American National Standards Institute A119.2,NFPA 501C, CANADIAN CSA STANDARD Z-240 (Canadian-built or units built for Canada), and applicable motor vehicle standards. These standards establish the plumbing, heating, electrical and other requirements for quality and safety. Compliance with these standards is indicated by the SEAL attached just outside the entry door. This SEAL is the outward sign of internal quality.

Like all finely crafted equipment, your motorhome will require care and regular maintenance in order to retain its maximum performance characteristics. This manual, along with the information provided in your Owner's Information Kit and Chassis Operator's Manual outlines important areas of maintenance and provides a maintenance schedule that you should follow to ensure safe, trouble-free service. Study these instructions carefully. A good working knowledge of your unit and how to care for it will help you enjoy many miles and years of recreational living.

If you have any questions regarding operation, maintenance, or service, please contact your dealer immediately so he can assist you. Your dealer's Service or Sales Department is equipped to handle most any problem which might occur. Customer service is of utmost importance to your dealer and is just as important to the manufacturer. This manual contains a section (on inside of front cover) outlining the warranty and explaining your rights and obligations, as well as the rights and obligations of the dealer and manufacturer, under the terms of the warranty. Please read this section carefully. You will be better informed in case you have a warranty related problem and your dealer will be better able to get you back on the road again in a timely manner.

We sincerely believe that your dealer and the factory representative will be able to solve any problem

which might arise. If their combined efforts are not satisfactory, please send a letter describing the circumstances to:

DAMON CORPORATION 52570 Paul Drive Elkhart In. 46514

Please include the dealers name, and model and serial number of your motor home.

Thank you for choosing our product. Your dealer and we, the manufacturer, will continually strive to merit your confidence.

NOTE: Some equipment and features described or shown in this manual may or not be optional on your model. This instructional manual is of general nature only. Because of the continuous process of product improvement conducted by DAMON CORPORATION it is possible that recent product changes may not be included in this manual. Specifications may change without notice. This manual is accurate as of date of publication. The instructions included in this manual are intended as a guide, and in no respect extend the responsibilities of the manufacturing subsidiary, parent company or affiliates beyond the standard written warranty as presented in this manual.

NOTE: Photographs or illustrations in this manual are representative of function and may or not be specific in their depiction of actual equipment, fabrics, interior or exterior decor, or design options as installed on or in your motor home.

NOTE: This product is designed for recreational use and short term occupancy only. It is not designed or intended to be used as permanent housing. Use of this product for long term or permanent occupancy may lead to premature deterioration of interior finishes, fabrics, carpeting, drapes, or components. Damage or deterioration due to long term occupancy may not be considered normal, and may under the terms of the warranty, constitute misuse, abuse, or neglect, and may therefore reduce or void your warranty protection.

REPORTING SAFETY DEFECTS

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

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

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to http://www.safecar.gov; or write to:

Administrator, NHTSA, 400 Seventh Street, SW., Washington, DC 20590. You can also obtain information about motor vehicle safety from http://www.safecar.gov.

PLANNING AND PREPARATION

The camping trip is one of the most popular types of vacations, and each year millions of Americans embark on camping trips using some type of recreational vehicle. Proper planning of your trip, including familiarity with your equipment, your itinerary, anticipated activities, and anticipated needs will ensure a pleasurable experience. That is what this manual is all about. The ideas and instructions presented here are intended to help you get the most from your new RV, and enjoy your trip.

READ THE BOOK

A thorough knowledge of your RV is important if you are going to get the most out of the convenience and safety items built into your unit. Be as familiar with it as you are with your personal car or truck. Study all the booklets included in your Owner's Information Kit. These booklets cover details of operation for the major appliances and equipment built into your motor home for your comfort, convenience and safety.

LICENSES

The vehicle licensing laws vary from state-tostate. Check with your state license bureau or nearest branch office for the requirements of your state. Be sure to renew your driver's license if it has or will expire during your trip.

INSURANCE

Personal liability, property damage, collision, and theft of contents may be features of your automobile policy which apply to your RV. Talk to your insurance agent about details for appropriate coverage. Always carry your policy card.

INSPECT AND MAINTAIN

Follow a consistent schedule of inspection and maintenance for your motor home. Your continuing safety and comfort depend on it. This manual includes items of maintenance and recommended maintenance intervals. Adherence to these schedules will minimize the possibility of failure of any important system or part of your motor home. The time spent inspecting and maintaining your motor home will provide you with many years of recreational pleasure.

LOADING AND WEIGHT DISTRIBUTION

Proper loading is one of the most important considerations when traveling in a motor home. Your motor home is built to withstand a certain maximum load. Check the certification label attached to the motor home to determine the safe load limits. For safety's sake, NEVER OVERLOAD THE MOTOR HOME. This manual contains information about proper loading and weighing of your motor home.

CONTROL OF THE MOTOR HOME

Know how to control your motor home on the highway. Be familiar with passing and stopping requirements, and problems that can develop. Know how to brake properly, how to back up and how to turn. Practice in a secluded place until you become familiar with the handling characteristics and techniques of your motor home. Don't overlook the laws of your state or province that govern driving a motor home. Your state Motor Vehicle Department office can provide you with the applicable vehicle codes that spell out your rights and responsibilities as a motor home owner.

PRE-TRAVEL CHECK

Whenever you depart, be it from your home, rest area, or campsite, you should perform these pre-travel checks:

TIRES should be inspected before each trip for uneven wear, road damage, foreign objects, peeling or bulging, and correct tire pressure. Heat generated by surface friction will increase the tire's air pressure, therefore do not bleed air out of a hot tire. Check tire pressure after the vehicle has been parked for at least one hour. Inflate tire to recommended pressure as indicated on the side of the tire or in tire manufacturer's instruction booklet.

CAUTION: Proper tire inflation is extremely important.

CAUTION: When purchasing a new tire, be certain it is the same size and has the same ply rating and load range as the original tire. DO NOT mix radial ply with bias or bias-belted tires.

WHEEL LUGS must be tightened to the specifications in the chassis manufacturer's owner's manual.

LIGHTS should be tested, including brake lights, warning flashers, clearance lights, taillights, turn signals and headlights. Clean all lens covers.

REARVIEW MIRRORS should be adjusted so the driver can see to the rear on both the right and left side of the unit.

POWER CORD (120-Volt Shoreline) must be unplugged from the external source, and properly stored for transit also making sure the cord hatch is secured.

WATER FILL hoses must be disconnected, properly drained and stored, and the caps and hatches secured. Fill the fresh water tank as required prior to storing hoses.

SEWAGE should be emptied from the holding tanks for transit. Termination valves must be closed and locked. The sewer hose must be removed from the termination valve outlet and stored. Termination cap must be securely fastened to the termination outlet.

ENTRY STEP must be returned to its travel position. Pay special attention to this every time you move your unit. Severe damage may result if not retracted during transit.

LP GAS TANK level and gas line connections should be checked.

CAUTION: Some states prohibit vehicles equipped with LP gas tanks from using tunnels. A few other states prohibit traveling with the Service Valve open and the pilots lit. Check the regulations of the states through which you intend to travel.

WINDSHIELD should be clean, wiper blades inspected, and windshield washer reservoir filled.

INTERIOR DOORS AND DRAWERS should be closed and secured. Loose items should be secured or stored away.

