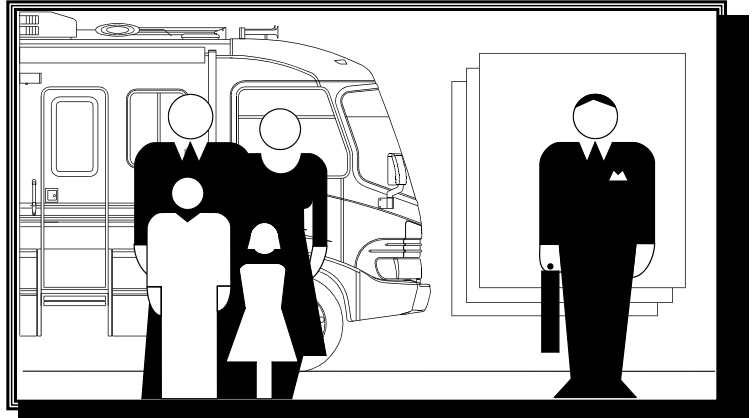




## General Information

In time you will develop a knack for spotting wonderful little roadside locations by turning off the main highway and exploring. There are many modern recreational vehicle parks (including state, county, and federal parks) with good facilities where you can obtain hook-ups for electrical, water, and sewage connections. Directories are published which describe these parks and the availability of services and hook-ups. On

overnight or weekend trips chances are you will not fill up the sewage holding tank, deplete the water or LP gas supply, or run down the batteries which supply the living area 12 volt DC current. On longer trips when you have stayed where sewer connections and utility hook-ups were not available it will be necessary for you to stop occasionally to empty the holding tanks, and to replenish your water and LP gas supply. Many gas stations have installed sanitary dumping stations. Publications are available which list these dumping stations. When you stop for the night your Monaco motor home is built to be safely parked in any spot that is relatively level and where the ground is firm. Try to pick as level a parking spot as possible. Your facilities are with you, you are self-contained.



These safety alert symbols mean **CAUTION** or **WARNING** - "Personal Safety Instructions". Read and understand instructions where these symbols are displayed in this manual. Failure to comply with specific instruction may result in personal injury or death. Many instructions are required by the National Safety Associations.

## Customer Relations

Only by insuring your confidence and satisfaction with our products and services can we have continued success as a manufacturer of motor homes. We believe a good relationship with our customers is just as important as improving the technical excellence of our products. Your authorized dealer is pleased to help you with instructions about your motor home and to offer service when you need it. Most problems arise from misunderstandings about warranty or service needs. If problems remain after you have consulted your dealer you are invited to contact our Consumer Affairs Department. Please have all pertinent information (serial numbers, model number, etc.) when calling. We will work with the dealer and see that every attempt to resolve the matter is made.



Customer Service Department  
Monaco Coach Corporation  
91320 Coburg Industrial Way  
Coburg, Oregon 97408  
800-283-0869

## Reporting Safety Defects

If you believe that your motor home has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Monaco. If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of motor homes, it may order a recall or remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer or Monaco. To contact NHTSA you may either call the Auto Safety Hot line toll-free at 1-800-424-9393 (or 366-0123 in Washington DC area) or write to:

NHTSA  
400 Seventh Street  
US Department of Transportation  
Washington, DC 20590

## Taking Delivery

Your motor home has been inspected by factory personnel throughout the manufacturing process. Your dealer performs additional pre-delivery inspections and system checks, and helps you understand the limited warranty and completes any necessary forms.

### **Dealer Responsibilities Include:**

1. A customer orientation to the motor home, its systems and components, and their operation.
2. Ensuring the customer receives a complete Owner's Packet with warranty cards and registrations for the motor home and separately warranted products including detailed operating and maintenance instructions.
3. Reviewing limited warranty provisions with the customer stressing the importance of mailing warranty cards and registrations to the manufacturers within the prescribed time limit to avoid loss of warranty coverage. Assisting the customer in completing these forms and assist in locating serial numbers. Requesting that the customer



## Warranty & Information

**2000**

reads all warranty information when possible and explaining any provision not clearly understood.

4. Instructing the customer on how to get local and out-of-town service on the motor home and its separately warranted components whether in or out of warranty.

### **Customer Responsibility**

As a new motor home vehicle owner you are responsible for regular and proper maintenance. This will help you prevent conditions arising from neglect that are not covered by your Monaco Limited Warranty. Maintenance services should be performed in accordance with this Owner's manual, and any other applicable manuals. As the owner, it is your responsibility and obligation to return the motor home to an authorized dealer for repairs and service (See Limited Warranty). Since the authorized dealer where you purchased your new motor home is responsible for its proper servicing before delivery, and has an interest in your continued satisfaction, we recommend that Inspection, Warranty and Maintenance Services be performed by the dealership. We suggest that you take your new motor home on a weekend shake down before leaving on an extending trip.

### **Warranty Information File**

In addition to this Owner Manual you will find a Warranty Information File in your unit. This file contains valuable documents about your motor home systems and equipment. Be sure you read and understand all the information in this file to help you safely operate, maintain and trouble shoot those items.

## **Suggestions for Obtaining Service for Your Motor Home**

### **Give Thought to the Appointment Time**

Know when to take your motor home in for service. Monday and Friday are busy days for most dealers. Therefore, it makes sense to make a mid-week appointment whenever possible. Ask your dealer if additional time is needed for check in and completion of paperwork.

### **Prepare for the Appointment**

If you're having warranty work done be sure to have your warranty registration papers with you. All work to be performed may not be covered by the warranty; be sure to discuss additional charges with the service manager. Keep a maintenance log of your motor home service history. This can often provide a clue to the current problem.



---

**Prepare a List**

Make a written list of specific repairs needed. It is important the service manager be aware of all previous work which has been done on your motor home. For example: if the motor home has been repaired due to an accident. While this may not seem important it could have a significant effect on the dealers diagnosis of a problem.

**Be Reasonable With Your Requests**

Don't leave a list of 20 items to be serviced and expect to have your motor home back by five o'clock. If you list a number of items, and you must have your motor home back by the end of the day, discuss the situation with the service manager and list your items in order of priority. Expect to make a second appointment for work not completed or for the parts that may need to be ordered.

**You Can't Look Over the Technicians Shoulder**

Please don't be offended when you are told you cannot watch the work being done. Insurance requirements forbid the admission of customers to a service area.

**Inspect the Work Properly**

Check out the service or repair job when you pick up your motor home and notify the service manager of any dissatisfaction. If circumstances prevent returning for immediate corrective work make an appointment as soon as possible.



## Vendor List

### AIR CONDITIONER

Dometic Corp  
219-463-7712  
Information: Section 3

### ATTIC FAN

Fan-Tastic Vent  
800-521-0298  
Information: Section 3

### AWNINGS

Carefree of Colorado  
303-469-3324  
Information: Section 3

### BATTERIES

Battery Pro's  
541-683-1810  
Information: Section 6

### CARBON MONOXIDE DETECTOR

MTI Industries, Inc.  
800-383-0269  
Information: Section 2

### DIESEL ENGINES

Cater Piller, Inc.  
800-447-4986  
Information: Section 9

### ELECTRIC STEP

Kwikee  
503-836-2126  
Information: Section 3

### FIRE EXTINGUISHER

The Fire Extinguisher Co.  
919-563-5911  
Information: Section 2

### FURNACE

Atwood Mobile Products  
801-972-4621  
Information: Section 3

### GENERATOR

Onan  
219-271-0303  
Information: Section 6

### GFI OUTLET

Kevco  
219-522-8820  
Information: Section 6

### HITCH RECEIVER

Reese Products  
219-264-7564  
Information: Section 2

### LEVELING JACKS

Power Gear  
800-334-4712  
Information: Section 2

### LIGHTS

RB Gustafson  
219-522-0871  
Information: Section 9

### LP GAS DETECTOR

MTI Industries, Inc.  
800-383-0269  
Information: Section 5

### MICROWAVE

Sharp Electronics Corp.  
800-447-4700  
Information: Section 3

### MONITOR PANEL/ STORAGE TANKS

KIB Enterprises  
219-294-1504

### POWER CONVERTER

Progressive Dynamics  
616-781-7802  
Information: Section 6

### POWER HEATED MIRROR

Velvac  
219-294-7691  
Information: Section 9

### RANGE

Atwood Mobile Products  
219-262-2655  
Information: Section 3

### REAR VISION SYSTEM

Intec  
800-468-3254  
Information: Section 3

### REFRIGERATOR

Norcold  
800-543-1219  
Information: Section 3

### ROOF VENT

Ventline  
219-848-4491  
Information: Section 3

Continued 



**SEATING**

Flexsteel Industries  
219-831-4050  
Information: Section 3

**SMOKE DETECTOR**

Bob Gun Associates  
616-467-8705  
Information: Section 2

**TELEVISION ANTENNA**

Winegard Company  
319-753-0121  
Information: Section 3

**TIRES**

Goodyear Tire & Rubber Co.  
800-847-3638  
Information: Section 9

**WATER FILTER**

Everpure, Inc.  
800-323-7873  
Information: Section 4

**WATER HEATER**

Atwood Mobile Products  
219-262-2655  
Information: Section 4

**WINDOW**

Excel Window  
219-264-2131  
Information: Section 2

**NOTES**



---

## Glossary of Terms

**AC ELECTRICITY** - Alternating current also known as household power.

**BLACK WATER** - Term associated with the sewage holding tank. The toilet drains directly into this tank.

**CAMPSTORE** - A store that usually has bread, milk and other essentials but not fresh meats, fruits or vegetables.

**CITY WATER** - A term associated with the water supply that you hook-up to when you are at camp grounds. It is called city water because you pull water from a central source (like in a city) and not the fresh water tank.

**CURBSIDE** - This refers to the side of the motor home which faces the curb when it is parked. Often called the door side.

**DC ELECTRICITY** - Direct current also known as battery power.

**DRY CAMPING** - Camping in the motor home when there is no city water hook-up or shore power. In other words using only the water and power that is in the motor home and not anything from another source.

**DUMP STATION** - Sites where you can drain your waste (gray) and sewage (black) tanks. In most states it is illegal to drain your tanks anywhere except at dump stations.

**DUMP VALVE** - Another name for the T-handle valve used to drain the sewage (black) and waste (gray tanks).

**EGRESS WINDOW** - The formal name for the emergency window located in the rear of the motor home. Egress windows can be easily identified by their red handles.

**FULL HOOK-UP SITE** - A camp ground that has city water, shore power and sewer hook-ups or connections available.

**GRAY WATER** - Term associated with the waste water holding tank. Water from the sink drains, the shower and the washer/dryer (if equipped) go into this tank.

**ICC BLINK LIGHTS** - This switch enables you to blink clearance lights on motor home. It is commonly used as a way of indicating your thanks for a courtesy shown to you by another driver.

Continued 



**LOW POINT** - The lowest point in the plumbing. Drains are placed here so that water will drain out of the lower end of the motor home. These drains must be closed when you fill the water tank.

**PRIMITIVE SITE** - A camp ground that may have either city water, shore power or sewer hook-up but not all of them. Primitive sites may have no hook-ups or connections at all.

**DRAIN TRAP** - This is a curve that is in all drains. Water is trapped in the curve and this creates a barrier so tank odors cannot escape through the drain.

**PULL-THROUGH SITES** - Camp sites that you pull the unit through without having to back up into the site.

**ROAD SIDE** - This refers to the side of the motor home which faces the road when it is parked. Often called the off-door side.

**SHORE LINE** - This is the electrical cord which runs from the motor home to the camp ground 120 volt electrical supply.

**SHORE POWER** - This is the 120 volt outlet that you can plug your motor home into a camp ground.

**STABILIZING JACKS** - These jacks are extended after you have parked the motor home. They are used to level the motor home.

**STINGER** - An arm attachment on a tow truck that is used to lift motor home slightly so that it can be towed.

**TAG AXLE** - A non-drive axle located behind front axle. A tag axle increases weight carrying capacity of chassis.

**WINTERIZED** - If you see this on a unit it means that the unit has been prepared for storage. All water systems are drained and RV antifreeze has been added to protect the water lines and drains. Low point drains will be open.





---

**WARRANTY STATEMENT****MONACO COACH CORPORATION  
NONCOMMERCIAL USE LIMITED WARRANTY****LIMITED WARRANTY:**

Monaco Coach Corporation (Monaco) warrants to you, the original purchaser, for a period of (1) year from the date of purchase or 24,000 miles, whichever comes first, that this Monaco Coach Corporation motor home shall be free of SUBSTANTIAL DEFECTS (as defined below) in material and workmanship attributable to Monaco. Items incorporated in the motorhome that were purchased, manufactured and/or installed outside Monaco's factory are not covered by this warranty, but may be covered by the Seller, Manufacturer and/or installer of the particular item.

Monaco will repair the defect, pay the reasonable parts and labor charges to perform the repair, and in the event that original consumer purchaser's motorhome is inoperative due to malfunction of a warranted part, Monaco will pay the cost of having the motorhome towed to the nearest Monaco authorized repair facility. If your motorhome must be towed, you must contact Monaco prior to incurring the towing charges for its direction to the nearest authorized repair facility. Monaco reserves the right to make use of new and/or remanufactured parts at its own option in making such repairs.

Monaco reserves the right to change the parts and designs of its motorhomes from time to time without notice and with no obligation to make corresponding changes in its motorhomes previously manufactured.

If you are a commercial purchaser, please refer to Monaco's 90-day limited warranty which will be provided upon request.

**"SUBSTANTIAL DEFECT" DEFINITION:**

A part or system qualifies as a substantial defect under this warranty only when it fails to perform substantially within the design specifications for the part or system and the failure is attributed to work performed by Monaco

**WARRANTY RECOVERY LIMITATIONS AND DISCLAIMERS:**

No person shall be entitled to recover from Monaco any consequential or incidental damages resulting from any defect in the motorhome. There is no warranty of any nature made by Monaco beyond that contained in the warranty. All implied warranties of mer-

Continued 



merchantability or of fitness for a specific purpose are limited in duration to warranty period of one (1) year from purchase by original consumer purchaser or 24,000 miles, whichever comes first. All implied and express warranties on items not covered are disclaimed, including any warranties of merchantability or fitness for a particular purpose and such uncovered parts or systems are sold "as is". You and any supplier who may warrant such component part assume the entire risk as to the quality and performance of such uncovered parts and systems. If the uncovered parts and systems prove defective, you and any supplier that may warrant that part or system and not Monaco, assumes the entire cost of repair with respect to such systems or parts.

Some states do not allow limitations how long an implied warranty lasts or the exclusion of limitation or incidental or consequential damages, so the above limitations may not apply to you. This warranty gives specific legal rights and other rights which may vary from state to state.

#### **WHAT IS NOT COVERED:**

Items purchased, manufactured and/or installed outside Monaco's factory are not covered by this particular item.

The engine, the transmission and its components, batteries, tires, axles and domestic appliances are not covered under this warranty. Any warranties covering these items are provided by the manufacturer of such items and are not the responsibility of Monaco. The domestic appliances that are not covered include, without limitation, the refrigerator, stove, oven, microwave, ice maker, water heater, furnace, television, stereo, radio, compact disc player, video cassette player/recorder, washer, dryer and all other domestic appliances.

Any service contracts offered by a dealer are not warranties of Monaco. All rights and remedies on such contracts are between the purchaser, the dealer, and the administrator of the service contract.

This warranty does not cover any motorhome that is rented, leased, or loaned for use by anyone other than the original owner.

Damage or corrosion due to accidents, misuse or alterations is not covered under this Warranty. By definition, this shall exclude from coverage any accident or damage caused by off road use, collision, fire, theft, freezing temperatures, vandalism, riot, explosions, objects striking motorhome, driving over curbs, overloading, racing or unauthorized motorhome alterations. Additionally, warranty coverage shall not apply if the odometer



## Warranty & Information

**2000**

has been stopped, disconnected or altered. Basic instructions for proper use of this motorhome are discussed in the Owner's Manuals.

Damage or surface corrosion due from airborne fallout (including chemicals, tree sap, etc.) stones, hail, earthquake, water, acid rain, flooding, windstorm, lightning, road salt, road salt spray, blowing sand, road surface debris or other environmental factors are not covered under this Warranty.

Damage caused by off road use or a lack of proper maintenance as described in the Maintenance schedule, in any applicable instructions from Monaco or in any instructions from a systems or component part manufacturer or in instructions from a repair facility or as common sense would dictate are not covered. Damage caused by failure to use the fuel, oil and lubricants recommended in the Owner's Manual is not covered under this Warranty. Proof of proper maintenance is your responsibility, therefore you should keep all receipts evidencing maintenance performed. Maintenance expenses shall be borne by you. Normal wear-and-tear is not covered under this Warranty.

### **USAGE LIMITATIONS:**

Any usage beyond design intentions will relieve Monaco of responsibility under this Warranty. Usage of this motorhome in a manner inconsistent with Owner's Manual directions will also invalidate the Warranty in regard to defects caused by that inconsistent usage.

Misuse or neglect of the motorhome, failure to provide reasonable and necessary maintenance, unauthorized alteration or modification, accident or improper loading shall discharge Monaco from any and all obligation under this warranty.

This limited warranty does not cover any motorhomes subjected to any commercial or rental use whatsoever. Any such commercial or rental use voids this limited non commercial consumer warranty. The sole coverage available to any purchaser making any commercial or rental use of a motorhome is defined by Monaco's limited commercial warranty, which contains different terms.

Monaco considers any commercial or rental use whatsoever as voiding this limited warranty and limiting owner to coverage, if any, available under Monaco's written commercial limited warranty. For the purposes of this paragraph, any use, even part-time or only occasionally, in any business or business-oriented activity, constitutes commercial use.

Continued 

**YOUR EXPENSE RESPONSIBILITY:**

You shall be responsible for and bear all expenses incurred in delivering the motorhome to Monaco's factory or authorized repair facility for warranty service including, but not limited to, the costs of transporting the motorhome for warranty service, lodging and meals. Unless prohibited by law, if Monaco deems it necessary to have the motorhome returned to the factory you shall be responsible for and bear all expenses incurred in delivering the motorhome to Monaco's factory.

Regular maintenance, including cleaning, polishing, lubricating, replacing filters and worn brake linings and performing other normal maintenance services required shall be at your expense. See Maintenance Schedule and Owner's Manual for recommended maintenance procedures.

**MANDATORY NOTICE:**

TO THE EXTENT PERMITTED BY LAW, YOU MUST NOTIFY MONACO (NOT JUST YOUR DEALER) IN WRITING THAT THERE HAVE BEEN TWO UNSUCCESSFUL REPAIR ATTEMPTS OR MORE THAN 15 DAYS AGGREGATE REPAIR TIME ON SUBSTANTIAL DEFECTS. THIS NOTICE MUST BE GIVEN TO MONACO IMMEDIATELY AFTER THE SECOND REPAIR ATTEMPT OF ANY SUBSTANTIAL DEFECT OR IMMEDIATELY AFTER 15 DAYS OF AGGREGATE REPAIR TIME ON SUBSTANTIAL DEFECTS DURING THE TERM OF THE WARRANTY. TO THE EXTENT PERMITTED BY LAW, FAILURE TO PROVIDE MONACO WITH THE REQUIRED NOTICE VOIDS THIS WARRANTY. IF A CLAIMED DEFECT IS RELATED TO AN APPLIANCE THAT FOUND TO BE COVERED BY THIS WARRANTY OR ANY OTHER WARRANTY OR LAW, ANY REPLACEMENT RIGHTS, TO THE EXTENT PERMITTED BY LAW, SHALL BE LIMITED TO REPLACEMENT OF THAT APPLIANCE, NOTHING MORE. TO THE EXTENT PERMITTED BY LAW, YOU AGREE ALL DISPUTES WITH MONACO WILL BE RESOLVED EXCLUSIVELY BY BINDING ARBITRATION UNDER THE RULES OF THE AMERICAN ARBITRATION ASSOCIATION IN (A) ELKHART, INDIANA OR EUGENE, OREGON AT BUYER'S CHOICE, (B) AS OTHERWISE MUTUALLY AGREED OR (C) AS DETERMINED UNDER THE RULES OF THE AMERICAN ARBITRATION ASSOCIATION.

**PROCEDURE FOR OBTAINING WARRANTY SERVICE:**

If towing is necessary phone Monaco prior to towing for assistance. A toll free number (1-800-283-0869) is provided for your convenience.

To obtain Warranty Service, call the authorized repair facility nearest you for an appointment. Contact Monaco's Warranty Department for assistance in locating an authorized warranty repair facility in your location. A list of Authorized service facilities can be



## Warranty & Information

obtained from Monaco by contacting it at the address listed below. You must deliver the motorhome to an authorized service center within a reasonable time after discovery of the defect and in no event after the expiration of the appropriated warranty period. Warranty Service can only be obtained at Monaco's authorized dealers and service centers. No other claims will be honored.

You must request that Monaco be consulted BEFORE work commences to avoid possible delay and reduction of reimbursement request and you must present your owner identification card to the Service Manager.

All request for reimbursement for warranty service must be received by Monaco on a Warranty Reimbursement Form with evidence of the charges and the work performed at the address noted below withing 60 days of the date the services were performed. If you cannot obtain satisfactory Warranty Service from authorized dealers or service centers, or if a substantial defect has not been resolved after the second repair attempt, you must contact Monaco in writing immediately to seek a satisfactory resolution of the situation. Written notice to a dealer or authorized or unauthorized repair facility shall not constitute written notice to Monaco of a continuing problem or unsatisfactory warranty service.

As a goodwill gesture, and without any legal obligation to do so, Monaco often provides reasonable assistance to the original consumer purchaser in contacting the manufacturers of components not warranted by Monaco if the original consumer purchaser believes such components to be defective. The original consumer purchaser may request such assistance by contacting Monaco's Warranty Department listed below.

As a good will gesture and solely to assist the purchaser who does not desire to take the motorhome to an authorized repair facility, Monaco may also refer you to an unauthorized repair facility, and may pay for a repair. Whether or not Monaco pays for such repair efforts shall not constitute a repair attempt by an authorized repair facility or Monaco.

### **PAYMENT FOR SERVICE:**

Request for warranty payments must be received by Monaco within 60 days of service rendered. Request for reimbursement submitted beyond 60 days will not be paid.

### **AUTHORITY TO ENLARGE WARRANTY:**

No person, dealer or repair agent has authority to enlarge, amend or modify this warranty. This Warranty gives only those legal rights specifically enumerated herein. You may have other legal rights which vary from state to state.

Continued 



**MONACO**

**2000**

Warranty & Information

---

**WARRANTY APPLICABILITY:**

This Warranty applies to covered parts of Monaco Coach Corporation motorhomes and Roadmaster Chassis registered in the United States and/or Canada.

**MONACO COACH CORPORATION  
ATTENTION: WARRANTY DEPARTMENT  
91320 COBURG INDUSTRIAL WAY  
COBURG, OREGON 97408  
1-877-466-6226**

**NOTES**

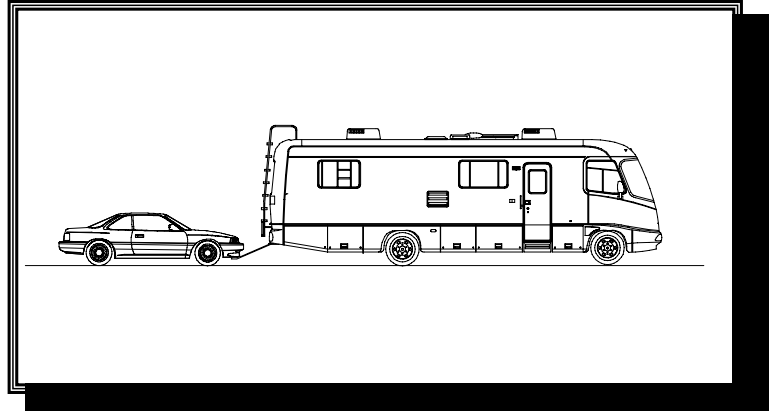


## Driving Safety

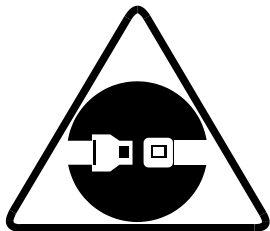
There are differences between your motor home and passenger automobiles. You should always be aware of those differences.

### Before You Start Out

As you first sit down in the driver's seat you will notice that you are sitting up higher and further to the left than in a passenger automobile. Your perspective of the road will therefore be different. Because of the driver's seat location and configuration of the motor home you will rely on the outside mirrors to line up with your lane and to check conditions behind you. Your dashboard may contain more gauges and controls than are normally found in passenger automobiles. You should become familiar with these devices and how they operate before starting out.



### Safety Seat Belts



All occupants must be furnished with and use seat belts while the motor home is moving. Driver's seat and all other seats designed to carry passengers while the motor home is in motion are equipped with safety seat belts. While traveling do not occupy beds or any seats that do not have a safety belt. Seat belts must only be used on permanently mounted seats. Driver's seat must be locked in the forward facing position while the motor home is in motion. Do not use a seat belt on more than one person.

To fasten seat belt, pull belt out of retractors and insert tab into buckle; you will hear a click when tab locks into buckle. Seat belt length automatically adjusts to your size and setting position. Do not route seat belts over armrests.

## ! WARNING !

Seats must be pointed in a forward position and seat belts fastened while motor home is in motion. Avoid seat rotation while in transit.

Children must not be transported unrestrained. Infants must be placed in approved safety seats. Small children must be restrained in child safety seats.

Failure to comply with these rules can cause injury or death.



## While Driving

Because your motor home is longer than the average automobile the turning radius will be wider. Therefore it is always a good idea to pay close attention when turning your motor home. Keep a close eye on the rear of the motor home making sure it will clear potential obstacles. Your motor home is also heavier than an average automobile with a higher center of gravity. Those factors may make it difficult to change momentum of your motor home. Swerves and sharp turns, especially at high speeds, could result in loss of control of the motor home. You should always keep that in mind and drive with extra caution necessary to avoid situations which might require quick momentum changes. You will find that your motor home will travel safely and comfortably at highway speed limits. However, it will take longer to reach that speed and you must always bear this in mind when overtaking and passing another vehicle. Allow more time to go around other vehicles because you cannot cut back as quickly due to the longer length of your motor home. When descending a long hill, drop down into a lower gear. The transmission and engine will help in controlling down hill speed and can lengthen brake life. The distance required to stop your motor home will be greater than an automobile's. Even though your motor home is equipped with brakes designed for its Gross Vehicle Weight Rating (GVWR) we suggest that you practice stopping away from traffic until you become accustomed to the motor home's stopping distance. When backing up have your co-pilot get out of the motor home and walk to the driver's side rear corner. Your co-pilot can watch for any obstacles and give hand signals to you as you back up. When traveling make sure that any bridges you cross can support the weight of your motor home. Check tonnage limit of bridges before crossing them. Signs are normally posted at bridge entrances. Know and observe the laws where you will be traveling as they may vary from state to state.

## Emergency Stopping

Always carry road flares or reflective warning signs to display if necessary. Pull off the roadway as far as possible for emergency stopping or tire changing. Turn ON your motor home hazard warning flashers when parked along side traffic lanes. Set the parking brake.

## Backing In

If your destination does not have drive through sites, pick a good level site and back in carefully. We suggest that you stop near the site, get out of the motor home and observe the surrounding area. Check for low-hanging tree limbs, posts, large rocks or other obstacles. Try to choose a site that is on the driver's side, so that you can see what the rear of the motor home is doing. With the site on the passenger side you would be backing into the site on your blind side which is more difficult. When site conditions are



## Driving & Safety Tips

satisfactory, maneuver motor home into a position for backing into the site space. Back up your motor home slowly using side mirrors as a guide or have another person outside to help guide you, until the motor home is in the desired position.

### **Parking**

Put the motor home gear shift in park and set hand brake. Turn off the ignition switch. Block all four wheels securely. Level motor home as directed under “Leveling Jacks”.

**Full Hook-Up Camping** - Connect the 120 volt AC power cord. Open the LP gas tank valve. Connect the fresh water supply or turn the water pump on. Connect the waste drain hose to the sewer hook-up. If applicable start the refrigerator, water heater and furnace. If applicable light the oven pilot light.

**Dry Camping** - Open the LP gas tank valve. Turn on the water pump. If applicable start the refrigerator, water heater and furnace. If applicable light the oven pilot light.

