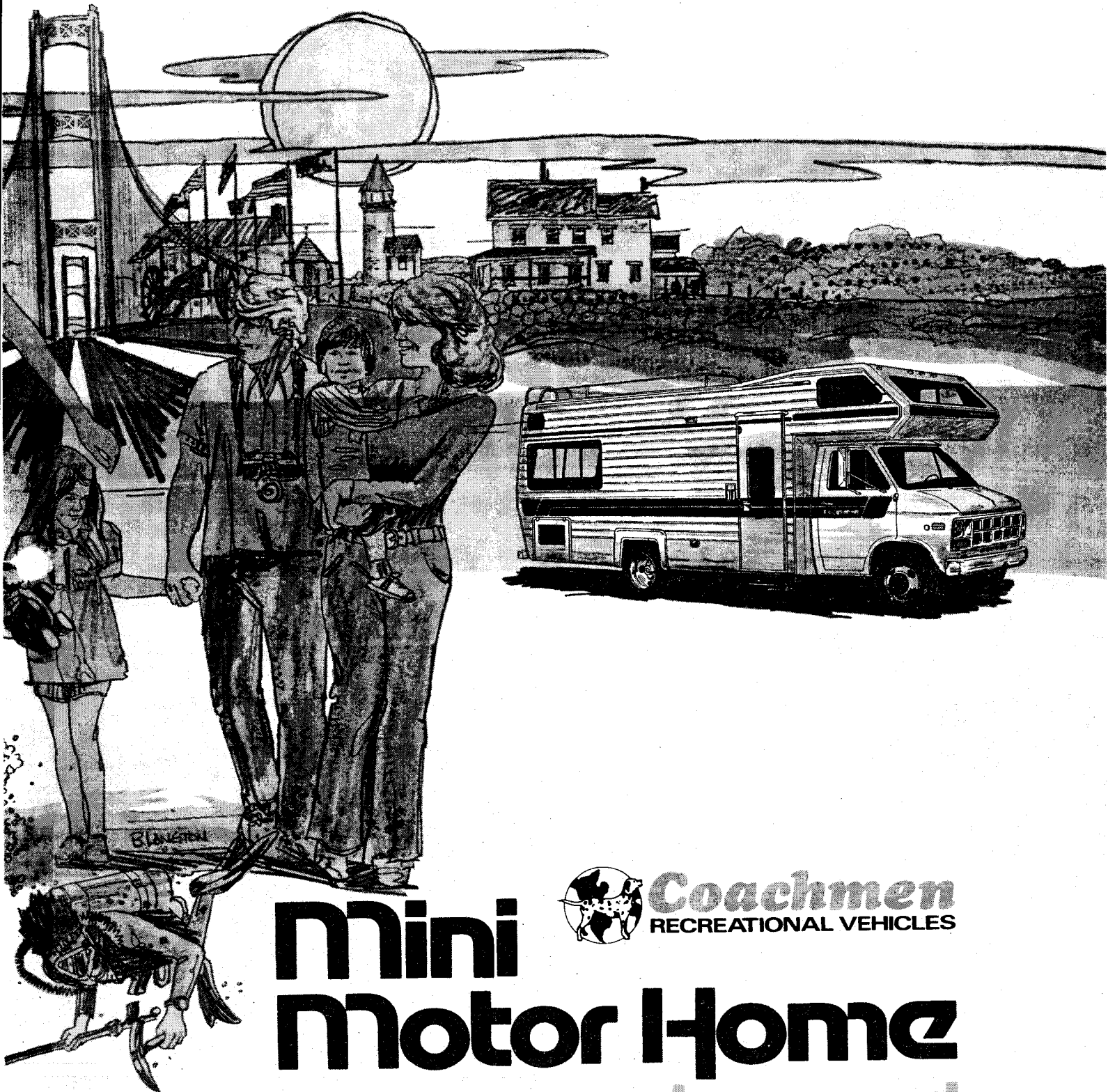


1979, 1980, 1981, 1982



Mini



Coachmen
RECREATIONAL VEHICLES

Motor Home

owner's manual

Welcome to Coachmen's ever-growing family of happy RV owners. Hours of relaxation, adventure and enjoyment are possible for you in your new Coachmen unit. Thousands of Coachmen RV owners have been enjoying their units for many years.

This Owner's Manual has been prepared to help you and your family enjoy your new Coachmen RV to its fullest, by providing basic instructions for the operation and maintenance of its appliances, accessories and RV systems. Read it carefully and follow the instructions. Also read and follow the instructions contained in the appliance and accessory instruction booklets provided by various manufacturers which also are a part of the "Coachmen Information Packet".

Operating and maintenance instructions pertaining to appliances in this Owner's Manual were obtained from and are used with the permission of the various manufacturers. We reserve the right to present edited portions of their material.

Coachmen Industries, Inc., works year 'round to improve its products. Accordingly, all specifications, equipment, and prices set forth in Coachmen literature are subject to change without notice or obligation.

Coachmen offers a wide variety of Recreational Vehicle models and choices of standard and optional equipment; therefore, certain descriptions in this manual may not apply to your unit. Ask your Coachmen dealer, or see the current brochure, for information concerning available standard or optional equipment.

JOIN the INTERNATIONAL COACHMEN CARAVAN!

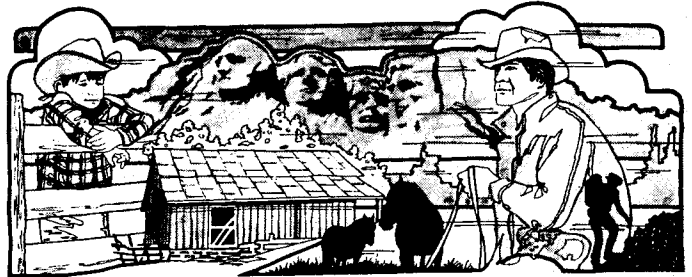
The International Coachmen Caravan is your owner's club. It's designed solely to help you get the most pleasure from owning a Coachmen Recreational Vehicle. For complete information on how to join the Caravan, just write to The International Caravan, P.O. Box 30, Middlebury, IN 46540.

HERE'S WHAT YOUR CARAVAN MEMBERSHIP WILL BRING YOU:

1. CARAVAN IDENTIFICATION PACKAGE

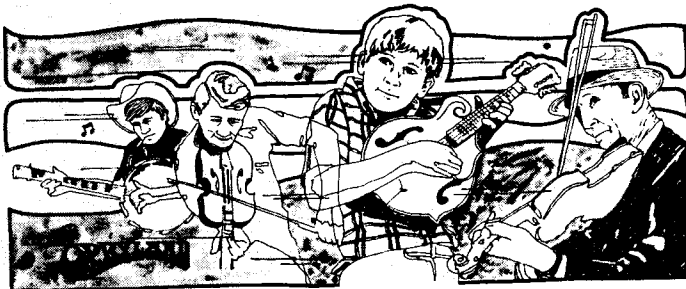
The first benefit a member receives is a complete Caravan Identification Package. The package includes a membership card and Coachmen Caravan decals and unit numbers.

These are all-important items to identify you as a full-fledged Caravanner eligible for all other Caravan benefits.



2. MEMBERSHIP ROSTER

Wherever your RV adventures lead you, you'll find friends with the Coachmen Caravan Roster. The list is organized by Caravan Identification numbers. When you spot another Caravan member — and there are more than 13,000 of them! — refer to your roster. You'll find the members' names, city, state and CB call letters. It's a great way to break the ice and open conversation.



3. MAP SERVICE

Caravan means travel and lots of it! To smooth the road for you and help you plan your trips, Caravan offers a special discount on the Rand McNally Road Atlas.

4. MAGAZINE DISCOUNTS

To help you enjoy all the aspects of RV'ing, Caravan offers its members special discounts on the best enthusiast magazines:

Trailer Life, Motor Home Life, Van Life and Woodall's.

Subscription cards will be furnished at no charge, to be mailed from the Caravan office.

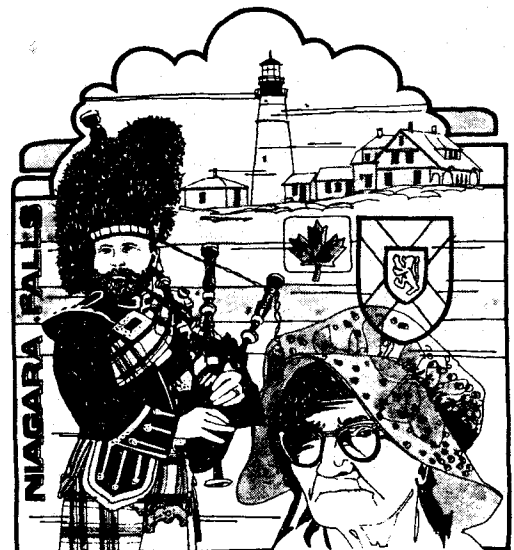
5. CARAVAN TRIPS AND RALLIES

Nova Scotia! The Indy 500! Florida! Hawaii! Interesting places and events are a big benefit of Caravan membership. Each year, the International Coachmen Caravan has several special trips as well as an International Rally.

The professional Caravan staff is constantly striving to develop outstanding tours and events. Traveling to special places with a Caravan of friends is always a memorable experience. It's a great way to get the family together.

6. CAPERS — YOUR MAGAZINE

Capers is a bi-monthly magazine written for — and largely by — Caravan members. Capers will bring you news of Caravan chapters across the continent as well as news of upcoming trips and rallies, feature articles on the many aspects of owning an RV, recipes for outdoor cooking, etc.



7. PETE'S MARKET

Pete's Market is the Caravanner's mail-order store, chock-full of special items to make your RV adventures more fun. Special decals, patches, clothing, accessories and jewelry featuring our symbol, Pete the Dalmation, are available at very reasonable prices exclusive to Caravan members.



8. DISCOUNT FILM PROCESSING PROGRAM

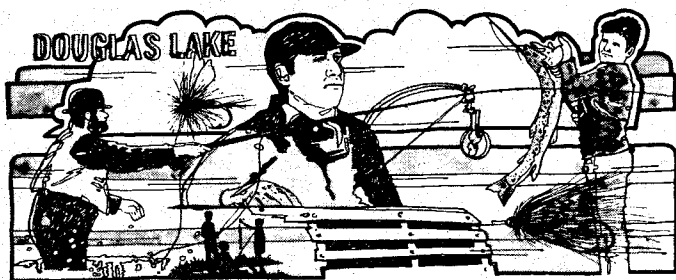
Photographs are the best way to preserve all those memories you'll be making on your Caravan trips and other RV travels. To help you have all the pictures you'll want, Caravan offers members a special discount film processing program. You'll receive an envelope to mail in your film for 24-hour processing at low, low rates.

9. CAR RENTAL PROGRAM

Wherever you travel, you'll benefit from the Caravan-Hertz Car Rental Program. All Caravan members are eligible for a 25% discount on Hertz Car Rentals. As a Caravan member, you'll receive a special card identifying you as eligible for this discount. Your family can travel more — for less!

10. DISCOUNTS ON TRAVEL ACCESSORIES

To help you enjoy your travels even more, Caravan members will receive discounts on travel accessories. You'll be able to purchase helpful items, such as highway emergency kits, at low, low rates exclusive to Caravan members.



11. CAMPGROUND MANUAL DISCOUNTS

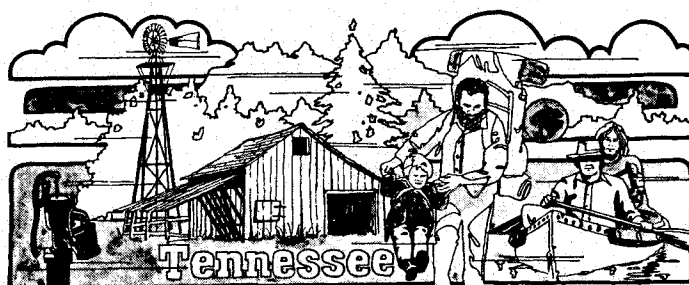
The well-known Wheelers RV Resort Campground Guide can really help you on your RV travels, and you can receive it at discount rates.

12. LOCAL, STATE & DISTRICT ACTIVITIES

In addition to International Caravan trips and rallies, you can enjoy your local, state and district Caravan Chapter activities all through the year. Whenever you feel like getting together with other Caravanners, chances are one of these groups will have an activity planned!

13. PERSONALIZED TRIP ROUTING

Caravan's Personalized Trip Routing Guide will help make your trip planning easier and your travels more enjoyable. Prepared especially for you by the Rand McNally Company, this trouble-free guide provides easy-to-read details on routes you request. Your customized route includes a National Inter-state map, individual state-by-state map routings, as well as maps of major cities on your way.



14. KOA PREFERRED CUSTOMER CARD

This card entitles you to special service at participating KOA campgrounds. Benefits include:

- Faster check-in and preferred treatment; meaning you can get the best sites available at the time of your arrival.
- Guaranteed money-back within one hour if you decide to leave.
- Extra benefits available at certain participating campgrounds.

The cost of a one-year membership is \$8.00; two-year membership, \$15.00, and three-year membership, \$20.00.



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INTRODUCTION

GENERAL

Now that you've purchased your new Coachmen mini motor home, you're anxious to start on your first trip. Coachmen and your authorized dealer have cooperated in providing the means for a quick getaway: Coachmen by designing and building your unit to rigid standards and thoroughly testing it at the factory, and your dealer by a careful re-testing of systems and an inspection prior to delivery to you. Yet, after all that, we're going to ask you not to make a hasty departure. Because we want you to enjoy every trip, whether it's overnight, a week-end or season-long excursion, we first want you to get to know your unit and make careful preparations. That's why you'll find more than operating and maintenance instructions in this manual: You'll also find tips and suggestions to help you get started. There also are dozens of illustrations for easy identification of the various components.

NOTE: Illustrations identified by a Figure Number will be found in the convenient fold-out at the back of the manual.

Our first suggestion is that after you've read this manual and the appliance and accessories instruction booklets, store them in your unit for handy reference.

An overnight or weekend "shakedown" trip can help RV'ing novices become familiar with their unit and its systems and appliances. The experience gained and the hints other RV'ers are usually eager to share will help make future RV'ing more enjoyable. Although you purchased your unit with certain standard and/or optional equipment, you may wish to add other accessories later. Experience is invaluable in determining which additional items, if any, to choose. Remember, your Coachmen dealer will assist you in every way possible.

LICENSES

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

INSURANCE

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

TRAVEL PREPARATIONS

GENERAL

Determine the various items of equipment, clothing, food and other supplies required for the length and destination of your journey. In a subsequent section, the importance of proper loading

is explained, but at this stage you're more concerned with a quick getaway. One way to reduce loading time is to purchase dinnerware and silverware, pots, pans, towels and bedding, which can remain in your unit at all times. After a trip, clean and launder the articles and replace them in your mini motor home, ready for your next trip. The following is a guide to help in your travel preparation.

CLOTHING

Compile a clothing list for each person. Consider the season and areas through which you intend to travel. Basic articles: Underwear, socks, footwear, shirts, blouses, trousers, slacks, dresses, shorts, sweaters, jackets or coats, rainwear and swim suits.

CAMP HYGIENE

Dishsoap, dishcloths and dishtowels, garbage and trash bags, mop, broom and dustpan.

PERSONAL HYGIENE

Soap, washcloths, towels, toothpaste, toothbrush, deodorant, shaving kit, toilet paper, laundry soap and laundry bag.

SAFETY

Flares and reflectors; flashlight; first aid kit; tow rope and/or chain.

FOOD AND WATER

Don't try to take a food supply for an extended trip. Take enough for two or three days and replenish supplies along the way. Take a basic supply of seasonings: Sugar, salt, pepper and spices. Plan meals so that fresh or refrigerated items are used before they spoil. Fill your fresh water tank before leaving (when traveling in winter, it is recommended that the water tank not be filled until the interior of your unit is thoroughly warmed or until you reach your destination).