EXTERIOR ACCESS DOORS for storage and equipment should be closed and locked, also making sure that loose items are secured or stored for transit.

REFRIGERATOR door should be secured with the travel latch, and the items inside made ready for transit.

WINDOWS AND VENTS should be closed and secured or adjusted as desired.

WARNING: REAR WINDOWS SHOULD NOT BE OPENED DURING TRANSIT AS EX-HAUST GASES MAY ENTER YOUR VEHICLE.

LOADING

A motor home chassis (springs, wheels, tires, axles, and frame) is designed to carry a certain maximum load. This load includes everything; the weight of the empty motor home itself, your belongings, fuel, fresh water, waste water and anything else that may be in or attached to the motor home. The maximum load for which the motor home is designed is called the GROSS VEHICLE WEIGHT RATING (GVWR).

Another critical factor is the Gross Axle Weight Rating (GAWR). This is the maximum weight a specific axle is designed to carry and each axle has its own GAWR. The GAWR's do not necessarily add up to the GVWR. Be careful, neither the axle loads nor the vehicle loads must ever exceed their respective weight ratings.

A properly loaded vehicle is safer and easier to drive. Distribute your cargo evenly from side-to-side and front-to-back. Heavier items should be stowed on or near the floor and as centrally located as possible. They should be secured so they cannot slide during a panic stop causing damage, or upset the careful balance you had when you started. Lighter items can be stored in overhead cabinets. Remember to leave space and weight allowance for souvenirs and other items you may purchase during your travels. A properly loaded vehicle can help you conserve fuel and prevent excessive wear on your vehicle's automotive system.

FEDERAL CERTIFICATION LABEL

The Federal Certification Label (found on the panel at left of the driver area, or on drivers door pillar) lists the date of manufacture, GVWR, GAWR (Front and Rear), tire size, rim size, tire PSI, Vehicle Identification Number (VIN), and the type of unit. This information will be helpful in determining proper loading.

CAPACITY

During the design and development of your motor home, the number and size of storage compartments, the liquid tank capacities, and the number of designated seating positions (DSP) are maximized for value and convenience. If the motor home operator fills all liquid tanks to capacity, fills all storage compartments and cupboards to maximum volume and fills all available designated seating positions with passengers, the motor home will probably be overloaded. According to Na-

tional Highway Traffic Safety Administration figures, an average vehicle occupant weighs 150 pounds, each gallon of gasoline weighs six pounds (6.0 lbs.), each gallon of diesel fuel weighs seven pounds (7.0 lbs.) each gallon of water weighs over eight pounds (8.3 lbs.). and each gallon of LP Gas weighs over four pounds (4.2 lbs.).

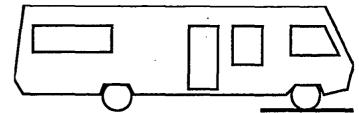
The operator is responsible for analyzing the conditions in which the motor home will be utilized for each trip. The number of passengers and placement of cargo will affect the amount of water cargo that you carry. A smaller passenger capacity for camping provides reasonable cargo capacity for trips taking more than one day. A larger passenger capacity for day use provides less cargo capacity for trips or activities not involving overnight stays. It may be necessary to reduce the amount of water carried and unload some cargo items normally carried for camping in order to provide carrying capacity for the additional day use passengers.

WEIGHT RATINGS

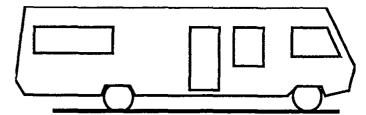
The Gross Vehicle Weight Rating (GVWR) and the Gross Axle Weight Ratings (GAWR) for your motor home, shown on the Federal certification label, are maximum's for a fully loaded vehicle. You must compare the GVWR and GAWR to the loaded weight of your motor home and make adjustments if necessary.

WEIGHING YOUR LOADED MOTOR HOME

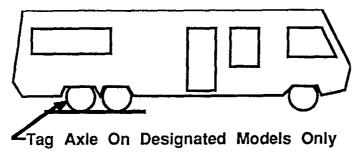
1. Drive the front wheels onto the scale platform and take a reading. This is the front Gross Axle Weight. (Reading 1).



2. Drive the entire vehicle (all axles) onto the scale and take a reading. This is the Gross Vehicle Weight. (Reading 2).



3. Drive forward until only the rear axle(s) are on the platform and take a reading. This reading is rear Gross Axle Weight. (Reading 3).



- 4. Compare reading 2 with the GVWR (Gross Vehicle Weight Rating) of your vehicle. This rating is located on the certification label. If the reading exceeds the GVWR rating, you will have to reduce the total vehicle load.
- 5. If reading 2 is less than the GVWR of your vehicle, check readings 1 and 3 to verify that each is less than the GAWR on the certification label. If either exceeds the GAWR for the axle(s), redistribute enough of the load to ensure that loads on the front and rear axle(s) are within the required limit.

WARNING: DO NOT EXCEED THE RATED LOAD OF THE MOTOR HOME, OR THE RATED LOAD OF ANY AXLE. EXCEEDING THE GAWROR GYWROF YOUR MOTOR HOME CAN CAUSE UNDESIRABLE HANDLING CHARACTERISTICS AND MAY CREATE A SAFETY HAZARD. OVERLOADING YOUR MOTOR HOME MAY ALSO REDUCE OR VOID YOUR WARRANTY PROTECTION.

TRAILER HITCHES AND TOWING

If you expect to pull a trailer with your motor home, please use these guidelines when choosing a hitch and trailer:

- Maximum Hitch Classification: Class II maximum trailer hitch weight of 200# and a maximum trailer weight of 2,000#.
- Trailer weight: Do not tow a trailer weighing more than recommended by the class rating of your hitch, or more than recommended by the chassis manufacturer, whichever is less.

• Gross Combined Weight Rating: GCWR is the maximum weight of which a motor home chassis is rated to power. This rating includes the combined weight of the motor home and the towed vehicle. See the chart below for your unit.

<u>Chassis</u>	<u>GVWR</u>	<u>GCWR</u>
Ford	10,500	18,500
Ford	11,500	18,500
Ford	17,000	25,000
Chevrolet	8,900	13,500
Chevrolet	10,500	17,000
Chevrolet	12,300	17,000
Chevrolet	14,800	17,000
Chevrolet	16,000	19,000
Spartan	16,000	N/A
Spartan	18,000	N/A
OshKosh	16,000	22,000
OshKosh	18,000	22,000

• Gross Combined Weight: GCW is the total weight (including driver, passengers, all cargo, fuels, and fluids) of the motor home and the towed vehicle combined. Compare the GCW with the GCWR. If the GCW is greater than the GCWR, then weight must be eliminated until scale weights are equal to or less than proper ratings.

WARNING: DO NOT EXCEED GROSS AXLE WEIGHT RATINGS OF ANY AXLE. DO NOT EXCEED THE MAXIMUM HITCH WEIGHTRATING. DO NOT EXCEED THE GROSS VEHICLE WEIGHT RATING OF EITHER THE MOTOR HOME OR THE TOWED VEHICLE. DO NOT EXCEED THE GROSS COMBINED WEIGHT RATING OF THE MOTOR HOME. EXCEEDING ANY OF THESE RATINGS MAY CAUSE UNSTABLE DRIVING AND HANDLING CHARACTERISTICS, DAMAGE TO YOUR MOTOR HOME CHASSIS OR TOWED VEHICLE, AND WILL VOID YOUR WARRANTY PROTECTION.