## **! WARNING !**

Do not use leveling jacks (or air suspension) to support vehicle while under coach or changing tires. Hydraulic leveling system is designed as a leveling system only.

Do not use as a jack or in conjunction with a jack. It is highly recommended that should a tire change be required that it be performed by a knowledgeable trained professional. Attempts to change tires while supporting motor home with hydraulic system could result in damage to motor home and risk causing serious injury.

## **Leveling Jacks**

### **Before You Operate Leveling Jacks**

Leveling system shall only be operated under the following conditions:

- ◆ Motor home is parked on a reasonable level surface.
- ◆ “PARKING BRAKE” is engaged.
- ◆ Transmission is engaged in “Neutral or Park”.
- ◆ Ignition switch is in ACC position.

**! CAUTION !**

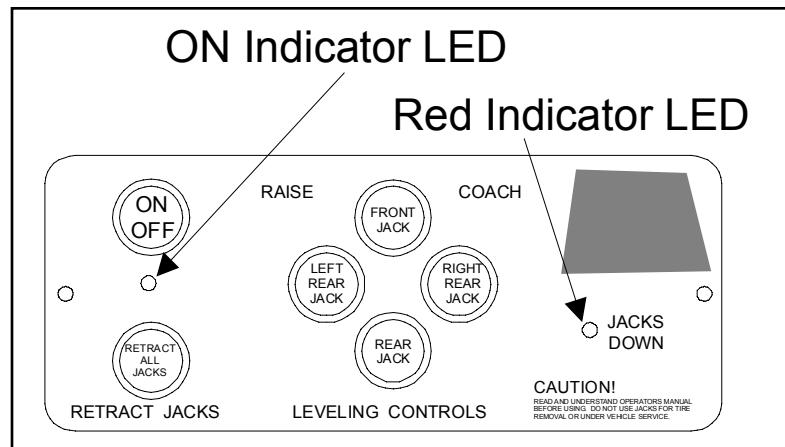
Check that potential jack contact locations are clear of obstructions or depressions before operation.

Keep people clear of motor home while leveling system is in use.

Never expose hands or other parts of the body near hydraulic leaks. High pressure oil leaks may cut and penetrate your skin causing serious injury.

**To Level Motor Home**

- ◆ Push “ON/OFF” pad on control panel. System is now operational and “ON/OFF” light will be lit. IF “ON/OFF” light is not lit, see “BEFORE YOU OPERATE LEVELING JACKS” conditions above.
- ◆ Push “FRONT” pad until jacks contact with ground is felt.
- ◆ Push and hold air bag dump switch to allow air to escape chassis air suspension. Release switch after air escaping sound stops.
- ◆ Push pad “FRONT” or REAR” that is opposite air bubble in level vial that is pointed front to rear (i.e. If bubble is towards front of coach push “REAR” pad). Keep pad depressed until bubble is centered in vial.
- ◆ Push pad “LEFT or “RIGHT” that is opposition air bubble in vial level that is pointed left to right (i.e. If bubble is towards left of coach push “RIGHT PAD”). Keep pad depressed until bubble is centered in vial.



**NOTE:** Right and left rear jacks are used to level motor home side to side. Pushing “LEFT” pad on control panel will extend left rear jack. Pushing “RIGHT” pad on control panel will extend right rear jack. There is no individual control for right or left front jacks.

**! CAUTION !**

Park motor home on reasonable solid surface or jacks may sink into ground. ON extremely soft surfaces use load distribution pads under each jack.

Never lift all wheels off the ground to level motor home. Doing so may create an unstable condition.



## Driving & Safety Tips

### To Retract Leveling Jacks

- ◆ Place ignition switch in ACC position.
- ◆ Push “ON/OFF” pad on. See first step of leveling.
- ◆ Push “Retract All Jacks” pad. All jacks will start to retract and return to full retract position. When all jacks return to full retract position the “JACKS DOWN” light will go out.

**NOTE:** If you wish to stop jacks from retracting, turn system off and back on again by pushing the ON/OFF pad twice. You can then re-level the motor home by following the steps under “To Level Motor Home”.

- ◆ When the “JACKS DOWN” light goes out push “ON/OFF” pad on control panel to deenergize the system. Perform a brief visual inspection around your motor home to verify that all jacks are fully retracted. You may then proceed to travel.

### Drive Away Protection System

If the ignition switch is in “RUN” position, jacks are down, and an operator takes the transmission out of neutral or park or releases the parking brake, the “JACKS DOWN” indicator will light and the alarm beeper will activate. The system will then automatically retract all jacks until jacks are fully retracted or the operator resets the parking brake and places the transmission back into park or neutral.

### Leveling Jacks Maintenance

- ◆ Change fluid every 36 months.
- ◆ Check fluid level every month. Fluid should be within 1/4 inch of fill port lip and checked only with all jacks retracted.
- ◆ Inspect and clean all hydraulic pump electrical connections every 12 months.
- ◆ Remove dirt and road debris from jacks as needed.
- ◆ If jacks are down for extended periods, it is recommended to spray exposed chrome rods with a silicone lubricant every seven days for protection.

In most applications, Type A automatic transmission fluid will work satisfactorily. If operating in cold temperature (less than 10-F<sup>0</sup>) jacks may extend and retract slowly.

## ! CAUTION !

Do not rely solely upon warning lights or warning buzzer to determine position of leveling jacks. It is operator’s responsibility to check that all jacks are raised all the way up before moving motor home.



For cold weather operation, fluids specially-formulated for low temperatures may be desirable. Consult factory for recommended cold weather fluid.

- ◆ Useable Reservoir Capacity = 1.2 gal.
- ◆ 4-Jack System Capacity = 2.4 gal. (approx.)

## **Vehicle Loading**

There are two important factors to consider when loading your motor home; total weight and balance. When loading heavy objects keep them as low as possible, preferably on the floor. Load weight must be distributed as evenly as possible.

### **Unloaded Vehicle Weight (UVW)**

UVW means weight of this motor home as built at the factory with full fuel, engine oil, and coolants. UVW does not include cargo, fresh water, LP Gas, occupants, or dealer installed accessories.

### **Net Carrying Capacity (NCC)**

NCC means maximum weight of all occupants including driver, personal belongings, food, fresh water, LP gas, tools, tongue weight of towed vehicle, dealer installed accessories, etc., that can be carried by this motor home. (NCC is equal to or less than GVWR minus UVW).

### **Gross Combination Weight Rating (GCWR)**

GCWR means value specified by motor home manufacturer as maximum allowable loaded weight of this motor home with its towed trailer or towed vehicle.

### **Gross Axle Weight Rating (GAWR)**

GAWR means load-carrying capacity specified by manufacturer of a single axle system, as measured at the tire ground interfaces.



Driving & Safety Tips

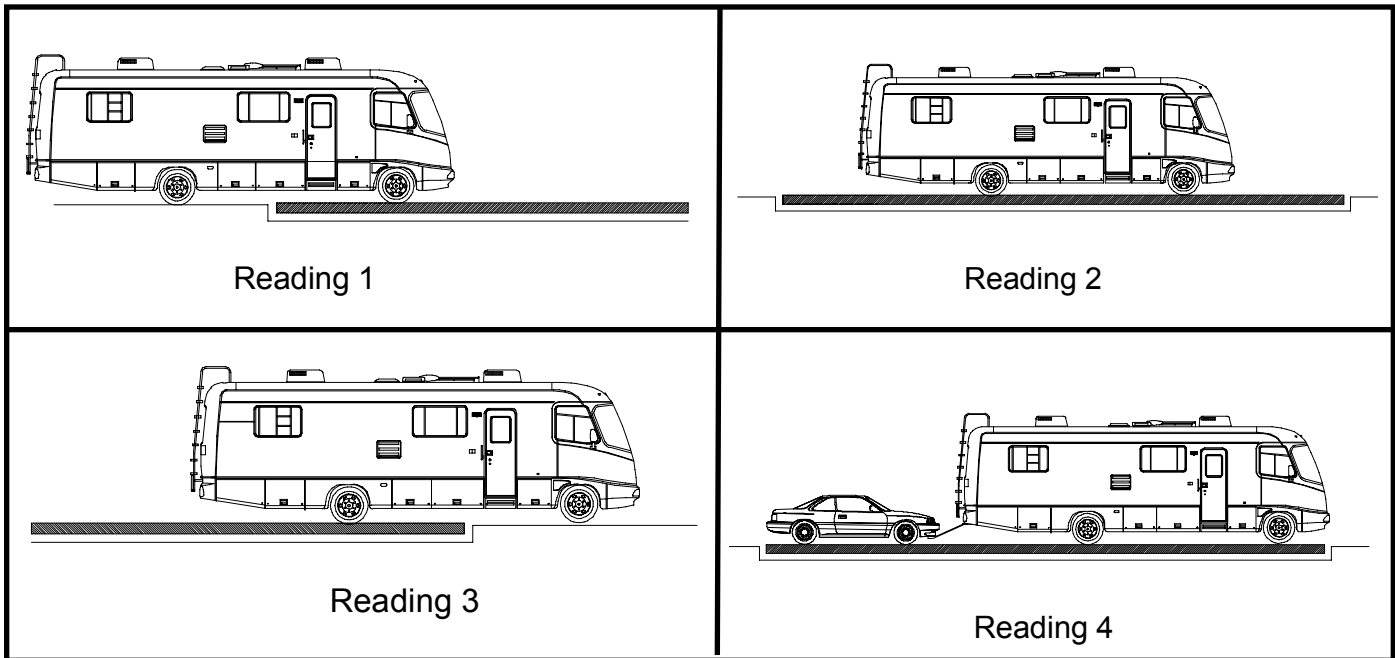
MOTOR HOME WEIGHT INFORMATION		CONSULT OWNER'S MANUAL FOR SPECIFIC WEIGHING INSTRUCTIONS AND TOWING GUIDELINES.	
MODEL		GVWR	
UVW	NCC	GCWR	
<p><b>THIS MOTOR HOME IS CAPABLE OF CARRYING UP TO</b> _____ <b>GAL.</b></p> <p><b>OF FRESH WATER (INCLUDING WATER HEATER) FOR A TOTAL OF</b> _____ <b>LBS.</b></p> <p><b>REFERENCE:</b> WEIGHT OF FRESH WATER IS 8.33 EQUAL LBS/GAL; WEIGHT OF LP GAS IS 4.5 LBS/GAL (AVERAGE).</p>			
<p><b>GVWR GROSS VEHICLE WEIGHT RATING</b> MEANS THE MAXIMUM PERMISSIBLE WEIGHT OF THIS MOTOR HOME. THE GVWR IS EQUAL TO OR GREATER THAN THE SUM OF THE UNLOADED VEHICLE WEIGHT PLUS THE NET CARRYING CAPACITY.</p>			
<p><b>UVW UNLOADED VEHICLE WEIGHT</b> MEANS THE WEIGHT OF THIS MOTOR HOME AS BUILT AT THE FACTORY WILL FULL FUEL, ENGINE OIL, AND COOLANTS. THE UVW DOES NOT INCLUDE CARGO, FRESH WATER, LP GAS, OCCUPANTS, OR DEALER INSTALLED ACCESSORIES.</p>			
<p><b>NCC NET CARRYING CAPACITY</b> MEANS THE MAXIMUM WEIGHT OF ALL OCCUPANTS INCLUDING THE DRIVER, PERSONAL BELONGINGS, FOOD, FRESH WATER, LP GAS TOOLS, TONGUE WEIGHT OF TOWED VEHICLE, DEALER INSTALLED ACCESSORIES, ETC. THAT CAN BE CARRIED BY THIS MOTOR HOME (NCC IS EQUAL TO OR LESS THAN GVWR MINUS UVW)</p>			
<p><b>GCWR GROSS COMBINATION WEIGHT RATING</b> MEANS THE VALUE SPECIFIED BY THE MOTOR HOME MANUFACTURER AS THE MAXIMUM ALLOWABLE LOADED WEIGHT OF THIS MOTOR HOME WITH ITS TOWED TRAILER OR TOWED VEHICLE.</p>			
<p>CD-126</p>			
<p>This label is located on the inside of a wardrobe door.</p>			



MONACO

2000

## Driving & Safety Tips



## Weighing Your Motor Home

READING 1 - GAW (Gross Axle Weight) front axle on scale only (loaded for travel)

READING 2 - GVW (Gross Vehicle Weight) entire unit on scale (loaded for travel).

READING 3 - GAW (Gross Axle Weight) rear axle on scale only (loaded for travel).

READING 4 - GCW (Gross Combined Weight) entire unit on scale with towed vehicle (loaded for travel).

**NOTE:** Compare actual weights to ratings to ensure you are below maximum ratings.

## Smoke Detector

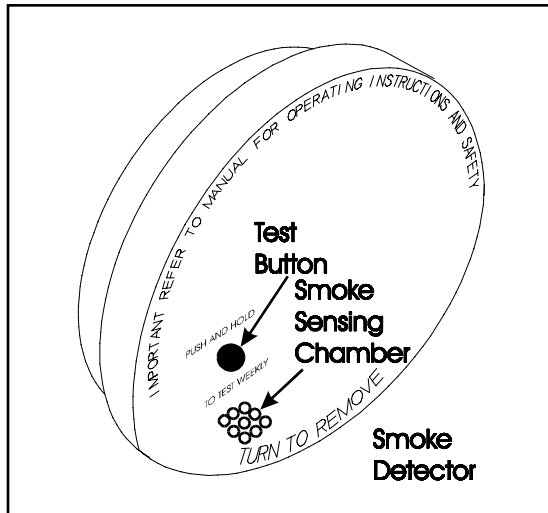
Statistics show that most fire casualties are not caused by direct flame, but by the less visible smoke (products of combustion). Smoke detector responds to both visible and invisible products of combustion. A smoke detector will automatically return from alarm to normal state when the reason for activation, the presence of smoke, is completely removed. Three of the most common fire killers are: smoking in bed, leaving children unattended and cleaning with flammable fluids. Please be safety conscious and avoid unnecessary risk.



## Driving & Safety Tips

### How to Test

To test the electronics of the alarm press the test button on the cover of the smoke alarm for a few seconds. The smoke alarm will sound by making a continuous loud beep. To complete the test sequence release the button and the alarm should stop.



To test if smoke can reach the ionization/sensing chamber you must blow smoke into the sensing chamber, in a careful fire safe manner, until the alarm sounds. Do not use an open direct flame, of any kind, or you may damage your detector. The smoke alarm will stop sounding once smoke has cleared the ionization chamber.

**NOTE:** Test the smoke alarm after the motor home has been in storage, before each trip, and at least once a week during use.

### Maintenance

Vacuum slots in cover and sides with a soft brush attachment every month. Your smoke alarm should be cleaned every six months to help keep the unit working sufficiently. Do not paint the detector.

The only acceptable batteries for use in the the smoke alarm are the Eveready 216 or equivalent. A battery should power the smoke alarm for at least one year under normal use. When the battery reaches the end of its normal life a low battery warning (intermittent beeping) will indicate the need for battery replacement.

### Trouble Shooting

If the alarm does not sound when the test button is pushed or with the smoke test, try the following:

- ◆ Inspect for obvious damage
- ◆ Check for recommended battery type
- ◆ Check battery for proper connection, or replace battery if needed
- ◆ Gently vacuum as recommended.



If these procedures do not correct the problem, do not attempt repairs. If the smoke alarm is within the warranty period and terms indicate the nature of the problem, return the unit to your dealer. Smoke detectors beyond warranty cannot be economically repaired.

Abnormal air conditions may cause the smoke alarm to be highly sensitive and give a false alarm. If not fire is apparent ventilate the room and/or blow fresh air into the motor home until the alarm stops. Once cleared the smoke alarm will automatically reset. Dust can lead to excessive sensitivity; vacuum as recommended.

## Carbon Monoxide Detector

Your motor home is equipped with a carbon monoxide detector. Carbon monoxide (CO) is a colorless, odorless and tasteless gas. Even low levels of CO have been known to cause brain and other vital organ damage in unborn infants with no effect on the mother. In cases of mild exposure symptoms include a slight headache, nausea, vomiting, and fatigue. Symptoms of medium exposure are severe throbbing headaches, drowsiness, confusion and fast heart rate. Extreme exposure can result in unconsciousness, convulsions, cardio-respirator failure and death. Young children and household pets may be the first effected. Your CO detector is designed to detect the toxic CO fumes that result from vehicle exhaust and incomplete combustion sources like a furnace, gas stove, or water heater. Consequently, it is uncommon for household smoke from cigarettes or normal cooking to cause the alarm to sound.

### Operating Instructions

The detector is equipped with a self-cleaning CO sensor and requires a ten minute initial warm-up period to clean the sensor element and achieve stabilization. The green power light should be lit when the power is on. If the light is not lit, turn off power and check all wire connections. If power is on and connections are correct but the indicator still does not light, the detector should be returned for service. Do not attempt to fix the detector yourself.

The indicator light displays a specific color to monitor conditions as follows:

- ◆ Green color indicates an “ON” or normal condition. The CO detector has power and is sensing air for presence of CO gas. The alarm horn will not sound.
- ◆ Yellow color indicates a “TROUBLE” or malfunction condition; the alarm horn will sound and cannot be reset by TEST/RESET button. CO detector is not working properly and must be immediately replaced or repaired.
- ◆ Red color indicates an “ALARM CONDITION”, the detector has sensed a presence of hazardous level of carbon monoxide. The alarm horn will sound continuously until reset by the RESET switch.

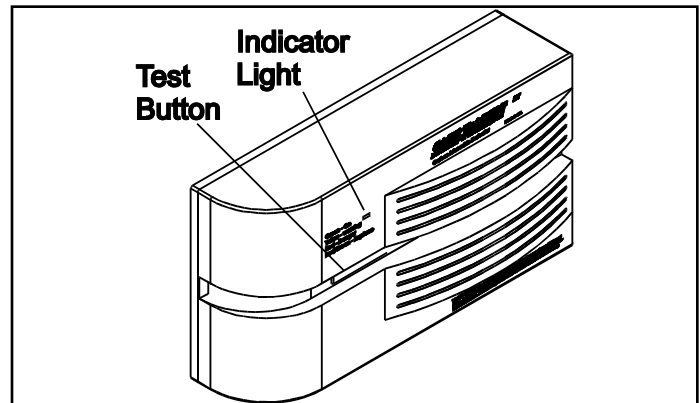




## Driving & Safety Tips

### When the Alarm Sounds

When the alarm sounds you should have the detector and motor home checked by an authorized service technician as soon as possible. Never disconnect a CO detector to silence a nuisance alarm. Evacuate motor home immediately when RED light is lit and alarm sounds. Do a head count to check that all persons are accounted for. Call the nearest fire department and ask them to determine the source of carbon monoxide. Do not re-enter motor home until it has been aired out and the problem is corrected.



### Testing Your Carbon Monoxide Detector

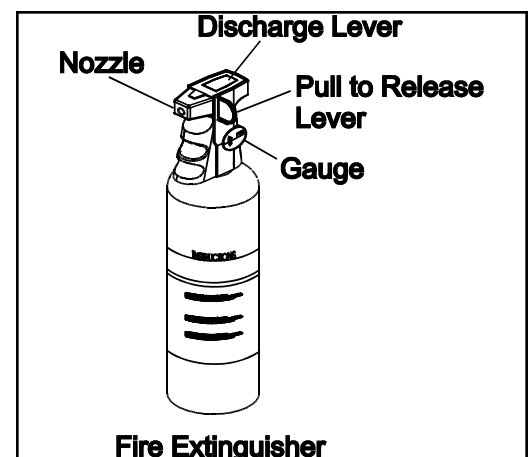
Test the carbon monoxide detector operation after the motor home has been in storage, before each trip, and at least once a week during use. You can test the alarm by holding the test button in until the alarm sounds. The alarm will stop beeping in about 30 seconds.

### Cleaning Your Detector

Use a vacuum cleaner to remove dust and any other build-up on the detector. Do not wash. Wipe the detector with a damp cloth and dry it with a towel. Do not open the detector for cleaning. Do not paint the detector. We recommend replacing your carbon monoxide detector every 10 years.

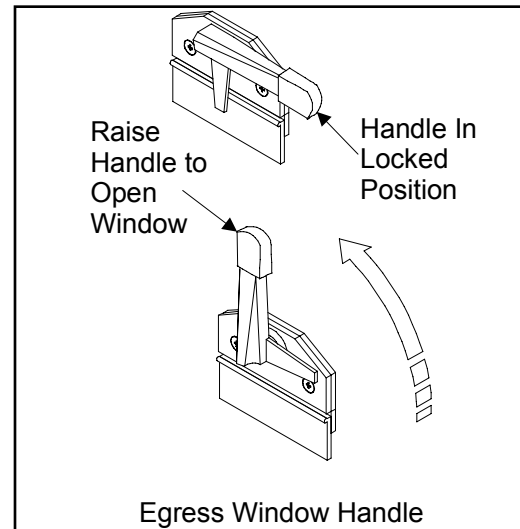
## Fire Extinguisher

The fire extinguisher in your motor home is located near the main entrance door. Please read the operating instructions that are printed on the fire extinguisher. If there is any doubt on the operation of the fire extinguisher you and your family should practice using it then replace or recharge it. Inspect the fire extinguisher at least once a month; more frequently if it is exposed to weather or possible tampering. Check gauge for extinguisher level. Partially discharging will cause a loss of pressure.



## Egress Exit Window

Motor homes are equipped with an egress exit window. This window is designed to be used as an additional exit for the motor home in the case of an emergency. It can easily be identified by the red color of the handle. Open the egress window by lifting the handle and pushing outward on the window. The window can be closed by pulling the window closed and lowering the handle to the down or locked position.



## Towing Procedure

It is recommended that if a towing company is called make sure they use a stinger (an arm that goes under motor home and hooks to front cross member). This is the safest and most efficient way to tow a motor home. It also protects the front bumper and cap from damage. Generally, if your motor home ever needs to be towed follow these instructions.

- ◆ Secure any loose or protruding parts if motor home is damaged.
- ◆ Inspect points of attachment on disabled motor home. If attachment points are damaged, select other attachment points at a substantial frame structural member.
- ◆ Never allow anyone to go under a motor home while it is being lifted by towing equipment unless the disabled motor home is adequately supported by safety stands.
- ◆ Do not tow motor home from the rear. Towing from the rear will cause front tires and suspension to be seriously overloaded, possibly resulting in tire or front suspension failure. Rear frame extensions are not designed to withstand loads imposed by lifting the rear of motor home.
- ◆ If rear wheels are disabled place motor home on a flat bed trailer, or use a heavy duty dolly under rear wheels and tow from the front of the motor home.
- ◆ Drive shaft should be removed to protect transmission.

## Towing Without Stinger

Make sure the tow truck can safely pull the weight of your motor home. It is recommended that you give the tow company the weight of your motor home when you call them. If your motor home is going to be towed without a stinger do the following:

## Driving & Safety Tips

---

- ◆ Wrap chains around both A=arms or front axle on each side.
- ◆ Pass chains beneath tow bar below bumper.
- ◆ Position a 6' x 6' timber between ends of main frame rails and tow vehicle transfer plate to maintain clearance to body parts.
- ◆ Attach safety chains, which are completely independent of primary lifting device, to main frame walls.
- ◆ When the motor home is under tow, allow enough room between the front of the motor home and rear of the tow vehicle while turning corners.

### Using Rear Hitch

When using a rear hitch remember that your motor home is intended for towing light loads. Your motor home is designed to be used primarily as a recreational vehicle, towing will affect durability and economy. Your safety and satisfaction require proper use. Avoid excessive loads or any other abuse. Instructions for towing are listed in the chassis Owner's manual provided in your Owner's Information File. You should not use your motor home to tow anything until your motor home has been driven 500 miles (800 kilometers). Weight pushing down on the rear hitch must not exceed 300 pounds. We recommend weighing your motor home as it will be operated to be certain that there is proper weight distribution. When weighing your motor home be sure to take the passenger locations into consideration. Total weight of your motor home and any vehicle towed by it must not exceed the GCWR.

### **Ready to Leave Checklist**

- ◆ Drain and flush out holding tanks. Close valves all the way and install caps securely.
- ◆ Disconnect sewer hose and store it in an outside compartment.
- ◆ Fill fresh water tank. Disconnect and store fresh water hose.
- ◆ Disconnect shore line and store it in an outside compartment.
- ◆ Disconnect cable TV and phone hookups and lower TV antenna.
- ◆ Retract any awnings and secure them for transport.
- ◆ Close all roof vents.
- ◆ If applicable retract leveling jacks to their travel position.
- ◆ Check engine oil, transmission fluid, brake fluid, engine coolant, power steering fluid, windshield washer fluid and tire inflation.
- ◆ Secure any loose, heavy or sharp objects in the motor home or service compartments.
- ◆ Turn off interior lights, water heater, furnace and water pump.
- ◆ Check LP gas tank gauge to make sure there is LP gas available.



- ◆ Check fuel gauge and lights on motor home.
- ◆ Fasten bifold and pocket doors securely.
- ◆ Walk around your motor home one last time to make sure everything is stored away and outside compartments are closed and locked. Pull forward, clean site if necessary and check for forgotten items.
- ◆ Secure and lock entrance door.

## To Temporarily Store Motor Home (Between Weekend or Monthly Trips)

### To Store:

- ◆ Drain holding tanks.
- ◆ Shut off all appliances and water heater. Close LP gas valve.
- ◆ Turn water pump OFF.
- ◆ Close all roof vents.
- ◆ Remove articles from refrigerator/freezer and clean thoroughly. Leave door ajar to prevent mildew.
- ◆ Retract any awnings and secure them for transport.
- ◆ Turn battery disconnects to OFF.
- ◆ Secure and lock entrance door.

### To Take Out of Storage:

- ◆ Turn battery disconnects to ON.
- ◆ Turn on LP gas valve and check operation of appliances and water heater.
- ◆ Perform "Ready to Leave Checklist"

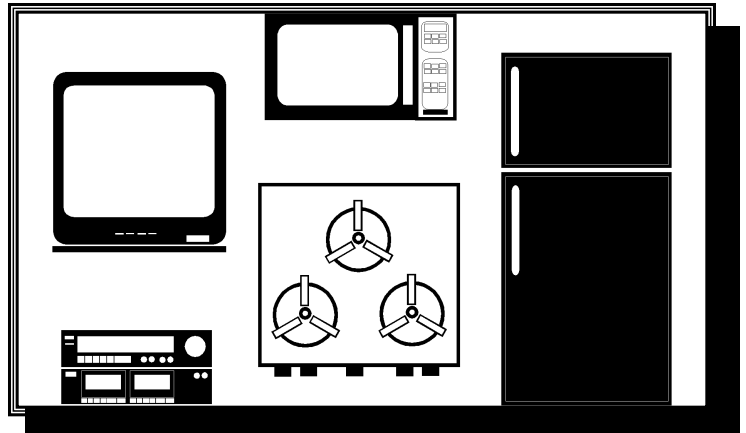
## NOTES



## Appliances & Equipment

### General Information

This chapter covers the operation and care of various appliances and types of equipment found in your motor home. Your motor home can be equipped with many different kinds of equipment such as: refrigerator, range, microwave, television, VCR, stereo, furnace, water heater, air conditioning, awning and slide-out room. The appliances found in your motor home are similar to those you have in your home.



Many operate on LP gas, AC/DC current, or a combination. Detailed information, CAUTION and WARNING instructions for your various appliances and electronic components, other than what is in this chapter, can be found in the manufacturer's annuals in your motor home information file.

### ! WARNING !

Most LP gas appliances and equipment used in recreation motor homes are vented to the outside. When parked close to a gasoline pump it is possible that gasoline fumes could enter this type of appliance or equipment and ignite the burner flame causing a fire or explosion. Shut off these appliances when refueling motor home.

Carbon Monoxide can cause nausea, fainting, or death. Inadequate ventilation or partial blockage of LP gas appliances and equipment flues can result in increased carbon monoxide fumes when operating in LP gas mode.

Do not store cigarette lighter fluid, petrol, ether, etc. in refrigerator, they can cause a fire or explosion.

## Refrigerator

### Operating Instructions - 900 Series

A 12 volt DC supply is required to operate the refrigerator; if indicator lights are not lit on the control panel when the refrigerator is turned on, check for loss of DC supply voltage. The shore line must be plugged in for 120 volt AC operation. The refrigerator AC power cord must be plugged in and LP gas valve must be open for operation (refrigerator AC power cord is located in refrigerator outside compartment). Refer to Chapter 8



“Diagrams” for compartment locations. A 2-way refrigerator operates on AC current or LP Gas. A 3-way refrigerator (optional) operates on AC current, DC current, or LP Gas.