MEAL PREPARATION

Bottle cap and can opener; matches, lighter or igniter device; pots, pans, plates, glasses, and cups (paper or plastic are lighter and less likely to break while the vehicle is in motion); silverware and carving knife.

TOOL CHEST

Include an assortment of wrenches and screwdrivers, pliers, hammer, shovel, tire pressure gauge, small level, electrical and masking tape.

ADDITIONAL TOOLS

You may also want to take a hatchet, saw, and 12-volt portable tire pump.

EQUIPMENT

Fresh water hose (garden) and bucket; "Y"

type water hose fitting; 20-foot 3-prong power cord; 3-prong adapter with grounding wire; fuses; wheel chocks, leveling ramp or blocks.

SLEEPING GEAR

Sleeping bags are ideal for cold climates, but sheets and blankets are better suited for warm weather. Take along an extra blanket or two for sudden drops in temperatures, such as can be expected in mountain areas even during summer. Be sure to take pillows, pajamas and mattress pads, if normally used.

ENTERTAINMENT

Take along games, toys, books, magazines, or other items of entertainment to occupy passengers while traveling or in case you encounter inclement weather.

IMPORTANT DOCUMENTS

Carry your vehicle registration and insurance policy card(s). If you are borrowing a vehicle, you should have a notarized letter of authorization from the owner with you.

TOURIST INFORMATION

Current road maps and tourist information for states through which you intend to travel are available through state tourist agencies. You also may want to purchase a tourist guide book.

If you will be visiting federally-operated national parks, monuments and recreation facilities, you may wish to look into the Golden Age Passport and the Golden Eagle Passport. They can help families cut spending at those areas where fees are involved.

GOLDEN AGE PASSPORT — The Golden Age Passport is a free lifetime pass for persons 62 and over and covers all admission fees and a 50 percent discount on use fees (except fees charged by private concessionaires). It may be obtained only at park service offices and at parks where entrance fees are charged. It cannot be obtained by mail or at post offices. To obtain the Golden Age Passport you will need proof of age, such as a driver's license, or be prepared to sign an affidavit swearing that you are 62 or over. NOTE: Medicare cards are not accepted since in some cases they are issued to younger persons.

GOLDEN EAGLE PASSPORT — The Golden Eagle Passport costs \$10 and is designed for persons who plan to visit several parks or federally-operated facilities in a single year. It covers all admission charges but does not cover use fees and is good only during the calendar year in which it is issued. It may be purchased in person or by mail at the National Park Service headquarters, Department of the Interior, Washington, D.C. 20240; at regional

offices and at facilities where entrance fees are charged.

Both the Golden Age and Golden Eagle Passports cover admission fees for the permit holder and any persons accompanying him or her in a private vehicle. Where entry is not by vehicle, the passport covers the permit holder and members of his or her immediate family.

HOME SECURITY

Make arrangements for someone to check your house periodically. Stop mail and newspaper delivery. If you intend to be away for more than 2 weeks, request police surveillance. Carry an extra set of vehicle and house keys on a separate key ring.

PRE-TRAVEL CHECK

GENERAL

Whether departing from your home, rest area, or campsite, you should perform these pre-travel checks:

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

REARVIEW MIRRORS should be adjusted so the driver can see both sides of the unit.

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

POWER CORD (120-Volt Shoreline) must be unplugged from the external source, pushed into its compartment and the cord hatch secured.

WATER FILL hoses must be disconnected and the caps secured.

SEWAGE TERMINATION VALVES must be closed and locked. The sewer hose must be removed from the termination outlet and stored in the rear bumper. The termination cap(s) must be securely fastened to the termination outlet(s).

WINDOWS AND VENTS should be closed and secured (the rear windows should remain closed while driving to avoid drawing exhaust fumes into the vehicle).

TV ANTENNA must be cranked down to its travel position.

LP GAS container and gas line connections should be checked.

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

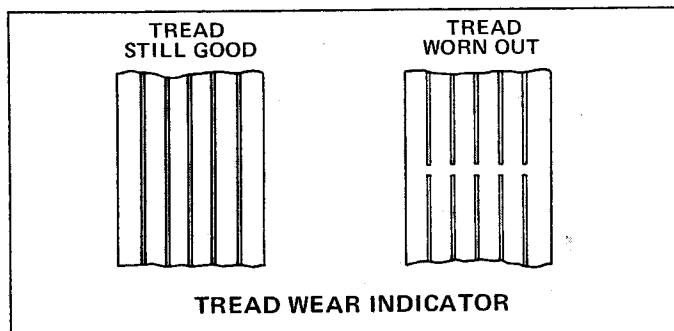
EXTERIOR ACCESS DOORS AND HATCHES should be closed and locked.

INTERIOR DOORS AND DRAWERS should be locked and secured. Loose items should be lashed down or stored away.

REFRIGERATOR DOOR should be secured with the travel latch.

AUTOMOTIVE SYSTEM should have the pre-travel check outlined in the chassis manufacturer's owner's manual.

TIRES should be inspected before each trip. Replace a tire when it is worn to 1/16" depth in two or more adjacent grooves, or to the level of the tread indicators molded into the bottom of the tread grooves, when the indicators appear in two or more adjacent grooves at three locations around the tire. Check tire for uneven wear, road damage, foreign objects, or excessive peeling or bulging.



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

Each morning inspect tire condition and pressure on your unit. Heat generated by surface friction will increase the tire's air pressure approximately 6 to 9 psi; therefore, do not bleed air out of a hot tire. Inflate tire to recommended pressure as indicated on tire or in tire manufacturer's instruction booklet.

NOTE: Proper tire inflation is extremely important.

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

DOOR STEP (Figure 1) must be returned to its travel position by lifting front edge of step and folding it over, then pushing it under the unit.

LOADING

GENERAL

A properly-loaded vehicle will perform better and handle more safely. Distribute your cargo evenly from side-to-side and front-to-back. Store heavier items on or close to the floor and as centrally as possible. Lighter items may be stored in cabinets, closets and drawers. Luggage or similar cargo transported inside your mini motor home should be

secured to prevent them from causing damage in case of a sudden stop or accident. Remember to leave space and weight allowance for souvenirs or other items you may purchase during your travels.

WEIGHT DETERMINATIONS

It is extremely important that you weigh your vehicle prior to leaving on a trip to determine whether your cargo is within the allowable limits for the various suspension components. Check the Federal Sticker or the Vehicle Identification Number (VIN) plate for the maximum weight ratings of each axle and the proper tire inflation for the intended load.

FEDERAL STICKER

Found on the driver's door post, the Federal Sticker lists the Coachmen Serial Number, the front and rear Gross Axle Weight Rating (GAWR) and the Gross Vehicle Weight Rating (GVWR). The VIN Plate also lists the GAWR, GVWR and the Chassis Serial Number.

MFD. BY	
Coachmen Industries, Inc.	
INCOMPLETE VEHICLE MFD. BY	
GVWR	WITH
GAWR FRONT	RIMS.
AT	PSI
GAWR REAR	WITH
TIRES	RIMS.
AT	PSI COLD
THIS VEHICLE CONFORMS TO ALL APPLICABLE	
FEDERAL MOTOR VEHICLE SAFETY STANDARDS	
IN EFFECT IN	
VEHICLE ID. NO.	
TYPE: MULTIPURPOSE PASSENGER VEHICLE	

FEDERAL STICKER

DEFINITIONS

GAWR — The allowable weight, including cargo and passengers, which can safely be supported by each axle.

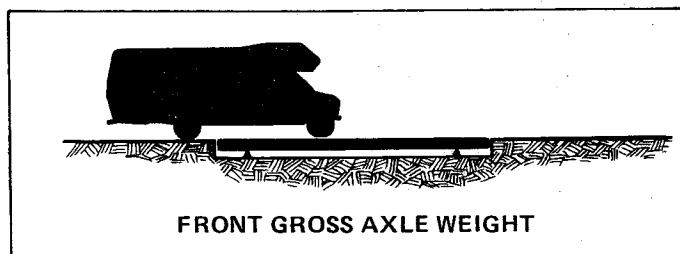
GVWR — The maximum permissible weight of your vehicle, including cargo, all options and passengers.

GVW AND GAW — Are found by weighing the vehicle fully-loaded. GVW is the actual weight of the mini motor home and all standard and optional equipment, cargo and passengers. GAW is the portion of the fully-loaded vehicle which is transferred to the axle(s).

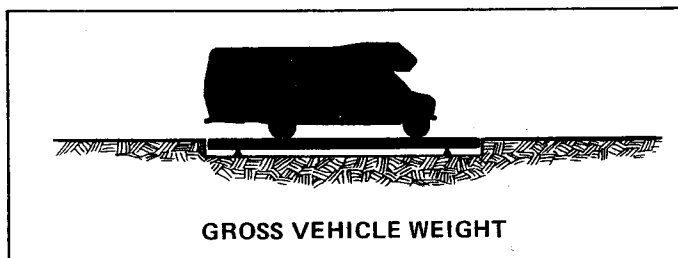
You can weigh your vehicle at a grain elevator, sand and gravel dealer or government weighing station (they are listed in the yellow pages of your telephone directory). The small fee involved may save you considerable trouble and expense later. Be certain to weigh the mini motor home with all passengers, cargo, LP gas and water aboard.

WEIGHING

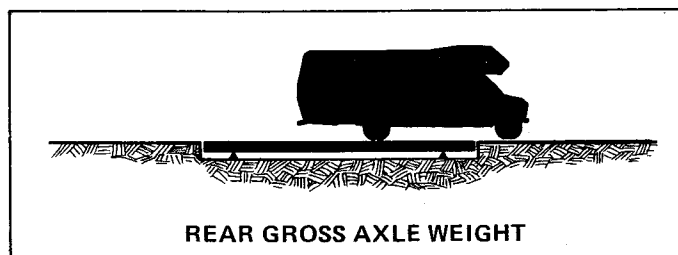
STEP 1 — Drive only the front axle of the mini motor home onto the scale. Compare the weight to the front GAWR listed on the Federal Sticker.



STEP 2 — Pull forward so that the front and rear axles are on the scale. Compare the weight to the GVWR listed on the Federal Sticker.



STEP 3 — Pull forward so that only the rear axles are on the scale. Compare the weight to the rear GAWR listed on the Federal Sticker.



NOTE: If any of the weights exceed the listed rating, relocate the passengers and redistribute or remove a portion of the cargo, until the weight is within the proper tolerance.

DRIVING

GENERAL

Power steering and power brakes help make driving your Coachmen mini motor home as effortless as possible. But you must remember that the mini motor home is longer, higher and wider than a family automobile. Be especially watchful for low bridges, overpasses, awnings or similar obstructions, which might damage your roof or accessories mounted on the roof. Watch for overhanging tree branches which also can do considerable damage to the windshield or roof of your mini motor home (refer to the brochure for clearance measurements). Before leaving on a trip, you may want to practice turning, braking, backing and accelerating.

PULLING INTO TRAFFIC

Check for oncoming traffic in all directions. Signal before entering the traffic flow. Accelerate slowly and smoothly and remember to compensate for less acceleration than that of a vehicle with a higher power-to-weight ratio.

TURNING

Because of the length of your Coachmen mini motor home, always pull farther ahead before turning either left or right to allow sufficient clearance for the rear of your vehicle.

PASSING

Avoid sudden maneuvers when passing another vehicle. Remember that additional time and distance are required to pass safely. Wait until the road is clear of oncoming traffic for at least 1/2 mile. Check the rearview mirrors and signal lane change before passing. When you are safely ahead of the other vehicle, signal lane change and return to your original lane.

DOWNSHIFTING

When climbing steep grades, downshift the transmission to a lower gear and reduce speed to 45 mph.

BRAKING

Allow a safe distance in which to stop your mini motor home. Never follow another vehicle closer than one vehicle length for each 10 mph. Pump the brake pedal lightly to stop on wet or icy roads. If you start to slide, turn the steering wheel in the direction of the slide. DO NOT tromp the brake pedal — a panic stop will increase the slide. DO NOT rest your foot on the brake pedal when you are not intending to stop. "Riding" the brakes will waste gasoline and can cause excessive brake temperatures, lining wear and possible brake failure.

OVERHEATING

The engine may overheat while climbing or descending steep grades. If your unit's engine does overheat, pull well off the road. Shift to Park (P) for Chevrolet and GMC, or Neutral (N) for Dodge, and run the engine with your foot resting lightly on the accelerator pedal. If the engine does not cool within 5 minutes, turn it off and locate the problem. For a Ford chassis, if the indicator moves to (H), pull well off the road and immediately turn the engine off. Locate the problem before continuing your trip.

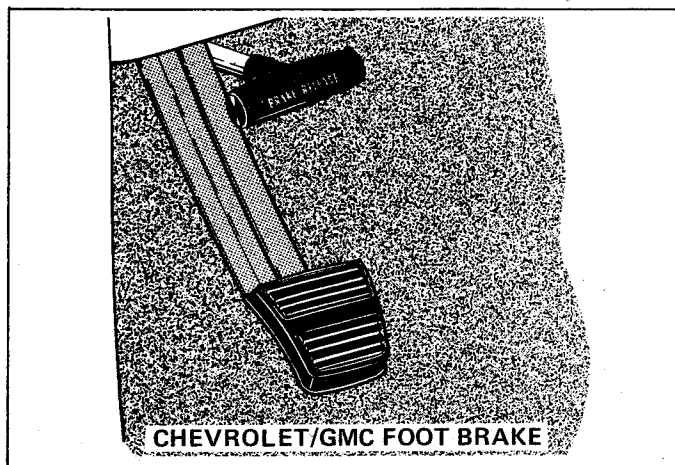
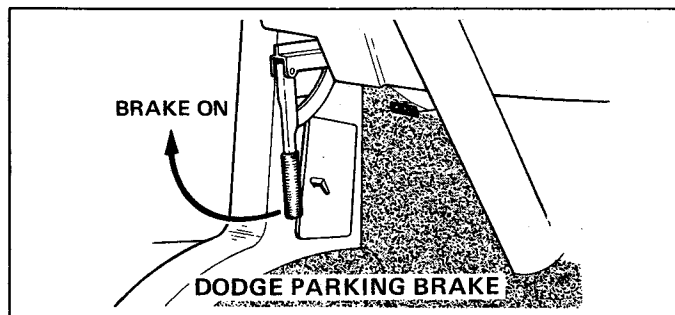
Engine temperature problems may be avoided if you climb long grades and descend moderately-steep grades in second gear; climb steep grades in first gear and if your unit has auto air conditioning, turn it off.

CAUTION: DO NOT exceed the maximum speed listed in the chassis manufacturer's manual for first and second gear — excessive engine

speed will overheat the transmission, which may cause early transmission failure.

PARKING ON A GRADE

Always apply the foot brake then set the parking brake, when parking on a grade, before moving the shift lever to Park (P). When preparing to move the vehicle, move shift lever out of Park (P) before releasing parking brake. If this sequence is not followed, you may not be able to move the shift lever out of Park (P). If this torque lock does occur, you may have to have another vehicle push yours a short distance until you can move the shift lever.



HOLDING ON AN UPGRADE

Use foot brake or parking brake and parking gear to hold the vehicle on an upgrade. Using a driving gear to hold the unit may cause the engine or transmission to overheat. **DO NOT** idle the engine for more than 1 minute with the transmission in gear.

FREEING A STUCK VEHICLE

To pull your vehicle out of snow, sand or mud, apply slight pressure to the accelerator pedal and move the gear selector lever rhythmically between first gear and Reverse (R). If possible, keep the front wheels pointed straight ahead. Avoid sharp turns. Once the vehicle starts to move, do not stop until it is on firm ground.