TOWING AUTOMOBILES

If you plan to tow an automobile with your motor home, the tongue weight must not exceed the maximum allowed (200#). The Gross Combined Weight must not exceed the GCWR of your chassis.

WARNING: TOWING DEVICES (OTHER THAN WHEELED DOLLIES) THAT RAISE THE FRONT OR REAR WHEELS OF THE VEHICLE IN TOW OFF THE GROUND CREATE TONGUE WEIGHTS IN EXCESS OF THE MAXIMUM ALLOWED, AND MUST NOT BE USED.

ON THE ROAD

SAFETY BELTS

Seat belts are an important safety feature of your vehicle. Each seat designed to carry passengers while the vehicle is in motion, also known as a designated seating position (DSP), is equipped with a type (1) lapbelt. The number of seats equipped with seat belts is to provide a choice of seating locations. Refer to CARRYING CAPACITY in the loading section for proper loading techniques.

To adjust your seat belt:

- Pivot the buckle at a right angle to the belt and pull to the desired length.
- Make sure the belt is not twisted, and press the tongue end into the buckle end. Be sure the two are latched together, and adjust the belt snugly around your abdomen.
- To release, simply depress the button in the center of the buckle and remove the tongue.

Child restraint seats may be used with the lap belts provided. Check the seat instructions for proper installation, and adjusting. Child restraint seats are required to a certain age. Check the states you are going to be traveling in for the proper age requirements.

WARNING: WHILE THE MOTOR HOME IS IN MOTION, FASTEN SEAT BELTS AND DO NOT ALLOW PASSENGERS TO OCCUPY ANY SEAT OR BED THAT IS NOT EQUIPPED WITH A SEAT BELT.

FUEL SYSTEM

Only use recommended fuel as specified by the chassis manufacturer. Do not over fill the fuel tank, but allow for expansion of fuel (caused by temperature increases) by stopping the filling process when the automatic pump shuts off.

WARNING: MODERN FUEL SYSTEMS MAY BUILD UP VAPOR PRESSURE WITHIN THE TANK AS THE FUEL WARMS DURING USE OR HOT WEATHER. UNDER CERTAIN CONDITIONS, SUDDEN RELEASE OF THIS PRES-

SURE WHEN REMOVING THE FILLER CAP CAN SPRAY FUEL FROM THE OPENING, CAUSING A POSSIBLE HAZARD. WHEN REMOVING THE FILLER CAP, ROTATE IT SLOWLY ONLY FAR ENOUGH TO ALLOW PRESSURE TO RELEASE. AFTER ANY "HISSING" SOUNDS DIE DOWN COMPLETE THE REMOVAL OF THE CAP. TO PROTECT THE GASOLINE SYSTEM FROM EXCESSIVE PRESSURE OR VACUUM, OR FROM SUDDEN RELEASE OF PRESSURE, REPLACE LOST CAPS WITH CAPS OF THE SAME DESIGN AVAILABLE FROM YOUR MOTOR HOME DEALER.

CARBON MONOXIDE SAFETY PRE-CAUTIONS

Carbon monoxide is a colorless, tasteless, odorless gas. It is a by-product of combustion in the engine. The engines in your motor home and generator system produce it constantly while they are running. CARBON MONOXIDE IS DEADLY. Please read and understand the following precautions to protect yourself and others from the effects of carbon monoxide poisoning.

WARNING: EXHAUST GASES ARE DEADLY. DO NOT BLOCK THE TAILPIPE OR SITUATE THE VEHICLE IN A PLACE WHERE THE EXHAUST GASES HAVE ANY POSSIBILITY OF ACCUMULATING EITHER OUTSIDE, UNDERNEATH, OR INSIDE YOUR VEHICLE OR ANY NEARBY VEHICLES. OUTSIDE AIR MOVEMENTS CAN CARRY EXHAUST GASES INSIDE THE VEHICLE THROUGH WINDOWS OR OTHER OPENINGS REMOTE FROM THE EXHAUST OUTLET. OPERATE THE ENGINE ONLY WHEN SAFE DISPERSION OF EXHAUST GASES CAN BE ASSURED.

WARNING: DO NOT UNDER ANY CIRCUMSTANCES OPERATE THE VEHICLE OR GENERATOR ENGINE WHILE SLEEPING.

DRIVING

Once you become accustomed to the feel of the controls and the reference points from the driver's seat, you will find driving the motor home comparable to

driving your family car. Become familiar with the position of the motor home in traffic, and be cautious when maneuvering to allow for the length and width of the vehicle. Always allow extra room to corner and to change lanes. Learn to use the side mirrors to view the road behind. Check them often.

Drive with consideration on the highway, observing all speed and safety regulations. The best cruising speed of your motor home will vary with road and weather conditions.

Remember that your motor home is heavier than a car, making it less maneuverable and harder to stop. Also, because of its greater side surface area, it is more easily affected by cross winds. Allow extra distances for passing and stopping, and drive at a moderate speed, particularly in traffic and in gusty wind conditions.

Driving on winding or mountain roads is not difficult if done with reasonable care: Observe proper vehicle speeds when ascending or descending hills and always operate in the proper transmission range. Downshift on hills to avoid overheating or undue engine loads. Downshift when descending grades. Engine braking power will help control vehicle speed, and relieve some of the strain on the brakes.

Road conditions, terrain, weather, and other driving factors are sometimes unpredictable, and mountain driving or desert temperatures can put extreme demands on drive train components, especially the transmission. Under extreme heat conditions you may need to turn off the vehicle air conditioner to improve engine and transmission cooling.

Allow for the extra height of your motor home and avoid areas having low overhead clearance. Check for low hanging tree branches or other obstructions wherever you drive or park. Avoid low roof heights when pulling in for service. This may be particularly important if you drive with the overhead vents open or if the motor home is equipped with a roof air conditioner, roof rack, or TV/radio antenna.

DASH BOARD/CONTROLS

TILT STEERING WHEEL can be moved to allow additional room for entrance and exit as well as selected driving positions. Operate the tilt mechanism

by lifting the small control lever on the left side of the steering column just below the directional signal lever (some models have the tilt steering lever incorporated into the signal lever). Move the steering wheel to the desired position and release the lever to secure in place.

WARNING: NEVER ATTEMPT TO ADJUST THE STEERING WHEEL WHILE THE VEHICLE IS IN MOTION.

GENERATOR START switch allows remote starting or shut-down of your power generator. When the generator is running a red light on switch will be illuminated. An hour meter shows the total amount of time the generator has been in operation.

AUXILIARY START SYSTEM installed in your motor home permits using the auxiliary RV battery power to aid in starting the motor home engine if the vehicle battery has discharged. When necessary (indicated by one or more clicking sounds when the key is turned to the START position), use the Auxiliary Start System as follows:

NOTE: Always set the parking brake prior to using the auxiliary start system.

- 1. Press and hold the AUX START switch located on the dash.
 - 2. Turn the key to start engine in normal manner.
- 3. Release AUX START switch and operate motor home in a normal manner.