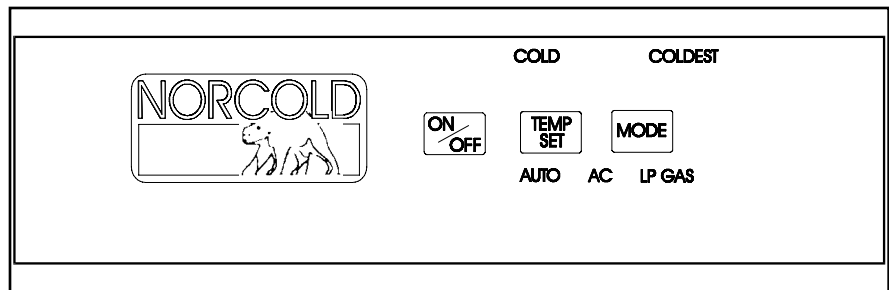
**Door - 900 Series**

The handle is equipped with a storage latch which enables doors to be left partially open to prevent buildup of odor during extended refrigerator shut down periods. To us the storage latch, open door approximately 1/2 inch and slide storage latch in cut out on strike plate.

**Control Panel - 900 Series**

**LCD Display** - The window has a light which illuminates when any button is pressed and remains lit for 10 seconds after button is released.

**ON/OFF Button** - Press button to turn refrigerator ON. Press button and hold until no lights are lit to turn refrigerator OFF.



**MODE Button** - Pressing and holding button allows user to cycle through three choices; on “AUTO” and two manual modes (AC and LP Gas). The refrigerator will not switch to a new operating mode until the button is released.

**TEMP SET Button** - Press and hold button to select desired temperature setting. Temperature settings appear in the display window, with the highest number reading indicating the coldest setting.

**Manual Mode - 900 Series**

To operate in “MANUAL” mode, press and hold “MODE” button until desired operating mode (AC & LP Gas) is displayed. If energy source is interrupted, a diagnostic code will flash in LED display and an alarm will sound. Turn refrigerator OFF to silence alarm and refer to refrigerator Operator’s manual for diagnostic meaning.

## Appliances & Equipment

### AUTO Mode - 900 Series

- ◆ Press main power ON/OFF button so that display light is lit.
- ◆ Press TEMP SET button and hold until coldest reading is indicated.
- ◆ Press and hold MODE button to select AUTO setting then release button.  
Operating control automatically selects one of the following:
  1. When 120 volt AC is available, “AUTO AC” will be visible in display panel indicating refrigerator is operating on AC Current.
  2. If 120 volt AC is not available, refrigerator will switch to LP gas operation and “AUTO LP GAS” will be visible in display panel. If gas burner does not ignite within 30 seconds refrigerator gas valve will automatically close, controls will revert to a standby mode in which an alarm will sound and flashing LED display will indicate “A1”. Turn refrigerator OFF to silence alarm. If gas burner does not light after several tries, consult your authorized dealer for assistance. If AC electric becomes available while refrigerator is operating in “AUTO LP GAS” mode, refrigerator will switch to “AUTO AC” operation.
- ◆ After the refrigerator is operating press “TEMP SET” button and adjust to desired temperature.

### Shut Down - 900 Series

Press ON/OFF button and hold until no indicator lights are lit. If the refrigerator will not be in operations for a period of weeks it should be emptied, defrosted, cleaned and the doors left ajar. Ice trays should be dried and kept outside the refrigerator.

### Diagnostic Codes - 900 Series

Operating controls are equipped with a diagnostic systems which alerts to a problem in any mode of operation. When a problem occurs within a given mode, operating controls will revert to a standby mode in which an alarm will sound and a diagnostic code will flash in LED window. Turn the refrigerator OFF to silence the alarm and refer to refrigerator Operator’s manual for diagnostic meaning.

### Operating Instructions - 1200 Series

A 12 volt DC supply is required to operate the refrigerator; if indicator lights are not lit on the control panel when the refrigerator is turned on, check for loss of DC supply voltage. The shore line must be plugged in for 120 volt AC operation. The refrigera-

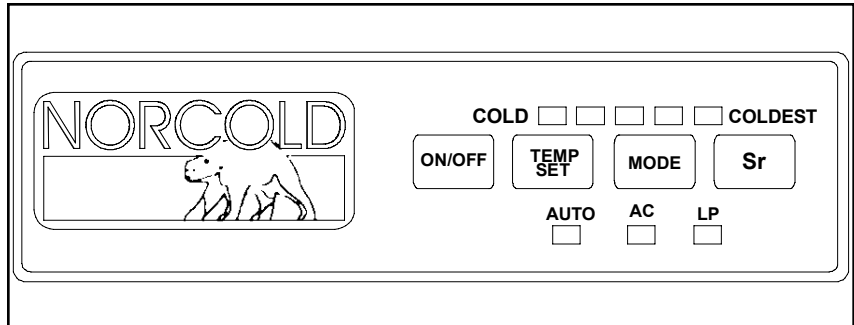


tor AC power cord must be plugged in and LP gas valve must be open for operation (refrigerator AC power cord is located in refrigerator outside compartment). Refer to Chapter 8 “Diagrams” for compartment locations. The refrigerator operates on AC current or LP Gas.

**Control Panel - 1200 Series**

**LED Display** - Flashes a LED fault code to diagnose an abnormal operating condition.

**ON/OFF Button** - Press button to turn refrigerator ON. Press button and hold until no lights are lit to turn refrigerator OFF.



**MODE Button** - Pressing and holding button allows the user to cycle through three choices; AUTO, AC and LP modes. The refrigerator will not switch to new operating mode until the button is released.

**TEMP SET Button** - Press and hold button to select desired temperature setting. Temperature settings appear in display between COLD and COLDEST range.

**Manual Mode - 1200 Series**

To operate in “MANUAL” mode, press and hold “MODE” button until desired operating mode (AC OR LP) light is lit. If energy source is interrupted, a diagnostic code will flash in LED display and an alarm will sound. Turn refrigerator OFF to silence alarm and refer to refrigerator Operator’s manual for diagnostic meaning.

**AUTO Mode - 1200 Series**

- ◆ Press main power ON/OFF button so that any light is lit.
- ◆ Press TEMP SET button and hold until COLDEST reading is indicated.
- ◆ Press and hold MODE button to select AUTO setting then release button. Operating control automatically selects one of the following:

1. When 120 volt AC is available, AUTO and AC lights will be lit indicating refrigerator is operating on AC current. After 10 seconds AC light will go off and AUTO light will stay lit. Press and quickly release MODE button to display operating mode.



2. When 120 volt AC is not available, AUTO and LP lights will be lit indicating refrigerator is operating on LP gas. After 10 seconds LP light will go off and AUTO light will stay lit. Press and quickly release MODE button to display operating mode. If gas burner does not ignite within 30 seconds refrigerator gas valve will automatically close, controls will revert to a standby mode in which an alarm will sound and flashing LED display will indicate a fault code. Turn refrigerator OFF to silence alarm. If gas burner does not light after several tries consult your authorized dealer for assistance. If AC electric becomes available while refrigerator is operating in "AUTO LP GAS" mode, refrigerator will switch to "AUTO AC" operation.

- ◆ After refrigerator is operating press TEMP SET button and adjust to desired temperature.

### **Shut Down - 1200 Series**

Press ON/OFF button and hold until no indicator lights are lit. If the refrigerator will not be in operation for a period of weeks it should be emptied, defrosted, cleaned and doors left ajar. Ice trays should be dried and kept outside refrigerator.

### **Diagnostic Codes - 1200 Series**

Operating controls are equipped with a diagnostic system which alerts to a problem in any mode of operation. When a problem occurs within a given mode, operating controls will revert to a standby mode in which an alarm will sound and a diagnostic code will flash in LED window. Turn refrigerator OFF to silence alarm and refer to refrigerator Operator's manual for diagnostic meaning.

## **Ice Maker Operation**

The refrigerator must be allowed to pre-cool properly before starting the ice maker. The refrigerator has to be connected to a 120 volt AC before the ice maker can operate.

- ◆ The water pump must be in the ON position or the system hooked to a water supply to furnish the ice maker with water.
- ◆ Manual water shut off valve must be open. The valve is located inside motor home under the kitchen sink next to the water filter.
- ◆ To start the ice maker move the ice level bail arm to the down position.
- ◆ To shut off the ice maker move the ice bail arm all the way to the up position.



When the ice maker thermostat senses preset temperature for ejection of ice cubes, the mold fins will start to rotate dumping ice cubes and the mold will refill with water.

The first few cycles of the ice maker may make small ice cubes due to air trapped in water lines. The first container of ice cubes should be dumped if the water system has been winterized or not in use for several weeks.

## Defrosting Refrigerator

- ◆ Shut down refrigerator.
- ◆ While emptying refrigerator, leave a drip tray under the cooling fins.
- ◆ Keep cabinet and freezer doors open.
- ◆ Defrosting time can be reduced by placing a pan of hot water in freezer.
- ◆ After frost has melted, empty drip tray and clean refrigerator.

### ! CAUTION !

Do not use a hot air blower. Permanent damage could result from warping metal or plastic parts. Do not use a knife, ice pick or other sharp tools to remove frost from freezer, they can create a leak in the ammonia system.

## Cleaning Refrigerator

Cleaning the refrigerator is usually done after it is defrosted or when it is put into storage.

- ◆ To clean interior lining of refrigerator use a luke warm weak soda solution.
- ◆ Use only warm water to clean cooling fins and ice trays.
- ◆ Never use strong chemicals or abrasives to clean these parts as protective surfaces will be damaged.

## Microwave Oven

Microwave oven operates on AC current only. For instructions on how to operate special features on the microwave oven refer to manufacturer's manual in your motor home information file.

## Appliances & Equipment

### Cleaning Microwave Oven

- ◆ To clean inside walls, ceiling and floor, wipe up any splatters or spills with a soft damp cloth or sponge after each use or clean with mild detergent and water.
- ◆ Clean outside surface with mild soap and water, rinse and dry with a soft cloth.
- ◆ Never use strong chemicals or abrasives to clean microwave oven or surfaces will be damaged.

### **Cooktop - (Optional)**

Cooktop burners use electronic to light burners. Inverter must be ON, shore power plugged in or generator running to supply current to ignitors.

- ◆ To light burners, make sure LP gas is turned on.
- ◆ Push in and turn burner knob to HI position.
- ◆ Ignitors will spark until burner lights.
- ◆ Turn burner knob to desired setting.
- ◆ Turn burner knob to OFF when finished.

If burner does not light within 4 to 10 seconds, turn burner knob to OFF. Check that LP gas is present, cooktop cord is plugged in, circuit breaker is not tripped and electronic ignitors spark. If burner does not light after three attempts, contact your servicing dealer.

### **! WARNING !**

Do not heat motor home interior with cooktop, range or oven. Gas combustion consumes oxygen inside motor home.

### **Range w/Oven**

**Range** - Top burners use electronic ignitors to light burners. Inverter must be ON, shore power plugged in or generator running to supply current to ignitors.

- ◆ To light burners, raise burner cover and fold it to the back of range.
- ◆ Push in and turn burner control knob counterclockwise to turn gas on, wait two seconds, and turn left spark ignitor control knob clockwise until a flame appears.
- ◆ After burners have been shut off and range has cooled, fold cover over range.

#### **Oven:**

- ◆ To light oven pilot push in oven control knob and rotate counterclockwise to PILOT ON position.



- ◆ Light oven pilot light located at bottom and back of oven to the left of oven burner. Oven pilot may be slow in lighting due to initial air in gas line.
- ◆ Oven pilot has been factory adjusted and no further adjustment is necessary.
- ◆ To light oven push in on oven knob and turn to desired temperature.
- ◆ To extinguish oven pilot push in oven control knob and turn clockwise to OFF.

### **Cleaning Cooktop or Range**

- ◆ Clean all surfaces as soon as possible after spills or spotting.
- ◆ Use warm soapy water only. Grit or acid-type cleaners should never be used.
- ◆ Use oven cleaner in oven; Follow directions for any oven cleaner used.
- ◆ To remove range top lift top upwards by front edge and pull top up and away from rear trim.
- ◆ To install range top, lower top into place. Apply slight downward pressure on both sides of top to engage retaining clips.
- ◆ Run spin cycle to reduce amount of water in washer.
- ◆ To clean drain screen open service door by pressing on left hand side.
- ◆ Place a cloth or shallow tray under drain screen housing, as a small amount of water may run out.
- ◆ Turn drain screen counterclockwise and pull drain screen out.
- ◆ Clean screen to remove any dirt and lint.
- ◆ To replace screen slide it back into housing and turn it clockwise to secure.
- ◆ Close service door.

## **Television Antenna**

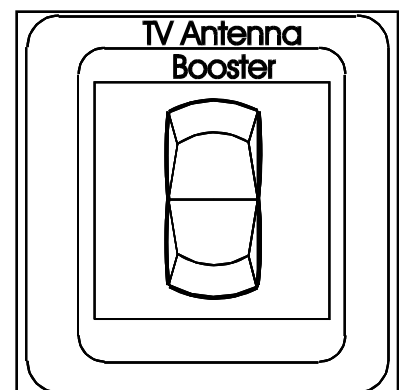
### **Antenna Booster**

The television antenna is designed for color and black-and-white televisions. If reception is poor make sure power supply switch is ON and connectors are tight. The power switch is located in an overhead compartment next to entrance door. If reception remains poor, check with your authorized dealer.

### **To Raise Antenna**

Before raising antenna check for clearance above motor home.

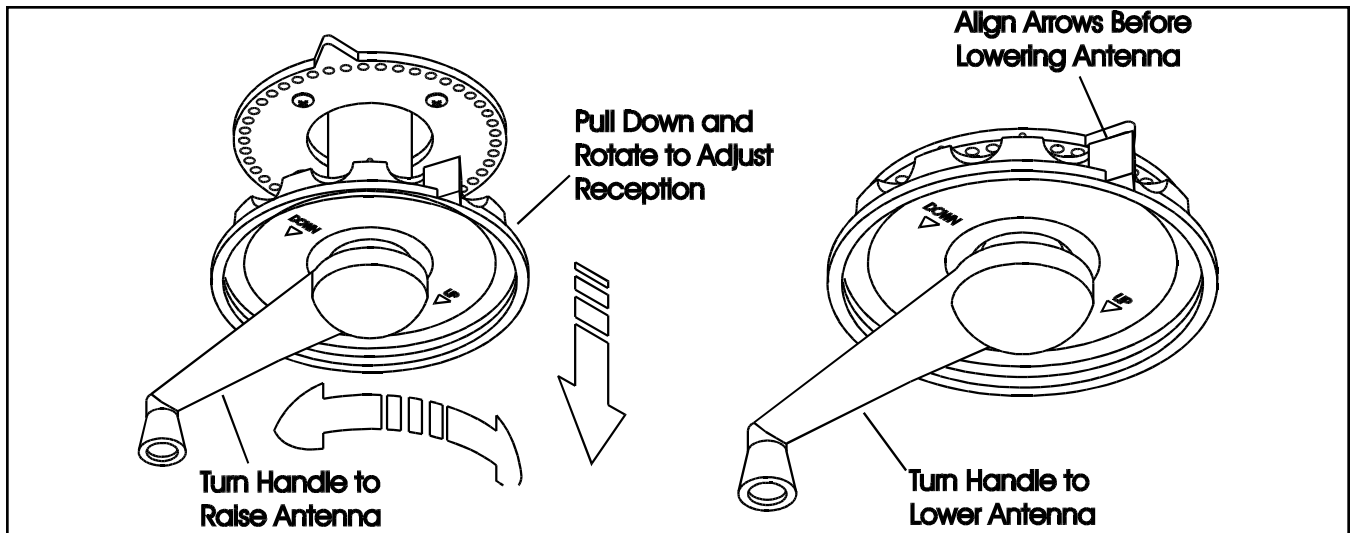
- ◆ To raise antenna to operating position, turn crank toward UP arrow until you feel resistance.
- ◆ Turn power booster switch to ON position.





## Appliances & Equipment

- ◆ Rotate antenna only when antenna is fully raised; to rotate antenna, pull down on rotating knob until it disengages ceiling plate. Turn antenna clockwise or counterclockwise for best picture and sound. Do not rotate antenna except when it is in the fully raised position.



### ! WARNING !

Do not raise TV antenna near overhead electrical wires as contact may cause serious injury or death.

Do not move motor home when TV antenna is up. There is a red warning light on operator's dash panel. When the ignition switch is turned to the ON position the warning light will be lit if antenna is up. When this light is lit lower antenna before moving the motor home.

### To Lower Antenna

**Important: Never lower antenna without first aligning pointer.**

- ◆ To lower antenna, align arrow on rotating knob with pointer on ceiling plate. Do not force handle or you will damage antenna.
- ◆ Turn crank towards DOWN arrow position until you feel resistance.



## Satellite System Prep (Optional)

If your motor home does not have a satellite dish, check to see if optional satellite system prep wiring has been installed. If your motor home is equipped with a satellite dish system, refer to manufacturer's Owner's manual in your Owner's information file for operating instructions.

## Television and VCR

Your motor home is equipped with a color TV located above operator's seat. There is also a color TV in bedroom. VCR is located in an overhead compartment in front of motor home. VCR and TV's are powered by 120 volt electricity only. For detailed information and operating instructions on VCR and TV's refer to manufacturer's manual in your Owner's information file.

## VCR & TV Cable Switch Box

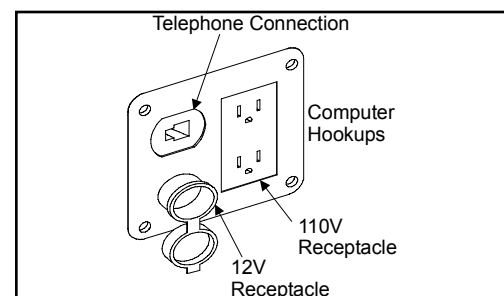
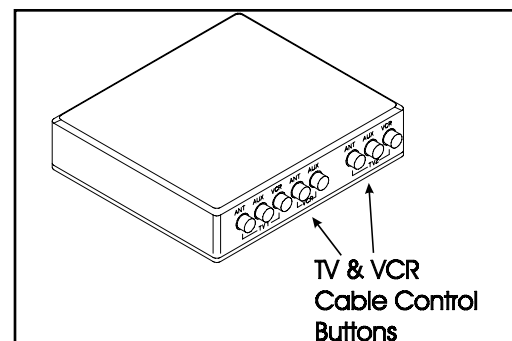
The VCR can be used by either one or both TV's. The cable switch box is located in an overhead compartment in the front of the motor home. This box allows you to choose whether you want TV's to use VCR, cable hookup, roof antenna or any combination of the three. For detailed information and operating instructions on the cable switch box refer to manufacturer's manual in your Owner's information file.

## Cable and Telephone Hookups

Your motor home is equipped with cable TV and telephone hookups. These hookups can be used to connect to cable TV and telephone services at campgrounds (hookups are located in outside water control and center compartments).

## Computer Station Hookups

Your motor home is equipped with necessary plugs, 12V or 110V and telephone jacks, to operate your computer. The plug panel is located in the front of the motor home on passenger side wall.



## Appliances & Equipment

### Stereo & CD Player

Your motor home is equipped with an AM/FM CD Player Stereo located in the dash. Stereo receives 12 volt power directly from the house battery. You may also have an (Optional) stereo available with a built in cassette player. For detailed information and operating instructions on the stereo and CD player systems refer to manufacturer's manual in your Owner's information file.

### Citizens Band (CB) Radio Prep

Located under the dash next to the two pin dash accessory connector is a two pin connector labeled Citizens Band Radio. The red wire is at 12VDC DC and is fused at 2 amps through the front distribution panel. The white wire is connected to chassis frame.

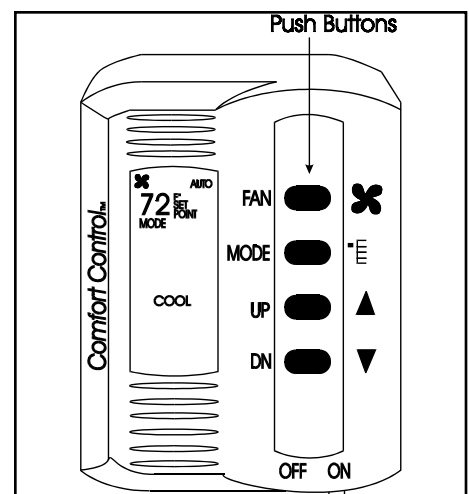
### Rear Vision System

If your motor home does not have a rear vision system, the wiring is provided behind the dash and rear cap for future installation.

The rear vision system consists of a camera located on the rear of the motor home and a monitor located in the dash. The operator can see what is behind the motor home when backing up. The rear vision monitor system is equipped with the ability to be ON all the time when the ignition switch is ON or only activated when the motor home gear shift is in reverse when backing up. For detailed information and operating instructions on the rear vision system, refer to manufacturer's manual in your Owner's information file.

### Roof Air Conditioner

The roof mounted air conditioner filters, circulates, cools and dehumidifies air inside your motor home. The air conditioner operates only on a 120 volt AC current from shore line or electric AC generator. A small amount of water from dehumidification will collect and is dispelled outside the motor home. Air flow inside the motor home is controlled by adjusting louvers located on the ceiling.





**To Operate Air Conditioner:**

- ◆ Slide ON/OFF switch to ON position.
- ◆ Push fan button until desired AUTO, LOW or HIGH appears on display.
- ◆ Push MODE button until COOL appears on display.
- ◆ Push UP or DN buttons to adjust desired temperature and setting appears on display.
- ◆ To shut off air conditioner slide ON/OFF switch to OFF position.

Return air filters should be cleaned frequently and are located on the motor home ceiling inside air intake vent covers. Never run the air conditioner without the return air filters in place. This may plug evaporator core with dirt and may substantially affect performance.

**To Clean Covers and Filters:**

- ◆ Remove vent covers and filters.
- ◆ Wash filters and covers in warm soapy water, DO NOT use solvents.
- ◆ Rinse filters and covers thoroughly with fresh water and allow them to dry.
- ◆ Reinstall filters and covers.

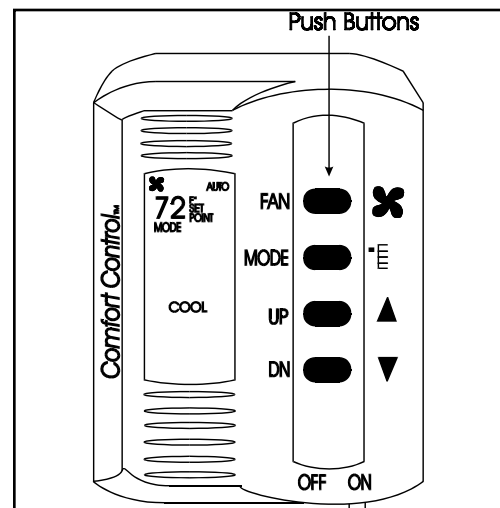
## Bathroom Exhaust Fan

The exhaust fan is powered by 12V DC. Always close dome lid when motor home is stored or unattended for an extended period of time. High winds and moisture leakage could cause serious damage to motor home. The fan is for ventilation only, it will not cool the motor home.

## Attic Air Vent

The attic fan will either pull air in or extract air from inside the motor home. There are 3 controls located in the ceiling attic vent. Knurled knob opens vent. Round knob controls fan speed settings. IN/OUT switch controls air flow to inside or outside of motor home. Fan will run only when the cover is open at least 3 inches.

- ◆ To operate open vent and turn fan ON to desired speed.
- ◆ To change direction of the fan turn the fan OFF, wait for blades to stop moving, push IN/OUT switch to desired position and turn fan ON to desired speed.





## Appliances & Equipment

- ◆ If your motor home has a thermostat, set it at the desired temperature for ON/OFF fan operations.

### Furnace

#### Operating Instructions

- ◆ Slide ON/OFF switch to ON position.
- ◆ Push fan button until desired AUTO, LOW, or HIGH appears on display.
- ◆ Push MODE button until FURNACE appears on display.
- ◆ Push UP or DN buttons to adjust temperature at 10<sup>0</sup> higher than the motor home temperature and setting appears on display.
- ◆ Allow 40 to 60 seconds for furnace to begin operating.
- ◆ Push UP or DN buttons to adjust desired temperature and setting appears on display.
- ◆ If furnace does not light, and you do not smell gas, repeat the above procedure.
- ◆ If furnace does not ignite after three attempts slide thermostat control to OFF and call a qualified service technician or your gas supplier.
- ◆ To shut down furnace slide thermostat control to OFF. After you have turned the furnace off or burner has shut down the fan will run for approximately 30 to 60 seconds to cool down the furnace.

#### Cleaning Furnace

Clean entire furnace and air tube passageways periodically to remove dust, lint, etc. Check gas systems for leaks at least once a year. Check and clean blower wheel annually. Control compartment of furnace must be kept clean; failure to do so could result in operational or fire hazards.

Before each heating season starts furnace should be thoroughly cleaned of wasp and spider nests, lint accumulations and other debris. Debris will restrict air flow for combustion, bind up combustion air impeller and keep blower fan from running. Check

burner pilot orifices for debris. Lint accumulations will cause blower to become unbalanced and vibrate, restrict ability of blower to move air, and if blown onto heat exchanger will cause odor and fire hazard. Contact your authorized dealer service technician for annual cleaning.

**! WARNING !**

Never attempt to modify this furnace. Fire, explosion, asphyxiation or carbon monoxide poisoning may result in serious bodily harm or death.

If you smell gas (a rotten egg or sulfur smell) at any time, perform the following steps immediately:

- ◆ Turn off main gas supply.
- ◆ Do not touch any electric switches.
- ◆ Extinguish any open flames.
- ◆ Open windows and doors.
- ◆ Do not try to light any appliance.
- ◆ Exit the motor home and contact a service center or gas supplier.

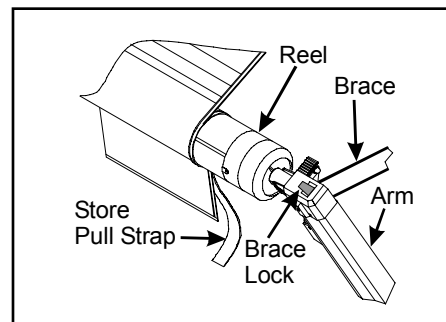
Do not store combustible or any other material next to the furnace. Storage of any materials may restrict the air flow and affect the efficiency of your furnace or result in a fire.

Be careful when washing your motor home so that water is not aimed directly into furnace outside vent. If water is forced into vent and past fan baffles in furnace, rusting and improper combustion could occur. For your safety do not use gasoline or other flammable vapors and liquids in vicinity of furnace. Electrical power to furnace should be turned off while cleaning control compartment to avoid shock or damage to furnace.