CAUTION: *DO NOT race the engine or spin the wheels; prolonged efforts to free a stuck vehicle may result in overheating and transmission and axle failure.*

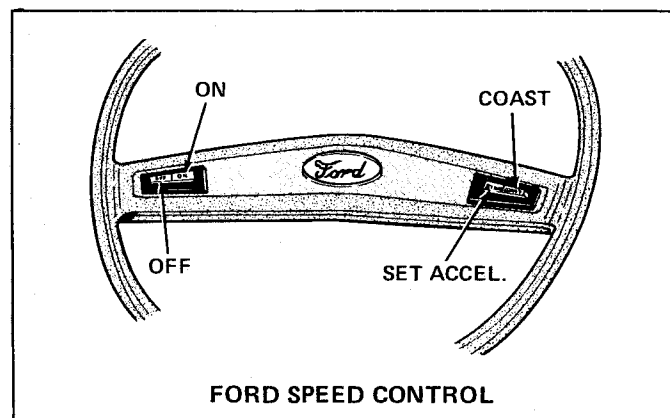
TOWING

We do not recommend towing trailers (boat, camping, travel trailers) or other vehicles with this unit.

AUTO SPEED CONTROL

This device controls the accelerator at speeds over 30 mph. It is located at the end of the turn signal lever or on the steering wheel spokes, depending on which chassis model you have.

FORD — Located on the steering wheel spokes, the control consists of an ON/OFF and a SET-ACCEL/COAST switch.



To activate, press the ON switch; accelerate to the desired speed, then press SET-ACCEL and release. Remove your foot from the accelerator pedal. The switch activates the system and establishes memory.

A tap on the brake pedal or normal braking will deactivate the system without erasing memory. To return to the pre-set speed, press the SET-ACCEL switch. To erase memory, press OFF or turn off the ignition.

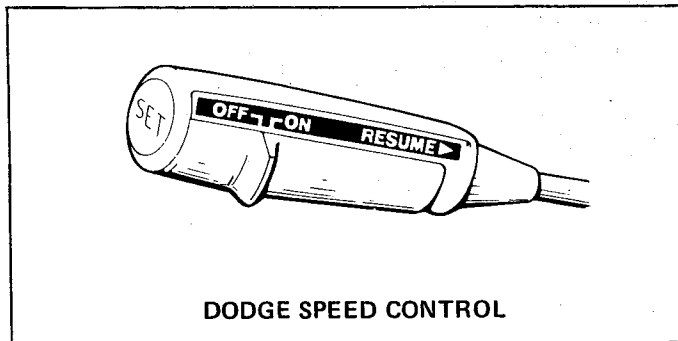
To increase your speed, press SET-ACCEL until your vehicle reaches the desired speed or accelerate to new speed and press SET-ACCEL. Reduce your speed by pressing COAST, the vehicle will gradually slow down; when the desired speed is attained, release switch.

To pass, accelerate as normal. Return to your lane and release the accelerator, you will return to the set speed.

CAUTION: *Do not operate mobile radio transmitters, such as citizen band radios, while the speed control is in operation. This may cause momentary fluctuations from the desired speed.*

DODGE — Located at the end of the turn signal lever, the control consists of a set button and a control slide.

To activate, move the control slide to ON. Accelerate to the desired speed, press the set button and release. Remove your foot from the accelerator pedal. The set button activates the system and establishes memory.

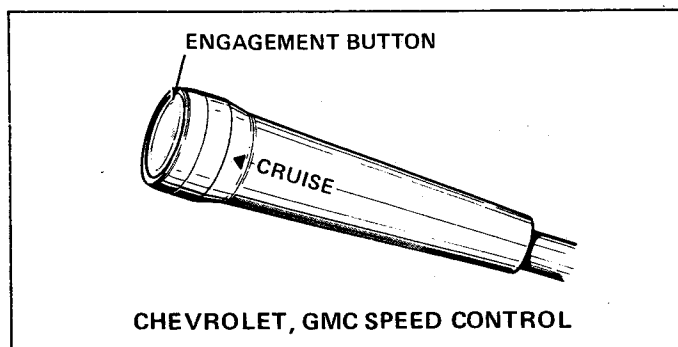


A tap of the brake pedal or normal braking will deactivate the system without erasing the memory. To return to the pre-set speed, move the control slide to RESUME. Do not allow the control slide to jerk back to ON, it may overshoot and turn the system off. To erase the memory, move the control slide to OFF or turn off the ignition.

To establish another speed, either accelerate or slow down and press set button when the desired speed is attained. If the system is already activated, you can increase your speed by tapping the set button.

To pass, accelerate as normal. Return to your lane and release the accelerator, you will return to the set speed.

CHEVROLET AND GMC — The control is located at the end of the turn signal lever.



To activate, accelerate to the desired speed and push in the engagement button momentarily; take your foot off the accelerator and the speed will be maintained. To reset at higher speed, accelerate to the desired speed, push in the engagement button fully and release slowly. To reset at slower speed, depress the engagement button fully and hold. Allow vehicle to decelerate until desired speed is reached, then release engagement button slowly. You can increase your speed, such as for passing, by depressing the accelerator pedal. When you let up on the accelerator, the vehicle will return to the pre-set speed. Lightly apply the brake pedal to disengage the system.

CAUTION: Do not use any auto speed control when conditions are not suitable for maintaining a constant speed, such as in heavy or varying traffic or in strong winds or on slippery roads.

TIRE CHANGE

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

CAUTION: Use the jack only for changing tires. Never get beneath the vehicle when using the jack; never start or run the engine while vehicle is on the jack. Always securely stow the spare tire on the spare tire carrier and return all jacking equipment to its proper storage area.

CAMPING

CAMPSITE SELECTION

Some campgrounds do not accept reservations, but make one whenever you can. If possible, arrive early so you may inspect and choose a site during daylight hours. Try to avoid sites near a swamp, stream or other bodies of water which may harbor mosquitoes or other insects. Avoid parking under dead trees or loose limbs which might fall and cause injury or damage. Stay away from areas which show signs of flash flooding. DO NOT park on private property without first obtaining permission.

In winter, park behind a grove of trees, bushes or similar type of windbreak. Close the gap between the ground and the bottom of your vehicle's outside walls with plastic, canvas or similar material. This will cut down cold drafts which can affect interior temperatures.

COURTESY

Common courtesy will help make your stay more pleasant. Campsites are often close together and RV walls are not as thick as those in your home, so loud noises may disturb your neighbors. Follow the posted rules of the campsite. Open fires may not be permitted. If you can build a campfire, clear the area of flammable materials; never leave a campfire untended and always make certain the embers are completely extinguished.

LIVING AREA

SETUP

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

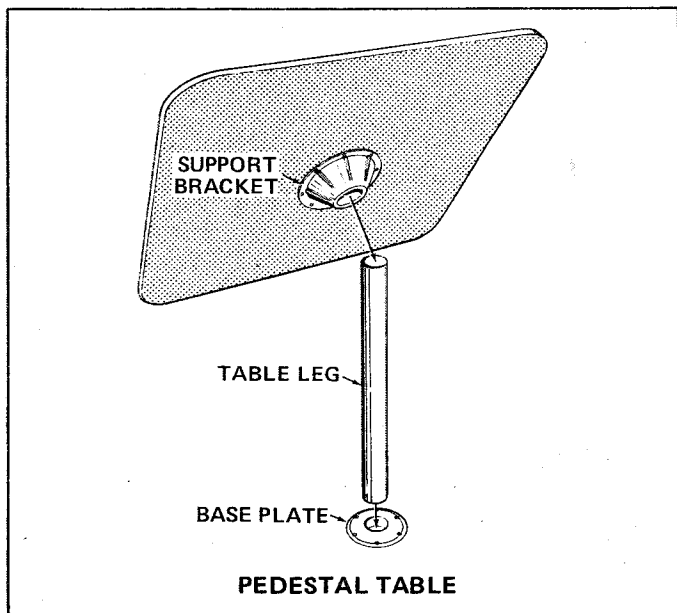
are furnished with some refrigerators and are available from your Coachmen dealer.

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

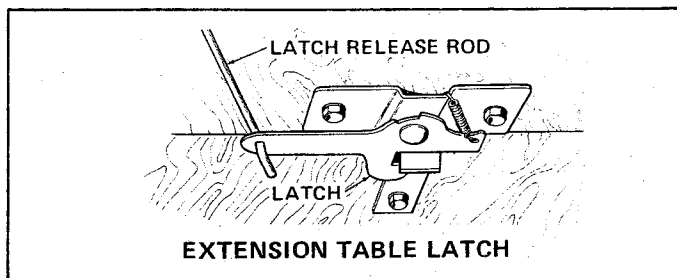
If your unit needs side-to-side leveling, you may make a step ramp (Figure 2) using 1" x 6" or 2" x 6" boards of varying lengths. Pull forward or back onto the leveling ramp until the tire(s) on the low side are level.

TABLES

PEDESTAL TYPE — Insert table leg into recessed floor base. Lower table support bracket onto the leg.

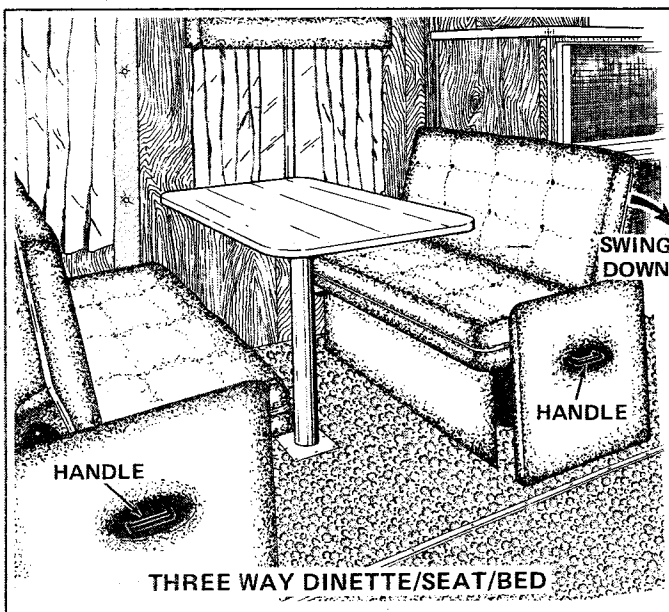


EXTENSION TYPE — Pull table outward to release from travel position. Swing table up and pull leg down to the locked position. Release the latch located under the table. Pull out the sliding portion of the table. Insert leaf(s) and push table together.



HINGE TYPE — Lift table front and lower back to insert tabs, located on the back edge of the table, into the wall brackets. Swing table leg down to the locked position.

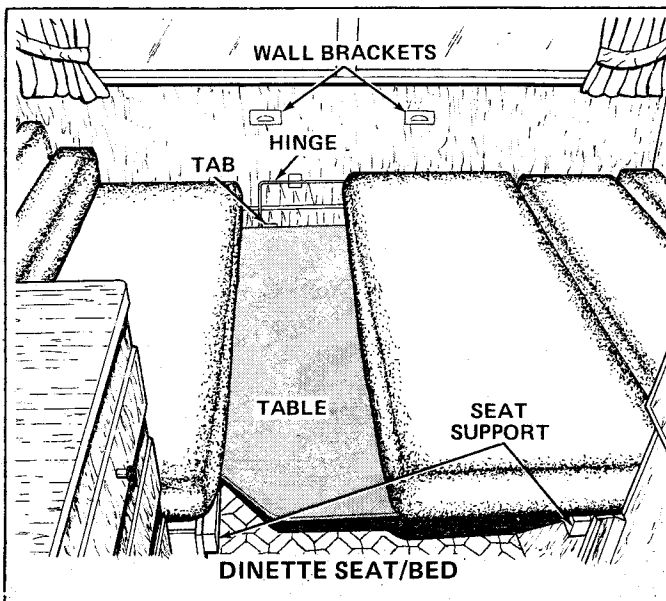
THREE-WAY DINETTE SEAT — To change seat direction, pull out the handle; lift and rotate backrest to face in other direction. Press down on seat and push in on the handle. Test the seat to make sure it is locked in place. The front dinette seat must face forward if it is to be occupied while traveling.



BEDS

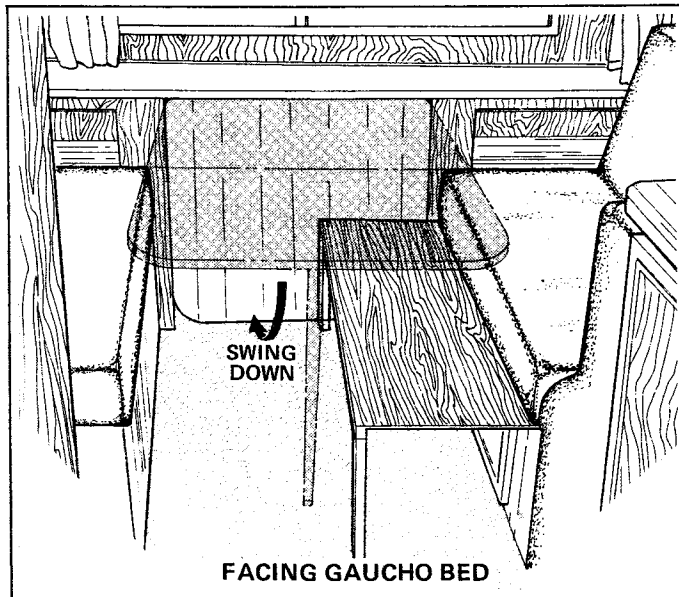
THREE-WAY DINETTE SEAT/BED — To make the three-way dinette seat into a bed, remove the dinette table. Be certain the seats are in the table setup position. Pull out the handle and push down on the backrest. Push the handle back into the locked position. Repeat this procedure on the opposite seat to assemble the other half of the bed.

HINGE TYPE DINETTE SEAT/BED — Fold leg under and lower table onto dinette seat supports. Arrange cushions on top.

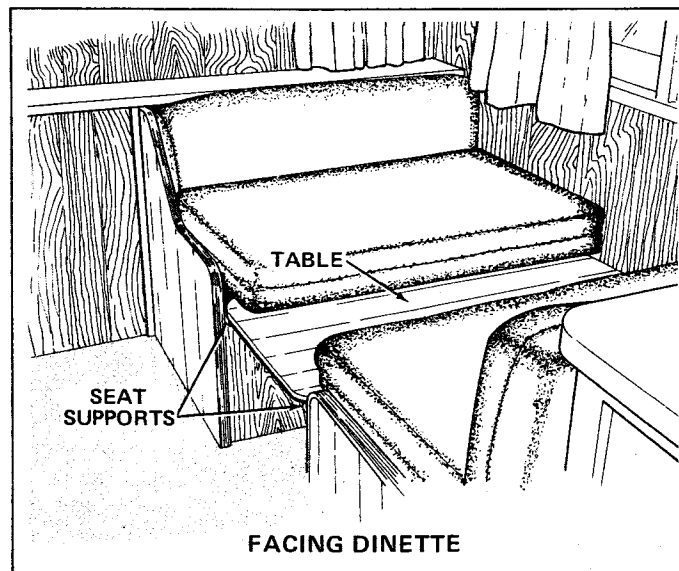


SINGLE GAUCHO — Remove table. Lift front edge of gauchio platform and slide it out. Arrange cushions on platform.