CAUTION: Do not hold the ignition key in the start position for more than 30 seconds. Be careful not to run down the auxiliary RV battery as this could leave you without all 12-volt power.

When operating properly, your vehicle alternator will be able to handle normal vehicle driving requirements and also recharge the batteries in a reasonable time when on the road.

FOG LIGHTS (optional) are offered to provided for more visible driving during foggy conditions.

WIPERS are switched either together or individually (depending on your model). This is a two speed switch for HIGH or LOW operation.

WASHER Switch located next to the wiper switch provides washer fluid to the windshield. Check the washer fluid level prior to any trips. Also be aware of the temperature conditions in which you will be traveling in to allow for the proper type of fluid to add to your washer reservoir.

DASH FANS (optional) provide air flow in the cockpit area. They can be of assistance to the defroster system during cold temperatures, or circulate cool air from your air conditioner during hot weather.

HEADLIGHT switch operates like the one in your automobile. The first position turns on the parking lights. The full out position turns on the headlights. Rotating the knob controls the brightness of the dash lights (set this to your preference).

AUTOMOTIVE AIR CONDITIONER For specific instructions, refer to the information provided by the air conditioner or chassis manufacturer.

CAUTION: The automotive air conditioner places additional load on the vehicle's cooling system. If the engine runs abnormally hot, shut off the air conditioner until it cools down.

HORN switch operates the roof mounted electric horns (optional).

SPOT LIGHT (optional) controls allow you to direct the roof mount spotlight wherever you like. Use good and courteous judgement on items you shine your light on.

REMOTE MIRROR (optional) switch allows you to set the viewing angle of your mirrors from the convenience of the drivers seat.

HEATED MIRROR (optional) switch provides heat to each mirror to eliminate icing or fogging of the mirrors. The switch will illuminate when in operation. There is not an automatic shut off, so when heat is no longer required you must manually turn off the switch.

LEVELING SYSTEM (optional) indicator light (when lit) shows that the leveling system is engaged. The

leveling system should be retracted before attempting to move your motor home. If the leveling system has been retracted and the light is still on, check to make sure the jack legs are retracted properly.

PARKING

When parking parallel to a curb, be sure to allow for poles or obstructions as the front and rear portions of the motor home swing wider than an automobile. Remember that your motor home is larger than your automobile and requires more space. Be careful your unit does not occupy road space or block driveways while parking. When parking on an incline, turn the front wheels into the curb in the direction of the roll to aid the parking brake. Always set the parking brake when parking.

PARKING BRAKES

On a class "A" chassis: The parking brake is engaged by pulling the brake lever (located near the floor and left driver wall) upward. To release push the lever back down.

On a class "C" chassis: The parking brake is engaged by pushing the brake pedal (located near the floor and left driver wall) downward. To release pull the brake release lever upward.

TIRE CHANGE

Change a tire on as level and firm a surface as possible. If you are on the roadside, activate the vehicle's hazard warning flashers. Apply parking brake. Set up flares and/or warning lights. See the chassis manufacturer's owner's manual for specific jacking and tire removal, and replacement instructions which pertain to your unit. Stop at the nearest service facility and have the torque of the lug nuts checked.

CAUTION: Never place the jack under a bumper or edge of the sidewall. Always place the jack as specified by the chassis owners manual. Use the jack only for changing tires. Never get underneath the vehicle when using the jack; never start or run the engine while vehicle is on the jack. Always securely stow the spare tire and return all jacking equipment to its proper storage area.

LIVING AREA

SETUP

You'll want your unit to be level for your own comfort (you don't want items sliding off counters and tables and out of cabinets). But more importantly, the unit must be level in order for your refrigerator and drainage system, both of which function by gravity, to operate properly. Place a level on the bottom of the refrigerator compartment or in a normally level location inside the vehicle to determine levelness.

NOTE: When the unit has been leveled side-to-side and front-to-back, you may wish to permanently attach levels on the front and/or back and sides of the unit or inside near the driver, on the sidewall and dash panel. This will allow you to tell at a glance if you've stopped on a level site, and will help speed up the leveling process.

CONDENSATION

Just as moisture collects on the outside of a glass of cold water during humid weather, moisture can condense on the inside surfaces of your motor home during use in cold weather when humidity of the interior is high. This condition is much greater in a recreational vehicle than in most houses because the insulated walls of the vehicle are much thinner than house walls, and the small size and tight construction of the vehicle allow a quick buildup of high moisture levels in the inside air. Condensation can be a problem when the saturation point is reached as moisture is released in the form of condensation because of the relatively small air volume. Certain amounts of condensation should be expected, especially on cool surfaces such as windows and metal door frames. However, excess condensation can damage walls and ceilings.

Bathing, dish washing, laundry, appliances and unvented gas burners are among causes of added moisture in the air. You can control this by allowing the moisture to escape to the outside. Use your vent hood and fan when cooking. Keep bathroom door closed and the vent or window open when bathing and for even a period of time when you have finished bathing, to allow for dissipation of all the moisture. Don't hang wet clothes in your unit to dry, and if you have a clothes dryer, be certain it is vented to the outside.

In hot weather, air conditioning can help make you more comfortable because it removes excess humidity from the air, while lowering the air temperature.

You can check on the humidity in your unit by installing a humidistat or hygrometer, which measure relative humidity. If humidity levels are persistently high, particularly in winter, a dehumidifier may be necessary.

If you use skirting, be sure that it is ventilated adequately, and be careful not to block engine exhaust.

STORAGE COMPARTMENTS

Storage facilities in your motor home have been designed to remain secure while the vehicle is in motion. Most exterior compartments have key-operated locks. The LP gas compartment is required by fire-prevention regulations to be non-locking. Interior doors and drawers have travel latches when closed. To open drawers lift slightly to clear the catch, then pull open.

When storing articles:

- Always keep tools and equipment stored in areas where they will not shift while traveling.
- Whenever possible, place heavy articles in storage compartments which are low and near the axles for better weight distribution.
- Pack articles carefully in the storage compartments to minimize shifting. If necessary, use straps to prevent movement.
- Be sure liquid containers are capped and cannot tip or spill. Secure all glass containers and dishes before traveling.
 - Secure all free standing furniture.
- Exterior storage compartments may not be watertight in all climate conditions. Carry any articles which could be damaged by water inside the motor home.

WARNING: OUTSIDE STORAGE COMPART-MENTS ARE NOT SEALED OR VENTED EN-CLOSURES, AND ARE NOT ACCESSIBLE FROM INSIDE THE MOTOR HOME. DO NOT STORE FLAMMABLE VOLATILE LIQUIDS, HAZARD-OUS CHEMICALS OR EQUIPMENT IN THESE AREAS.

TABLES AND BEDS

A variety of tables, many of which convert into beds, are used. Several types also can be extended. Have your dealer set up and demonstrate the tables and beds installed in your unit.

DINETTE / BED CONVERSION --- To convert the dinette table into a bed:

- Raise the table several inches to disengage posts from the table supports.
- Reach under the table, raise leg posts from base mounts and lay legs down on the floor.
- Lower table top into position on table rests on face of the dinette seat to complete bed base.
 - Slide seat and back cushion into place over bed base.

The under-seat storage may be reached by raising the cushion frame or, on some models, through the door at the end of the seat.