## Side Awning (Optional)

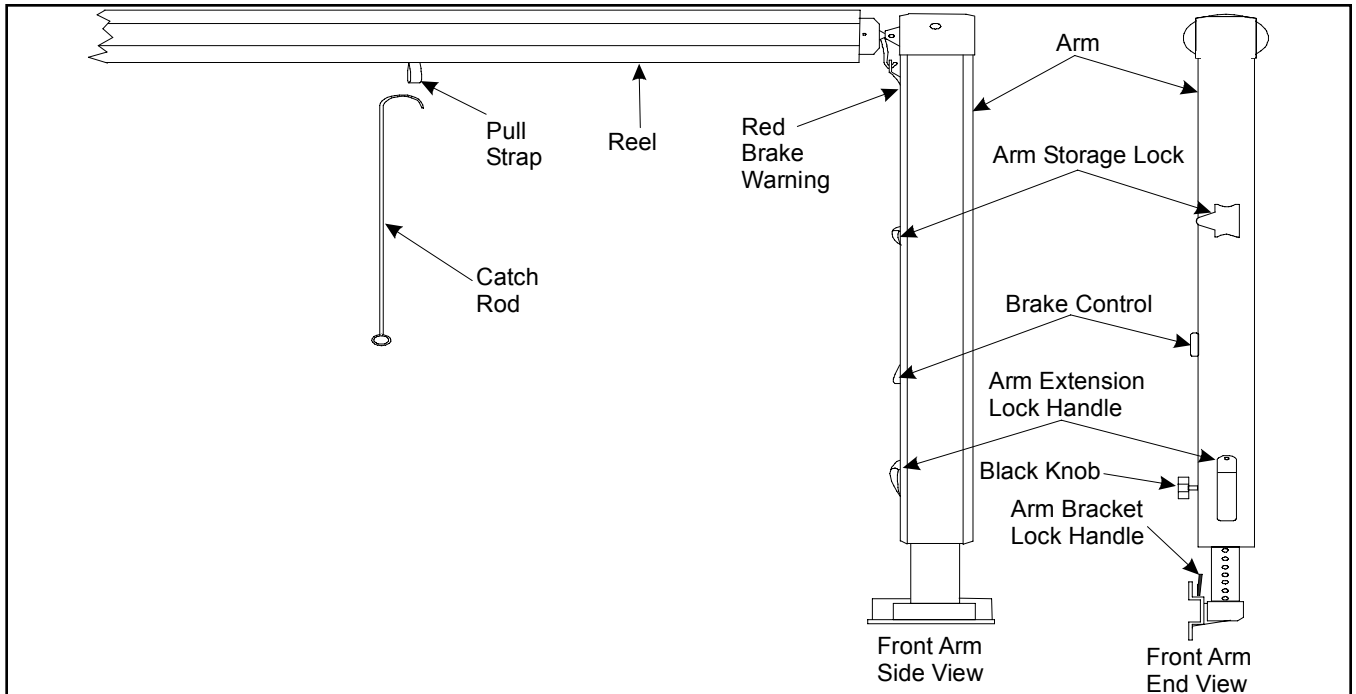
### To Extend Awning

- ◆ Have someone help you extend awning.
- ◆ To extend awning loosen black brace locking knobs located on the inside lower front and rear braces. Failure to loosen black knobs will prevent awning from locks, top hale on front and rear arms, all the way up to unlocked position.
- ◆ Slide brake control, center handle located on front arm only, all the way up to unlocked position; red warning be visible at top of arm.
- ◆ Hook loop of pull strap, located in center of reel, with catch rod and draw awning, reel assembly and arms all the way out away from motor home.
- ◆ Hold awning out and have someone push both front and rear braces, attached to





## Appliances & Equipment



black knobs, all the way out to reel end of arms and lock braces in place.

- ◆ Tighten black locking knobs. Braces that are left in down position or not locked reel end of arms will allow awning to retract inadvertently.
- ◆ Slide center pull strap to one end of awning and store.
- ◆ Raise arm extension lock handles, located on bottom of front and rear arms, all the way up to unlock position. Extend arms up to position awning at desired height and lower lock handles to secure arms.

### To Retract Awning

#### ! CAUTION !

The awning is under extreme spring tension when extended. If the pull strap is released quickly or let go completely, the awning will abruptly roll up to the stored position and can cause bodily injury or damage to awning.

- ◆ Have someone help you retract awning.
- ◆ If applicable move awning out of carport position (see "Using Carport Feature").
- ◆ Retract arms to lower awning until arms rest on lower stop bolts and lock in position.
- ◆ Position pull strap in center of reel.
- ◆ Hold pull strap and have someone loosen black knobs and lower braces all the

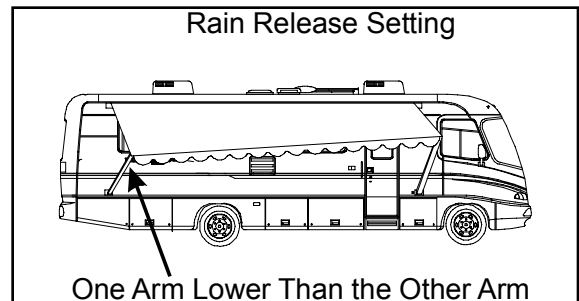


way toward motor home; **do not tighten black knobs.**

- ◆ Pull down slightly on pull strap, have someone release slide brake and allow awning to roll up to stored position.
- ◆ Lower arm storage locks, top handle on front and rear arms, to lock awning in place.
- ◆ Tighten both front and rear black knobs.

### Rain Release Setting

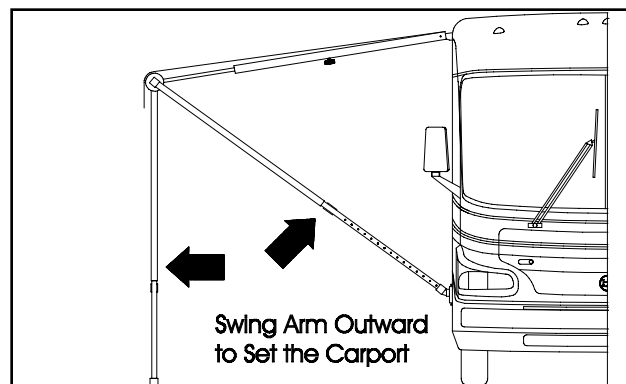
After you have extended the awning you can choose to position it in rain release position. This position will prevent water build up on the awning. To position awning lower one arm of awning and leave the other arm in normal position. This will create enough of a slope for adequate water run off.



### Using Carport Feature

In order to use carport feature safely, braces must be extended and locked to the end of side arms and black knobs tightened.

- ◆ Extend awning as described under “To Extend Awning”.
- ◆ Unlatch bottom of rear arm by pushing in on lock handle on arm bracket and swing arm away from motor home to an upright position.
- ◆ Raise rear arm extension lock handle all the way up to unlocked position, extend arm to position awning at desired height and lower lock handle to lock arms in place. **Drive stakes through bottom holes in arm.**
- ◆ Unlatch bottom of front arm by bushing in on lock handle on arm bracket and swing arm away from motor home to an upright position.
- ◆ Raise front arm extension lock handle all the way up to unlocked position, extend arm to position awning at desired height and lower lock handle to lock arms in place. **Drive stakes through bottom holes in arm.**
- ◆ To move awning out of carport position reverse above steps.





## Appliances & Equipment

### Securing Awning for Travel

Before travel, check the following:

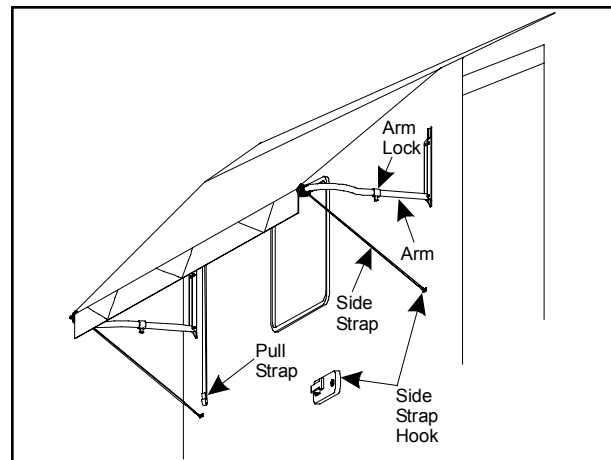
- ◆ Awning is fully retracted to side of motor home.
- ◆ Black locking knobs are tightened.
- ◆ Storage locks are down in locked position.
- ◆ Brake control is in full down (locked) position and no red warning is showing.
- ◆ Bottom of front and rear arms are latched properly into bottom brackets.
- ◆ Catch rod is stored away.

### Slide-Out Awning

#### To Extend Awning

Slide-out room must extend equally at both ends so that awning fabric will be taut when room is fully extended.

- ◆ Move slide-out room all the way out.
- ◆ Find pull rod.
- ◆ Using pull rod push arm locks (one on each end arm) up all the way to the unlocked position.
- ◆ Hook pull rod end into pull strap of awning and pull awning and arms out all the way.
- ◆ Hook end of side strap loops (one on each end of awning) onto side strap hooks on slide-out room.
- ◆ Slowly release awning.
- ◆ Pull strap to one side, remove pull rod and store strap.
- ◆ Store pull rod.



#### To Retract Awning

- ◆ Find pull rod.
- ◆ Using pull rod, position pull strap in center of awning.
- ◆ Pull awning out all the way.
- ◆ Unhook side strap loops (one on each end of awning) from side strap hooks on slide-out room.



- ◆ Slowly release awning and allow it to roll up all the way.
- ◆ Pull arms locks (one on each end arm) down into locked position. Make sure arms are locked securely, wind can pull awning away from the motor home and damage awnings if not locked properly.

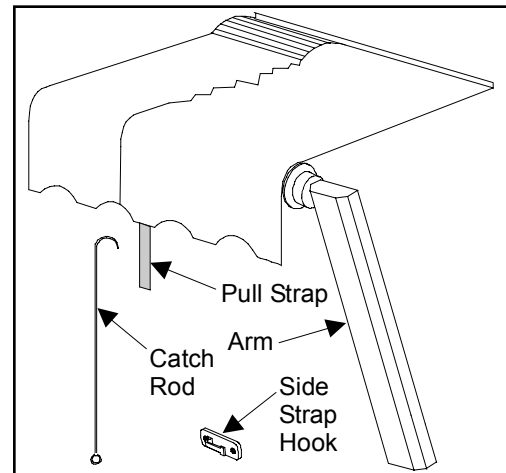
## Window Awning (Optional)

### To Extend Awning

- ◆ Hook loop of pull strap with catch rod and pull awning, reel assembly and side arms to extend fully away from motor home.
- ◆ Hook pull strap on side strap hook, remove catch rod from pull strap and store.

### To Retract Awning

- ◆ Hook catch rod on pull strap, remove pull strap from side strap hook and slowly allow awning to retract.
- ◆ Remove catch rod from pull strap and store.

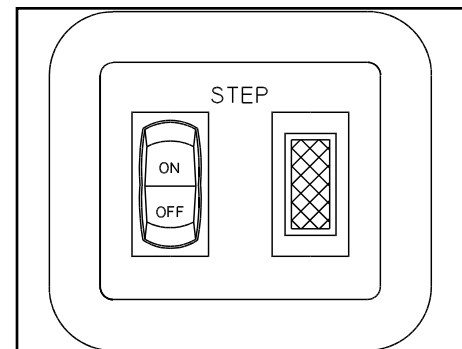


## Electric Entry Step

Your electric entry step features amber lighting under step, automatic retraction with ignition key in RUN position and a last out benefit. Located just inside the door is a switch with an indicator light. The indicator light will be illuminated when step switch is in the ON position.

### Operation (Normal)

- ◆ With ignition key in off position, move step switch to ON position. Indicator light will illuminate and step will extend and retract with opening and closing door.
- ◆ If switch is turned off with step in retracted position, step will not extend when opening door.
- ◆ If step switch is turned off after step has been fully extended for approximately 5-10 seconds, step will not retract when closing door.
- ◆ When motor home ignition key is in RUN position, step will always extend and retract with door regardless of step switch position.



## Appliances & Equipment

- ◆ Any time step switch is on and door is open, an amber light under the step will be illuminated placing a drain of approximately 1/2 amp on chassis battery.

### Operation (Last Out)

- ◆ If step is in extended position with step switch off and door closed, starting engine or placing ignition key in RUN position will cause step to automatically retract.
- ◆ When engine is stopped and ignition key is returned to OFF position, opening door will cause step to extend.
- ◆ Allow step to fully extend and wait approximately 5-10 seconds before closing door.
- ◆ Step will remain extended until step switch is return to ON position or ignition key is rotated to RUN position.

**NOTE:** Not allowing step to fully extend and remain extended for 5-10 seconds before closing door may cause step to retract. Opening door after this will cause no step extension until step switch is returned to ON position.

### **To Convert Dinette Into a Bed**

- ◆ Remove dinette seat cushions from seats.
- ◆ Lift up on end of table and release lock on leg.
- ◆ Swing table leg back until it locks.
- ◆ Pull table away from ledge and lower it down until table lays on ledge of dinette seat.
- ◆ Table is hinged for easy movement. Lay table on dinette seat ledges and spread cushions out to form a mattress.
- ◆ To return dinette to its original position lift table back onto ledge.
- ◆ Release lock on leg and allow it to lock in outstretched position.
- ◆ Lower table until leg rests on floor.

### **To Convert Sofa into a Bed**

- ◆ Grab front edge of sofa under cushions and pull up and out. Sofa will extend into a fold-out bed.
- ◆ To return bed to sofa position lift up on front edge and push in.

### **Securing Dinette Chairs for Travel**

- ◆ Tie down chairs securely so that it is not possible to sit in any chairs.



**! WARNING !**

Do not occupy any of these chairs while motor home is in motion. Chairs are not equipped with occupant restraint systems. In addition, chairs must be stored in an enclosed area or secured with tie-down straps prior to setting motor home into motion to avoid risk of personal injury to motor home occupants resulting from a crash or sudden stop.

**Galley Slide-Out Room**

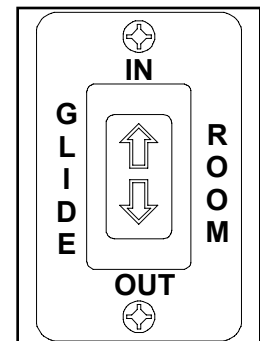
**! WARNING !**

Make sure you have 5 or more feet of clear space on the outside of your motor home before moving the slide-out in the OUT position. Be sure you have sufficient clearance of the inside of your motor home before you retract the slide-out. Do not operate the slide-out when the battery has been removed from the motor home. Use with the converter only may damage the slide-out's electrical components. Continuous operation of the slide-out could cause battery drain and damage to the slide-out motor from over heating.

Never move motor home without having the slide-out retracted.

**To Extend Slide-Out Room**

- ◆ Check that you have at least five (5) feet of clearance out - side of motor home for slide-out room.
- ◆ Locate tow locking bar mechanisms on top of slide-out room inside motor home.
- ◆ Move handles to unlocked position, unscrew handles to release bar mechanisms and remove bars from between wall and top of slide-out room.
- ◆ Store bars for reuse before motor home is in motion.
- ◆ Press and hold slide-out room switch in the OUT position. Switch is located in a side overhead compartment near entrance door. Slide-out room will move slowly to the OUT position and drive motor will not stop automatically.
- ◆ To stop slide-out room before room reaches OUT position, release switch.
- ◆ To continue room movement push and hold switch in.





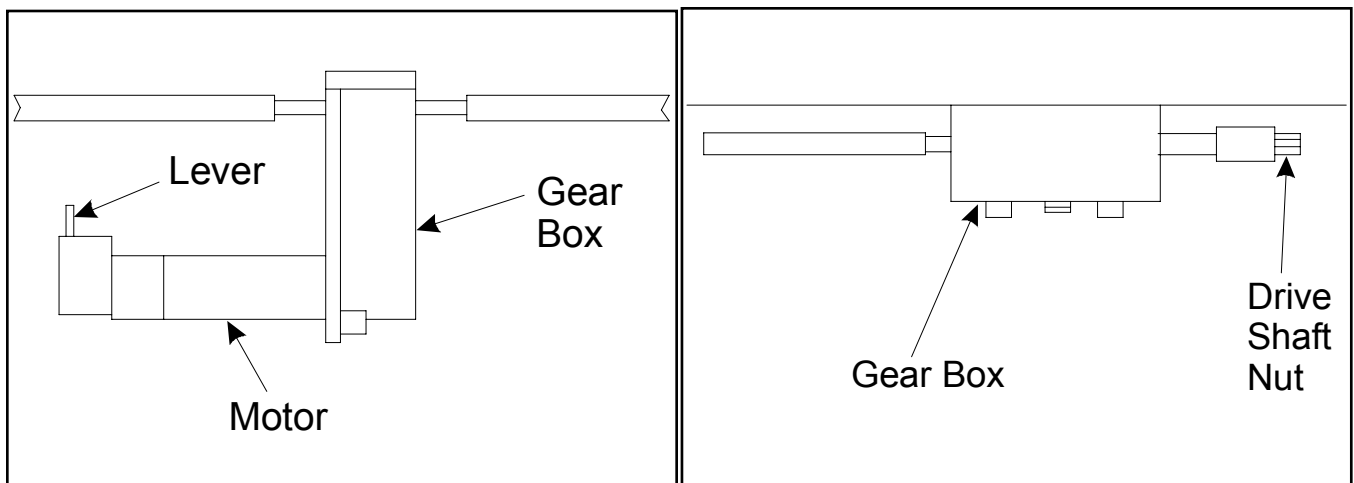
## Appliances & Equipment

### To Retract Slide-Out Room

- ◆ Check that there is sufficient clearance inside motor home for slide-out room.
- ◆ If applicable, clean floor.
- ◆ Press and hold switch in the IN position. Slide-out room will move slowly to the IN position and drive motor will not stop automatically.
- ◆ To stop slide-out room before room reaches IN position, release switch. To continue room movement push and hold switch in.
- ◆ After slide-out room is all the way retracted locate two removed locking bar mechanisms.
- ◆ Place bar mechanisms between wall and top edge of slide-out room.
- ◆ Turn handles to snugly tighten lock bars and move handles to locked positions so that slide-out room cannot move.

### Manual Operation

- ◆ To move slide-out room manually open outside storage compartment doors underneath slide-out room.
- ◆ Remove plastic covers from top of compartments to gain access to drive shaft and drive mechanisms.
- ◆ Move lever on motor to opposite side and turn end of shaft next to gear box with wrench to move slide-out room.
- ◆ Move lever to original position for normal operation.



### Slide-Out Room Maintenance

Before retracting slide-out room remove any debris from outdoor top of room. Periodically treat outside seals with pliable silicone lubricant.



## Bedroom Slide-Out

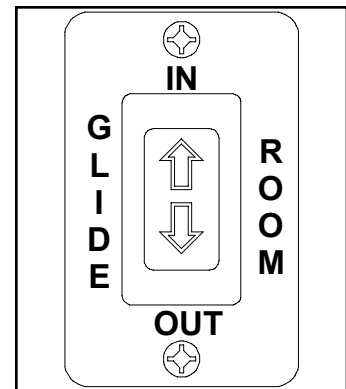
### To Extend Slide-out

#### ! WARNING !

Make sure you have 5 or more feet of clear space on the outside of your motor home before moving the slide-out in the OUT position. Be sure you have sufficient clearance of the inside of your motor home before you retract the slide-out. Do not operate the slide-out when the battery has been removed from the motor home. Use with the converter only may damage the slide-out's electrical components. Continuous operation of the slide-out could cause battery drain and damage to the slide-out motor from over heating.

Never move motor home without having the slide-out retracted.

- ◆ Check that you have at least five (5) feet of clearance outside motor home for slide-out room.
- ◆ Locate two locking bar mechanisms on top of slide-out room inside motor home.
- ◆ Move handles to unlocked position, unscrew handles to release bar mechanisms and remove bars from between wall and top of slide-out.
- ◆ Store bars for reuse before motor home is in motion.
- ◆ Press and hold slide-out room switch in the OUT position. Switch is located on bedroom wall. Slide-out room will move slowly to the OUT position and drive motor will not stop automatically.
- ◆ To stop slide-out room before room reaches OUT position, release switch.
- ◆ To continue room movement push and hold switch in.



### To Retract Slide-Out

- ◆ Check that there is sufficient clearance inside motor home for slide-out.
- ◆ If applicable clean floor.
- ◆ Press and hold switch in the IN position. Slide-out will move slowly to the IN position and drive motor will not stop automatically.
- ◆ To stop slide-out before it reaches IN position, release switch. To continue movement push and hold switch in.
- ◆ After slide-out is all the way retracted locate two removed locking bar mechanisms.

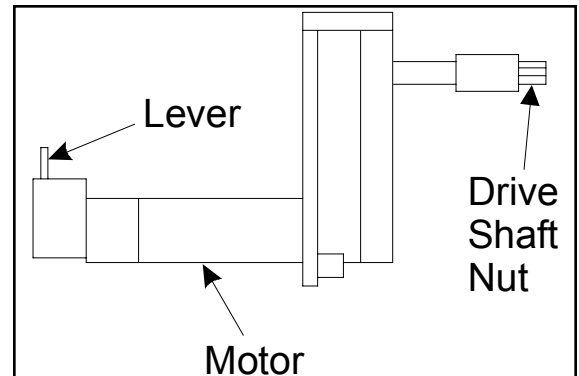


## Appliances & Equipment

- ◆ Place bar mechanisms between wall and top edge of slide-out.
- ◆ Turn handles to snugly tighten lock bars and move handles to locked positions so that slide-out cannot move.

### Manual Operation

- ◆ To move slide-out manually open storage compartment underneath bed.
- ◆ Move lever on motor to opposite side and turn end of shaft with wrench to move slide-out.
- ◆ Move lever to original position for normal operation.



### Slide-Out Room Maintenance

Before retracting slide-out room remove any debris from outdoor top of room. Periodically treat outside seals with pliable silicone lubricant.

## NOTES



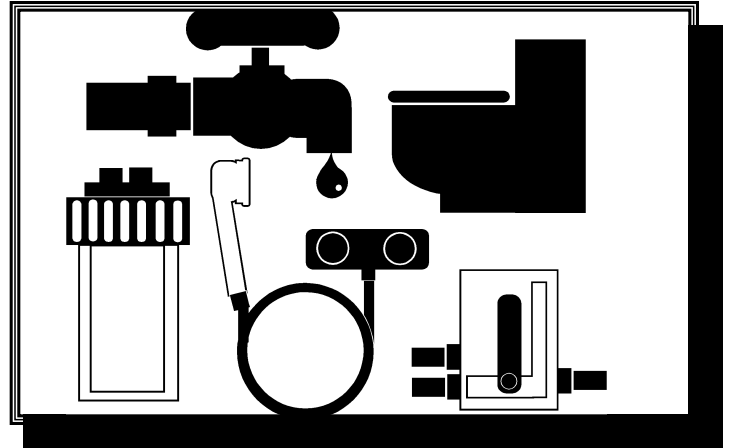
**NOTES**



# Water Systems

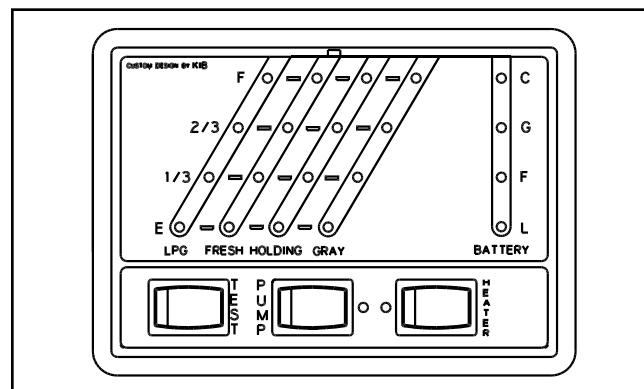
## General Information

It is hard to imagine how much water you use everyday when you are at home. Newcomers to self contained motor homes soon discover that water does not last very long unless consumption is drastically reduced. For instance, you can use less water for showering if you wet down; turn off water while soaping; then turn on water to rinse. This way a good shower uses a gallon or less of water. There is plenty of water to meet your needs once you adjust your habits.



There are two different water systems in your motor home. The fresh water system consists of the fresh water tank, water pump, water heater and a city water connection. The waste water system consists of a waste holding tank (gray water), a sewage holding tank (black water), toilet and drains.

The control panel for these two systems has a water pump switch, water heater switch and level indicator lights for tanks. To check water level of all tanks push test button on left side of panel.



## Water Pump

A water pump is used to pressurize the fresh water system when it is not connected to city water. The water pump is totally automatic and self-priming, operating on demand as water is used. The pump is located in an outside water connection panel compartment on the road side of motor home. To operate pump, check water level in tank from the control panel; refill if necessary (see "Fresh Water Tank Fill"). Open all valves and faucets except drain valves. This includes hot and cold water valves, all faucets, and shower. Make sure water heater bypass valve is set to NORMAL FLOW position (see "Water Heater Bypass System") so that water can run into your water heater. Turn pump on by pushing switch on control panel and wait for water lines and hot water tank to fill. Close each faucet when it delivers a steady stream of water (cold water faucets first). The pump is now ready for automatic operation. It will start when a faucet is opened and stop once faucet is closed. Do not allow pump to run when the fresh water supply tank is empty. Continued operation with a dry tank may open an electrical cir-



cuit and/or damage pump. For more detailed information see manufacturer's brochure in your information file.

## City Water Hook-Up

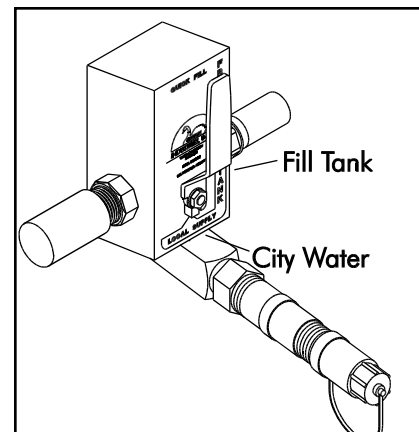
### ! CAUTION !

Some water sources develop high pressure, particularly in mountainous regions. High pressure is anything over 55 psi (pounds per square inch). Excessive pressure can cause leaks in water lines and/or damage water heater. Water pressure regulators are available to protect water system against high pressures. See your dealer for information.

When connecting your motor home to city water be sure to use a hose manufactured and labeled for potable water to insure that hose will not flavor water.

### To Hook-up City Water

- ◆ Attach hose to CITY/FRESH WATER FILL connection on the water connection panel located in an outside service compartment on the roadside of the motor home and to a water source.
- ◆ Turn valve to LOCAL SUPPLY position.
- ◆ Shut off water pump on control panel.
- ◆ Turn on water supply and open faucets to purge any trapped air in water system.



## Fresh Water Tank Fill

- ◆ To fill tank close tank drain valve and connect hose to CITY/FRESH WATER FILL valve and to water source. Fill and drain valves are located in an outside water connection panel compartment on the roadside of the motor home.
- ◆ Turn valve to FRESH WATER TANK position.
- ◆ Turn on water and check level of tank on control panel while filling so tank does not overflow. There is no automatic shut off on valve. There is an overflow drain in the tank.
- ◆ Shut off water and unhook hose when tank is full.



## Water Systems

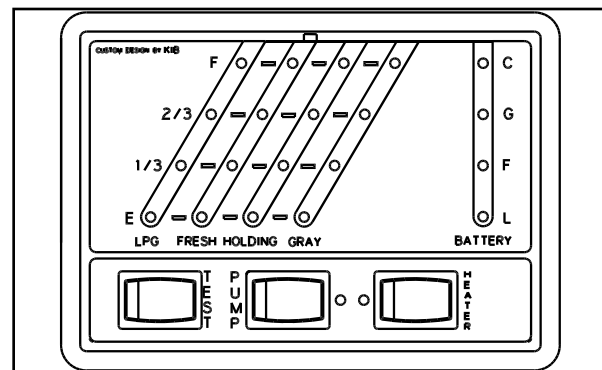
### Disinfecting Fresh Water System

Disinfecting the water system with chlorine bleach (superchlorination) protects you and your family from bacteriological or viral contamination from any common water source. You should disinfect the water system if your motor home is new or hasn't been used in a long time. Use the following procedure to disinfect the water system.

- ◆ Prepare a chlorine solution using 1 gallon water and 1/4 cup of chlorine bleach (sodium hypochlorite solution). Pour chlorine solution into empty fresh water tank using 1 gallon of solution for every 15 gallons of tank capacity.  
Example: Add 2-2/3 gallons solution to a 40 gallon tank. Add 4-2/3 gallons solution to a 70 gallon tank. This mixture puts a 50 ppm (parts per million) residual chlorine concentration in the motor home's water system. This concentration will act as a quick-kill dosage for harmful bacteria, viruses and slime-forming organisms. Concentrations higher than 50 ppm may damage water lines and/or tanks.
- ◆ Fill tank with fresh water. Open each faucet in turn and run water until you smell a distinct chlorine odor. Do not forget hot water, tub and shower faucets.
- ◆ Allow system to stand for 4 hours.
- ◆ Drain system and flush with fresh water. Drain is located in an outside water control compartment. Flush with fresh water repeatedly, if necessary, until no chlorine taste or smell is left in the water system.

### Water Heater

Your motor home is equipped with a six gallon water heater. The water heater operates on LP gas only and is controlled by a switch on the control panel. Before operating the water heater be sure fresh water tank and water heater are filled with water. Purge any air from the water heater by opening all faucets until water flows steadily from each.