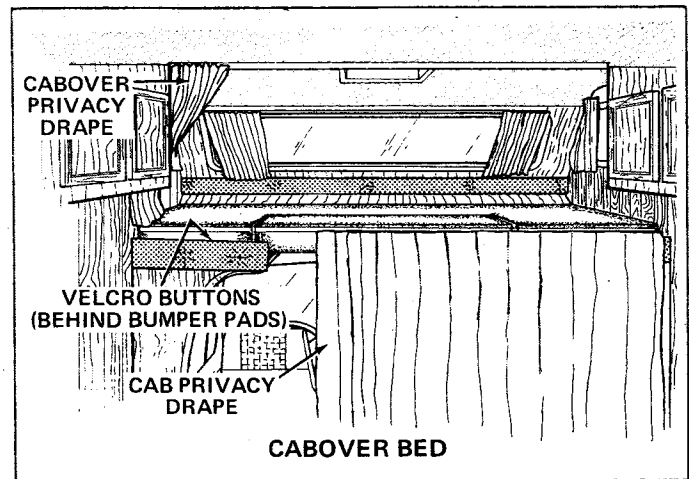
FACING GAUCHO PLATFORMS — Swing extension table down and latch in travel position. Slide each platform out until they meet. Arrange cushions on top.



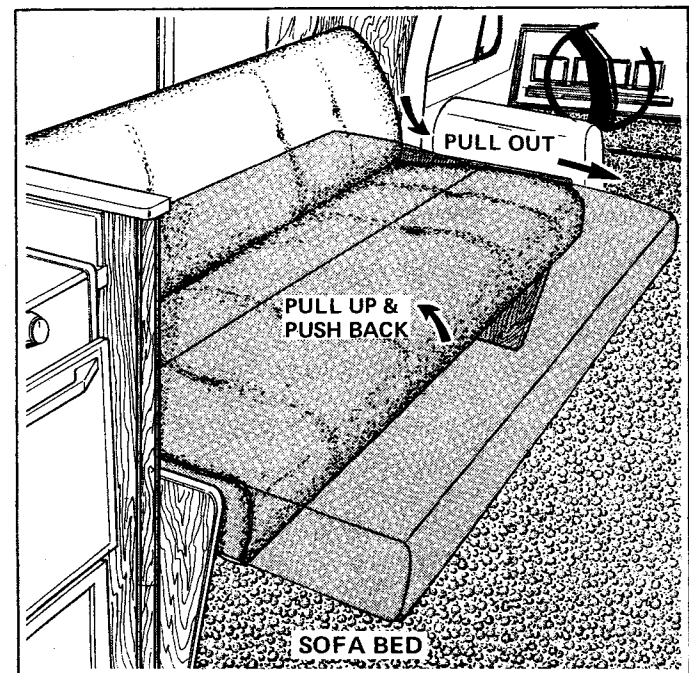
FACING DINETTE SEATS — Lift pedestal table and remove leg. Place table on seat braces and arrange cushions on top. Store leg under table or in a closet.



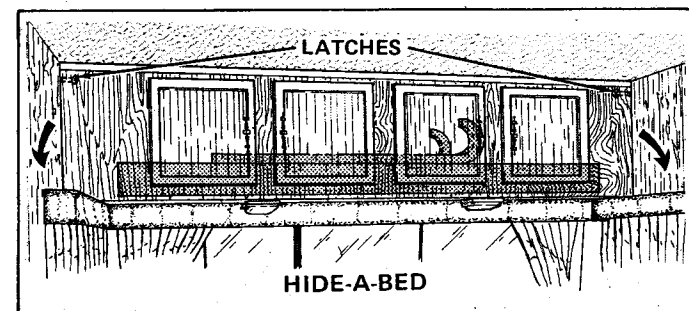
CABOVER — The cabover bed assembly includes a privacy drape, which slides along a track on the ceiling. To use the bed, pull the folded section out and lower onto the supports. A driving area privacy drape can be attached by pressing the Velcro strip on the drape to the Velcro buttons on the inside of the bumper pad. The drape hangs to the floor, separating the driving area from the living area.



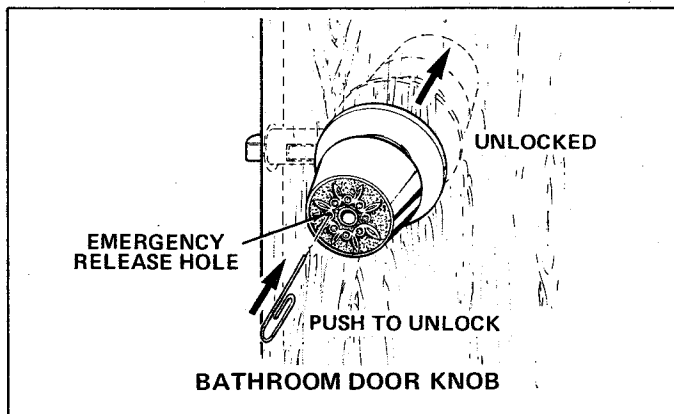
SOFA BED — To make sofa into a bed, pull seat section upward and push toward back of sofa until latch releases, then lower to flat position.



CABINET HIDE-A-BED — Open both end cabinet doors. Release latches (one is located inside at each end of the cabinet). Close the cabinet doors securely. Swing cabinet face down so that it rests on its supports. Position reinforcing boards on top of the cabinet face. Arrange mattress pads on top.



BATHROOM DOOR LOCK — Flush-mounted bathroom doors can be locked or unlocked from the inside by pushing in or pulling out on the inside knob. It can be unlocked from the outside by pushing a small metal object, such as a paper clip, into the emergency release hole.



CARE OF CUSHION COVERS — Vacuum covers regularly. To remove grease spots, use a commercial degreaser. For other stains, use a soapy, damp cloth. Covers should be dry cleaned only.

CARE OF DRAPES, CURTAINS, VALANCES — Drapes may be machine washed and dried or dry cleaned. Sheer curtains should be hand washed, drip dried then cool ironed. Valances may be cleaned with a vacuum sweeper or wiped with a damp cloth.

CARE OF WOODWORK — Clean the woodwork with regular household furniture polish. DO NOT use water to clean wooden surfaces. Scuffs may be covered with furniture wax and stain mixture. Scratches may be covered with Putty Stic.

CARE OF WARDROBE AND DRAWERS — Clean wood surfaces with household furniture polish. Wash plastic surfaces with warm water and liquid soap.

CARE OF FLOORING — Sweep and damp mop vinyl floors occasionally. Vacuum and shampoo carpet as required.

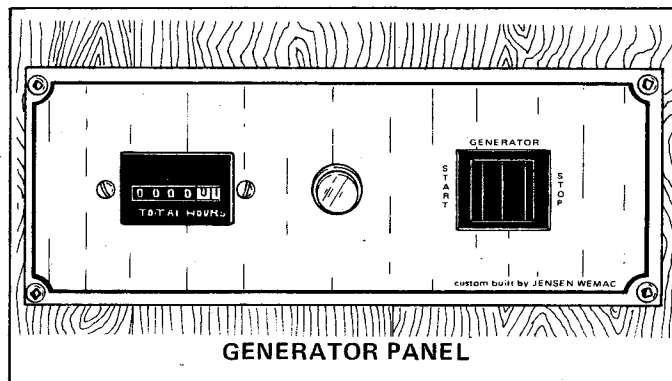
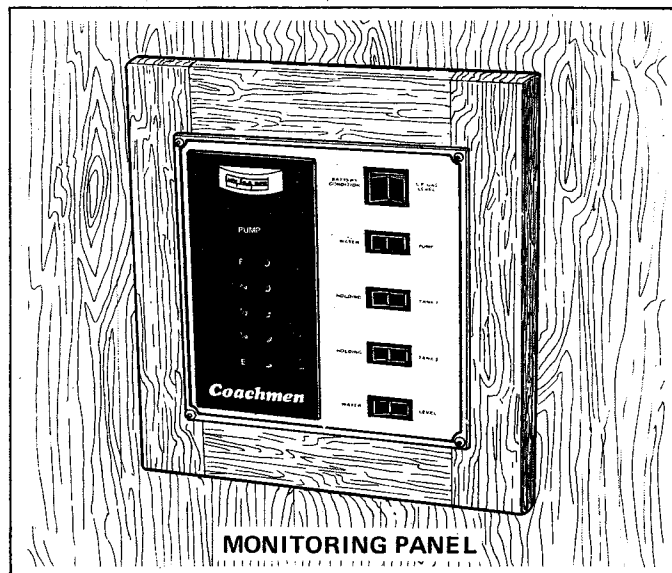
BASIC SYSTEMS

GENERAL

The basic utility systems in your Coachmen mini motor home can be classified under four titles—Electrical, LP Gas, Fresh Water and Drainage/Sewer. This section outlines these systems, describing their operation, function and simple maintenance. It is not intended as a service guide. Your mini motor home has been engineered and built to provide trouble-free operation, but should a problem arise, we recommend that you contact your authorized Coachmen dealer.

An optional monitoring panel allows you to check the condition of most systems conveniently from the interior of your mini motor home. It has indicators to show the volume of fresh water, LP

gas, waste and gray water in your holding tanks, the condition of your RV battery and also contains the water pump switch. The generator remote START/STOP switch, and the generator running-time meter are on a separate panel.



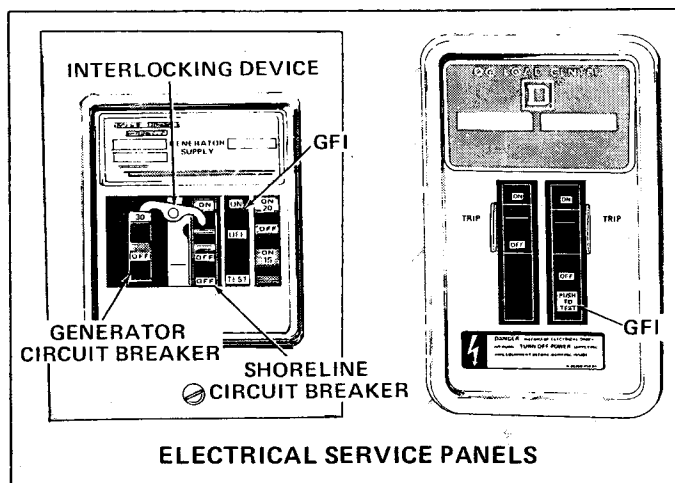
ELECTRICAL

GENERAL

Your mini motor home has two separate electrical systems which provide power while you are camped or traveling. There is a 12-volt direct current system, such as those in automobiles, and a 120-volt alternating current system, which requires an external source of 120-volt electricity, provided by a connection to a campsite or household receptacle or by an optional generator. The 120-volt system should be used whenever a 120-volt hookup is available to reduce the load on your 12-volt battery. The 12-volt system is supplied by batteries and is used when you are on the road or in campsites which do not provide 120-volt hookups. Because most components in your mini motor home, such as the water pump, range hood light and fan, interior lights and interior 12-volt receptacles, operate only on a 12-volt source, your vehicle is equipped with a power converter which changes 120-volt AC to 12-volt DC power.

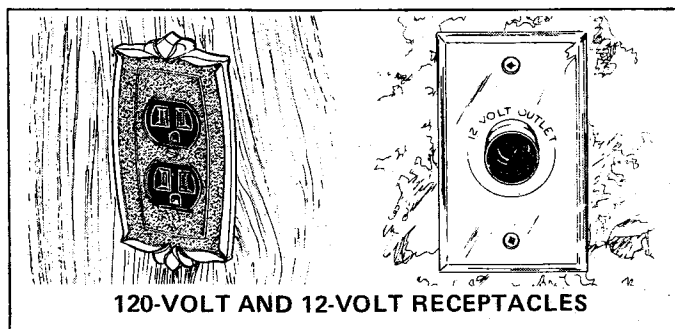
120-VOLT SYSTEM

The 120-volt system supplies electricity for optional roof air conditioners, the refrigerator, power converter for the 12-volt system, the exterior 120-volt receptacles (Figure 3), and the 120-volt receptacles located throughout your mini motor home, which are used to operate regular household appliances. Whether you use the external 120-volt Shoreline connection or an auxiliary generator, the power source is connected directly into the main electrical Service Panel and is distributed through circuit breakers.



GROUND FAULT INTERRUPTER — The bath and exterior receptacles are connected to a Ground Fault Interrupter (GFI). This highly-sensitive circuit breaker will help protect against severe electrical shock if a ground fault develops. If this occurs, the GFI will break the circuit by turning the power off to those receptacles. Should this happen, unplug all appliances on that circuit and reset the breaker.

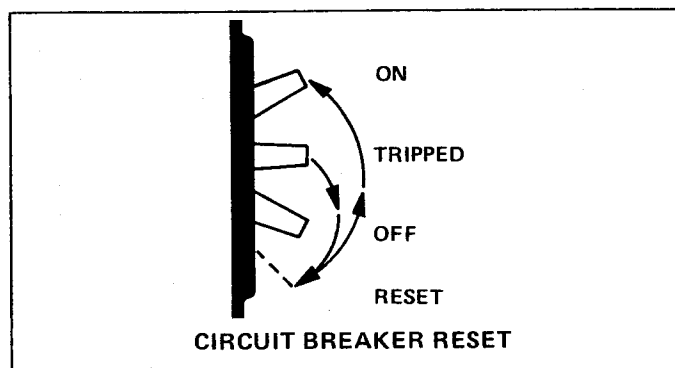
CAUTION: The GFI does not completely eliminate electrical shock. Small children and persons with heart conditions or other disabilities that make them especially sensitive to electrical shock may still be injured by a ground fault on the bath or exterior receptacles.



Test the GFI system at least once a month, preferably before each trip. Depress the PUSH TO TEST button. The button will pop out if the circuit breaker is operating properly. Power will be off at bath and exterior receptacles. Plug a test light into these outlets to verify power is off. To restore power, push in the button.

NOTE: If the button does not pop out or the test light indicates a live circuit, DO NOT use the outlets. Call your Coachmen dealer.

SHORELINE CONNECTION — The Shoreline (Figures 4 and 5) is a 25', 30-amp power cord with a 3-prong grounding plug on one end, permanently attached at the other end to the Service Panel. It can be pulled from its storage compartment through a hatch in the sidewall of your vehicle and connected to an external 120-volt receptacle. Some campsites and trailer parks still have two-slot receptacles. If it is necessary to use a three-to-two adapter, be certain its grounding wire is fastened securely to the outlet grounding screw. If in doubt, you may attach a No. 6-AWG copper wire to the frame of the vehicle and fasten it to an 8-inch copper or brass stake driven into the ground.



The 120-volt system is protected by the circuit breakers. If a circuit breaker opens, unplug the appliances on that circuit, allow a short period for the breaker to cool, then reset the breaker. If the breaker continues to open, contact your Coachmen dealer.

12-VOLT SYSTEM

The 12-volt system, which includes the automotive battery and RV battery (Figures 6 and 7), plus the 12-volt converter, supplies power to the exterior and interior lights, the range hood fan and light, the furnace blower, the refrigerator, water pump, porch light, 12-volt receptacles (22' models) and monitoring panel. The 12-volt energy is supplied by the automotive or RV batteries or the power converter.

The automotive battery supplies 12-volt power to the engine ignition system, the dashboard lights and accessories, headlights, taillights, backup lights, clearance lights, turn signals and warning flasher lights. The automotive alternator will charge both the automotive and the RV batteries although an isolator prevents the RV system from drawing power directly from the automotive battery.

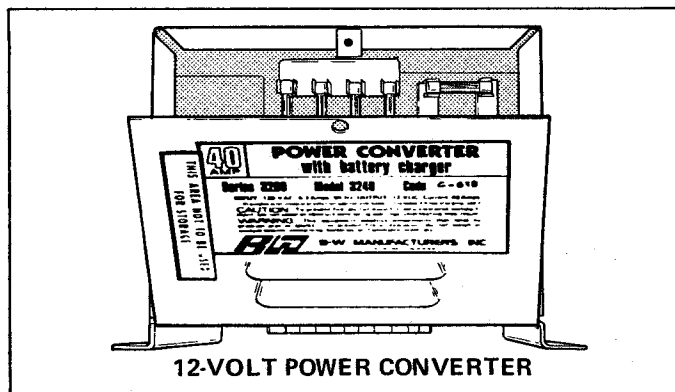
The RV battery supplies power to the furnace blower, water pump, power vent, range hood fan and light, interior 12-volt receptacles, interior lights, refrigerator and monitoring panel. The 12-volt receptacles can be used only for appliances specifically designed for that type of energy. The RV

battery also is charged by the power converter whenever you are using a Shoreline connection or generator.