PULL-UP TYPE — Lift pull-up table from its storage location behind the cabinet. Some pull-up tables have extension leaves which can be added to make additional table surface.

SOFA

Several types of sofas are used. Some are ready to be used as a bed when the bottom is pulled out and the back folded down; others are electric (optional) and are adjusted with the simple flip of a switch. Be certain your dealer instructs you in the proper operation of the type of sofa bed in your unit.

BARREL CHAIRS

To swivel seat, pull up on lever located on the left side of seat and turn seat to desired position. To slide the seat, pull lever located at left side, and move seat forward or backward.

WARNING: BARREL CHAIRS SHOULD BE IN THE LOCKED POSITION DURING TRANSIT.

NOTE: Some barrel chairs DO NOT swivel.

DIVIDER DRAPES & DOORS

A divider drape, to separate the exterior from the living area is included in all models. The drape is attached to the underside of the cabinet above the driver/passenger seats.

A folding divider door, to separate the bedroom area in some models, slides along a track at the top of the doorway or ceiling. Secure open with tieback when not in use.

SYSTEMS

The basic utility systems in your unit can be classified under four general titles: Electrical, LP Gas, Safety Provisions, and Plumbing. This section outlines these systems, describing their function, operation, and simple maintenance. This section is not intended as a service guide. Should a problem arise, we recommend that you contact your authorized dealer.

A monitoring panel (optional on some models) allows you to check the levels of these systems: the volume of fresh water, waste and gray water in your holding tanks, and the condition of your RV battery and LP gas. Have your dealer explain and demonstrate the operation of the monitoring panel in your unit.

ELECTRICAL SYSTEM

The electrical systems in your motor home are designed and built in accordance with the latest codes, standards, and regulations effective at the time of construction. They consist of two types of systems (Alternating Current/120-volt & Direct Current/12-volt).

Because of the many model variations and options, it is not possible to provide wiring diagrams in this manual. In certain situations specific wiring diagrams may be available to help troubleshoot, however we recommend any electrical work to be done by your dealer or a qualified electrician. Complete wiring diagrams are not available.

CHASSIS ELECTRICAL

The chassis electrical is separate from the coach electrical except for the emergency start system,(as described under DASH BOARD/CONTROLS) which may provide power from the auxiliary batteries to the chassis batteries.

The chassis system gets its power from the automotive battery which provides power to all of the dash controls and their functions. These circuits are all fused at the circuit panel located under the hood on the firewall. If any vehicle electrical system should fail, first check the fuses at this circuit panel. These are automotive type fuses which are available at most service stations.

WARNING: REPLACE FUSES OR BULBS ONLY WITH THOSE OF EQUIVALENT SIZE AND TYPE AS MARKED ON THE FUSE OR BULB. INCORRECT SIZING WILL NOT MATCH COMPONENT CIRCUITRY CAUSING A POSSIBLE HAZARD.

COACH ELECTRICAL (Direct Current-DC)

The DC electrical system operated by the auxiliary RV batteries and the power converter provide power to all 12-volt coach fixtures. All fixture circuits originate at the fuse panel located with the power converter. This converter is the nerve center of the 12-volt system. When the converter is in operation it provides a charge to the RV batteries while also providing DC power to the 12-volt circuits. When AC power is not being used the 12-volt system draws its power from the auxiliary RV batteries. The power converter automatically switches the DC load from the batteries to the converter when AC power is provided.

Battery charging is accomplished by the converter (when AC power is supplied) or the engine alternator when the engine is in operation.

Battery maintenance is important for proper operation. Check batteries for proper securement, cracks, clean terminals, and any evidence of acid leaks.

If replacement is required, use batteries equivalent to original equipment. DO NOT USE REGULAR AUTOMOTIVE BATTERIES FOR REPLACEMENT.

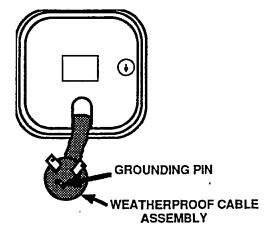
WARNING: NEVER EXPOSE BATTERIES TO OPEN FLAME OR ELECTRICAL SPARK. CHEMICAL ACTION IN THE BATTERY GENERATES HYDROGEN GAS WHICH IS FLAMMABLE AND EXPLOSIVE. DO NOT ALLOW BATTERY ELECTROLYTE (BATTERY ACID) TO CONTACT SKIN, EYES, FABRIC, OR PAINTED SURFACES. WEAR EYE PROTECTION WHEN WORKING WITH BATTERIES.

Most 12-volt lighting fixtures have individual bulbs for replacement as needed.

COACH ELECTRICAL (Alternating Current-AC)

The AC electrical system provides grounded electrical power to your 120-volt electrical appliances through the external shoreline or your power generator.

The shoreline is a one piece molded cord to provide a weatherproof cable assembly. Included in this cord is the third pin for grounding purposes. If any adapter is used, make sure the ground is maintained.



WARNING: DO NOT REMOVE THE GROUNDING PIN OR ALTER IT IN ANY WAY.

AC receptacles are located throughout your unit for your convenience. Certain circuits are dedicated to individual appliances (ie..air conditioners, microwave/convection) because of load requirements.

Your unit is provided with a ground fault circuit interrupter (GFCI) receptacle located in the bathroom, also providing protection to the patio receptacle. The GFCI is designed to limit the time of exposure to an electrical shock caused by current leakage to ground. The GFCI <u>DOES NOT</u> protect against overloads.

CAUTION: The GFCI does not protect against contact with the hot and neutral power lines simultaneously.

NOTE: The GFCI should be checked once a month to assure proper operation.

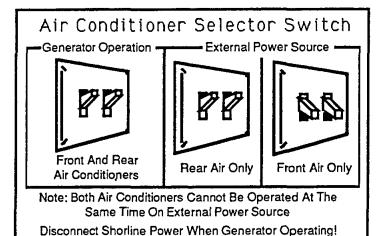
- 1. Press the "TEST" button.
- 2. The "RESET" button will pop up. If the "RESET" button does not pop up, a loss of ground fault protection is indicated. DO NOT USE that outlet or other outlets on the same circuit until the electrical system has been

checked out by a qualified electrician.

3. To restore power push the "RESET" button.

NOTE: If the patio receptacle does not work, check the bathroom receptacle to make sure the reset button has not been tripped.

Your ESCAPER motor home is optional (on designated models) with two roof mount air conditioners. These air conditioners may be operated at the same time with generator power only. Operation from shoreline power of either the front or rear air conditioner may be selected at the dual switch marked AIR CONDITIONER SELECTOR SWITCH (as shown in the diagram).



GENERATOR

Your ESCAPER motor home is optional with a generator to provide independent AC power. When the generator is in operation an automatic switch will change the AC appliances to generator power from the previous AC source. A short delay occurs before the switching process is complete to allow the generator to stabilize its output.

NOTE: Disconnect the shoreline power when the generator is in operation.

The generator is mounted to allow for easy access during service functions.