### ! CAUTION !

Do not operate water heater unless water covers the heating element. Failure to do so may damage water heater and void warranty.



### **LP Gas Operation**

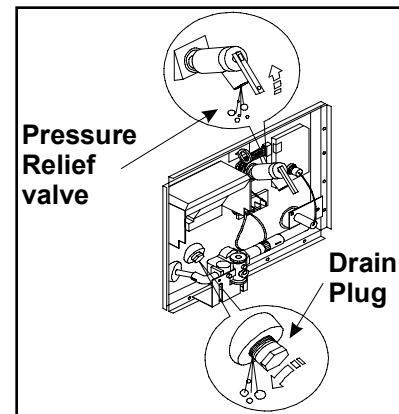
To light the water heater turn on the LP gas supply and push control switch to ON. If no flame is established within a 10 to 15 second period, the system will go into lock-out. This means that the water heater is not igniting. To reset the system push switch to OFF and back to ON position. If the water heater fails to ignite after three tries, contract your authorized dealer for service. Lock-out can occur when LP gas tank has been refilled. If the water heater goes into lock-out frequently, during regular use, contact your authorized dealer for service. To turn off water heater push control switch to OFF.

### **Draining and Storage**

If your motor home is to be stored for a long period of time or during winter months the water heater must be drained to prevent damage from freezing. Refer to Chapter 7 “Winterizing” for instructions. Be sure to refill water heater with water before resuming operation.

### **Temperature/Pressure Relief Valve**

The water heater is equipped with a temperature and pressure relief valve which is designed to open if the water temperature within the heater reaches 210<sup>o</sup>F (98.8<sup>o</sup>C), or if the water heater reaches 150 pounds. Motor home water systems are closed systems and during the heating cycle pressure build-up in the system may reach 150 pounds. If this pressure is reached, the pressure relief valve will open and water will drip from the valve. This dripping will continue until the pressure is reduced below 150 pounds and valve closes.



### **Burner Compartment**

Periodically check the service compartment and screen in door on outside of motor home (refer to Chapter 8 “Diagrams” for location) to see that no foreign material has accumulated to prevent flow of combustion and ventilating air.

## **! WARNING !**

Do not store any combustible materials or liquids near or adjacent to this water heater. Do not plug pressure temperature relief valve under any circumstances. A severe explosion or fire could result causing bodily injury or death.



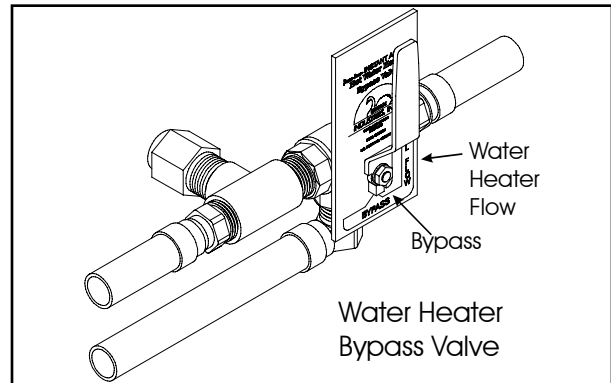


## Water Systems

### Water Heater Bypass System

The water heater bypass is a valve located on the back of the water heater. By turning the handle on valve to BYPASS position you can divert water away from the water heater. Do this when you winterize the unit. Bypassing the water heater keeps antifreeze out of the water heater.

For water heater operation turn valve so that handle points to NORMAL FLOW.



### Trouble Shooting Fresh Water System

Water system problems and leaks usually fall into two categories: System problems and problems caused by improper use or lack of attention. These problems usually stem from improper winterizing, poor maintenance, road vibration and campsite water pressure variations. Check all plumbing connections for leaks at least once a year. If the water pump runs when a faucet is not open check for a water leak; be sure tank drain valves are closed. If the system continues to leak take your motor home to an authorized dealer for service.

### Waste Water Systems

Waste drainage system was designed to provide adequate and safe storage and/or discharge of waste materials. All materials used in fabrication and installation of the system is tested by a nationally recognized testing laboratory. The entire fabricated waste system is factory tested in accordance with the American National Standards Code A119.2. The drainage system uses ABS plastic piping and fittings connected to sinks, shower, toilet and holding tanks and provides for their drainage to an outside termination. The motor home should be reasonably level for best operation of the system. There are two separate systems, one for waste water (gray water) and one for sewage waste (black water). Each one has its own control valve and both empty through the sewer drain hose. When traveling, we recommend holding tanks be empty or less than half full.

#### Drain Traps

Sinks and shower drains have a water trap to prevent holding tank odor from entering the motor home. These traps must have water in them to trap odors. During travel water can spill out of sinks and shower drain traps. Also, during storage water can evaporate and allow odor into the motor home. If odor is detected run water into sinks and shower to fill drain traps.



### **Toilet Operating Instructions**

The toilet operates from either the fresh water tank or from a city water supply. The water pump must be turned on or city water connected. The toilet flushed directly in the black water holding tank and uses high velocity water injection to produce a swirl effect in bowl.

To flush the toilet push lever down all the way, hold for 4-8 seconds and release lever. Push thumb lever on hand spray water saver to direct spray toward desired area of bowl while flushing. If additional water is needed in bowl raise flush lever to add water.

Water is retained in bowl using a sealing blade attached to the foot pedal. If the sealing blade does not move freely after extended use apply a light film of silicone spray on blade. If toilet water is running, blade could be partial open or sealing groove of blade could be clogged. Clean seal groove taking care not to damage rubber seals.

To clean toilet use any good quality non-abrasive cleaner. Avoid highly concentrated or acidic household cleaners which might damage rubber seals.

### **Proper Waste Disposal**

Most state parks have strict regulations about discharging wastes except into authorized disposal systems. Dumping raw sewage from toilet holding tanks except at authorized dumping stations is universally prohibited. Illegal dumping along roadside by a minority of recreational vehicle users has resulted in tough laws, and has unfairly labeled all camping vehicle trailers as unwelcome in some areas. Most states, national and private parks have either a central dump facility or campsite hook-up for sewage. You will find a list of dumping stations from coast to coast in Woodall's Campground Directory, Trailer Life's RV Campgrounds and services Directory, Rand McNally's Campground and Trailer Park Guide, Good Sam Park Director (Good Sam Club), and other publications. Some major oil companies offer dump facilities at selected stations. Plan ahead, and you will find few inconveniences in proper and legal disposal of holding tank wastes.

### **Waste Holding Tank - Gray Water**

#### **! CAUTION !**

Do not use any products that contain petroleum or ammonia in place of an RV odor controlling chemical. Petroleum and ammonia will damage ABS plastic holding tanks and seals.

Waste water tank is located under the floor. Waste tank stores sinks and shower drain water. Chemical is not required in this holding tank.



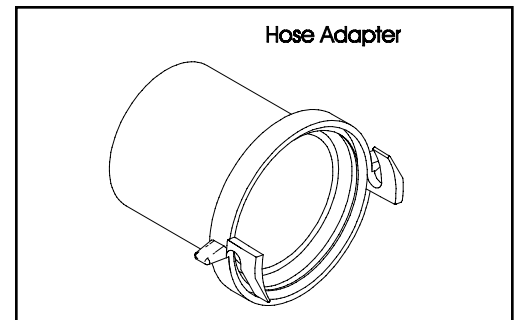
# Water Systems

## Sewage Holding Tank - Black Water

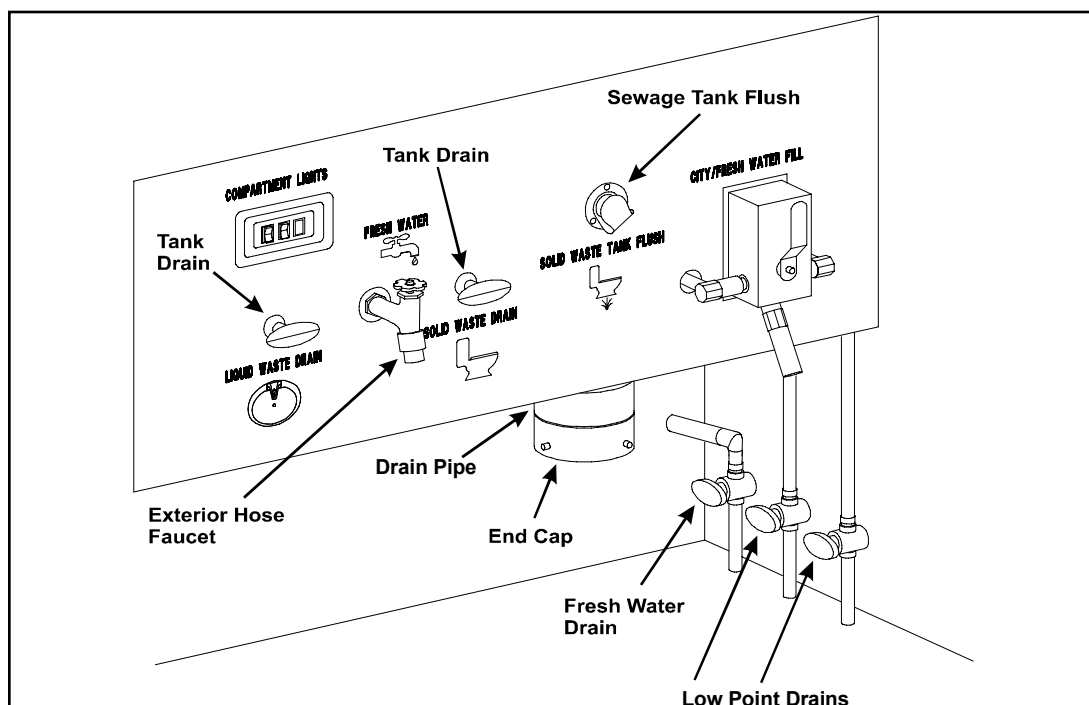
The sewage holding tank is located directly beneath the toilet. Before using the toilet you need to treat the holding tank with water that is mixed with an odor controlling chemical. Chemical is readily available at any RV supply store. Be careful not to spill chemical on your hands, clothing, or carpet; chemical can cause a permanent stain. To treat tank, pour chemical into toilet and flush toilet to allow chemical to mix with water. Continue to flush toilet until there is at least 1 inch of water/chemical solution in tank directly under toilet.

## To Drain Waste and Sewage Tanks

To empty tanks connect adapter to drain hose. You will find an adapter stored in a drawer inside of the motor home. Once you have placed the adapter on the drain hose it can remain there for life of hose. T-handle drain valves are located on the water control panel in the outside service compartment on the road-side of the motor home.



To drain tanks turn drain end cap counterclockwise and remove it from the drain pipe. Unscrew bottom access hold plus from the service compartment, feed adapter end of hose up through hold and install hose adapter on drain pipe. Attach other end of drain hose to sewer connection at dump station. Drain sewage tank first by pulling T-handle out (SOLID WASTE DRAIN) on water control panel.





Flush holding tank with flush system. Connect water supply hose to SEWAGE TANK FLUSH connection on water connection panel. Turn water on and flush system for approximately two minutes or until water runs clear from drain hose. Turn water off and disconnect hose when finished flushing system. After you have drained sewage tank, drain waste water tank by pulling T-handle out (LIQUID WASTE DRAIN) on water control panel. When tanks are empty, you need to flush them with a fresh water rinse before you close valves. Waste water tank is flushed by pouring two gallons of water down a sink drain. Run toilet water to flush sewage tank. Always push both T-handles in and install end cap (required in some states) when in transit to prevent leakage.

### **When Connected to Sewer Hook-Up**

Keep holding tank (black water) valve closed at all times, except when dumping. Waste holding tank (gray water) can remain open to drain when parked; connect drain hose to sewer hook-up. Before emptying, be sure there is enough liquid in tanks to provide a smooth flow through valve and drain hose. Sufficient liquid in tanks cause a swirling action that should take with it accumulated solid wastes. Empty tanks when they are 1/2 to totally full.

### **What Not to Put in Holding Tanks**

- ◆ Do not flush facial tissues. They are treated chemically to give them wet strength and they will not dissolve like toilet paper. Special holding tank tissues are available at most RV supply stores. Also, white toilet paper dissolves faster than colored papers.
- ◆ Do not use strong detergents or full strength bleach to deodorize and disinfect. Use odor control chemicals made especially for holding tanks.
- ◆ Do not put automotive antifreeze, ammonia, alcohol or acetone in holding tanks. Some chemicals will dissolve plastic.
- ◆ Do not put large table scraps in tanks. They could get stuck in or damage valve seals.

### **Cold Weather Use**

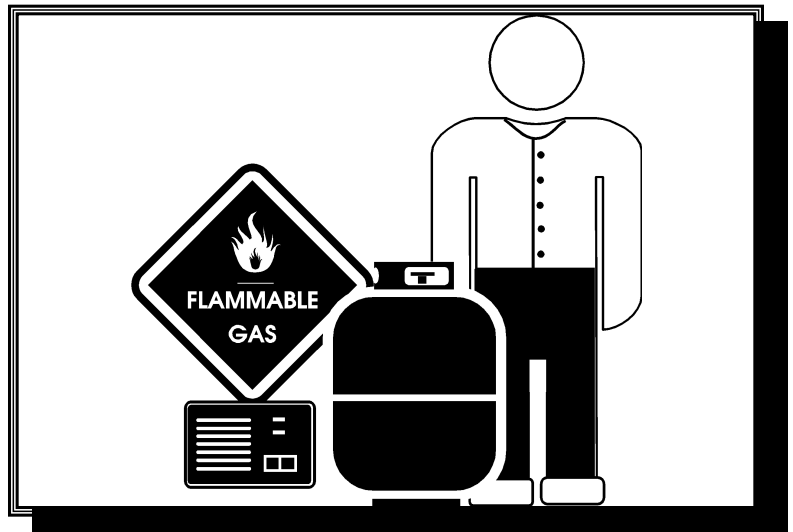
Your motor home was not designed for extended use in below freezing (32°F-0°C) weather. However, you may not experience any problems as long as temperatures do not fall too low. Interior water lines, fixtures, water storage tank and pump are normally protected from moderate freezing temperatures as long as furnace operates. Exposed drains may freeze quickly. If you are in doubt about what temperatures your motor home will tolerate then winterize with a potable antifreeze.

# LP Gas Systems

## General Information

Components for your motor home LP gas systems are approved for use in camping vehicles by a nationally recognized testing laboratory. When properly handled LP gas is a clean-burning dependable fuel for heat producing components. The LP gas tank in your motor home contains liquid petroleum gas under high pressure. As fuel is used, liquid gas vaporizes and passes through the tank valve to a regulator that automatically reduces pressure. Low-pressure gas is then distributed to components through a pip manifold system.

Component lighting problems are commonly caused by an improperly adjusted gas regulator. Never attempt to reset the regulator yourself. Have your dealer or an authorized service person make adjustments. In high altitudes or extreme cold weather (10°F/-12.2°C or lower) you may experience a shortage of LP gas. You can adjust to this by not running more than one component at a time, such as turning off the furnace while using the range. If you are going to be in higher altitudes or cold climates for a long period of time an authorized service person can adjust your LP regulator for these conditions.



We recommend that you have the LP gas system checked by an authorized dealer at least once a year, and thereafter every extended trip. Although the manufacturer and dealer both test carefully for leakage, travel vibrations could loosen fittings. Leaks can be easily found by applying a leak detector solution at the connections. If leak detection solution is not available a soapy water solution made with dish soap can be used. Tightening fittings usually stops any leaks. If not, shut off main gas valve at the tank and see your authorized dealer for repairs immediately. Hand tighten tank valves only. Do not use a wrench or pliers as over tightening may damage valve seats and cause them to leak. If you have a leak. If you have a leak identifying odor, smells like rotten eggs (sulfur), never light a match or have an open flame where you suspect leaking gas.

**! DANGER !**

Fire or an explosion from ignited gas or gas fumes can seriously injure you or cause death.

Shut off all LP gas tank valves when motor home is not in use. Since the introduction of DSI boards in appliances it is very important to shut off all LP gas valves, pilot lights and appliances and disable igniters (see operating instructions in Chapter 3) during refueling motor home and filling LP gas tanks to prevent a fire or explosion.

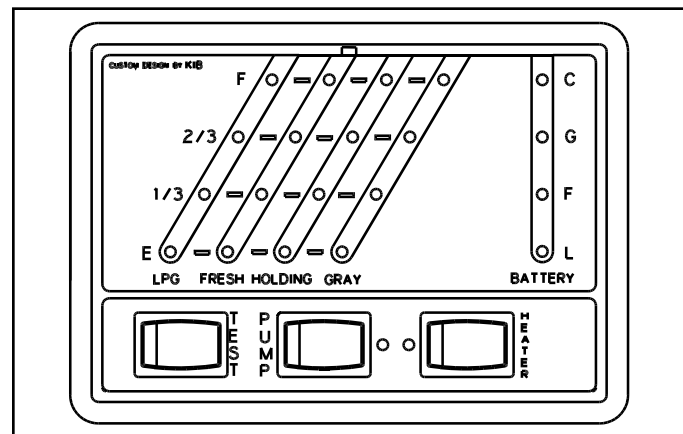
If you smell gas (a rotten egg or sulfur smell) at any time, perform the following steps immediately.

- ◆ Turn off main gas supply.
- ◆ Do not touch any electric switch.
- ◆ Extinguish any open flames.
- ◆ Open windows and doors.
- ◆ Do not try to light any appliance.
- ◆ Exit motor home and contract service center or gas supplier.

If you are storing LP gas tanks (do not transport or store LP gas tanks, gasoline, or other flammable liquids inside motor homes) that are not connected to a LP gas system install an approved plug in tank outlet holes to prevent leaks. Do not store empty LP gas tanks. Keep open flame and spark producing materials away from LP gas area. If this warning is ignored, a fire or explosion could result.

**LP Gas Consumption**

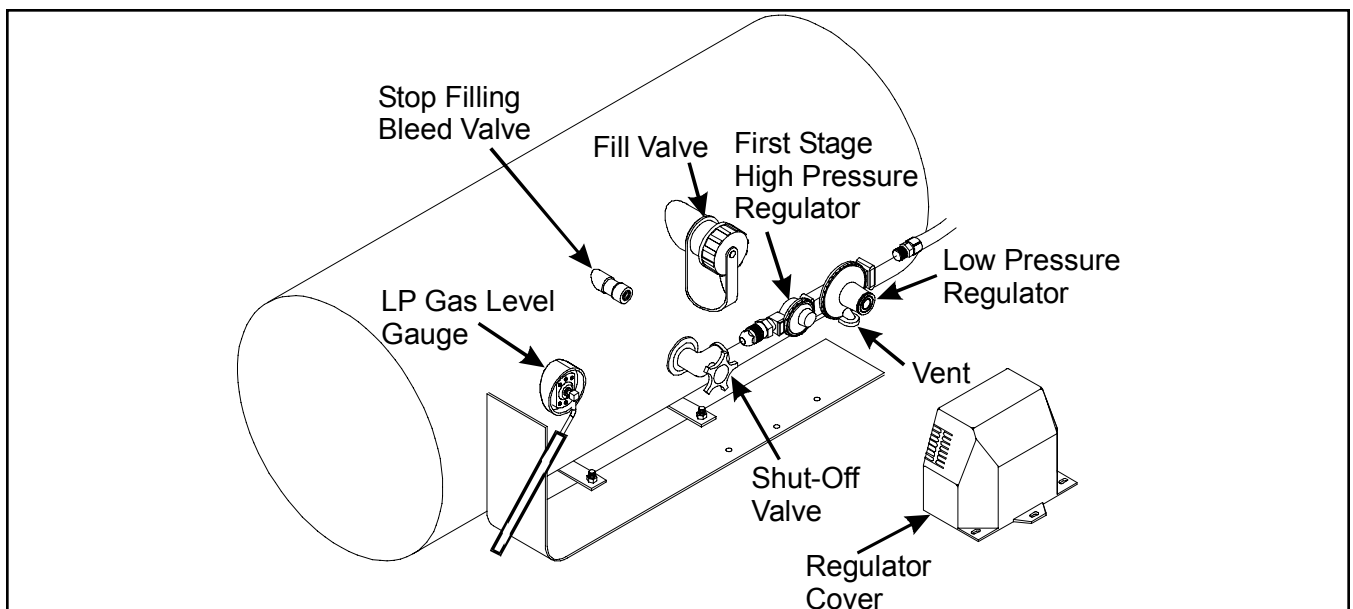
Each gallon of LP gas produces approximately 92,000 BTU's of heat. Total consumption depends on the rate of usage by each appliance and operating time. Oven and heating systems use the most gas. With sub-freezing temperatures and high winds consumption by the furnace can be very high. To check tank level press test switch on the monitor panel.



# LP Gas Systems

## Gas Distribution Lines

A primary manifold black steel pipe running throughout the motor home distributes LP gas to secondary lines. All secondary lines leading to gas appliances are made of copper tubing with flared fittings. If any of these lines rupture do not attempt to splice them. Always run a new line. We recommend gas distribution work to be performed by an authorized dealer or an authorized service technician. When removing or servicing any gas appliance close main valve at LP gas tank. This will prevent dangerous gas leakage that could result in an explosion and possible serious injury. If you suspect a leak get the system inspected and repaired by a qualified service technician as soon as possible.



## Filling LP Gas Tank

Woodall's Campground and Trailer Guide and other publications list refueling stations. Many travel parks sell LP gas. Shut off pilot lights, appliances and igniters (see operating instructions in Chapter 3) before filling LP gas tank to prevent a fire or explosion. Have a trained service person fill LP gas tank. Caution service technician that if your tank is new and being filled for the first time to purge any air from tank before filling. When the tank is filled to the proper level there is space available for conversion of liquid into gas. If a tank is over filled it may vent pressure. When this happens you may detect a strong rotten egg odor near the tank and/or hear a hissing noise. LP tank has a gas level gauge to aid in filling tank.



## LP Gas Regulator

The regulator is the heart of an LP gas system. LP gas in the tank is under high pressure. The regulator reduces pressure of gas so that it is safe to use with various appliances. The regulator is equipped with a vent so that it can breathe. This means that if pressure in the LP tank is too high the regulator will allow gas to escape through the vent until pressure returns to a normal range. It is important to keep vent clean and clear of obstructions or corrosion. If the vent becomes clogged, pressure from the LP tank could cause a failure of components. If you notice any corrosion contact a qualified LP gas service technician. The regulator is mounted so that the vent faces downward. If the vent becomes clogged, you can clean it with a toothbrush.

### ! WARNING !

Do not attempt to adjust the regulator, it is preset at the factory. If adjustments need to be made contact a qualified LP gas service technician. Adjustments can only be made by using special equipment. Failure to follow these instructions may result in a fire or explosion and cause severe personal injury or death.

## Operating Instructions

Open shut-off valve for use. Tank has a LP gas level gauge to monitor gas usage. Turn off valve when motor home is between trips and when in storage. Hand tighten valve, do not use a wrench or pliers to close valve. Valve is designed to be closed by hand. Over tightening may permanently damage valve seat.

## LP Gas Detector

Liquid Propane (LP) Gas is heavier than air and will settle to the lowest point which is generally the floor of your motor home. The detector is also sensitive to other fumes such as hair spray, of which most contain butane as the propellant. Butane, like propane, is heavier than air and will settle to the floor level where it will be detected. When this occurs, press reset button to stop alert sound for 60 seconds.

Other combustibles which will be detected include alcohol, liquor, deodorants, colognes, perfumes, wine, adhesives, lacquer, kerosene, gasoline, glues, most of all cleaning agents and propellant of aerosol cans. Most are lighter than air in their vapor state and will only be detected when the motor home is closed up.



# LP Gas Systems

## !WARNING!

When alarm sounds open all doors and windows to air out motor home and turn gas off at LP tank. Do not re-enter motor home until alarm stops sounding. If alarm sounds a second time after gas is turned back on, leave gas off and contact a qualified service technician to find source and repair gas leak.

### Operation

Detector only indicates presence of Propane Gas at sensor. Propane Gas may be present in other areas. This device is intended for detection of Propane Gas leaks only. LP gas detector is operating at all times when it is connected to its power source. This detector is a safety device, and must not be connected in such a way as to allow it to be switched off or become disconnected from its power supply.

When the motor home is equipped with a master cutoff switch, the detector will be turned off when the switch is turned OFF. When the detector is powered or turned ON a green indicator light will be lit. After 3 minutes the detector will begin monitoring immediate environment for combustible vapors. Propane you use to cook, refrigerate, and eat with is combustible. Should a leak occur, when gas reaches the detector in sufficient concentrations, your detector will produce a pulsating alarm sound and A RED indicator alarm light will flash. This alarm (4 rapid beeps per second) will continue to sound until gas has dissipated or until reset button is pressed. The reset button only stops alarm from sounding for 60 seconds.

Gas detector is powered by your motor home battery and/or your converter. It draws less current than drawn by one instrument panel lamp. Your detector will operate to detect gas until your battery is drained down to 9 volts. (Your low battery condition 10.4 volts). If the power source (battery and/or converter) is disconnected, or if power is otherwise interrupted, detector will not operate.

The gas detector has a self check circuit which runs at all times while the detector is powered. In the event that circuitry fails, a fault alarm will sound and the fault indic-





is distinctively different from the alarm sound.

### **Testing LP Gas Detector**

The detector must be operating for at least 3 minutes before it can be tested. Expose detector to gas and observe that alert alarm will begin to sound. Once method of simulating gas is to use a butane lighter. DO NOT ROTATE flint wheel. Just press on gas release button and point exit nozzle into gas sensing area near top left of detector. Alert will continue to sound until:

- ◆ Gas mixture at detector returns to a safe level.
- ◆ Reset button is pressed. When reset button is pressed, detector cannot be tested again for at least 3 minutes.

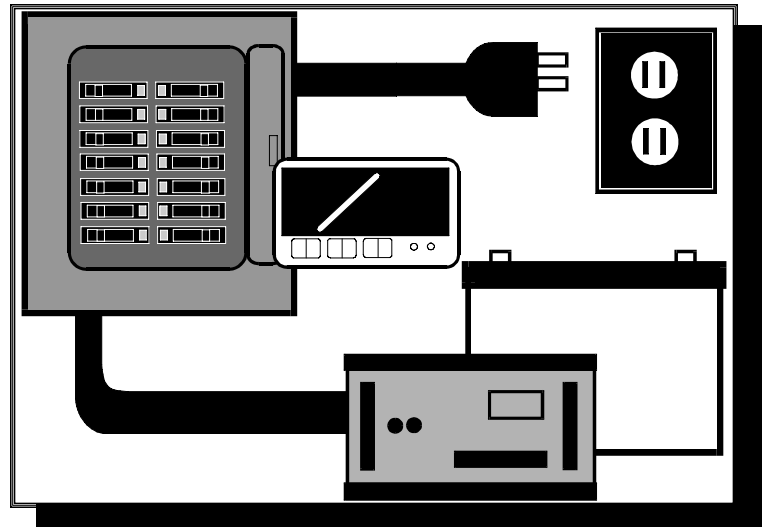
### **NOTES**

# Electrical Systems

## General Information

Your motor home electrical system consists of 120 Volt AC and 12 Volt DC systems. For additional component information other than what is in this manual refer to each manufacturer's brochure in your Owner's information packet.

The 120 Volt AC system includes a UL listed power cord, UL listed distribution panel, transfer switch, generator package and inverter/converter.



The 12 Volt DC system includes four 6 volt batteries, inverter/converter, two battery disconnects and a battery isolator system.

Fuses are installed to protect circuits from overloading. Do not change circuitry or add appliances yourself. See an authorized dealer. Always use the motor home's built-in power supply cord (shore line) to connect with 120V AC source.

### ! WARNING !

Disconnect 120V AC electric shore cord and negative terminal from 12V DC battery before working on electrical system.

Remove rings, metal watch bands, and other metal jewelry before working around batteries and connectors.

Use caution when using metal tools, if tool contacts a battery terminal or metal connected to it, shore circuit could occur which could cause personal injury, explosion or fire.

Before hooking up to park shore power, verify that proper voltage and ground protection is present. After hooking up to park shore power, verify that proper voltage and ground protection is present in motor home. Inexpensive testers are available for this purpose.