BATTERY — Check the liquid level at least once a month. It must be above the plates. The battery manufacturer approves using a good grade of drinking water, excluding mineral water. Keep terminals free of dirt and corrosion. Use a hydrometer to check battery charge. When specific gravity is below 1.255, recharge the battery until 1.260 is indicated.

CAUTION: If the battery must be "Quick Charged", turn off the refrigerator.

CONVERTER — The power converter transforms 120-volt AC into 12-volt DC and supplies power to all of the 12-volt systems (except the refrigerator) when it is supplied by a 120-volt source. Each 12-volt circuit is protected by a fuse in the converter. Open the converter door to expose the fuses. A listing of the circuits is on the inside of the door. Some fuses protect circuits with more than one function, others may be for specific appliances. If a fuse breaks, turn off or unplug all appliances on that circuit. Replace the broken fuse with one of the same ampere rating. If the fuse continues to break, contact your Coachmen dealer.



GENERATOR

The optional generator (Figures 8 and 9) is a gasoline powered appliance which will supply 120-volt electricity. It can be operated when your mini motor home is stopped or while you are traveling. The generator draws gasoline from the vehicle's gasoline tank. A remote generator starter switch is mounted in your unit and another is on the generator. There is an Interlocking Device attached to the circuit breakers for the Shoreline and Generator in the Service panel, which prevents the simultaneous use of both systems. When you push the Shoreline Breaker ON, the Interlocking Device automatically pushes the Generator breaker OFF, and vice versa. You can, however, turn both breakers to OFF at the same time. Before starting your generator, switch both breakers to OFF.

For maintenance or service, the generator on some Leprechauns can be pulled out of its compartment on slider tracks (generators in Cadet models do

not slide out). Remove the bolt at each side of the generator support, then pull the generator out. Be certain to push the generator into its compartment and replace the bolts securely before using the generator or moving your mini motor home.

The complete operation and care procedures for your generator are in the generator manufacturer's manual, but below are a few of the basic requirements:

Make certain the generator crankcase oil is to the FULL mark; that air flow to and from the power plant is unobstructed, and that cooling fins are clean. Push START/STOP switch to the start position and hold until generator is running, then release switch. Damage may result if starter is operated for more than 30 seconds. Allow the generator to warm up before switching the circuit breaker in the Service panel to ON. To stop, press the START/STOP switch to the stop position. If the generator has been running with a full load connected, switch the Generator and Shoreline circuit breakers OFF and allow the generator to run a few minutes before pushing stop switch.

Check the oil daily or at least every 8 hours of operating time. Clean the cooling fins at least every 200 hours; remove any dust, dirt or oil which may have accumulated. Change oil in a new generator after the first 25 hours of operating time and every 100 hours thereafter. Use oil specified in the manufacturer's manual. Change the oil filter every 200 hours. Check the air cleaner element every 100 hours; clean it by tapping it against a flat surface. Change the air cleaning element at least every 400 hours. The schedules above are only a guide; when the generator is used in extremely dusty or cold conditions, all maintenance steps may need to be more frequent.

WARNING: When running, the engine powering a generator can discharge carbon monoxide gas, which can cause death if inhaled even for a short period. Although exhaust fumes are usually readily evident, carbon monoxide is particularly dangerous because it is colorless and odorless. When operating a generator, DO NOT open roof vents, windows or doors which could draw fumes into your unit. DO NOT operate the generator where an object, such as a tree, bush or building, may deflect exhaust fumes inside your unit. DO NOT operate the generator inside a building unless the exhaust is vented safely outside. DO NOT operate the generator where exhaust gas could accumulate and seep back inside an occupied vehicle, tent or building.

FRESH WATER SYSTEM

GENERAL

Fresh water for your unit is supplied either by the vehicle's fresh water tank or an external pres-

surized source. Both supply water to the kitchen sink, tub/shower, lavatory, toilet and water heater.

CITY WATER

Connect a hose to a "city" pressurized water faucet and to the vehicle's water inlet (Figure 10). When using the city water hookup, the water tank and pump are bypassed. You cannot fill the water tank through the city water inlet.

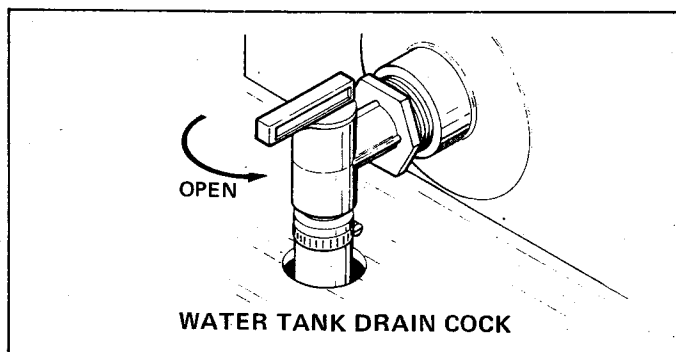
Although a common garden hose can be used to fill water tanks and to connect to city water, longtime RV'ers recommend a hose specifically manufactured for this purpose.

CAUTION: In areas where city water pressure exceeds 60 psi, you should use a pressure regulator. Excessive water pressure may damage lines and connections. See your Coachmen dealer for further details.

WATER TANK

Open the gravity water fill, either by pulling out the fill spout or opening the door (Figures 11 and 12). Use a hose or vessel to fill the water tank. Water will flow out the water fill when the tank is full.

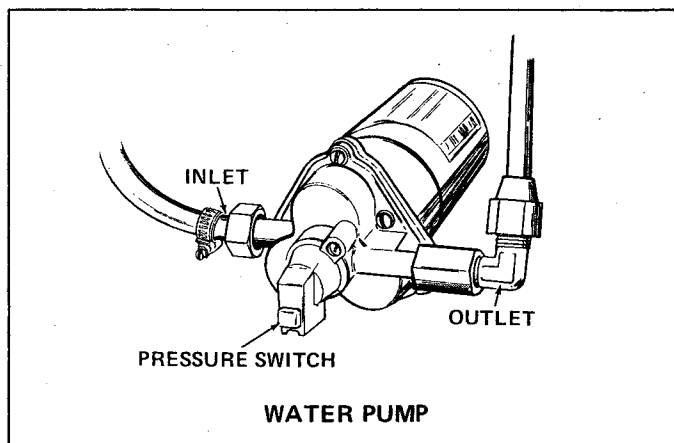
SANITIZING WATER TANK — Sanitize your unit's water tank before initial use, after a period of nonuse, and whenever the tank is suspected of being contaminated. Open the drain cock and let the water drain out. The drain cock is attached to the side of the water tank near the bottom and can be reached from inside the unit. When the tank is empty, close the drain cock. Mix 3 gallons of water with 3/4 cup liquid household bleach. Pour the solution into the tank through the gravity water fill. Wait 3 hours. Drain and flush the tank with fresh, potable water. If a chlorine taste lingers, pour 1 quart of vinegar and 5 gallons of water into the tank. Wait several days before draining the tank. Flush tank with fresh, potable water.



WATER PUMP

Your water pump is a 12-volt DC appliance, activated by a switch on the Monitoring Panel or behind the kitchen counter. You may leave the switch ON while camping. This arrangement is known as a demand system. When you want water simply open a faucet; the pump will run only as

long as needed. If the pump fails to start when the switch is ON, check the fuse located in the converter. If the pump continues to operate, whether the faucets are open or closed, check the water tank, it may be empty, or there may be a leak in the system.



CARE OF SINKS, LAVATORY & TUB/SHOWER

Clean the kitchen sink, lavatory, tub and showerpan with non-abrasive cleaner. Stainless steel cleaner may be purchased at most grocery stores. ABS cleaner, such as Aqua K-7, may be purchased from your Coachmen dealer.

LEAKS

Traveling over bumpy or rough roads can cause pipe fittings to loosen; check pipe fittings regularly for signs of leakage.

DRAINAGE/SEWER SYSTEM

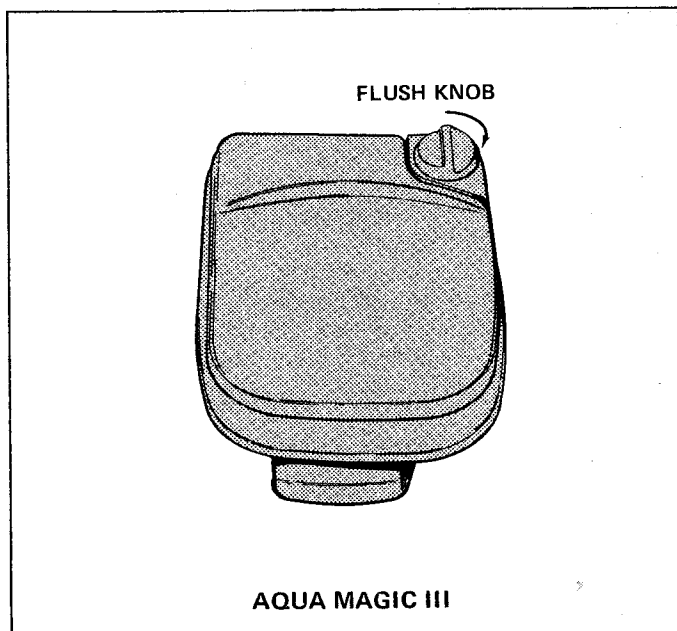
GENERAL

Your mini motor home will have a Drainage/Sewer system which functions much the same as the one in your home. It includes drain lines from the kitchen sinks, lavatory, and tub/shower to the gray water holding tank and a marine-type toilet which empties directly into a separate waste holding tank. The drainage system also includes vents which carry odors (caused by drain water and waste) out through the roof, while equalizing air pressure. The latter is necessary to maintain a water barrier against odors in the "P" traps and to ensure smooth flow and escape for your drainage system.

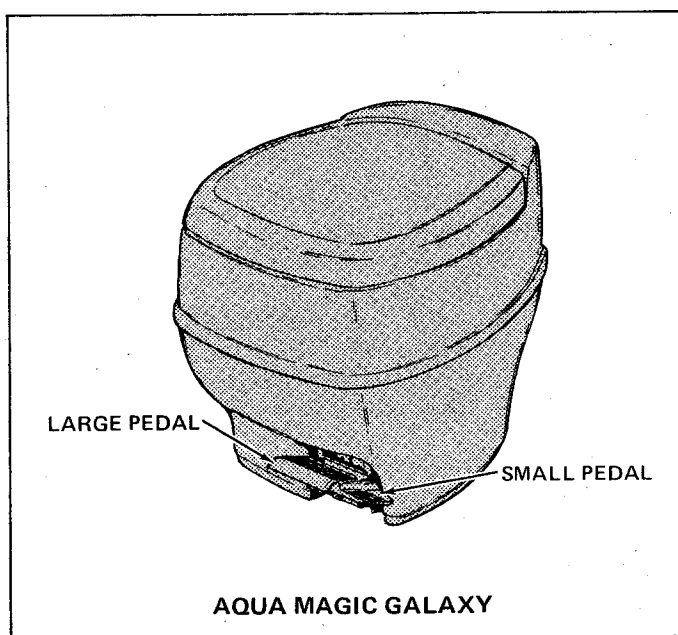
TOILET

Coachmen installs an Aqua Magic III or an Aqua Magic Galaxy toilet. The Aqua Magic III has a flush knob on top, the Aqua Magic Galaxy has two pedals near the front base. Before initial use and after emptying holding tank, flush the toilet. When the bowl is filled, pour in an 8-ounce bottle of Aqua Kem concentrate, then flush the toilet again. This will help control odors.

To operate the Aqua Magic III, turn the flush knob fully clockwise and hold until all contents have been swept into the holding tank. Always open for a minimum of 3 full seconds. When you release the knob, the bowl will automatically fill with water for next use.



To operate the Aqua Magic Galaxy, step on the small pedal to add water to the bowl. When the desired amount has entered, release the pedal slowly. To flush, step on the large pedal until the water swirls, release pedal slowly.



CARE OF TOILET — Use Aqua Bowl Cleaner as directed. DO NOT use highly-concentrated or high-acid household cleaners (NO SCOURING POWDER) to clean the bowl. If the slide valve does not move freely, apply silicone spray.

HOLDING TANKS

A gray water holding tank is for kitchen sinks, tub/shower and lavatory water; a waste holding tank is for the marine toilet. Each should be emptied frequently, always in a specified dumping station. Most campgrounds are equipped with dumping stations, often at each campsite; many service stations also have waste dumping stations.

EMPTYING HOLDING TANKS — Be certain your vehicle is level or sloped toward the termination outlet, since emptying of holding tanks depends upon gravity. Remove the sewage drain hose (Figure 13) from its storage area in the rear bumper. Remove the cap from the termination outlet and connect the sewage drain hose. If you leave the hose connected to the termination outlet when you are camped, DO NOT open the termination valve until you want to empty the holding tank. The system is not like your plumbing at home, where waste is flushed directly into the sewer system. Instead, if the valve is left open, only liquid waste may drain out, causing solids to collect and harden in the bottom of the holding tank.

To drain either holding tank, pull out the dump valve slide handle (Figures 14 and 15).

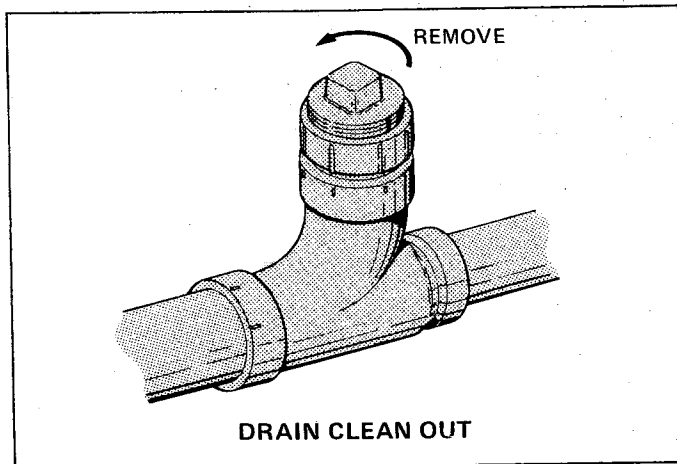
Flush or pour about 2 gallons of water through the toilet when emptying the waste holding tank and drain again. This flushes the tank and helps clean the drain hose. Repeat as necessary. Follow the same procedure for a gray water holding tank, although a repeat flushing may not be necessary. When the tank is empty, push the dump valve handle in until it seats. Remove the hose, wash it and replace it in its rear bumper holder. Replace termination outlet cap.

DRAIN PIPING

If your unit does not have a gray water holding tank, it will have a drain pipe which terminates on the road side of the vehicle. To drain, remove the termination outlet cap and attach the drain hose. Some campsites will have septic service for the disposal of gray water at each site. If the site is not so equipped, collect the gray water in a bucket or container and dispose of as required by park rules. To avoid contaminating your water system, use different hoses for fresh water and drainage. Hoses of different colors will help you avoid interchanging them. The same is true for buckets or other vessels used for fresh water and drainage; paint or mark them to prevent contamination.

DRAIN CARE

Use clear water to clean exterior pipe surfaces. DO NOT use harsh drain cleaner chemicals or solvents in drains. Drain cleanouts are installed at intervals to facilitate drain cleaning or unclogging. Use a wrench to remove and replace drain cleanout plug.