Refer to the generator owners manual for necessary service requirements and operating instructions

WARNING: EXHAUST GASES ARE DEADLY. DO NOT BLOCK THE TAILPIPE OR SITUATE THE VEHICLE IN A PLACE WHERE THE EX-

HAUST GASES HAVE ANY POSSIBILITY OF ACCUMULATING EITHER OUTSIDE, UNDERNEATH, OR INSIDE YOUR VEHICLE OR ANY NEARBY VEHICLES. OUTSIDE AIR MOVEMENTS CAN CARRY EXHAUST GASES INSIDE THE VEHICLE THROUGH WINDOWS OR OTHER OPENINGS REMOTE FROM THE EXHAUST OUTLET. OPERATE THE GENERATOR ENGINE ONLY WHEN SAFE DISPERSION OF

HAUST GASES HAVE ANY POSSIBILITY OF ACCUMULATING EITHER OUTSIDE, UNDERNEATH, OR INSIDE YOUR VEHICLE OR ANY NEARBY VEHICLES. OUTSIDE AIR MOVE-PERSED SAFELY.

WARNING: DO NOT UNDER ANY CIRCUM-STANCES OPERATE THE GENERATOR ENGINE WHILE SLEEPING.

LIQUEFIED PETROLEUM GAS SYSTEM

This vehicle is designed with a liquefied petroleum gas system to provide a safe and reliable fuel source for your range, furnace, water heater, and refrigerator. As with any flammable and volatile material, proper handling and precautions should be exercised at all times. The following warnings must be reviewed and adhered to for trouble free operation.

WARNING: LP GAS CONTAINERS SHALL NOT BE PLACED OR STORED INSIDE THE VEHICLE. LP GAS CONTAINERS ARE EQUIPPED WITH SAFETY DEVICES THAT RELIEVE EXCESSIVE PRESSURE BY DISCHARGING GAS TO THE ATMOSPHERE.

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

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

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

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

WARNING: DO NOT FILL CONTAINER(S) TO MORE THAN 80 PERCENT OF CAPACITY.

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

WARNING: ALL PILOT LIGHTS AND AP-PLIANCES SHALL BE TURNED OFF DURING REFUELING OF MOTOR FUEL TANKS AND/OR LP GAS CONTAINERS.

WARNING: PORTABLE FUEL BURNING EQUIPMENT, INCLUDING WOOD AND CHARCOAL GRILLS AND STOVES, SHALL NOT BE USED INSIDE THE RECREATIONAL VEHICLE. THE USE OF THIS EQUIPMENT INSIDE THE RECREATIONAL VEHICLE MAY CAUSE FIRES OR ASPHYXIATION.

WARNING: DO NOT BRING OR STORE LP GAS CONTAINER, GASOLINE, OR OTHER FLAMMABLE LIQUIDS INSIDE THE VEHICLE BECAUSE FIRE OR EXPLOSION MAY RESULT.

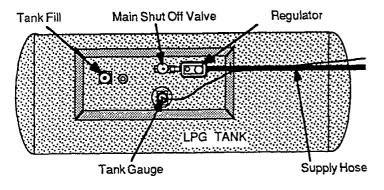
WARNING: IF YOU SMELL GAS;

- 1. EXTINGUISH ANY OPEN FLAMES, PILOT LIGHTS AND ALL SMOKING MATERIALS
 - 2. DO NOT TOUCH ELECTRICAL SWITCHES
- 3. SHUT OFF THE GAS SUPPLY AT THE TANK VALVE(S) OR GAS SUPPLY CONNECTION
- 4. OPEN DOORS AND OTHER VENTI-LATING OPENINGS
- 5. LEAVE THE AREA UNTIL ODOR CLEARS
- 6. HAVE THE GAS SYSTEM CHECKED AND LEAKAGE SOURCE CORRECTED BEFORE USING AGAIN.

WARNING: THELPGAS REGULATOR MUST ALWAYS BE INSTALLED WITH THE DIA-PHRAGM VENT FACING DOWNWARD. REGULATORS THAT ARE NOT IN COMPARTMENTS HAVE BEEN EQUIPPED WITH A PROTECTIVE COVER. MAKE SURE THAT THE REGULATOR VENT FACES DOWNWARD AND THAT THE COVER IS KEPT IN PLACE TO MINIMIZE VENT BLOCKAGE THAT COULD RESULT IN EXCESSIVE GAS PRESSURE CAUSING FIRE OR EXPLOSION.

LP GAS TANK

The LP Gas tank is mounted to the chassis below the floor and behind the skirting of your motor home. The exact location varies from model to model.



There is no need to remove the tank as it is accessible for filling through an access door located directly in front of the tank.

The tank and fittings have been completely assembled; however, upon initial filling all connections should be checked for leakage. This may be done with a soapy water or bubble solution. Do not use products containing ammonia or chlorine, and do not use open flame when checking for any leaks on your LP gas system.

The LP gas is stored in the tank as a liquid under pressure and vaporizes under the control of the pressure regulator for use with all of the LP appliances. The LP gas in the tank is much colder than the air that surrounds the tank, but as the air temperature drops closer to the temperature of the liquid in the tank, the liquid doesn't vaporize as easily. Consequently, the BTU value of the LP drops dramatically. The closer the tank is to full during cold temperatures, the better the BTU valve will be; however, do not fill the tank more than 80 percent of capacity.

Freezing of the LP Gas system is a potential problem during cold temperatures because of moisture in the LP

Gas or supply system. Precautions should be taken to keep your tank and system free of moisture, and check with your LP service station about approved antifreeze or de-icer that may be available to reduce the possibility of freeze up.

The tank has a gauge installed to show the level of LP in the tank. The gauge has a wire extending from it which connects to the monitor panel on the inside of your unit for convenient reading of tank levels from inside your motor home.

LP GAS REGULATOR

The LP Gas tank has a regulator installed just downstream of the main shut-off valve. The regulator controls the pressure to the appliances as required for proper operation. This regulator has been preset by the regulator manufacturer and should not be adjusted unless necessary, and then only by a qualified LPG service technician.

The regulator has a vent to permit it to breath allowing the diaphragm to move up and down, and also allow a release for excess pressure which may build up. This vent must be facing downward and should be checked periodically to make sure it is clean and free from obstructions. Clogging from corrosion, dirt, insects and other debris is the most common cause of regulator malfunction.

LIGHTING APPLIANCES

When lighting your LPG appliances for the first time, or after refueling the LPG tank, trapped air will need to be purged from the system which could take a few seconds or a few minutes depending on the distance of the appliance from the tank. Follow the appliance manufacturer's lighting and operating instructions found in the owners information package. Make sure that the water heater has water in it prior to igniting.

SAFETY PROVISIONS

Your motor home has been supplied with various safety features and equipment for your convenience and safe operation. As with all areas in life the chance for accidents is possible, and the recreational life style is no exception.

EXIT FACILITIES

Every sleeping area in your recreational vehicle is provided with two exits located remote from each other. These exits are either in the form of an exit window (which will be labeled in red letters EXIT) or as the main entry door(s) (not labeled). The exit window handles will be red in color also. Make sure all occupants are aware of the exit locations and their operation.

SMOKE DETECTOR

At least one smoke detector is installed in every unit, generally in the hall area leading to the bedroom, as close to the living area as possible. This is a battery operated smoke detector which should be tested as indicated by following the warning:

WARNING: TEST SMOKE DETECTOR OP-ERATION AFTER VEHICLE HAS BEEN IN STORAGE, BEFORE EACHTRIP, AND AT LEAST ONCE PER WEEK DURING USE.