**Electrical Switch Chart - Some Switches Not On All Units**

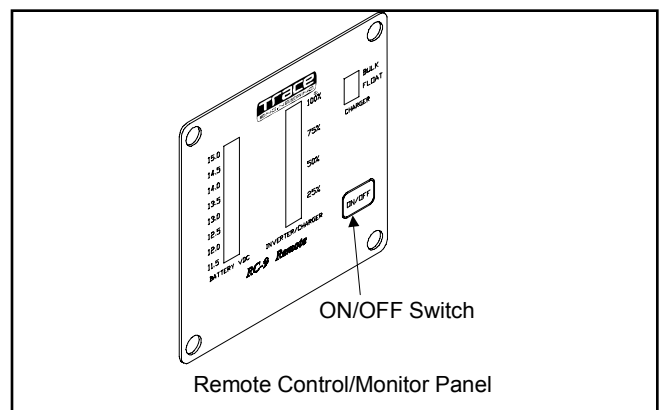
<b>SWITCH</b>	<b>LOCATION - Varies Slightly On Some Units</b>	<b>FUNCTION/USAGE</b>
Air Conditioner Thermostat(s)	Dinette Wall, Bedroom Wall (Units With Two Air Conditioners Only)	Regulates Cool Air Temperature
Battery Disconnect	Entrance Door Stepwell	Turns ON/OFF All House Electrical Systems
Battery Level - House	Control Panel In Bathroom	Measures Battery Voltage
Electric Generator	Dash, Generator Outside Roadside Compartment	Starts/Stops Electrical Generator
Fan - Ceiling Exhaust - Bathroom	Fan Base	Turns Fan ON/OFF
Fan - Ceiling Exhaust - Kitchen	Fan Base	Turns Fan ON/OFF
Furnace Thermostat	Dinette Wall - LP Valve Must Be Open	Regulates Heat Air Temperature
Light - Bath	Bathroom Vanity	Turns Lights ON/OFF
Light - Bath Ceiling	Light Base Vanity	Turns Lights ON/OFF
Light - Bathroom Vanity	Light Base Vanity	Turns Lights ON/OFF
Light - Bedroom Ceiling	Bedroom Wall, Light Base	Turns Lights ON/OFF
Lights - Bedroom Wall	Light Base	Turns Lights ON/OFF
Light - Dinette	Next to Entrance Door & Bedroom Wall	Turns Lights ON/OFF
Light - Engine Compartment	Light Base	Turns Lights ON/OFF
Lights - Kitchen and Living Room - Ceiling	Next to Entrance Door, Light Bases and Bedroom	Turns Lights ON/OFF
Lights - Kitchen	Light Base	Turns Lights ON/OFF
Lights - Living Room - Side	Light Bases	Turns Lights ON/OFF
Lights - Outside Compartments	Next to Entrance Door, Outside Water Compartment	Turns Lights ON/OFF
Light - Porch	Next to Entrance Door	Turns Lights ON/OFF
Light - Toilet Room	Light Base and Toilet Wall	Turns Lights ON/OFF

# Electrical Systems

Light - Water Control Panel	Automatic When Door Opens	Turns Lights ON/OFF
Bedroom Slide-Out	Bedroom Wall	Moves Room OUT/IN
Living Room Slide-Out	Next to Entrance Door	Moves Room OUT/IN
Radio	Dash Panel, Bedroom	Turns Radio ON/OFF
Step - Entry	Next to Entrance Door	Turns Step ON/OFF
TV Power Booster	Front Overhead Cabinet	Turns Amplifier ON/OFF
TV/VCR Control Box	Front Overhead Cabinet	Switches TV Options
Water Heater - Electric Operation	Bathroom Wall - Needs Shore Power	Turns Water Heater ON/OFF
Water Heater - LP Operation	Control Panel in Bathroom - LP Valve Must Be Open	Turns Water Heater ON/OFF
Water Pump	Control Panel in Bathroom & Service Panel	Turns Pump ON/OFF
Water Tanks Level	Control Panel in Bathroom	Measures Tanks Level

## Inverter/Converter

With inverter/converter turned ON and shore power connected, inverter will begin to operate if shore power is lost. Batteries must exceed 10.5VDC to operate inverter/converter. ON/OFF remote control panel is located on a bedroom wall. Remote control duplicates ON/OFF switch on inverter/converter. DC volts and amps are indicated on right bar graphs. Bulk Chart and Float Chart lights will blink slowly to indicate inverter charging process.



### ! CAUTION !

Before hooking up to park shore power, verify that proper voltage and ground protection is present. After hooking up to park shore power, verify that proper voltage and ground protection is present in motor home. Inexpensive testers are available for this purpose.



## 120V AC System - 50 AMP Service

Power supply cord is located in the roadside rear compartment and is permanently connected to the motor home. When the cord is plugged into the AC power supply it supplies power to distribution panel (located in bedroom night stand) through the transfer switch. Generator also supplies AC power to distribution panel through the transfer switch.

### Transfer Switch

The auto transfer switch automatically switches from shore power to generator power when the generator is started. There is a 45 second delay after the generator is started before the motor home electrical load is connected. This delay allows the generator to reach normal operating speed with no load connected.

### Ground Fault Circuit Interrupter (GFCI) Outlet

#### **! CAUTION !**

If the GFCI breaker continues to trip, there is a loss in protection and a potentially dangerous condition. Have the system repaired by a qualified electrician.

For your protection certain circuits, in a motor home, are protected by a Ground Fault Circuit Interrupter (GFCI). The GFCI receptacle is located in the bathroom. GFCI protected receptacles wired down into the stream of the bathroom GFCI include kitchen receptacles, outside receptacle, and all non-dedicated receptacles located within 6 ft. of any lavatory or sink.

### Testing Instructions

Test GFCI at least once a month. To test GFCI be sure that 120 volt electrical system is on. Before you start test be sure the reset button is pushed all the way in. Push test button in, this should cause the reset button to pop out which means the protected circuit has be disconnected. Push the reset button in until you hear a click, this will reactivate protected circuit. If GFCI is working properly the reset button will stay pushed in.

# Electrical Systems

## !WARNING !

Do not block service compartment ventilating air inlets and outlets. Engine requires a constant supply of cooling air. Do not operate generator when motor home is parked in high grass or brush. Engine exhaust could ignite grass or brush and resulting fire could cause property damage, and/or personal injury or death.

When motor home is in parked position move the dash air condition control in OFF position to prevent outside air from entering motor home.

Engine exhaust gases contain carbon monoxide which is an odorless and colorless gas. Carbon monoxide gas is poisonous and can cause unconsciousness and/or death. Inspect exhaust system thoroughly before starting engine. Do not block exhaust pipe or situate motor home in a place where exhaust gases have any possibility of accumulating either outside, underneath, or inside motor home or any nearby vehicles. Operate generator only when safe dispersion of exhaust gases can be assured and monitor outside conditions to be sure that exhaust gases continue to be dispersed safely.

When working in generator compartment, remove house battery ground cable and turn HOUSE BATTERY disconnect to OFF position to avoid personal injury.

Failure to turn off 120V AC appliances/equipment when starting and/or stopping generator may damage transfer switch and/or electrical problems.

## 120V AC Generator

The generator is located in a service compartment on the roadside of the motor home. The generator may stop running before the chassis fuel tank is completely empty. This is a safety feature to prevent the motor home from running completely out of fuel.

A preheater control lever on the generator needs to be set for changing temperature to prevent the engine from erratic operation and over speeding. At temperatures below 40°F (4°C) move lever to WINTER position; between 40°F (4°C) and 70°F (21°C) the lever can be in SUMMER or WINTER position; above 70°F (21°C) move lever to SUMMER position.

## Starting Generator

The generator is controlled by either a remote switch on dash or switch located on generator. To start generator, shut off all 120V AC appliances/equipment. Push start

switch and hold until generator is running and release switch. Dash switch will be lit when generator is running. Normally the generator will start running within 5 seconds; if it fails to start after cranking for 10 seconds, release switch and wait 30 seconds before cranking again. If the generator fails to start after 5 attempts allow starter motor to cool down for 5 minutes before cranking again.

## Stopping Generator

Turn off all 120V AC appliances/equipment and run generator for at least 3 minutes before turning generator off. This lets lubricating oil carry heat away from combustion chamber and bearings. To stop generator, push switch to stop position for approximately one second then release. For in-depth information regarding low oil shut-down protection, circuit breaker locations and maintenance procedures, refer to manufacturer's brochure in your Owner's information file.

## 12V DC System

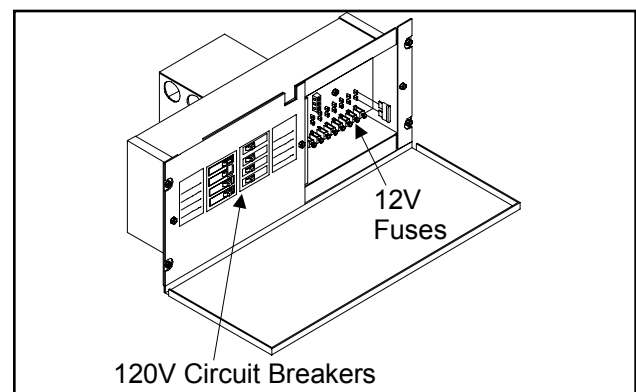
Two 6-volt batteries are located in the first compartment behind the curbside rear wheels. Positive battery lead is routed to an insulator post in the generator compartment (generator start motor/HWH pump), then to a 12V DC distribution panel on firewall.

## Inside Motor Home Distribution Panel Circuit and Fuses

Fuse assignments are listed on a fuse label attached to the inside cover of the distribution panel. When replacing fuses, always replace with same size as listed for a particular location. Fuse sizes shown are maximum fuse sizes allowable, installing fuse sizes other than those listed can cause electrical wiring to become overloaded and create hazardous situations.

Fuse assignments are as follows:

1. Bath Lights/Vent - 15 amp Fuse
2. Dinette/Porch/Rt. Overhead - 15 amp Fuse
3. Bedroom/ODS Lights - 15 amp Fuse
4. Kitchen/Left Overhead, Stove Vent,  
Opt. Vent - 15 amp Fuse
5. Ceiling Lights - 15 amp Fuse
6. Furnace - 15 amp Fuse
7. Monitor Panel - 15 amp Fuse
8. Slide-out - 15 amp Fuse
9. Radio - 5 amp Fuse





# Electrical Systems

Circuit Breaker assignments are as follows:

Left Side:

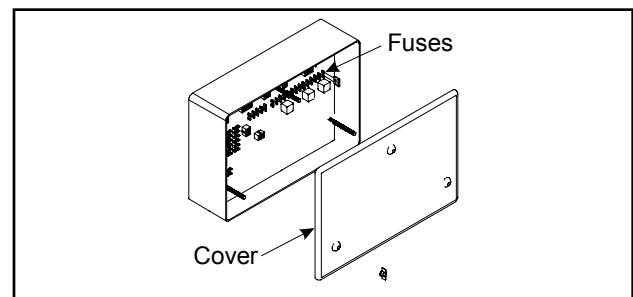
- ◆ 50 AMP MAIN
- ◆ Front Air Conditioner
- ◆ Rear Air Conditioner

Right Side:

- ◆ Converter, Bedroom, TV, Dining Room
- ◆ Bathroom, Kitchen, Refrigerator, TV, VCR
- ◆ Water Heater
- ◆ Microwave

## Outside Motor Home Distribution Panel

The distribution panel (12V DC) is located inside a roadside compartment. Fuse assignments are listed on a fuse label attached to the inside cover of the front distribution panel. When replacing fuses, always replace with the same size as listed for a particular location. Fuse sizes shown are maximum fuse sizes allowable. Installing fuse sizes other than those listed can cause electrical wiring to become overloaded and create hazardous situations.



Fuse assignments are as follows:

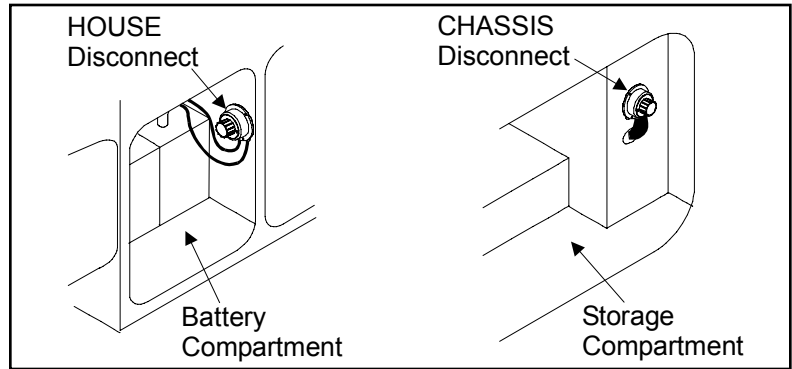
- |  |   |
|--|---|
| 1. Slide-Out Room - 15 amp C.B.          | 20. Rear Vision (Opt) - 5 amp Fuse                  |
| 2. LP Detector - 3 amp Fuse              | 21. Leveling Jacks (Opt) - 5 amp Fuse               |
| 3. Power Seat (Opt) - 15 amp C.B.        | 22. Accessory Switch - 15 amp Fuse                  |
| 4. Power Seat (Opt) - 15 amp C.B.        | 25. Air Conditioner - 20 amp Fuse                   |
| 5. Storage Lights - 15 amp Fuse          | 26. Jack/Antenna Warning Lamp - 5 amp Fuse          |
| 6. Bedroom Slide-Out - 15 amp C.B.       | 27. TV Cutout Relay - 7.5 amp Fuse                  |
| 7. Auxiliary Start/TV Amp - 7.5 amp Fuse | 28. Galley Slide-Out Room Ign. Relay - 7.5 amp Fuse |
| 8. Cigarette Lighter - 15 amp Fuse       | 29. Mirror Heaters - 15 amp Fuse                    |
| 9. Map Lights - 7.5 amp Fuse             | 30. Mirror Motors - 1 amp Fuse                      |
| 10. C.B. Radio - 2 amp Fuse              | 33. Step/Isolator Relay - 7.5 amp Fuse              |
| 11. Service Light - 7.5 amp Fuse         | 34. Marker Lights - 7.5 amp Fuse                    |
| 12. 12V Receptacle - 15 amp Fuse         |   |
| 13. Step Switch - 7.5 amp Fuse           |   |
| 14. Step Motor - 25 amp Fuse             |   |

**NOTE:** Number's 15, 16, 17, 18, 19, 23, 24, 31, 32 are not used.



### Power Disconnects

The disconnects are mounted in outside roadside compartments: HOUSE BATTERY disconnect turns power ON or OFF from the house batteries and CHASSIS BATTERY disconnect turns power ON or OFF from chassis battery. Both disconnects supply 12V DC power to fuses and circuit breakers inside distribution panel.



### Batteries

**!WARNING !**

Do not allow battery electrolyte to come into contact with skin, eyes, fabric or painted surfaces. Electrolyte is sulfuric acid solution which could cause serious personal injury or property damage. Wear eye protection when working with batteries.

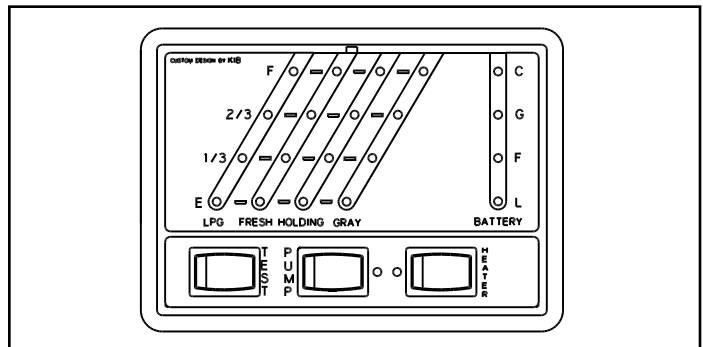
Do not store anything in battery compartment near batteries that might touch terminals. This could cause an electrical short circuit, drain battery's power, or start a fire.

House batteries power level can be check by pushing the test button on the left side of the control panel.

Batteries are located on the curb side of the motor home and are charged two ways:

1. When 120V AC shore line is plugged in, 55 amp converter supplies power to the 12V DC circuits and charges house batteries.

2. Chassis charging systems supplies power to house 12V DC circuits when engine is running. Chassis charging system will continue to supply power to house system unless excessive loading prevents chassis system from keeping up with demand. In this case chassis systems take priority and separates house system from it circuits.



# Electrical Systems

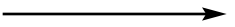
## **Battery Inspection & Care**

Check external condition of batteries periodically. Look for cracks in cover and case. Check vent plugs and replace them if they are cracked or broken. Keep batteries clean. Accumulations of acid film and dirt may permit current flow between terminals which could drain battery.

When not using your motor home for an extended period of time, remove batteries and store them in a warm dry place. Mark positive and negative cables for easy identification. Charge batteries periodically during storage. If you are putting your motor home into storage for a long time then it is recommended that you remove all batteries from clocks, radios, smoke alarms, etc. that may be inside your motor home. This prevents unnecessary drain and corrosion of batteries. Motor home batteries are deep cycle marine batteries that consume water and they must be periodically filled. Use distilled water only.

## **Chassis Fuses and Circuits**

There are two fuse boxes in addition to the front distribution box that supply your motor home chassis with 12V DC power. One fuse box is located under the dash on the curbside of the motor home and the second fuse box is located outside the motor home behind grille on chassis firewall. Fuse assignments are listed on the next two pages.

Continued 

**Fuse Box Under Dash**

**NOTE:** Fuse Number's 1, 3, 10, 11, 12, 15, 16, 17 are not used.

<b>Fuse Location</b>	<b>Size</b>	<b>Circuit</b>
2	8.25A	Interval Wiper/Washer Windshield Wiper Washer System
4	15A	Instrument Panel Warning Lights Programmable Speedometer/Odometer Module, Warning Chime
5	20A	Instrument Panel Lamps, Prk/Marker, Light Module, (POSM)
6	10A	Body Builders Accessory Feed (Accessory and Run)
7	20A	Overdrive Cancel Switch, Turn Signals
8	15A	Body Builders Accessory Feed (Run Only)
9	20A	Brake Pressure Switch, Hazard Lamp, Stop Lamps
13	5A	Instrument Panel Illumination
14	5A	Not Used (For Radio Feed - see Inside Fuse Panel)
18	15A	Not Used by Body Builder

# Electrical Systems

## Fuse Box Behind Grille on Firewall

**NOTE:** Fuses G, H, I, J, T, U are not used. Relay #5 is not used.

Fuse Location	Size	Circuit
A	15A	Not used (For Cigar Lighter - See Front Distribution Panel)
B	20A	Flash to Pass, Daytime Running Lamps
C	20A	Horn Relay, Slip Ring Assembly
D	20A	Body Builder Battery Accessory Feed
E	15A	Heated Exhaust Gas Oxygen Sensor, Back-up Lamps, Blower Relay Coil
F	10A	Speed Control
K	20 MAXI	Prndl Sensor, Starter Motor Relay, T.F.I. Module
L	Diode	EEC Relay
M	30 MAXI	EEC Relay
N	60 MAXI	Ignition Switch
O	30 MAXI	Electric Brake
P	50 MAXI	Not Used (For Blower Motor Feed - See Front Distribution Panel)
Q	60 MAXI	Head Lamps, Main Light Switch, PSOM
R	20 MAXI	Fuel Pump Relay
S	20 MAXI	Body Builder Battery Feed
V	20 MAXI	TFI Ignition Module, Ignition Coil, Distributor, Radio Capacitor, EEC Relay Coil
Relay #1		Electronic Engine Control (EEC)
Relay #2		Fuel Pump Relay
Relay #3		Horn Relay
Relay #4		Not Used



MONACO

2000

Electrical Systems

---

**NOTES**



## Unit Care & Maintenance

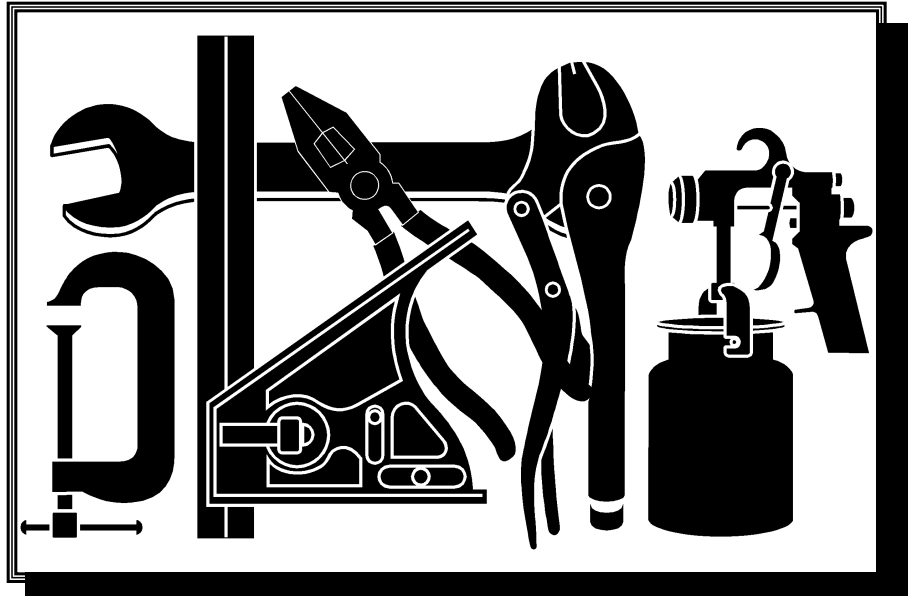
### Exterior Care

The exterior of your camping motor home is made of a pre-finished aluminum and fiberglass. Wash it frequently with a mild soap in lukewarm water. If you travel roads that have been salted for ice removal, wash your motor home as soon as possible. Most common causes of corrosion are: accumulation of road salt, dirt and moisture in hard to reach areas under your motor home.

Undercarriage should be rinsed off periodically to prevent build-up of dirt or chemicals. To minimize the chance of corrosion, be thorough when you wash your motor home. Make sure you wash the undercarriage and wheel wells as well as the exterior of the motor home. A good automotive cleaner/wash should be used to remove tree sap, road tars, and insects that may damage the surface. Do not use naphtha or turpentine. We recommend that you wash your motor home about every three weeks and wax it in the spring and fall.

**NOTE:** Aerosol cans of spray enamels are available from your dealer for use on steel chassis parts. Do not use them on exterior aluminum or fiberglass.

Check seals around doors, windows and external seams at least twice a year. If a seal is cracked or dried out it should be replaced with new material to prevent leakage. Sealants can be purchased from your Monaco dealer. Check roof seals once a year to see if they are cracked or peeling, if so reseal seams. If you need to reseal roof, use Dolphine 7547 Lo Thix UVR ElastiSeal in Off White. Be sure that you do not kneel on roof without a knee pad. Pressure from your knees will dent the aluminum roof. Walking on the roof will not dent it.



**!WARNING !**

Urea-formaldehyde is used in production of particle board, hardwood plywood or paneling. Urea-formaldehyde resin may release formaldehyde vapors which may cause headaches, eye, nose and throat irritation in some people. Formaldehyde may aggravate some allergies or upper respiratory problems like asthma. Proper ventilation should reduce the risk of such problems.

**Interior Care**

Fabrics have been manufactured with the same quality you would expect to find in a furniture store. However, if abused they are not completely resistant to damage. Special care is needed when your motor home is exposed to a very humid climate for an extended period of time. Cover upholstery and make sure window coverings are down to protect from sun damage. This will protect fabric from any unnecessary exposure to moisture. Sofa, pillows, dinette cushions, living area chairs, driver/passenger seating, and window treatments have been treated with Scotch Guard to prevent overall water spots or soiling. Soiling may occur more frequently and items will probably need more attention than your furniture at home. Use the following guidelines for cleaning your upholstery fabrics.

- ◆ Water base cleaners are not recommended.
- ◆ If a spill does occur, blot up spot, but do not rub it in.
- ◆ Some solvents are not recommended since they may have an adverse reaction on specific backings of your upholstery fabric.
- ◆ To prevent overall soiling frequent vacuuming or light brushing to remove dust and grime is recommended.
- ◆ Spot clean, using a mild water-free solvent or dry cleaning product.
- ◆ Clean only in a well ventilated area and avoid any product containing carbon tetra-chloride or other toxic materials.
- ◆ Use a professional furniture cleaning service for an overall cleaning.

**Bedsread/Draperies/Valance/Headboards**

We recommend dry cleaning for your bedsread and draperies just as you would for your draperies and comforters at home. Although this is more expensive, proper care of material will help insure a longer life. Care of hardboard and bedroom valance fabric should be done with same instructions given for upholstery fabrics. Laundering and improper cleaning may result in fabric shrinking or deteriorating prematurely.





# Unit Care & Maintenance

---

## **Wall and Ceiling Coverings**

Your decorative wall and ceiling coverings are not much different from vinyl wall paper that you may have in your home. They should be cleaned with a non-abrasive cleaner and a soft cloth.

## **Solid Wood Cabinetry**

These products should be cared for as you would any fine piece of wood furniture. Apply a furniture polish when you clean your motor home to maintain natural beauty and luster of the wood. This will keep your cabinetry looking new and keep wood from drying out.

## **Counter Tops**

High pressure laminate counter tops are quite easy to keep clean. Waxing is not necessary. Glass rings, food spills, water spots and smudges usually wipe off with a damp cloth or sponge. Stubborn stains can be removed with a spray cleaner. Laminated surface resists alcohol, fruit acids, cosmetics and most household chemicals. Avoid contact with dyes, strong laundry bleaches and bluing solutions. Indelible inks used on food packages may leave a stain so take care when unpacking groceries on a damp counter-top. Sharp knives can damage the finish so confine slicing to a good cutting board. Counter tops resist minor heat. Very hot pots and pans straight from the oven or broiler should be placed on hot pads. Keep irons on an ironing board and lighted cigarettes in an ashtray. For lasting beauty avoid using harsh abrasives, scouring powders, peroxides or bleaches. These can dull the surface and make it more likely to stain next time.

## **Appliances**

Care for these as you would at home by using a kitchen cleaner.

## **Carpet**

Your carpet is made of Nylon. Professional cleaning is recommended for major cleaning. Frequent vacuuming is recommended for daily accumulations.

## **Bath Fixtures**

Clean your tub/shower, sinks, and toilets as you would at home. A non-abrasive cleaner is recommended. When cleaning mirrors or shower doors a vinegar and water solution works very well to remove hard water spots and stains.

**Hardware/Accessories/Light Fixtures**

Wipe clean as you would for daily cleaning. Use a non-abrasive cleaner to avoid damaging finish.

**Cleaning Of Brass Fixtures**

To clean fixtures, wipe with a soft damp cloth. Warm water will remove dry water spots. Do not use cleaners which contain abrasive or harsh chemicals. Never use alcohol or other organic solvents.

**Windows**

Any glass will develop water spots if glass is not cleaned properly. Spotting effect is magnified when the glass has a reflective finish. Use a squeegee immediately after washing to reduce water spotting. To remove stubborn water stains from reflective glass, we recommend Cerium Oxide Polishing Compound. This compound is made by C.R. Lawrence and is available at most glass shops.

**Condensation**

Condensation is a natural phenomenon. The amount of condensation will vary with climate conditions, particularly relative humidity. Condensation occurs because there is water vapor present in the air, and each of us adds more by breathing, bathing, cooking, etc. Water vapor collects wherever there is available air space, and when temperature reaches dew point water vapor in air condenses and changes to liquid form.

**Controlling Moisture Condensation**

You can reduce or eliminate interior moisture condensation during cold weather by taking following steps:

Partially open roof vents and windows so that outside air can circulate into interior air. Increase ventilation when larger numbers of people are in the motor home; even when it is raining or snowing air from outside will be far drier than interior air.

Cover ground under motor home with a vapor barrier such as a 6 mil polyethylene cover.

Install a dehumidifier. Continuous use of a dehumidifier will be more effective in removing excess moisture from interior air. While use of a dehumidifier is not a cure-all, and ventilation and moisture reduction continue to be important, operation of a dehu-



## Unit Care & Maintenance

modifier will reduce the amount of outside air needed for ventilation.

Reduce moisture released inside motor home. Run range vent fan when cooking and bath vent fan (or open bath vent) when bathing to reduce water vapor. Avoid making steam from excessive boiling or use of hot water.

Do not heat motor home interior with range or oven. Heating with the range or oven increases the risk of toxic fumes and oxygen depletion. Also, open flames add moisture to interior air increasing condensation.

In very cold weather, leave cabinet and closet doors partially open to warm and ventilate interior of storage compartments. Air flow will warm exterior wall surface reducing or eliminating condensation and preventing possible ice formation.