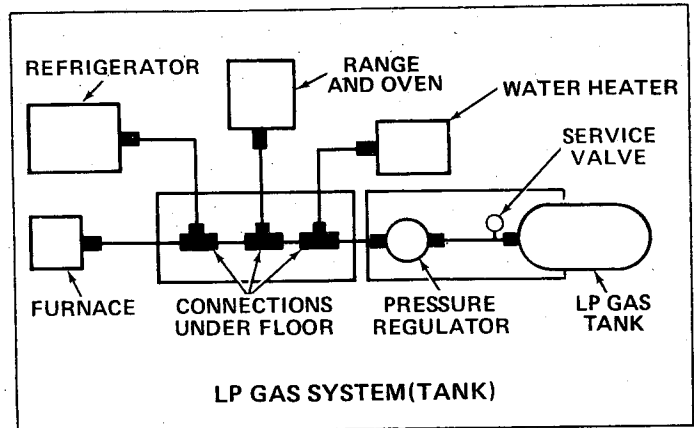
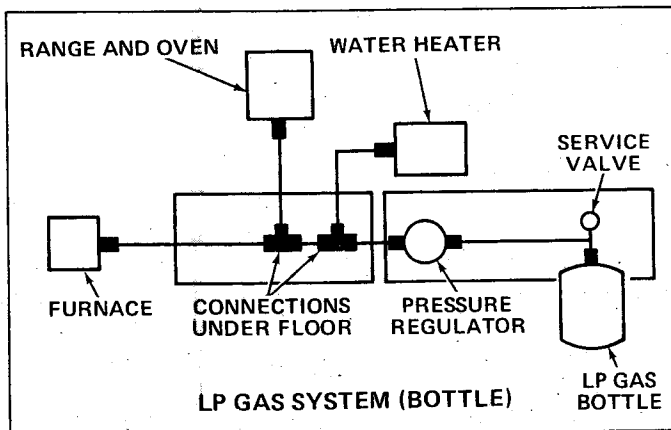


LP GAS SYSTEM

GENERAL

The Liquefied Petroleum (LP) Gas System in your mini motor home furnishes fuel for hot water, heat, cooking and refrigeration. LP gas, a by-product of the petroleum refining process, provides a portable, efficient and inexpensive source of energy. It is stored in either a tank (Figure 16) or a bottle (Figure 17). The tank is mounted to the chassis of your unit and is reached through an access door. The bottle (some units have two bottles) is in an outside compartment.

Under pressure in the container, the LP gas turns to vapor; it is the vapor which burns. Each container has a 20% liquid level gauge which allows space for vapor expansion. In addition, each under-mount LP gas tank has a 80% automatic stop fill valve which prevents the tank from being overfilled (LP gas bottles do not have this device). The high pressure of the vapor in the container is reduced in two stages through a regulator. The container pressure will vary with temperature and altitude, but may be 100 to 250 pounds per square inch (psi) or more. It is reduced to about 12 psi in the first stage, then to about 6-1/4 ounces in the second stage (the 6-1/4 ounces per square inch also is expressed as 11 inches of water column). The LP gas is propane or a blend of propane and butane, depending upon your locale.



The LP gas system is designed and built to rigid standards and tested before leaving the factory. Your Coachmen dealer also tests the system prior to delivery to you. Except for simple maintenance and occasionally tightening a connection, you should take your unit to an authorized Coachmen dealer for LP gas problems. The LP tank or bottle should always be filled by an authorized LP supplier.

NOTE: Coachmen Industries is not responsible for personal injury or property damage resulting from improperly maintained LP gas appliances and systems.

LP gas burns readily and with intense heat. *With proper care and maintenance, it is safe and efficient.* However, there are certain characteristics of LP gas of which you should be aware. In its natural state, LP gas is odorless, but an additive gives it a distinctive odor so that leaks may be readily detected.

WARNING: For your safety, if you smell gas:

1. Open all windows
2. DO NOT touch electrical switches
3. Extinguish any open flame
4. Close Service valve
5. Immediately call your gas supplier

LP gas is heavier than air and tends to collect in low pockets. As LP gas settles into any closed area, it displaces air and thus could cause suffocation if not detected. It could also create a fire or explosion hazard.

Before using any LP gas appliance, read the respective manufacturer's instruction manual.

CLIMATE DIFFERENCES

The appliances will not function if the LP gas does not vaporize. Butane will not vaporize below 32 degrees F. (the freezing point of water), but propane will continue to vaporize down to 44 degrees below zero. Propane has become the main type of LP gas used in RV's in recent years. Your LP supplier will have the correct type or blend for your locale. If your travels will take you into an area where climate differs, ask your LP dealer for his recom-

mendations. The names of LP suppliers can be found in the yellow pages of your telephone directory under "Gas-Liquefied Petroleum - Bottled & Bulk". Many campgrounds now have LP gas fill facilities, as do some service stations.

To operate any LP gas appliance, the LP gas container's Service valve (Figures 16 and 17) must be OPEN. When first used, or after a refill, there may be some air in the gas lines which will escape when you open a range burner or similar LP gas valve. The air may extinguish your match or igniter the first time or two before you get ignition. Remember, too, that when you close the container's Service valve, some of the gas will remain in the lines. To completely bleed the lines of gas, CLOSE the container's Service valve and light a range burner to use up the excess. When the flame burns out, turn the range burner OFF.

BOTTLE CHANGEOVER

Units with double LP gas bottles require manual changeover. When one bottle is empty, CLOSE its Service valve and OPEN the Service valve on the other bottle. Whether you have single or double bottles, you should regularly check the volume of LP gas remaining to avoid depleting your supply. You can check the volume of LP gas by weighing the bottle, comparing the known weight of an empty and a filled bottle. The Tare (empty) Weight is stamped on the LP gas bottle handle.

Also stamped on the bottle is its Water Capacity in pounds. Multiply the Water Capacity by .42. The result will be the LP capacity in pounds (allowing for the 20% vapor space). Add the LP weight to the Tare Weight to get the total weight of a filled bottle.

EXAMPLE: If a 20-lb. bottle lists Tare Weight (TW) at 18 lbs. and Water Capacity (WC) at 48 lbs., the weight of the bottle when filled with LP to 80% of its total capacity will be 38 lbs. ($48 \times .42 = 20.16$ or 20 lbs. of LP. 18 lbs. plus 20 lbs. = 38 lbs.)

FILLING THE LP GAS CONTAINER

Before having an LP gas tank or bottle filled, be certain all burners and pilot lights are off.

BOTTLES — To remove an LP gas bottle, CLOSE the Service valve and turn the gas line connector clockwise to disconnect. For single or double bottles, unfasten the buckle on the retention band (Figure 17) and remove bottle(s). Transport the bottle(s) in an upright position.

Take your bottle(s) to an authorized LP supplier for filling. He will connect the fill nozzle to the gas line connector. The Service valve and 20% liquid level gauge must be OPEN. When liquid appears at the liquid level gauge, the bottle is filled to its LP capacity: stop filling immediately. When liquid LP gas is no longer visible, close the liquid level gauge and the Service valve. DO NOT use a wrench to tighten the Service valve or liquid level gauge; they are designed to be closed leak-tight by hand.

If you cannot hand-tighten properly, the valve probably needs repair or replacement.

Reinstall bottle(s) by placing in the compartment and fastening the buckle. Reconnect the gas line and check for leaks.

CAUTION: DO NOT smoke, strike a match or ignite a lighter when an LP gas container is being filled. A spark or flame could ignite the fumes.

TANK — A volume gauge (Figure 16) on the side of the undermount tank, indicates the amount of LP gas remaining. When your tank needs filling, drive your mini motor home to an authorized LP supplier (never remove the tank). He will connect the fill nozzle to the LP gas tank fill valve. Even though the tank is equipped with an 80% automatic stop fill valve, OPEN the 20% liquid level gauge. The Service valve must be CLOSED. When liquid appears at the liquid level gauge, the tank is filled to its LP capacity: stop filling immediately. When liquid LP gas is no longer visible, close the liquid level gauge. DO NOT use a wrench to tighten the Service valve or the liquid level gauge; they are designed to be closed leak-tight by hand. If you cannot hand-tighten properly, the valve probably needs repair or replacement.

Because there may be some leakage of LP gas when the tank is being filled, we recommend that you drive at least a mile away from the LP gas dealer's before you relight any pilot lights or appliances. DO NOT relight pilots or appliances if the scent of LP gas is present. Open the windows and doors and wait 30 minutes. If the odor is still present, follow the instructions in the LP GAS LINE CHECK section.

CAUTION: Avoid overfilling by insisting that the LP gas tank never be filled beyond the 20% liquid level. If the tank is overfilled, have the LP gas dealer bleed out the excess. Overfilling does not allow sufficient space for the liquid to expand. This can produce excessive pressure which can cause LP gas leaks, creating a potential fire or explosion hazard. DO NOT smoke, strike a match or ignite a lighter when the LP gas tank is being filled. A spark or flame could ignite fumes. Be certain all burner and pilot flames are out and the Service valve is closed when filling your vehicle's gasoline tank(s).

LP GAS LINE CHECK

Check the gas line connection at least after each third refill and inspect other connections regularly, at least every 30 days or 5,000 miles of travel. To check, turn off all burners and pilot lights. Open all doors and windows. Open the LP gas container Service valve and use soapy water, a bubble solution or approved leak detector to test all line connections. Do not use products that contain ammonia or chlorine. Bubbles indicate a leak. Tighten the con-

nections with two open end wrenches until bubbles stop. If leak persists, contact your Coachmen dealer.

REGULATOR PRESSURE

Check the LP gas regulator at the beginning of each season, or whenever a problem is indicated. Correct line pressure is 11 inches of water column. Your Coachmen dealer or LP gas supplier can perform this check.

LP GAS CONTAINER CARE

After each trip, inspect the LP gas container. Sand off traces of rust and apply a rust preventive paint. Always use a light color paint, which reflects heat. When the LP gas system is not in use the Service valve should be closed.

LP GAS REGULATOR FREEZE-UPS

LP gas regulator freeze-up is a problem RV owners can prevent if they are aware of its causes. Freeze-up is usually caused by one of three things: moisture in the container, an overfilled container, or a greater vapor withdrawal demand than the container can deliver at a particular temperature. Freeze-ups occur more frequently in cold weather when equipment can freeze and there is a lower rate of vaporization and a higher rate of demand.

Moisture can enter the container in the LP gas or through condensation if air is allowed into the container through an open valve. Avoid these conditions by using moisture-free LP gas and keeping all container valves closed during storage. If moisture is present, have an authorized dealer purge the container and add anhydrous methanol, the dealer will know the correct amount for your size container.

An overfilled container can allow liquid gas, instead of vapor, to flow through the regulator. This can result in erratic regulator delivery pressure, improper appliance operation or burner outage, and possible frosting of the regulator and LP gas lines. This can be avoided by following the previously cited precaution about overfilling.

Liquid gas does not vaporize as rapidly in cold weather, so you may place too great a demand on your container's capacities in certain conditions. This can cause a refrigeration effect resulting in frosting of the container and regulator. Check with your Coachmen dealer or LP supplier about the appliance demands which can be met by your container at various temperatures. Always have your LP supplier add anhydrous methanol before filling the container in cold weather.

APPLIANCES AND ACCESSORIES

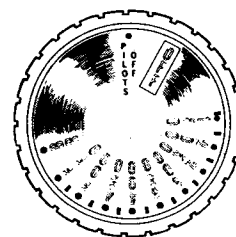
RANGE, RANGE HOOD, OVEN

GENERAL — Your Coachmen mini motor home is equipped with a three or four-burner range. Those with four-burners have ovens. Both range models have a power range hood. The range burners and

ovens are LP gas appliances. You should read the manufacturer's manual for complete details on the operation and care of the range, range hood and

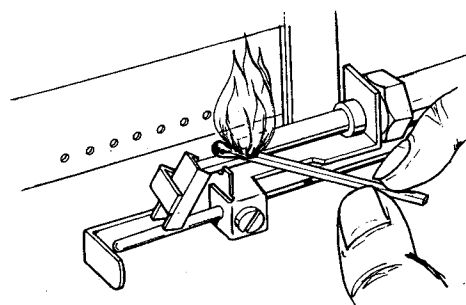
LIGHTING THE PILOTS — There are pilot burners on all LP gas ovens and the eye-level range/oven also has a pilot for the range burners. All pilot lights, including the range burner pilot, are turned on and off by the oven control knob. If you have the eye-level range/oven, you must light both the oven pilot and the range top pilot.

CAUTION: The oven control knob must be in the **PILOTS OFF** position unless the pilot or pilots are lit. Once lighted, the pilots will continue to burn when the oven control knob is in the **OFF** position.



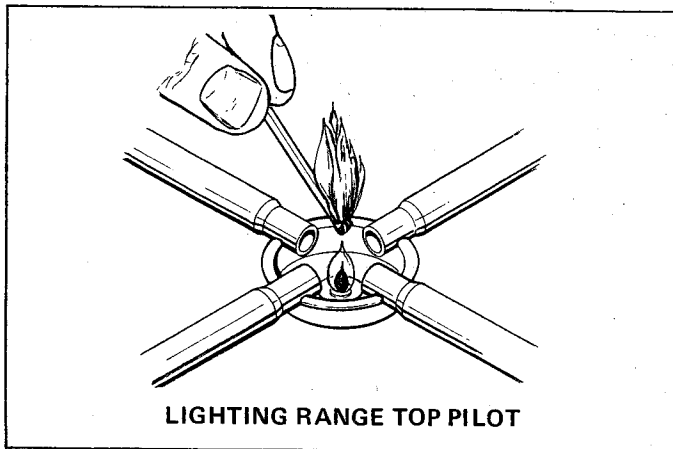
OVEN CONTROL KNOB

To light the oven pilot, be certain the LP gas container Service valve is **OPEN**, then depress and turn the oven control knob from **PILOTS OFF** to **OFF**. Open the oven door and hold a lighted match next to the constant pilot area (it is near the rear of the oven compartment, just below the main oven burner). Relight the pilot if air in the line extinguishes the flame. When the pilot remains lit, adjust the oven control knob to the desired temperature. If the oven is part of the eye-level model, light the range burner pilot before lighting the oven pilot.



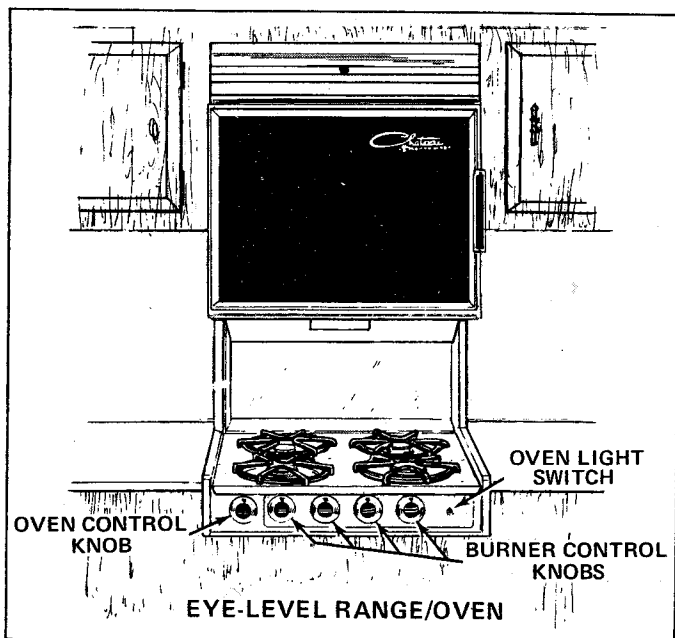
LIGHTING THE OVEN PILOT

To light the range burner pilot (eye-level range/oven models only) lift the main top panel and touch a lighted match to the pilot. Turn a range control knob full **ON**; if the burner lights, the pilot is operating properly.