FIRE EXTINGUISHER

Each recreational vehicle is equipped with a portable fire extinguisher mounted close to the main entry door.

This fire extinguisher is rated for Class B (gasoline, grease, flammable liquids) and Class C (electrical) fires. Test your extinguisher as recommended by the fire extinguisher manufacturer, and replace after use. Be familiar with your fire extinguisher location and its operation.

ENTRY STEPS

Each entry door is equipped with entry steps for convenience in entering and exiting your unit. Caution should be observed when entering and exiting as with any steps, but especially during wet and icy conditions.

ENTRY ASSIST HANDLE

Adjacent to each entry door is an entry assist handle for convenience and safety in entering and exiting your unit.

GAS DETECTOR

An LP Gas detector (optional), located near the floor in the galley area, will sense the presence of LP gas leakage. The leak detector (if gas is detected) will sound an alarm and automatically shut off the LP Gas at the tank. The detector is operated by 12-volt, thus, when the unit is not in use for an extended period of time or is being stored, switch the detector off to prevent discharging your battery.

Test the leak detector each time your unit is relocated and set up for use.

Refer to the gas detector owners manual for proper testing and operation procedures.

PLUMBING SYSTEMS

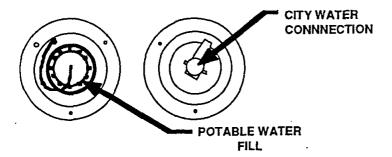
Your motor home is self contained, able to carry fresh water in the potable water storage tank and hold the waste water in dual holding tanks for dumping when convenient. Water connections are also available for a "city water" hose hook-up to an external pressurized water source.

FRESH WATER SYSTEM

The fresh water storage tank supplies potable water to all fixtures within your motor home by means of a 12-volt pump. This pump is located close to the storage tank and is equipped with a check valve for flow away from the tank, or to the fixtures only. The pump has an on/off switch located on the monitor panel in the face of the range hood. The pump will automatically build up pressure and maintain that pressure when turned on. The pump should be turned off when the fresh water storage tank has no water in it or when the motor home will not be in use.

The fresh water tank can be filled by pouring water in the inlet next to the city water connection. A cap is provided to keep foreign matter out of the system and to keep water from sloshing out.

The tank also has a drain to drain water out when the motor home is not in use. Low point drains are provided to enable draining the water lines. When possible, traveling with an empty fresh water tank will provide for more cargo carrying capacity. When filling the tank, to maximize water capacity, fill all water lines and the water heater as well.



The external "city water" hookup will provide pressurized water supply from the RV park or city water supply hookup. The same waterlines are utilized as with the storage tank and pump; however, the pumps check valve bypasses both the pump and the fresh water tank.

MONITOR PANEL

The monitor panel (optional in some models) allows you a convenient check of the approximate levels of all systems at the touch of a button. It is located in the face of the range hood and includes the on/off switch for the range hood light, range hood fan, pump, and a test button. The levels are registered as: E-Empty,1/3, 2/3 or F-Full for LP Gas Tank, Fresh Water Tank, Holding Tank (toilet waste) and Gray Tank (sink and shower wastes). The Battery indicator registers: L-Low, F-Fair, G-Good, and C-Charging.

The monitor panel gives its reading by means of an electrical signal between the probes. If there is an extremely low mineral content in the water, or there is a build-up or coating on the sensor probes on the interior of the tank(s), the readings on the monitor panel may be incorrect.

NOTE: Avoid pouring grease, oils, or similar substances down your drains or the toilet. If this should occur, the holding tanks may need to be washed out with a soapy water solution.

SANITIZING THE FRESH WATER SYSTEM

Sanitize the fresh water system at least once a year, or whenever the motor home is unused for prolonged periods of time. This will help to keep your water system fresh and discourage the growth of bacteria that can contaminate the water supply.

Use a chlorine and fresh water rinse as follows:

- 1) Prepare a solution of 1/4 cup household liquid chlorine bleach (5% sodium hypochlorite) to one gallon of water for each 15 gallons of tank capacity.
- 2) Close all faucets and drains, and fill the fresh water tank with the rinse solution.
- 3) Turn on the pump switch and circulate the rinse solution through the entire system.
- 4) Once the rinse solution has been circulated through the entire system, then continue to fill the fresh water tank until it is full.
- 5) Close all faucets and drains and let the system set for approximately three hours.

- 6) Drain the complete system
- 7) Flush the complete system with fresh water only for several minutes.
- 8) Close all drains and fill the fresh water tank as you normally would. Make sure that the water heater has water in it prior to igniting.

EXCESSIVE WATER PRESSURE

Some campgrounds or "city water" hook-up locations may not have regulated water pressure which could be excessive and may cause damage to your water system. Check with your dealer for recommendations of water pressure regulators.

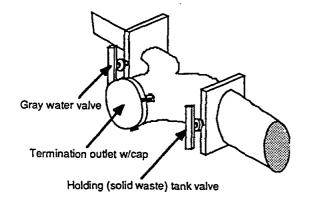
TROUBLESHOOTING THE FRESH WATER SYSTEM

Normal travel can cause vibration and flexing of your fresh water piping system, possibly causing fittings to work loose. If you notice wet areas near water connections or the pump runs while the faucets are closed, and no other fresh water fixtures are used, you should suspect a possible leak. Be sure all low point water line drains are closed, the tank drain is closed and all fixtures are turned off. If a leak is still suspected check all connections for tightness. Do not over tighten fitting as this may cause leakage.

Sometimes improper winterization can cause water lines to freeze and split (Refer to STORAGE DURING FREEZING TEMPERATURES for proper winterization). If this is the case return your unit to an authorized dealer for repairs.

WASTE WATER SYSTEM

The waste water system is comprised of dual holding tanks with individual termination valves. The holding



tank, as indicated on your monitor panel, collects all of the waste material from the toilet. The gray water tank collects the waste material from the sinks and shower. Both tanks are joined together after the termination valves to provide a single termination outlet for convenient dumping of waste materials. A flexible sewer hose is required to make the connection between your units termination and the approved dump station inlet.

The drainage system is very similar to that of your home. The system is trapped and vented to prevent waste gases from entering your motor home. The drain piping is made of ABS material and is resistant to most chemicals. The "P" traps at the fixtures are separable for use as clean-outs if necessary. Vents and clean-out fittings may also be used as a clean-out access.

TOILET

The toilet in your motor home is a marine type toilet. It can be flushed by depressing the foot pedal in the lower front corner of the toilet, and will automatically refill with water when the foot lever is released.

DUMPING YOUR HOLDING TANKS

As mentioned previously, your holding tanks terminate together at one location for convenience in dumping your tanks. A twist on cap is located at the termination outlet to help prevent leakage of waste material.

WARNING: THE HOLDING TANKS ARE ENCLOSED SEWER SYSTEMS AND MUST BE DRAINED INTO AN APPROVED DUMP STATION. TANKS SHOULD BE THOROUGHLY DRAINED AND RINSED TO PREVENT ANY ACCUMULATION ON THE INTERIOR OF THE TANKS.