## Winterizing

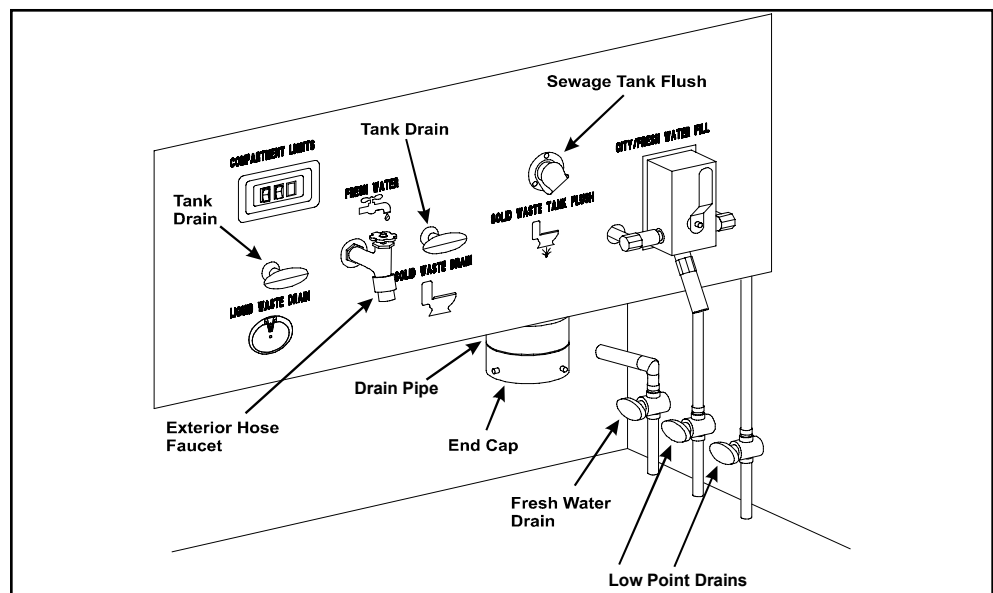
To use air pressure to winterize your motor home you will have to have access to an air compressor and adapter to connect air line to your water system. Adapters can be found at any RV supply store. You should not exceed 40 pounds p.s.i. when hooked to water lines. Higher pressures will damage lines.

### ! WARNING !

When draining low-point drain lines and water heater be sure water is not hot. Hot water from lines can burn you.

1. Drain fresh water tank by opening drain valve located in exterior service compartment.

2. Open low-point drains. Turn knobs to open drains. Opening low point drains clear water out of hot and cold water lines.





3. Let all water drain. Turn on pump and allow it to run for 30 seconds to 1 minute so that all water is cleared out of pump and fresh water tank. Pump switch is located on control panel.
4. Remove water heater drain plug and open pressure release valve (both are located behind water heater cover on exterior of motor home).
5. After you have drained water lines hook an air hose to the city water connection located outside motor home. Blow out water lines until no more water can be seen coming out of drain lines. Do not exceed 40 p.s.i. in water lines and faucets.
6. Open water heater bypass valve located on rear of water heater (Chapter 4 "Water Heater Bypass System").
7. Replace water heater drain plug and close pressure release valve. Open all faucets (including outside spigot) one at a time while air is on to clear water from faucet supply lines, also do not forget to drain the shower.
8. While air is on, hold spray nozzle (located right next to toilet) open until water has quit running. Hold toilet flush pedal or handle down until water has stopped running.
9. Unhook air hose and close city water connection.
10. You will need 1 gallon of RV antifreeze to protect various water lines in your motor home. Pour 1 pint in both kitchen and bath shower drains, 2 pints go in bath sink drain with some antifreeze going into gray tank to protect drain valve. While holding down flush pedal pour another 3-1/2 pints into toilet letting antifreeze run into black tank to protect valve located there. Pour last 1/2 pint of antifreeze into toilet after you have release flush pedal. Use a soft cloth to wipe out sinks and shower after you pour in antifreeze to protect surfaces from stains.
11. If you do not choose to fill water lines with NONTOXIC (potable) winterizing antifreeze, leave low-point drains open until you are ready to use your motor home again.

If you choose to fill water lines with antifreeze, you will need 10 gallons of NON-TOXIC (potable) winterizing antifreeze to protect water lines. Close all faucets and low point drains. Acquire a hose and adapter and install them on the inlet side of the water pump. Insert the end of hose into the antifreeze container and turn ON water pump. Open each inside faucet and shower valves until a small amount of antifreeze runs into the holding tanks and close faucets. Use a soft cloth to wipe out sinks and shower to protect surfaces from antifreeze stains. Flush stool and hold spray nozzle to allow a small amount of antifreeze to run into the holding tank. Open and close the exterior hose



## Unit Care & Maintenance

faucet to fill lines with antifreeze. When finished remove hose and adapter from water pump and reconnect original inlet line to pump.

### Winter Storage Check List

- ◆ Plumbing Lines - Drain and protect by filling with approved RV antifreeze.
- ◆ Water Heater - Drain.
- ◆ Toilet - Drain and hold pedal down until antifreeze appears in bowl.
- ◆ Fresh Water Tank - Drain.
- ◆ Body - Clean and wax. Oil locks and hinges. Repair roof seams as needed. After each snowfall remove heavy wet snow accumulation with a push broom.
- ◆ Tires - Block up motor home with wooden blocks or manufactured jack-stands on a hard level surface. Partially deflate tires. Cover tires to protect against sunlight.
- ◆ Countertop and Cabinets - Wash with mild soap and water.
- ◆ Curtains - Remove and clean according to care specifications.
- ◆ Windows - To protect interior fabric from fading cover windows by pulling blinds, closing shades or use a separate cover such as a sheet.
- ◆ Holding Tank - Drain and rinse. Close valves. Add a small amount of antifreeze to keep valves and gaskets lubricated.
- ◆ Drain Traps - Pour a cup of RV antifreeze down all drains.
- ◆ Batteries - Add distilled water and recharge if needed. Disconnect cables. Remove batteries and store them in a cool dry place. Check and recharge as needed.
- ◆ Refrigerator - Clean and leave both doors propped open. Cover exterior panels and roof vents.
- ◆ Air Conditioner - Remove air filters and clean or replace. Cover shroud.
- ◆ Roof must be kept clear of snow accumulation or damage may occur.

### Opening Motor Home Check List

If the motor home was properly and carefully prepared for storage taking it out of storage will not be difficult. The following procedure check list assumes that you stored your motor home properly. If you didn't and extensive freeze damage or other serious deterioration has occurred consult your dealer or an authorized service center for advice.

- ◆ Thoroughly inspect outside of motor home. Look for animal nests in wheel wells, furnace vent, water heater vent or in other out of the way places.
- ◆ Remove all appliance vents, ceiling vents and air conditioning covers. Be sure all furnace, water heater and refrigerator openings are free of debris, insect nests, webs, etc.



- ◆ Open all doors and compartments. Check for animal or insect intrusion, water damage or other deterioration.
- ◆ Check all chassis fluid levels - engine oil, engine coolant, power steering fluid, brake fluid transmission oil, rear axle oil.
- ◆ Check charge levels in batteries. Refill and recharge as necessary. Reinstall batteries if necessary. Be sure cable ends and terminals are clean and free of corrosion.
- ◆ Check tire pressures. Reinflate to specified cold pressure.
- ◆ Remove coverings from windows in necessary.
- ◆ Open vents and windows for ventilation.
- ◆ Be sure engine instruments indicate proper readings. Run engine up to operating temperature. Shut engine down. Check all fluids and fill as necessary.
- ◆ During engine run check operation of headlights, tail lights, turn signals, back-up lights, license plate light and emergency flashers. Operator motor home air conditioner. If air conditioner doesn't work, or unusual sounds occur, have system checked by a qualified air conditioner technician.
- ◆ Drain, flush, and sanitize fresh water system as outlined in water chapter. Inspect drain hose for leaks. Replace if necessary (repairs are not usually effective).
- ◆ Operate all faucets and fixtures in fresh water system.
- ◆ Check for leaks at all joints and fittings. Repair if necessary.
- ◆ Check 12 volt circuit breakers and inspect fuses.
- ◆ Operate all 12 volt lights and accessories.
- ◆ Install new batteries in battery operated devices.
- ◆ Test carbon monoxide, LP gas and smoke detectors.
- ◆ Check monitor panel operation.
- ◆ Open and operate vents and vent fans including range hood fan.
- ◆ Inspect 120 volt electrical system which includes power cord, converter, all outlets, and exposed wiring. If defects are found refer to your dealer or an authorized service center.
- ◆ Prepare generator for operation following instructions in generator operating manual in your Owner's information packet. Start and run generator.
- ◆ Operate 120 volt appliances and air conditioners. Be sure to uncover air conditioner shrouds.
- ◆ Inspect LP gas system and check for leaks. If LP tank shows signs of rust or corrosion have it inspected by a qualified LP technician.
- ◆ Operate each LP gas appliance. Observe all burner/pilot flames for proper color and size. In any case, have LP gas regulator adjusted for proper pressure by a qualified technician.
- ◆ Inspect and clean interior.
- ◆ Check sealant around all roof and body seams and windows. Reseal if necessary.
- ◆ Lubricate all exterior locks, hinges, and latches.



## Unit Care & Maintenance

---

- ◆ Check windshield wiper blade condition. Check wiper/washer operation.
- ◆ Wash and wax exterior. Inspect body for scratches or other damage. Touch up or repair as necessary. Flush underside thoroughly.
- ◆ Run through operational checks for steering, brakes, engine and transmission. Operate motor home slowly during these checks to allow sufficient circulation of fluids and resetting of components.
- ◆ Your camping motor home should now be ready for a new traveling season. If you choose, your dealer can double check your preparation and correct any defects or make any necessary adjustments.

### NOTES



MONACO

**2000**

Unit Care & Maintenance

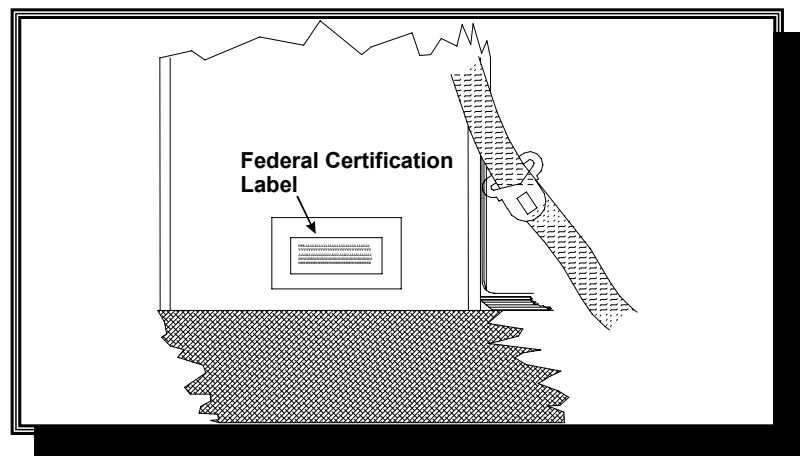
---

**NOTES**



# Diagrams & Specifications

This chapter is made up of drawings to identify locations of access doors, plug-ins, water connections, exterior views, dash views, etc. There are also charts of various capacities and bulb types used in your motor home. For your convenience we have included pages for you to use to list personal property ID numbers and serial numbers. The Federal Certification Label of your motor home is located near the operator's seat on the sidewall.



## Serial Number Information

Refer to the motor home information file for locations of component manufacturer serial number locations that are not listed below.

Motor Home Serial Number \_\_\_\_\_

Motor Home Federal Vehicle Identification Number (VIN) \_\_\_\_\_

Door Key Number \_\_\_\_\_

Range Model & Serial Number \_\_\_\_\_

Located under top burner plate.

Microwave Model & Serial Number \_\_\_\_\_

Located behind door on case.

Refrigerator Model & Serial Number \_\_\_\_\_

Located inside refrigerator compartment.

Furnace Model & Serial Number \_\_\_\_\_

Located in outside compartment on furnace.

Water Heater Model & Serial Number \_\_\_\_\_

Located in outside compartment on water heater.

Electric Generator \_\_\_\_\_

Located in outside compartment on generator.

Roof Air Conditioner \_\_\_\_\_

Located under top cover on air conditioner.



---

**Personal Property Information**

<b>Item</b>	<b>Serial Number</b>	<b>Value</b>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Insurance Information**

Company \_\_\_\_\_

Policy Number \_\_\_\_\_

Agent's Name & Address \_\_\_\_\_

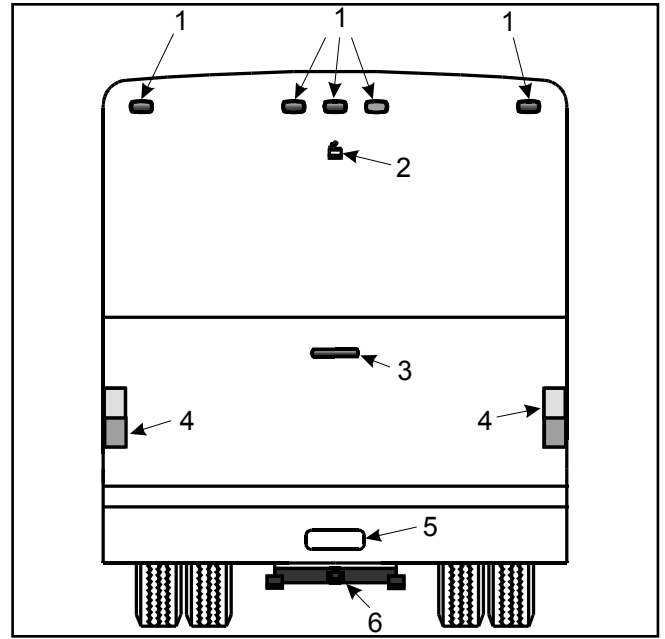
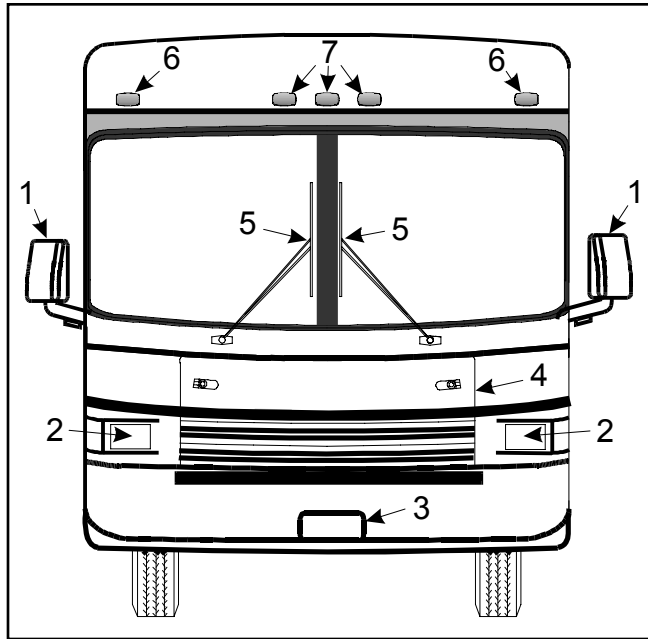
Business Phone \_\_\_\_\_

Emergency Phone \_\_\_\_\_

Renewal Dates \_\_\_\_\_



# Diagrams & Specifications



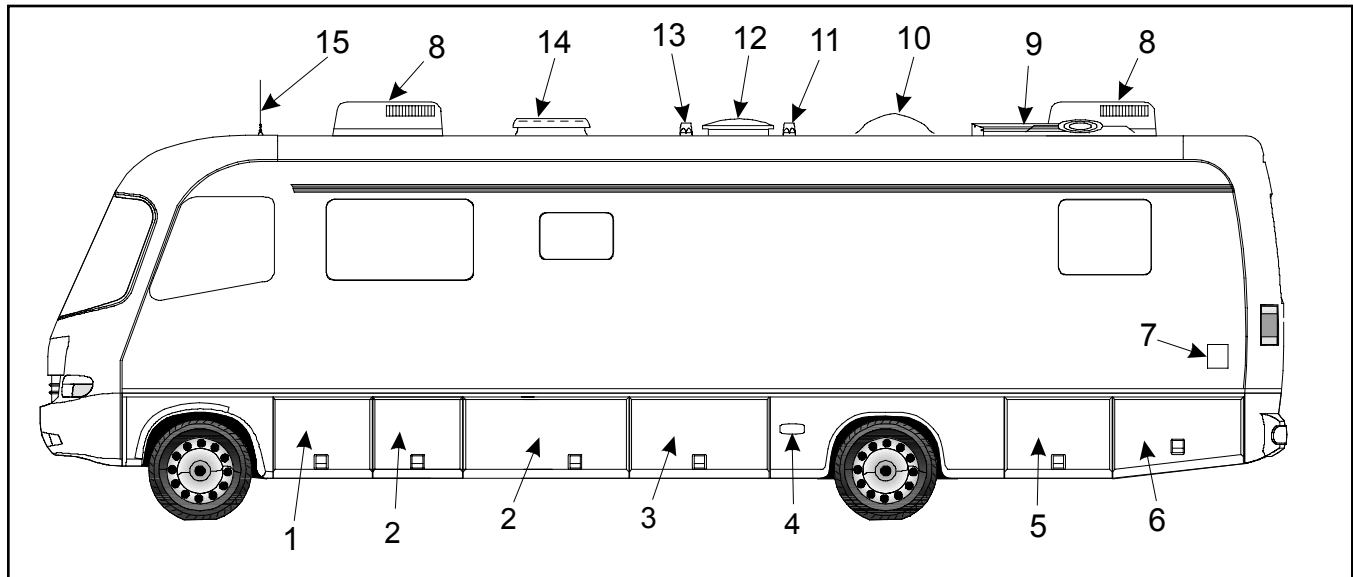
Locations vary from model to model. Identify each by their specific view.

## Front View

1. Mirrors
2. Headlights
3. License Plate
4. Engine Access Door
5. Windshield Wipers
6. Clearance Lights
7. Identification Lights

## Rear View

1. Clearance Lights
2. Camera
3. Third Brake Light
4. Turn Signals/Tail Lights
5. License Plate
6. Rear Tow Hitch



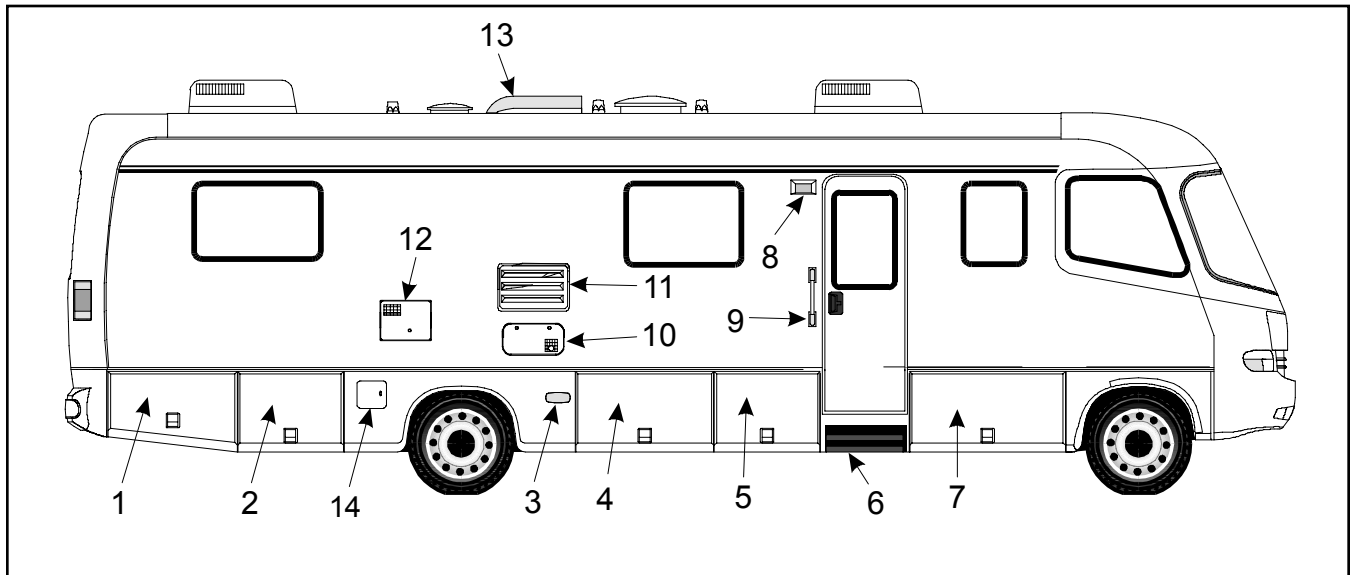
### Roadside View

Locations vary from model to model. Identify each by their specific view.

- |  |                       |
|--|-----------------------|
| 1. Storage & Electrical Panel                                      | 9. TV Antenna         |
| 2. Storage Compartment   | 10. Shower Vent       |
| 3. Electric Generator/Leveling Jacks<br>Hydraulic Pump             | 11. Toilet Vent       |
| 4. Side Marker Light   | 12. Roof Air Vent     |
| 5. Water Control Panel   | 13. Holding Tank Vent |
| 6. Electric Cord (Shore Line)/Storage/<br>Telephone & Cable Hookup | 14. Attic Air Vent    |
| 7. Gravity Fresh Water Fill  | 15. Radio Antenna     |
| 8. Roof Air Conditioner  |                       |



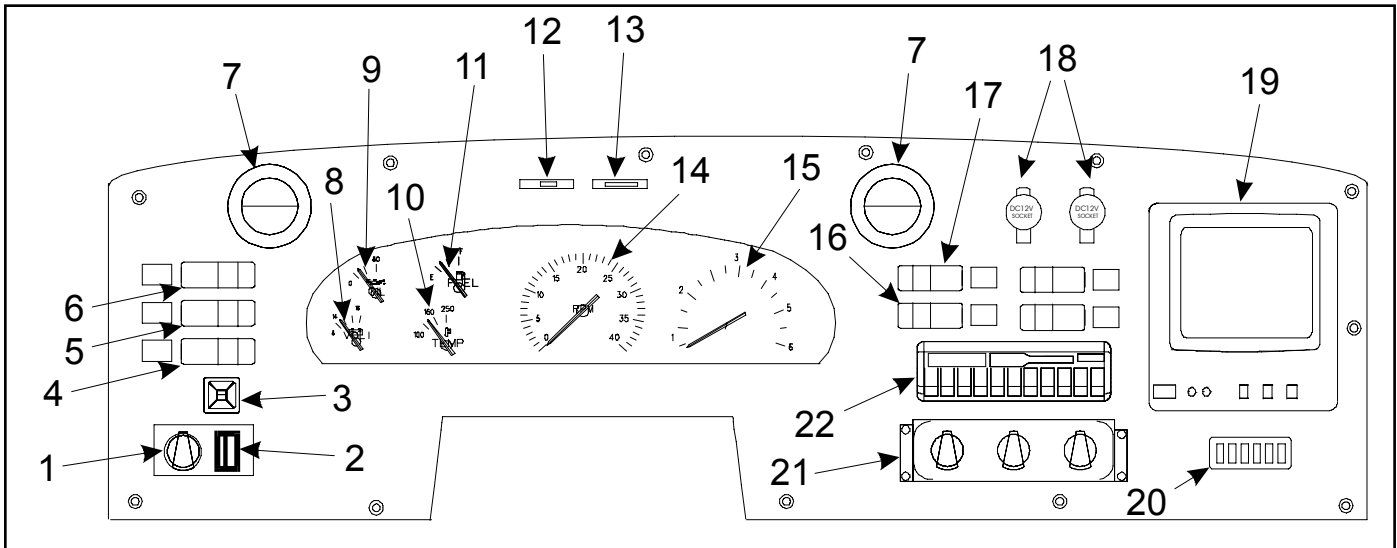
# Diagrams & Specifications



## Curbside View

Locations vary from model to model. Identify each by their specific view.

- |   |                              |
|---|------------------------------|
| 1. Storage Compartment                                | 8. Porch Light               |
| 2. Storage Compartment/House Batteries and Disconnect | 9. Grab Handle               |
| 3. Side Marker Light                                  | 10. Furnace Compartment      |
| 4. LP Tank/Storage Compartment                        | 11. Refrigerator Compartment |
| 5. Storage Compartment/Telephone                      | 12. Water Heater Compartment |
| 6. Step   | 13. Refrigerator Vent        |
| 7. Chassis Disconnect                                 | 14. Fuel Fill                |



## Dash Panel

1. Headlight Switch - Turns headlights on and off.
2. Panel Light Switch - Dims dash lights.
3. Power Mirrors Controls - Left lever controls movement of driver's side mirror and right lever controls movement of passenger's side mirror.
4. Mirror Defrost Switch - This switch will turn on heater in the exterior power mirrors to defrost them for better visibility.
5. Accessory Switch
6. Auxiliary Start Switch - If chassis battery cannot start the motor home you can push this switch to borrow from the coach battery to jump start motor home.
7. Air Conditioner Vent - Louvers in vent will direct air either right, left, up or down.
8. Voltmeter - Shows voltage of chassis electrical system.
9. Oil Pressure Gauge - Registers oil pressure of engine. A reading in midrange area at average engine temperature is considered average.
10. Engine Temperature Gauge - Normal operating temperatures is 190°F to 240°F.

## Diagrams & Specifications

---

11. Fuel Gauge - This gauge indicates approximate amount of fuel in fuel tank.
12. Jacks Down Warning Light - This light illuminates when leveling jacks are in down position with ignition switch ON. You should not move motor home unless jacks are in store position.
13. Antenna Up Warning Light - This light illuminates when TV antenna is in raised position with ignition switch ON. You should not move motor home until you lower antenna.
14. Speedometer - Speedometer indicates speed of motor home in both mile per hour (MPH) and kilometers per hour (KPH).
15. Tachometer - Registers RPM's of engine.
16. Radio power switch - Turns radio on and off independent of main switch on radio.
17. Generator Start Switch - This switch allows you to start generator from inside your motor home.
18. Cigarette Lighter - Can be used as a power source for a cellular phone.
19. Rear View Camera Monitor.
20. Air Conditioner Vent - Louvers in vent will direct either air to the right, left, up or down.
21. Dash air conditioning and heater controls. These controls operate dash air and heat only.
22. Radio - Complete instructions for operation of radio are in your Owner's Information Packet.