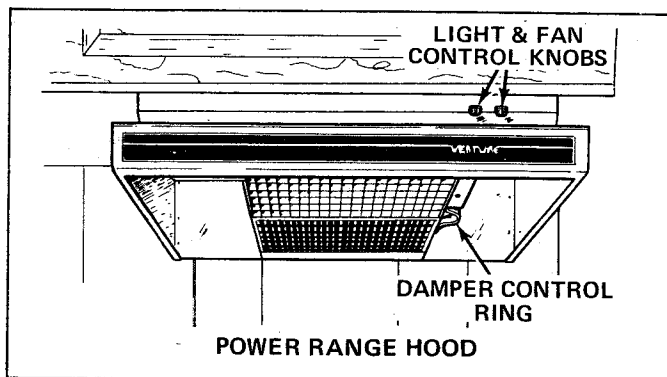


BROILER — Your oven is equipped with a broiler. To use it, light the oven and set the control knob to "B". Place the broiler pan in the area below the oven burner. Do not place meat too close to the flame, grease or fat may ignite. Use foil only as recommended: Never cover the holes in the broiler pan or the air openings in the oven bottom with foil. Always remove the broiler pan as soon as you have finished broiling. If the pan is not removed and the oven is used, the grease may bake onto the surfaces or the grease may ignite.

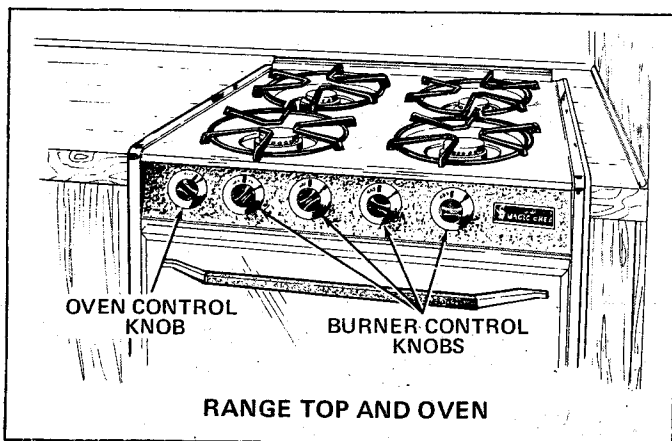
CAUTION: When using the range burners or oven, open a window or vent. **DO NOT** use range and/or oven to heat the interior of your unit. Failure to heed these cautions could result in asphyxiation.



RANGE HOOD — Your unit will have a gravity or 12-volt range hood. The gravity hood is a vent, which allows fumes to escape through a damper. Raise the damper when cooking. The power range hood has a fan and a light, each controlled by a knob on top of the hood. To operate, pull ring on the right side of the filter to release damper. Turn fan ON to draw smoke and cooking fumes out of the unit. To secure the damper, push the ring in. Keep the damper closed when traveling.



LIGHTING THE RANGE — Be certain the LP gas Service valve is OPEN. Light a match and hold it close to the range burner, then turn the burner's control knob to full ON. Air in the line may cause a blowing noise and may extinguish the match. When the line is free of air, the burner will light readily. Adjust the burner flame with the control knob.



CARE OF RANGE AND OVEN — Allow the range top to cool, then clean it with hot, soapy water. Use a damp cloth to clean chrome surfaces. Grease splatters, which may bake onto the surfaces, should be wiped off before they have time to harden. Use chrome polish to remove stubborn stains. Use a toothpick to clean clogged burner orifices. **DO NOT** use metal objects, such as an ice pick or wire to unclog burners. They may distort the opening and adversely affect burner operation.

Clean the oven with commercial cleaner after each trip, or as necessary. **DO NOT** apply cleaner to aluminum gas tubing, thermostat sensing bulb or electrical components.

CARE OF RANGE HOOD — For metal surfaces, use the same procedure as for the range top. For the power hood, clean the plastic light cover by removing and washing it. To clean the power hood filter, push on slot located in center front of screen and pull down. If not greasy, simply tap the filter to shake out dirt. If the filter is greasy, run hot,

soapy water over it until grease dissolves. Allow the filter to drain and dry then replace by positioning the flanges and push into place. Clean the fan and motor surfaces frequently to remove grease. The gravity hood can be cleaned by gently rubbing a soapy cloth over the screen.

WATER HEATER

GENERAL — The water heater is an LP gas appliance capable of heating 6 gallons of water to a pre-set temperature. It will fill automatically either from the fresh water tank or when the system is connected to a "city" water faucet. When filling the fresh water tank, open a hot water faucet briefly—with the pump switch ON—to allow the water heater to fill.

LIGHTING PILOT — Open the LP gas tank Service valve. Turn the gas cock knob to OFF. Always wait 5 minutes to allow LP gas which may have collected in the burner compartment, to dissipate. Your water heater will be equipped with a Robertshaw "UNITROL" thermostat (Figure 18) or an ITT General Control thermostat (Figure 19).

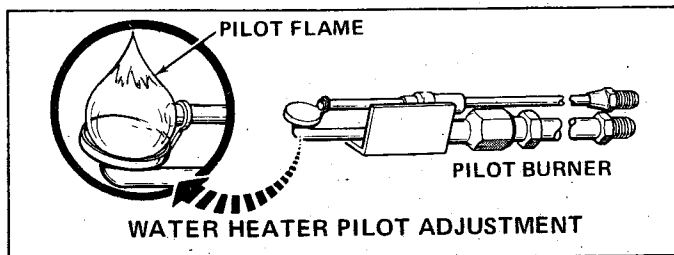
ROBERTSHAW "UNITROL" THERMOSTAT — Turn the gas cock knob counterclockwise to PILOT. Press and hold the reset button while you apply a lighted match to the pilot burner. Release the reset button after pilot has burned for 1 minute (repeat procedure if pilot goes out). Turn the gas cock knob to ON.

ITT GENERAL CONTROL THERMOSTAT — Turn and hold gas cock knob to PILOT position as you hold a lighted match to the pilot burner. Release the gas cock knob after 1 minute (repeat procedure if pilot goes out). Turn the gas cock knob to ON.

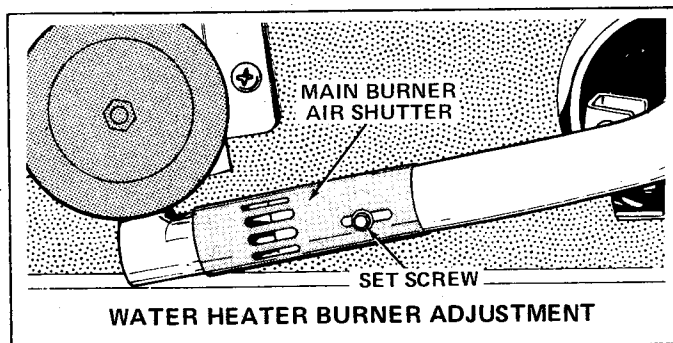
TEMPERATURE CONTROL — Adjust the Temperature Control Dial (UNITROL) or the Temperature Selector Lever (ITT) to the desired temperature as marked on the control.

NOTE: The main burner will light automatically and burn as needed to maintain the temperature you have selected. It is a good idea to light the water heater the night before you leave and turn it off in the morning. The water will remain hot for sometime while you are traveling.

PILOT ADJUSTMENT — Remove the pilot adjustment screw protective cap and turn set screw to adjust the flame so it is 1/2 inch high or has a yellow tip. The procedure is the same for the ITT, but the adjustment screw does not have a cap over it.



BURNER ADJUSTMENT — Loosen the set screw which holds the air shutter in place. Slide the main burner air shutter to the right until the flame has a yellow tip. Slowly slide the shutter to the left until the yellow tip disappears. Tighten set screw.



EXTINGUISHING BURNER — Turn the gas cock knob to OFF.

DRAINING — The water heater will have a drain cock or drain plug, which may be opened or removed in order to drain the water heater tank. To facilitate drainage, open all hot water faucets. When water ceases to drain, close the drain outlet. Because of the location of the drain outlet, about two quarts of water will remain in the bottom of the tank. This can be flushed as described in CARE OF WATER HEATER.

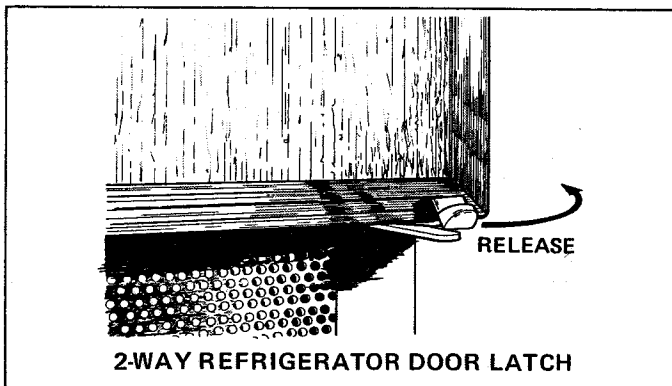
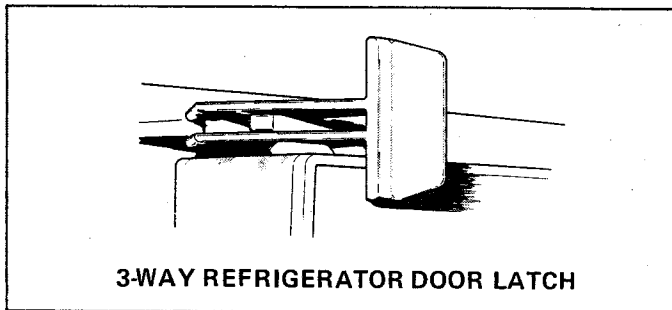
CARE OF WATER HEATER — Be certain the exterior compartment is clean and does not contain combustible materials. Never obstruct the relief valve or vent. If the water heater has a drain cock, use a metal object to scrape away the sediment. Periodically drain and flush the water heater tank. After draining, the remaining water can be removed by flushing the tank with water or blowing dry with air. In either case, close all hot water faucets and open the drain cock or plug. The water hose or air hose can be connected to the water inlet or outlet (inside the unit) or to the relief valve port (in exterior compartment). To use the relief valve port, the relief valve must be removed. Use a pipe or crescent wrench to turn the valve counterclockwise. Attach water or air hose and flush until water ceases to drain. Replace the water inlet or outlet hose or the relief valve and close the drain cock or replace the plug. The water heater is now ready for refilling or storage.

NOTE: The relief valve must be replaced securely. Use pipe compound to assure a water tight seal.

REFRIGERATOR

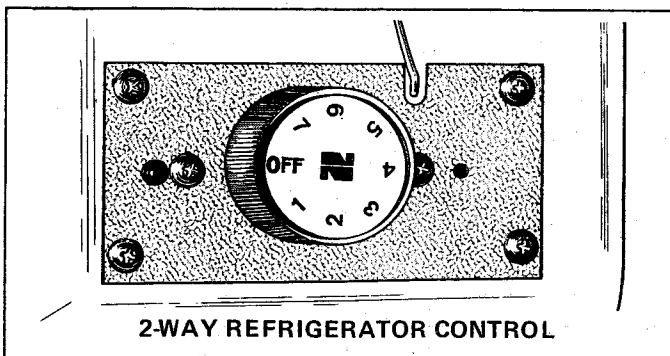
GENERAL — Whenever possible, park the vehicle so that the refrigerator side will be opposite the sun. Before starting on a trip, use the Shoreline connection to cool the refrigerator the night before. Keep items stored in your home refrigerator or freezer until you are ready to leave. This will reduce

the cooling load on your RV refrigerator and help keep perishable foods fresh longer. Always store food in sealable containers or suitable wrapping (wax paper, aluminum foil). During travel, use door latch.



Your refrigerator is either a 2-way (12-volt/120-volt) model or a 3-way (LP gas/12-volt/120-volt) model.

OPERATION OF 2-WAY MODEL — The refrigerator is powered by 12-volt or 120-volt electricity and changes automatically to the power source in use. While traveling, the battery will provide 12-volt electricity to power the refrigerator. When parked with the Shoreline connected, a relay will automatically switch from 12-volt to 120-volt electricity. Use the Shoreline whenever possible to save your battery. Your refrigerator will have a control knob on the upper right side of the inside back of the main compartment.



To test, plug Shoreline in and turn thermostat to 3. Wait 5 minutes, open freezer compartment and place your hand on the bottom left rear corner

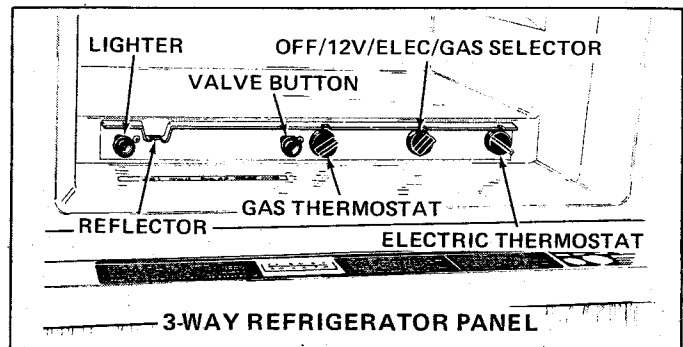
of the freezer. If it feels cool, the unit is operating properly. Close the door and allow the unit to complete the cycle, this indicates the thermostat is working. Unplug the Shoreline and open the refrigerator door for the inside air to warm. The motor will start, indicating the refrigerator is operating on DC electricity. Close the refrigerator door and wait 10 to 20 minutes to complete the cycle. If the inside temperature is cool, the refrigerator is functioning properly.

Your refrigerator will have a thermostat control knob ranging from OFF to 5 or OFF to 7. In either case, the highest number is the coldest setting. Keep the thermostat at the lowest setting which will adequately refrigerate the food, usually at 3.

OPERATION OF 3-WAY MODEL — When you park your vehicle even for a relatively short period, the refrigerator must be level since it functions on the gravity flow of chemicals (if you must stop on an uneven site, turn the selector to OFF). Use a level on the freezer compartment bottom to check levelness. Your refrigerator is powered by LP gas, 120-volt or 12-volt electricity. The control panel is located inside the refrigerator door.

LP GAS OPERATION — Turn the OFF/12V/ELEC/GAS selector counterclockwise to GAS. Pull the valve button out while pushing lighter button in. Repeat this until ignition is observed through the reflector. Turn the gas thermostat to the highest number on the dial. Later adjust temperature to meet your cooling requirements.

ELECTRIC OPERATION — The refrigerator operates on 12-volt or 120-volt electricity. The refrigerator is the only 12-volt appliance which does not draw power from the converter. Even with the Shoreline connected the refrigerator's only source of 12-volt power is the auxiliary battery. When parked at a campsite, switch to LP gas or to 120-volt electricity to conserve your battery. Make certain the refrigerator power cord, reached through the exterior access door, is plugged into the 120-volt receptacle, located in the outside compartment. Be sure the breaker is ON.



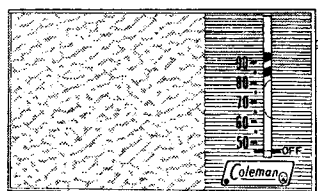
Push, then turn the OFF/12V/ELEC/GAS selector to the source of power desired, either 12V or ELEC (120-volt). Turn the electric thermostat to the highest number on the dial. Later adjust temperature to meet your cooling requirements.

CARE OF REFRIGERATOR — Remove food and ice after each trip. Clean interior with warm water and liquid dishsoap. Wipe dry with soft, dry cloth. **DO NOT** use abrasive cleaning material; it will scratch interior surfaces. Prop the door open during periods of nonuse.

To defrost refrigerator freezer, remove frozen food and ice. Turn off the thermostat. Place a pan of hot water inside the compartment to speed up the defrosting process. Dry the interior with a clean cloth.

FURNACE

GENERAL — The RV furnace is an LP gas appliance. It is either an automatic or Piezo ignition model. Both are controlled by a wall thermostat. Heat is circulated through a duct system.