To dump the tanks simply twist off the termination cap, connect the sewer hose, put the other end of the sewer hose into the approved dump station inlet, and open the termination valves. Rinse the tanks and hose thoroughly with fresh water before disconnecting. Once cleaning is complete, close the termination valves, replace the hose to the storage location, and replace the termination cap on the outlet. You may want to add a deodorant chemical approved for your sewer system to aide in the breakdown of solid wastes as well as making your system more pleasant to use.

NOTE: Do not leave the termination valves in the open position, or open them prior to having the sewer hose connected. Do not remove the termination cap with the termination valves in the open position.

The most common holding tank problem is clogging, which can be minimized by following a few simple suggestions:

- Prior to dumping make sure your tank is at least 3/4 full.
- Keep the tank valves closed, and the termination cap on.
- Cover the bottom of the tank with water after dumping is complete and leave this water in the tank.
- Use only approved toilet tissue for RV systems.
- Use approved holding tank deodorant chemicals.

- Do not put facial tissue, paper, or sanitary napkins into your holding tanks.
- Do not put solid objects into the tanks that could puncture or scratch your tanks.

USE DURING FREEZING TEMPERATURES

Special precautions must be taken if you intend on using your recreational vehicle during freezing temperatures or will be traveling through regions during freezing weather. Cold weather equipment such as extra insulation, storm windows, and special anti-freeze for RV use are a few items to consider. Consult with your dealer about your travel plans for specific procedures and equipment necessary to make your trip comfortable and pleasant.

MAINTENANCE AND SERVICE

CHASSIS OPERATOR'S MANUAL

Refer to your Chassis Operator's Manual for information on chassis service recommendations.

Have the engine coolant, and the engine oil levels checked each time when refueling.

CAUTION: To avoid possible injury during service; engage the parking brake, turn off the ignition, and remove the key, unless the particular procedure requires otherwise.

NOTE: Proper engine servicing and record of servicing may be mandatory to ensure chassis warranty protection. Follow the manufacturer's instructions on periodic maintenance checks,

BATTERY SERVICE

THE MAIN VEHICLE BATTERY is a 12-volt automotive battery which provides power for all vehicle requirements. Have this battery serviced when servicing other vehicle systems.

AUXILIARY BATTERIES or house batteries are dual auxiliary 12-volt batteries to provide living area power requirements. Have these batteries serviced when servicing other vehicle systems.

When operating properly, your vehicle alternator will be able to handle normal vehicle driving requirements and also recharge the battery in a reasonable time when on the road.

GENERATOR POWER PLANT SYSTEM SERVICE

Generator power plant (optional) service, recommended by the generator manufacturer, should be performed at an authorized service center. Routine or emergency service, such as adding oil, changing filters, or replacing spark plugs, could be accomplished at an auto service center, but must be done in accordance with the service instructions specified by the generator manufacturer.

EXTERIOR

Most exterior parts of your motor home are made of fiberglass which is a very durable material, but not indestructible. Exposure to the elements can cause premature deterioration without routine maintenance. The effects may be; fading, yellowing, or chalking, however these are surface cosmetic changes which do not affect the strength of your unit. Simple maintenance through cleaning by washing and waxing will insure lasting beauty.

DOORS, LOCKS, WINDOWS, AND VENTS

Moving parts of all doors, locks, windows, and vents should be adjusted and lubricated at least once a year or as needed depending on use. Screws and fasteners should be checked and tightened periodically. Check weather-stripping sealers to assure proper fit and seal.

SEALANTS

Weather proofing sealants are used around doors, windows, vents, and joints during construction of your motor home. These sealants are subject to the same deterioration from exposure as the fiberglass components, and must be checked periodically to assure the weatherproof integrity of your unit. If evidence of cracking or voids in sealants are apparent, have your dealer reseal these areas, or if you choose to do the work yourself he can recommend the proper sealant to use. Be sure to check all areas including the roof, floor, sides, front, and rear. Failure or neglect of proper sealant maintenance could result in leakage, and may reduce or void your warranty protection.

CAUTION: Before any sealants are applied, make sure that surfaces are clean and dry.

CAUTION: Do not seal or plug the "weep holes" on the bottom flange of the windows. These "weep holes" are designed into the windows to allow drainage of moisture from the window track caused by condensation or in the event of any leakage.

CARE OF UPHOLSTERY AND FABRICS

The manufacturer uses a variety of fabrics in its recreational vehicle models. Regular vacuuming will help keep colors fresh and prolong wear. Clean fabrics with pure solvents (petroleum distillate based products). Professional dry cleaning is recommended.

CAUTION: The use of water based or detergent based solvent cleaners may cause excessive shrinking. Water stains may become permanent and not be removed with solvent cleaning agents.

DRAPES, CURTAINS, BEDSPREADS, AND PILLOW SHAMS

Drapes, curtains, bedspreads, and pillow shams should be dry cleaned only.

VALANCES AND BLINDS

Valances and blinds should be vacuumed or wiped with a damp cloth.

NOTE: Cushion, seat and drapery fabrics are subject to normal deterioration caused by wear and exposure. Normal protective measures, such as keeping the drapes closed while the unit is not in use can help reduce discoloration caused by the suns rays.

CARE OF WALLS AND WOODWORK

Walls and woodwork may be cleaned with a soft cloth using mild liquid detergent and water. Never use harsh abrasives detergents, or chemical cleaning agents.

CARPETING

Vacuum carpet regularly and use only high quality carpet cleaners.

STORAGE

STORAGE DURING NON-FREEZING TEM-PERATURES

If you intend on storing your motor home or will not be using it for an extended length of time, certain procedures should be taken to prepare your motor home. The following list can be used as a guideline, however you may wish to add to or make your own list.

- Clean your motor home exterior completely including the underside. You may also want to wax it.
- Check the engine fluids for proper levels and temperature ratings.
- Check the tires for proper inflation. You may want to block the unit off the ground slightly to take pressure off of the tires.
- Park the unit in a level position and block the wheels.
 - · Cover the tires from direct sunlight.
- Check the batteries for proper charge and disconnect the battery cables.
- Drain all holding tanks, the fresh water tank, the water lines, and the water heater. When completed, be sure to close all drains and cap all inlets and outlets
 - Turn off the LP Gas supply at the LP tank.
- Turn off all appliances (refrigerator, furnace, water heater, and range).
 - Turn off all electrical equipment.
- Remove all perishables from the refrigerator and cabinets.
 - Block the refrigerator door open slightly to allow air

circulation and place a small box of baking soda inside.

- Open closet and cabinet doors slightly to allow air circulation there also.
- Close all windows, exterior doors, and vents except for one window in the front and rear which should be slightly opened to allow air circulation.
- Cover exterior vent openings to prevent insects from getting in.
 - Close the drapes, curtains, or blinds.
- Start your engine periodically (at least every 30 days) running the air conditioner and checking the fluids for proper levels. Check throughout the unit at this time to make sure everything else is in order.

STORAGE DURING FREEZING TEMPERA-TURES

To store your unit during freezing temperatures, follow the same steps as done for non-freezing temperatures except for the following.

- Prior to draining the fresh water tank, put an antifreeze solution (approved for RV water systems) in your fresh water tank and run this solution through the entire system.
- Drain the water system completely leaving some anti-freeze solution in the "P" traps, but draining everything else.
- If your unit is equipped with a water purifier, this must be removed.
- Make sure the engine anti-freeze is set for proper temperature levels.