**Chassis Specs**

<b>MODEL#</b>	<b>29W</b>	<b>32C</b>	<b>32S</b>	<b>34S</b>	<b>34F</b>	<b>36D</b>	<b>36G</b>
GVWR	18,000 lbs.	20,500 lbs.	20,500 lbs.	20,500 lbs.	20,500 lbs.	20,500 lbs.	20,500 lbs.
GCWR	23,000 lbs.	25,200 lbs.	25,200 lbs.	25,200 lbs.	25,200 lbs.	25,200 lbs.	25,200 lbs.
GAWR Front	7,000 lbs.	7,000 lbs.	7,000 lbs.	7,000 lbs.	7,000 lbs.	7,000 lbs.	7,000 lbs.
GAWR Rear	11,000 lbs.	13,500 lbs.	13,500 lbs.	13,500 lbs.	13,500 lbs.	13,500 lbs.	13,500 lbs.
Wheel Base	190"	208"	208"	228"	228"	228"	228"
Overall Length	29'10"	32'8"	32'8"	34'10"	34'10"	36'6"	36'6"
Overall Height with A/C	11'8"	11'8"	11'8"	11'8"	11'8"	11'8"	11'8"
Interior Height	6'6"	6'6"	6'6"	6'6"	6'6"	6'6"	6'6"
Interior Width	94 1/2"	94 1/2"	94 1/2"	94 1/2"	94 1/2"	94 1/2"	94 1/2"
Exterior Width	100.5"	100.5"	100.5"	100.5"	100.5"	100.5"	100.5"



# Diagrams & Specifications

## Tank Capacities (Approximate Gallons)

<b>MODEL#</b>	<b>29W</b>	<b>32C</b>	<b>32S</b>	<b>34S</b>	<b>34F</b>	<b>36D</b>	<b>36G</b>
Water Heater	6	6	6	6	6	6	6
Gray Holding Tank	45	45	45	45	45	45	45
Black Holding Tank	45	45	45	45	45	45	45
Fresh Water Tank	70	70	70	70	70	70	70
LP Gas Tank	27	27	27	27	27	27	27

## Engine Specs

	Ford V10 Gas Fuel Injection
Engine	6.8L V10
Cubic Inch Displacement	415
Tire Size	245/70RX19.5F
Fuel Tank (Approx. Gal)	75
Alternator (Amp)	130
Rear Axle Ratio	5.38:1
Overdrive	Standard



## Bulb Usage

### Interior Lights

- ◆ Sidewall - 1076
- ◆ Dinette Light - 1141
- ◆ Double Pancake - Bulb 1141
- ◆ Single Pancake - Bulb 1141
- ◆ Cosmetic Light - 9-019C
- ◆ Map Light - Bulb 1003
- ◆ Fluorescent Light - Philips F8T5/CW

### Exterior Lights

- ◆ Engine Light - GE 232
- ◆ Porch/Off Door Service Light - Bulb 1003
- ◆ Red Clearance - Bulb 194
- ◆ Amber Clearance - Bulb 194
- ◆ Storage Lights - 168
- ◆ Systems Compartment - 1141
- ◆ Tail Light Turn Signal (Top) - 3156
- ◆ Tail Light Brake/Tail (Center) - 3457
- ◆ Tail Light Back Up (Bottom) - 3156
- ◆ Third Brake Light - 562
- ◆ License Plate - Order Complete Assembly
- ◆ Front Amber Park (Outside Top) - 194
- ◆ Front Amber Turn/Park (Outside Bottom) - 1157
- ◆ Front Amber Turn (Inside Top) - 1156
- ◆ Front Headlight (Inside Bottom) HB519007

# Chassis Information

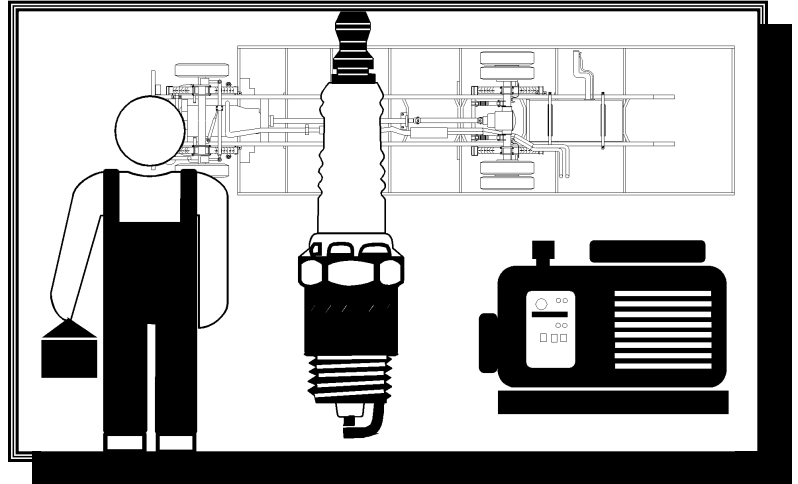
## General Information

Your motor home is built using a Ford chassis with an automatic transmission and is fueled by unleaded gasoline.

## Power Heated Mirrors

Your motor home is equipped with power heated mirrors. A switch located on the dash turns the heater on and off. To defrost the

mirrors turn the switch to the ON position. There is a switch on the dash for adjusting position of mirrors. Switch adjusts the top half of the mirrors. The bottom half of the mirrors are concave mirrors and need to be manually adjusted on the outside of the motor home.



## Wheel Covers

If your motor home comes with wheel covers you will need a special T-Handle wrench to remove and replace covers. This wrench is stored inside your motor home.

### To Remove Covers & Hardware

Covers are retained with two extenders and hardware. Extenders are located in a straight line with the valve stem and must be lined up when re-installed. Locate T-Handle wrench, pry off two chrome nut covers (in line with valve stem), remove nuts from extenders and pull off cover.

### Care and Maintenance of Wheel Covers

Clean only with mild soap and water. Do not use harsh detergents, acids, or abrasives. Periodically check jam nuts and stud extenders for tightness.

## Tires

Chassis manufacturers have designed your motor home with tires rated for highway speeds at GVWR. Inflate tires when they are cold to recommended pressure found

on tire side wall. Check tires often when traveling and do not overload them. Tires are covered by tire manufacturer's warranty. If you have a defective tire, refer to applicable warranty and do directly to the nearest dealer for adjustment. Never discard a defective tire, return tire to your dealer for inspection.

## !WARNING !

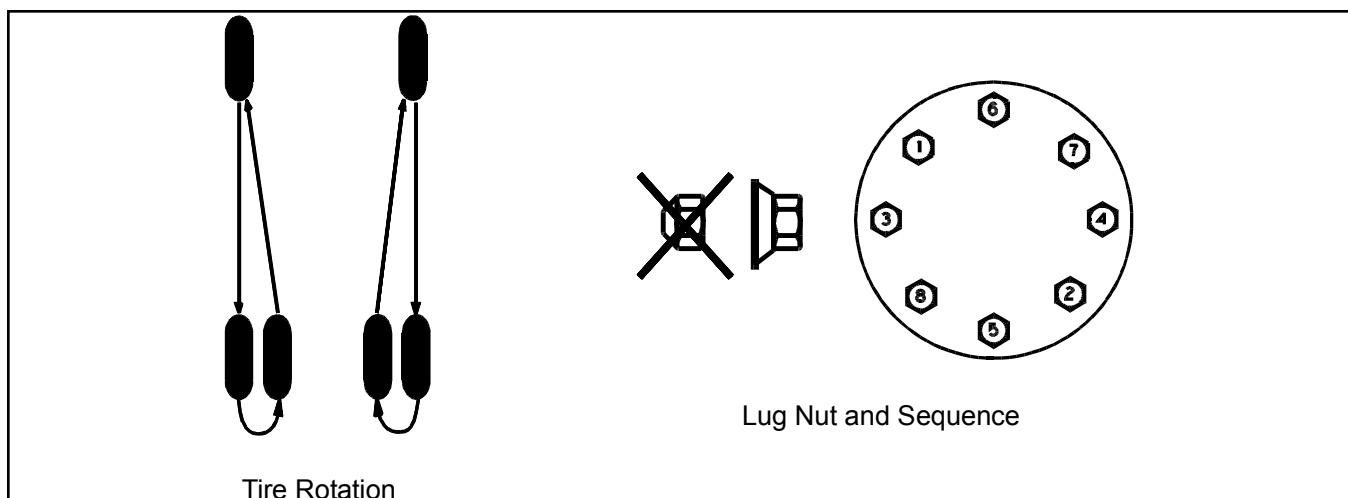
Tires are extremely heavy. To avoid personal injury and/or property damage obtain professional tire service help if you have a flat tire or tire blow out. Do not attempt to change the tire yourself.

### In Case Of a Flat Tire

In case of a sudden tire failure avoid heavy braking. Gradually decrease speed, hold steering wheel firmly and move slowly to a safe off-road place. Park on a firm level spot, turn off ignition, and turn on hazard flasher system. Your motor home comes equipped with a conventional spare tire, you can use it as a spare or as a regular tire. The spare tire is located in an outside compartment. The spare tire is held in place with a safety lock nut. The safety lock nut tool must be used to remove the tire. The tool is stored inside the motor home. It is recommended that if your motor home develops a flat tire or blow out you should call for roadside service. Due to size and weight of your motor home it is safer to rely on a professional service technician with proper equipment to change your tire. Your motor home does not come equipped with a jack and lug wrench.

### Tire Rotation

Rotate your tires every 6000 miles following one of the below diagrams.



# Chassis Information

## !WARNING !

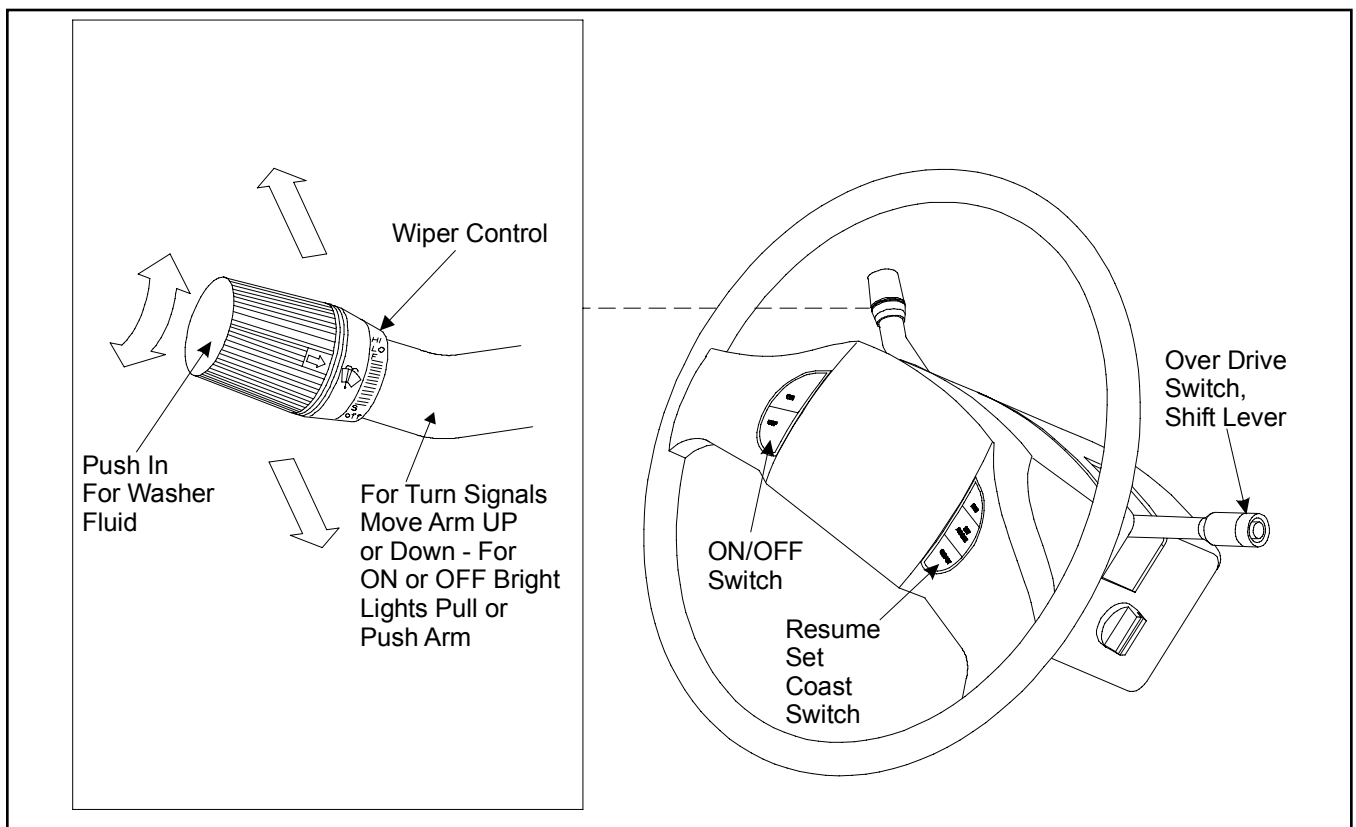
Be sure to tighten wheels in proper sequence. Ford uses a special lug nut. Do not use any other lug nut. Damage or injury could occur.

## Tilt Steering Wheel

The tilt steering wheel control is a lever located on the steering column near the dash. When you pull the lever you can freely move the wheel. Move the wheel to desired position and release the lever.

## Operator Controls

Controls on the left arm are used to operate wipers, turn signals and head light dimmer (turns brights on and off). Cruise controls are located on the steering wheel and Overdrive Lock-Out is located on end of shift lever.





## Cruise Control

The cruise control has a safety switch which will not allow the system to operate until your motor home is moving above 30 mph.

**To Set Speed** - Push and release ON switch on steering wheel and drive at desired speed above 30 mph. Hold desired speed with your foot while you press and release SET switch on steering wheel. One second after release, remove your foot from accelerator pedal. You can increase your speed at any time with accelerator pedal. When you release pedal you will return to set speed.

### **! WARNING !**

Do not use your speed control on slippery roads or in heavy traffic.

**To Accelerate** - Push and hold in on SET switch on steering wheel and your motor home will accelerate. When you release switch, your motor home set speed will be automatically set to the accelerated speed.

**To Coast** - Press and hold in COAST switch on steering wheel and allow motor home to coast. When you release switch your motor home set speed will be automatically set to the coast speed.

**To Disengage** - Depress brake pedal and you are in control of motor home's speed. You can also disengage speed control by pressing and releasing OFF switch on steering wheel.

**To Resume** - When you disengage system with brake you do not erase set speed from memory even if you come to a complete stop. To return to your chosen speed drive to a speed above 30 mph then push RESUME switch on steering wheel. Speed control will take you back to your original set speed. If rate of acceleration is faster or slower than you like, use accelerator to obtain a speed close to set speed then push RESUME switch. Speed control will automatically be turned off when ignition switch is turned off.

## Wiper/Washer Operation

Push in and hold end of arm to dispense washer fluid and release to stop fluid. Wipers will turn on and off automatically.

When rotating end of arm from OFF to DELAY, you will turn wipers on and a delay between wipes (ranging from 45 seconds to 2 seconds) will occur. Delay time changes as arm end is rotated. A continuous low or high speed can be obtained by rotating arm end

## Chassis Information

to appropriate position. To turn wipers off rotate arm end to OFF position.

### Headlight Beam Change & Turn Signals

Move arm upward for a right hand turn signal and downward for a left hand turn signal. Push arm away from steering wheel to switch from low to high beam, or pull towards steering wheel into detent position for high to low beam. Pull arm all the way up to turn headlights on for flashing.

### Over Drive Lock-Out Switch

To lock out overdrive for towing or direct drive transmission operation, push in on button located on end of shift lever. The indicator light on the lever will be lit. To return to over drive operation, push button in and release it. The indicator light on the lever will go out.

## Ford Chassis Quick Reference Chart

	Monthly	5,000 Miles	10,000 Miles	15,000 Miles	30,000 Miles	45,000 Miles	90,000 Miles	100,000 Miles
Check Lights, Tires, Engine Oil, Coolant Level, and Washer Solvent	4							
Check Seat Belts, Seats, Spare Tire & Wiper Blades	4							
Change Oil, Oil Filter, and Rotate Tires		4						
Replace Air Filter			4					
Check Brakes, Replace Fuel Filter				4				
Check Power Steering Fluid, Parking Brake, ABS, Air Bag, Battery Water Level and Terminals	4							
Check Exhaust Systems Service Transmission					4			



# Chassis Information

	Monthly	5,000 Miles	10,000 Miles	15,000 Miles	30,000 Miles	45,000 Miles	90,000 Miles	100,000 Miles
Drain and Replace Engine Coolant, Inspect Steering Linkage and Suspension						4		
Replace Drive Belt							4	
Replace PVC Valve and Spark Plugs								4
Lubricate Exterior Doors, Locks and Entrance Step			4					
Check LP Lines with Leak Detector and LP Appliances for Proper Operation			4					
Check Parking Brake, Wheels, Nuts and Lug Nut Torque			4					
Inspect & Reseal Entrance Door Jamb Corners, Clean Window and Door Seals and Spray w/Silicone Lubricant					4			
Have a Service Tech Check Fuel Tank Mounts and Fuel Line, Check Engine, Transmission, and Radiator Mounts, and Adjust Valve Lash Clearance			4					
Flush Fresh Water System					4			
Check Brake Lining					4			
Check/Repair Roof Seams					4			



# Chassis Information

---

## Common Parts

<b>Component</b>	<b>6.8 L V10 Engine</b>
Air Filter	FA-1634
Battery	BXT-65-750
Fuel Filter	FG-986B
Oil Filter	FL-820-S
PCV Valve	EV-233
Spark Plugs	AWSF-223

## Service Log

<b>Date</b>	<b>Mileage</b>	<b>Dealer Address</b>	<b>Service/Remarks</b>



**MONACO**

**2000**

## Chassis Information

Date	Mileage	Dealer Address	Service/Remarks

# Alphabetical Index

<b>Chapter 1 - Warranty &amp; Information</b>	<b>1-1</b>
<b>Chapter 2 - Driving &amp; Safety Tips</b>	<b>2-1</b>
<b>Chapter 3 - Appliances &amp; Equipment</b>	<b>3-1</b>
<b>Chapter 4 - Water Systems</b>	<b>4-1</b>
<b>Chapter 5 - LP Gas Systems</b>	<b>5-1</b>
<b>Chapter 6 - Electrical Systems</b>	<b>6-1</b>
<b>Chapter 7 - Unit Care &amp; Maintenance</b>	<b>7-1</b>
<b>Chapter 8 - Diagrams &amp; Specifications</b>	<b>8-1</b>
<b>Chapter 9 - Chassis Information</b>	<b>9-1</b>
12V DC System	6-6
Inside Motor Home Distribution Panel Circuits & Fuses	6-6
Outside Motor Home Distribution Panel	6-6
120V AC Generator	6-4
Starting Generator	6-5
Stopping Generator	6-5
120V AC System - 50 AMP Service.	6-3
Transfer Switch	6-4
Ground Fault Circuit Interrupter (GFCI) Outlet	6-4
Testing Instructions	6-4
Attic Air Vent	3-12
Awning - Side (Optional)	3-14
To Extend Awning	3-14
To Retract Awning	3-15
Rain Release Setting	3-16
Using Carport Feature	3-16
Securing Awning for Travel	3-17
Awning - Slide-Out	3-17
To Extend Awning	3-17
To Retract Awning	3-17
Awning - Window (Optional)	3-18
To Extend Awning	3-18
To Retract Awning	3-18
Bathroom Exhaust Fan	3-12



Batteries . . . . .	6-7
Battery Inspection & Care . . . . .	6-8
Bedroom Slide-Out . . . . .	3-22
To Extend Slide-Out . . . . .	3-22
To Retract Slide-Out . . . . .	3-22
Manual Operation . . . . .	3-22
Slide-Out Room Maintenance . . . . .	3-22
Bulb Usage . . . . .	8-10
Interior Lights . . . . .	8-10
Exterior Lights . . . . .	8-10
Cable & Telephone Hookups . . . . .	3-10
Carbon Monoxide Detector . . . . .	2-10
Operating Instructions . . . . .	2-10
When the Alarm Sounds . . . . .	2-11
Testing Your Carbon Monoxide Detector . . . . .	2-11
Cleaning Your Detector . . . . .	2-11
Chassis Fuses & Circuits . . . . .	6-8
Fuse Box Under Dash . . . . .	6-9
Fuse Box Behind Grille on Firewall . . . . .	6-10
Chassis Quick Reference Chart (Ford) . . . . .	9-5
Common Parts . . . . .	9-7
Service Log . . . . .	9-7
Chassis Specs . . . . .	8-8
Citizens Band (CB) Radio Prep . . . . .	3-11
City Water Hook-Up . . . . .	4-2
To Hook-Up City Water. . . . .	4-2
Cleaning Refrigerator . . . . .	3-6
Cooktop (Optional) . . . . .	3-7
Cleaning . . . . .	3-8
Computer Station Hookups . . . . .	3-10
Curbside View . . . . .	8-5
Customer Relations . . . . .	1-1
Dash Panel . . . . .	8-6
Defrosting Refrigerator. . . . .	3-6

# Alphabetical Index

Disinfecting Fresh Water Systems . . . . .	4-3
Driving Safety . . . . .	2-1
Before You Start Out . . . . .	2-1
Safety Seat Belts . . . . .	2-1
Egress Exit Window . . . . .	2-12
Electric Entry Step . . . . .	3-20
Operation (Normal) . . . . .	3-20
Operation (Last Out) . . . . .	3-21
Electrical Switch Chart . . . . .	6-2
Engine Specs . . . . .	8-9
Exterior Care . . . . .	7-1
Filling LP Gas Tank . . . . .	5-3
Fire Extinguisher . . . . .	2-11
Ford Chassis Quick Reference Chart . . . . .	9-5
Common Parts . . . . .	9-7
Service Log . . . . .	9-7
Fresh Water Tank Fill . . . . .	4-2
Fresh Water System Trouble Shooting . . . . .	4-5
Front View . . . . .	8-3
Furnace . . . . .	3-13
Operating Instructions . . . . .	3-13
Cleaning Furnace . . . . .	3-13
Galley Slide-Out Room . . . . .	3-20
To Extend Slide-Out . . . . .	3-20
To Retract Slide-Out . . . . .	3-21
Manual Operation . . . . .	3-21
Slide-Out Room Maintenance . . . . .	3-21
Gas Distribution Lines . . . . .	5-3
Glossary of Terms . . . . .	1-7
Ice Maker Operation . . . . .	3-5
Insurance Information . . . . .	8-2
Interior Care . . . . .	7-2



Bedsread/Draperies/Valance/Headboards . . . . .	7-2
Wall & Ceiling Coverings . . . . .	7-3
Solid Wood Cabinetry . . . . .	7-3
Counter Tops . . . . .	7-3
Appliances . . . . .	7-3
Carpet . . . . .	7-3
Bath Fixtures . . . . .	7-3
Hardware/Accessories/Light Fixtures . . . . .	7-4
Cleaning of Brass Fixtures . . . . .	7-4
Windows . . . . .	7-4
Condensation . . . . .	7-4
Controlling Moisture Condensation. . . . .	7-4
Inverter/Converter . . . . .	6-3
Leveling Jacks . . . . .	2-3
Before You Operate Leveling Jacks . . . . .	2-3
To Level Motor Home . . . . .	2-4
To Retract Leveling Jacks . . . . .	2-5
Drive Away Protection System . . . . .	2-5
Leveling Jacks Maintenance . . . . .	2-5
LP Gas Consumption . . . . .	5-2
LP Gas Detector . . . . .	5-4
Operation . . . . .	5-5
Testing LP Gas Detector . . . . .	5-6
LP Gas Regulator . . . . .	5-4
Operating Instructions . . . . .	5-4
Microwave Oven . . . . .	3-6
Cleaning Microwave Oven . . . . .	3-7
Operator Controls . . . . .	9-3
Cruise Control . . . . .	9-4
Wiper/Washer Operation . . . . .	9-4
Headlight Beam Change & Turn Signals . . . . .	9-5
Over Drive Lock-Out Switch . . . . .	9-4

# Alphabetical Index

Personal Property Information . . . . .	8-2
Power Heated Mirrors . . . . .	9-1
Power Disconnects . . . . .	6-7
Range w/Oven . . . . .	3-7
Cleaning . . . . .	3-8
Ready to Leave Checklist . . . . .	2-13
Rear Hitch - Using . . . . .	2-13
Rear View . . . . .	8-3
Rear Vision System . . . . .	3-11
Refrigerator - 900 Series . . . . .	3-1
Operating Instructions . . . . .	3-1
Door . . . . .	3-2
Control Panel . . . . .	3-2
Manual Mode . . . . .	3-2
Auto Mode . . . . .	3-3
Shut Down . . . . .	3-3
Diagnostic Codes . . . . .	3-3
Refrigerator - 1200 Series . . . . .	3-3
Operating Instructions . . . . .	3-3
Control Panel . . . . .	3-4
Manual Mode . . . . .	3-4
Auto Mode . . . . .	3-4
Shut Down . . . . .	3-5
Diagnostic Codes. . . . .	3-5
Reporting Safety Defects . . . . .	1-2
Roadside View . . . . .	8-4
Roof Air Conditioner . . . . .	3-11
To Operate Air Conditioner . . . . .	3-12
To Clean Covers & Filters . . . . .	3-12
Satellite System Prep (Optional) . . . . .	3-11
Securing Dinette Chairs for Travel . . . . .	3-21
Serial Number Information . . . . .	8-1
Side Awning (Optional). . . . .	3-14
To Extend Awning . . . . .	3-14



To Retract Awning . . . . .	3-15
Rain Release Setting . . . . .	3-16
Using Carport Feature . . . . .	3-16
Securing Awning for Travel . . . . .	3-17
Slide-Out Awning . . . . .	3-17
To Extend Awning . . . . .	3-17
To Retract Awning . . . . .	3-17
Slide-Out Room - Bedroom . . . . .	3-24
To Extend Slide-Out Room . . . . .	3-24
To Retract Slide-Out Room . . . . .	3-24
Manual Operation . . . . .	3-25
Slide-Out Room Maintenance . . . . .	3-25
Slide-Out Room - Galley . . . . .	3-20
To Extend Slide-Out Room . . . . .	3-20
To Retract Slide-Out Room . . . . .	3-21
Manual Operation . . . . .	3-21
Slide-Out Room Maintenance . . . . .	3-21
Smoke Detector . . . . .	2-8
How to Test . . . . .	2-9
Maintenance . . . . .	2-9
Trouble Shooting . . . . .	2-9
Step - Electric Entry . . . . .	3-18
Operation (Normal) . . . . .	3-18
Operation (Last Out) . . . . .	3-19
Stereo & CD Player . . . . .	3-11
Suggestions for Obtaining Service for Your Motor Home . . . . .	1-3
Be Reasonable with Your Requests . . . . .	1-4
Give Thought to Appointment Time . . . . .	1-3
Inspect the Work Properly . . . . .	1-4
Prepare a List . . . . .	1-4
Prepare for the Appointment . . . . .	1-3
You Can't Look Over The Technican's Shoulder . . . . .	1-4
Taking Delivery . . . . .	1-2
Dealer Responsibilities. . . . .	1-2
Customer Responsibilities . . . . .	1-3





# Alphabetical Index

Tank Capacities . . . . .	8-9
Television Antenna . . . . .	3-8
Antenna Booster . . . . .	3-8
To Raise Antenna . . . . .	3-8
To Lower Antenna . . . . .	3-9
Television & VCR . . . . .	3-10
Temporarily Store Motor Home . . . . .	2-14
To Store . . . . .	2-14
To Take Out of Storage . . . . .	2-14
Tilt Steering Wheel . . . . .	9-3
Tires . . . . .	9-1
In Case of a Flat Tire . . . . .	9-2
Tire Rotation . . . . .	9-2
To Convert Dinette into a Bed . . . . .	3-21
To Convert Sofa into a Bed . . . . .	3-21
Towing Procedure . . . . .	2-12
Towing without Stinger . . . . .	2-12
Trouble Shooting Fresh Water System . . . . .	4-5
Using Rear Hitch. . . . .	2-13
Vehicle Loading . . . . .	2-6
Unloaded Vehicle Weight (UVW) . . . . .	2-6
Net Carrying Capacity (NCC) . . . . .	2-6
Gross Combination Weight Rating (GCWR) . . . . .	2-6
Gross Axle Weight Rating (GAWR) . . . . .	2-6
Vendor List . . . . .	1-5
VCR & TV Cable Switch Box. . . . .	3-10
Warranty Information File . . . . .	1-3
Warranty Statement . . . . .	1-9
Waste Water Systems . . . . .	4-5
Drain Traps . . . . .	4-5
Toilet Operating Instructions . . . . .	4-6
Proper Waste Disposal. . . . .	4-6
Waste Holding Tank - Gray Water . . . . .	4-6




---

Waste Holding Tank - Black Water . . . . .	4-7
To Drain Waste and Sewage Tanks . . . . .	4-7
When Connected to Sewer Hook-Up . . . . .	4-8
What Not To Put In Holding Tanks . . . . .	4-8
Cold Weather Use . . . . .	4-8
Water Heater . . . . .	4-3
LP Gas Operation . . . . .	4-4
Draining & Storage . . . . .	4-4
Temperature/Pressure Relief Valve . . . . .	4-4
Burner Compartment . . . . .	4-4
Water Heater By-Pass System . . . . .	4-5
Water Hook-Up - City . . . . .	4-2
To Hook-Up City Water . . . . .	4-2
Water Pump . . . . .	4-1
Weighing Your Motor Home . . . . .	2-8
Wheel Covers . . . . .	9-1
To Remove Covers & Hardware . . . . .	9-1
Care & Maintenance of Wheel Covers . . . . .	9-1
While Driving . . . . .	2-2
Emergency Stopping . . . . .	2-2
Backing In . . . . .	2-2
Parking . . . . .	2-2
Window Awning (Optional) . . . . .	3-18
To Extend Awning . . . . .	3-18
To Retract Awning . . . . .	3-18
Winterizing . . . . .	7-5
Winter Storage Check-List . . . . .	7-7
Opening Motor Home Check-List . . . . .	7-7
Wiper/Washer Operation . . . . .	9-4