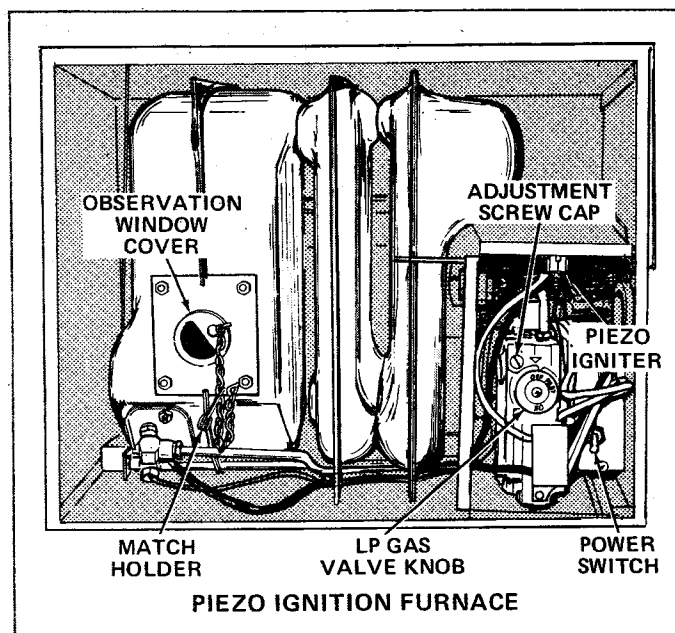
THERMOSTAT

***NOTE:** It is important to remember that although the furnace's heat source is LP gas, the blower operates on 12-volt electricity. **DO NOT** operate the furnace for prolonged periods unless the converter or automotive alternator is supplying 12-volt power. You could run down your RV battery.*

FURNACE IGNITION — When lighting the furnace, be certain the LP gas container's Service valve is **OPEN**. To remove the front panel, depress the silver tab and pull forward.

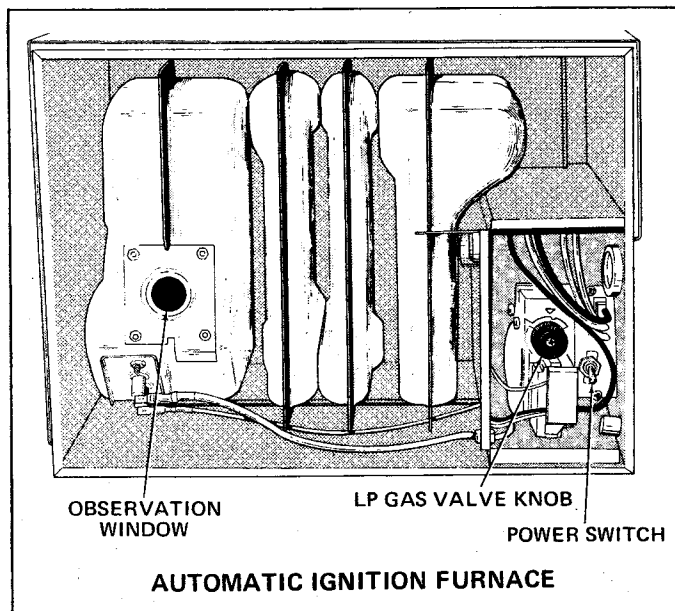
Piezo Ignition — Remove front panel. Set thermostat to highest setting (blower will start), then turn gas valve knob to **OFF** and wait 5 minutes. Reset thermostat to lowest setting (blower will stop). Turn gas valve knob to **PILOT**. Depress gas valve knob and light pilot by depressing Piezo igniter until it clicks or snaps. Several strokes may be required before the pilot lights. On initial lighting, the pilot may not ignite immediately due to air in the gas line. If this occurs, it may be necessary to hold the gas valve knob in for 1 minute or more before the pilot lights. When the pilot ignites, continue to hold in the gas valve knob for 30 seconds or until the pilot remains lighted when the gas valve knob is released. Turn the gas valve knob to **ON**. Replace front panel and set thermostat to desired temperature.

If the furnace doesn't light, set thermostat to **OFF**; wait 30 seconds and repeat lighting procedure.



Automatic Ignition — Remove the front panel. Set wall thermostat, power switch and gas valve knob **OFF**. Wait 5 minutes. Turn power switch and gas valve knob **ON**. Move thermostat up until blower begins to operate. Allow 20 seconds for the furnace to light. In cold weather, it may take up to 2 minutes or more for ignition. When lit, replace front panel and set thermostat to desired temperature.

If the furnace doesn't light, set thermostat to **OFF**; wait 30 seconds and repeat lighting procedure.



***NOTE:** If the furnace doesn't light after 3 attempts, turn **OFF** gas valve knob, power switch and wall thermostat, then contact your Coachmen dealer. **DO NOT** attempt to repair or adjust the furnace yourself.*

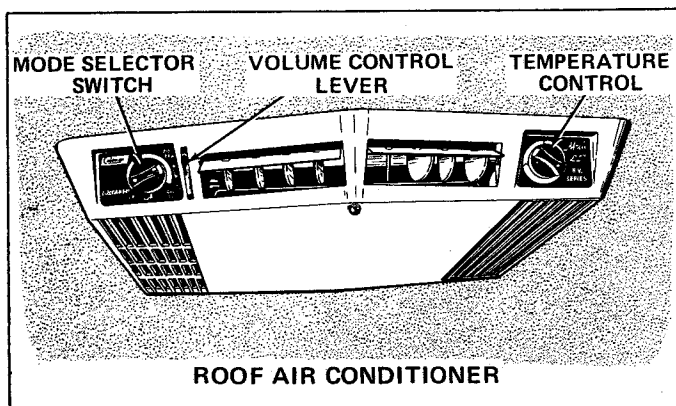
CARE OF FURNACE — Routine maintenance is suggested before lighting the furnace prior to each heating season. Clean the circulating air blower, the inside of the furnace casing and remove any contamination. Check all piping joints with a soap solution to detect leaks. The control compartment must be kept clean at all times. Check furnace Inlet/Exhaust Cover (Figure 20) on the outside of your unit periodically to be certain it is free of objects which might block the openings.

NOTE: Portable fuel burning heating appliances should not be used for comfort heating in the living area of your Coachmen unit.

ROOF AIR CONDITIONER

GENERAL — If you did not order the optional roof air conditioner at the time of purchase, your unit is wired so that one can be added. Just order it from your Coachmen dealer. The roof air conditioner will operate **ONLY** on 120-volt electricity.

CONTROLS — The roof air conditioner is controlled by a panel on the portion of the appliance which is attached to the ceiling inside your unit. Turn the control knob clockwise for colder air and counterclockwise for warmer air. You can adjust the air volume by sliding the volume control lever up or down.



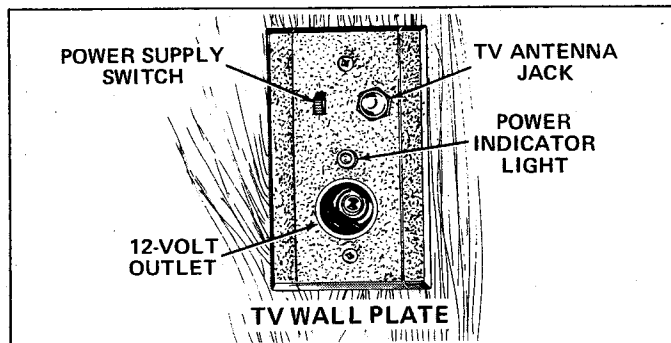
MODE SELECTOR SWITCH — You can select **FAN ONLY** or **COOLING** with the Mode Selector Switch. **FAN ONLY** is used to recirculate and filter the air inside your unit. The fan and filters operate during each mode as well, but on **FAN ONLY** there is no cooling function. To cool the air, turn the selector switch to the desired fan speed within **COOLING** function and turn the temperature control to the desired coolness. For fastest cooldown, turn the air volume control lever to maximum output.

*CAUTION: After turning the air conditioner off, allow 3 to 5 minutes before returning the selector switch to **COOLING**.*

CARE OF AIR CONDITIONER — Remove and clean the filter at least once every two weeks if it is used extensively. Wash filter with soap and water. **DO NOT** operate the air conditioner for extended periods without a filter.

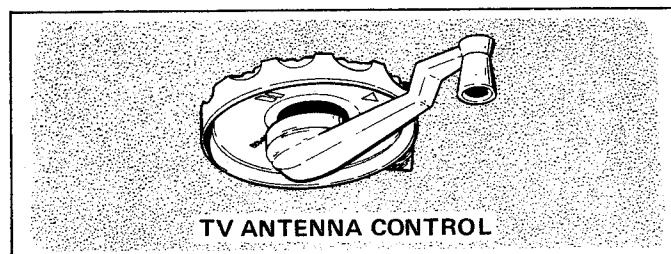
TV ANTENNA

If you plan to use your television in your Coachmen unit, an optional antenna will improve your reception. A coaxial connection for the antenna cable from your TV set, and a switch which turns on the amplifying system, are mounted on a wall plate. A light indicates when the power outlet switch is on. The plate also may include a 12-volt receptacle for TV sets especially designed for that type of energy.



Simply turn the antenna crank handle in the **UP** direction until some resistance is felt. Pull down the rotating knob to disengage it from the ceiling plate and turn it until you find the best sound and signal.

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



AM/FM/MPX STEREO RADIO AND 8-TRACK TAPE PLAYER

The tape player is equipped with an automatic head cleaner. Occasionally you will have to clean oxide off the tape playback gear, capstan shaft and the automatic track selector. To activate the capstan, depress the switch (located next to the capstan) with the eraser end of a pencil. Use a cotton swab, moistened with isopropyl alcohol, to clean the playback head, capstan shaft and the automatic track selector.

CAUTION: DO NOT use carbon tetrachloride to clean components of the tape player.

MAINTENANCE

GENERAL

Recreational vehicle owners are noted for the pride they take in the appearance of their units.

Proper maintenance will do more than keep your Coachmen mini motor home looking nice: it can help ensure trouble-free operation and maximum efficiency of the various components and appliances. Failure to properly maintain the vehicle or its components also may constitute a breach of your warranty obligations. Negligence, misuse or installation of unauthorized equipment could affect the operation of your unit and may void your warranty. See the various manufacturer's manuals for specific maintenance instructions.

ROOF

Your unit is equipped with a one-piece roof which does not require maintenance, other than washing and waxing. We recommend that you do not walk on the roof, except on areas intended for storage of luggage. Coat awning rails with silicone. Coat window seams with rubber composition sealant.

BODY

Wash dust and dirt, road tar, bird and tree droppings, insects and other foreign material from exterior surfaces. Use a mild soap in cold or lukewarm water. Apply automotive type wax at least once a year.

CAUTION: To avoid marring body surfaces, *DO NOT* use abrasive cleaning compound or cloth; *DO NOT* wipe the surface with a dry cloth; *DO NOT* wash or wax your unit in the hot sun, wait until the surfaces have cooled. Wait 30 days after purchase before waxing your new unit.

FRAME

Inspect the frame periodically. Remove dirt and rust and apply rust preventative paint.

AUTOMOTIVE SYSTEM

See your chassis owner's manual for recommended maintenance of the automotive system and components.

STORAGE

GENERAL

You should perform the following procedures if you will not be using your unit for an extended period.

LP GAS SYSTEM

Close the LP gas Service valve. Extinguish all pilots and close all LP gas valves. Light a range burner to consume any gas remaining in the lines. When the flame burns out, turn the range burner OFF.

WATER HEATER

Drain the water by opening the drain cock or removing the drain plug and opening all hot water faucets and the relief valve. Close all valves and faucets when water ceases to drain. To flush or blow dry, see CARE OF WATER HEATER in the APPLIANCE section.

FURNACE

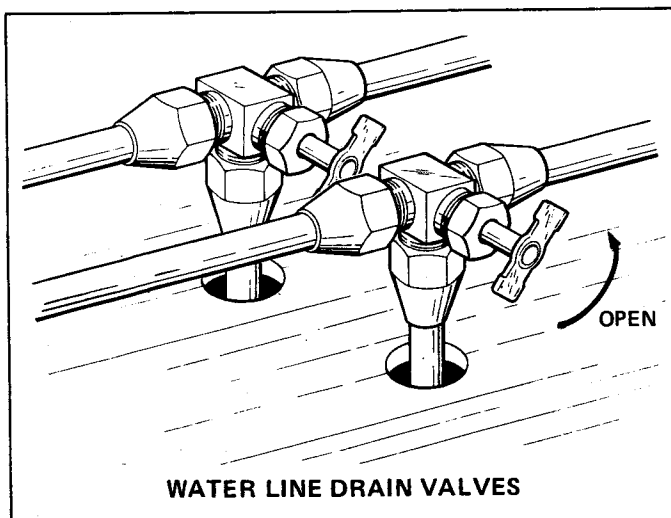
To shutdown the furnace for storage, turn OFF the LP gas control knob, the power switch, and the thermostat.

ELECTRICAL SYSTEM

Turn off all circuit breakers at the service panel.

WATER TANK

Turn ON water pump. Open all water faucets. Open the water tank drain valve and the hot and cold water line drain valves. When the tank is empty, close all faucets and drain valves.



WATER PUMP

When the water tank and water lines have been drained, remove the outlet hose from the pump. Turn the pump ON, allowing it to pump out any remaining water, usually about a cupful. Use a towel or rag to catch this water. If you wish to blow the lines out with air, apply the air nozzle to the system where the outlet hose has been removed. Be sure all valves are open. You can reattach the outlet hose now or later. The pump is now ready for summer or winter storage.

EXTERIOR

Store your unit in a garage or other shelter, if possible, or cover with a tarpaulin or plastic.

INTERIOR

Close and secure all doors and windows. Open a roof vent or window slightly to allow circulation,

but be certain interior damage does not occur during inclement weather.

WINTERIZATION

GENERAL

You should make special preparations for storing your unit in winter. All systems, components and appliances should be inspected and repaired prior to storage. Winterize the unit before removing the batteries.

Drain the fresh water system and water heater as described in STORAGE section, then pour 6 gallons of approved, non-toxic RV antifreeze into the gravity water fill. This will allow you to winterize the fresh water, drainage and sewer systems, and the water heater. Follow the checklist below.

CAUTION: *DO NOT use automotive anti-freeze in the fresh water system; it is poisonous.*

FRESH WATER SYSTEM can be winterized by briefly opening all faucets and turning the pump ON, with all of the sink and tub/shower drains closed. Turn the faucets off when antifreeze flows out. Turn water pump OFF. Water pump should be prepared as described in STORAGE section.

WATER HEATER can be drained by opening the drain cock or removing the drain plug and opening all hot water faucets and the relief valve. Although about two quarts of water will remain, there is ample room for expansion if it freezes. However, this water can be flushed as described in the CARE OF WATER HEATER in the APPLIANCE section, and antifreeze may be added if desired. The antifreeze may be added directly to the water heater tank or after the water system has been winterized, by opening a hot water faucet and the drain cock or plug. Close the drain cock or plug and the faucet when antifreeze appears at the drain outlet.

DRAINAGE SYSTEM should be winterized by removing the sink and tub/shower drain plugs to allow antifreeze to circulate through the lines. Pour an additional 2 cups of RV antifreeze into each drain.

HOLDING TANKS should be drained and rinsed before the antifreeze is allowed to run into them. The dump valve shafts should be inspected and lubricated if needed. Be certain dump valves are closed.

AQUA MAGIC TOILET should be flushed until antifreeze is present in the bowl. Turn the flush knob or step on the large pedal and insert a round object, such as a soft drink bottle, into the bowl outlet. Slowly release the knob or pedal until the blade holds the object in place. This will prevent water residue from being trapped inside the bowl where it could freeze. Leave the object in place all winter.

SHOWER HEAD should be drained and filled with winterizing solution.

LP GAS system should be prepared as described in the STORAGE section. The regulator should be covered to keep moisture out of the vent. Containers should have anhydrous methanol added by an LP supplier.

BATTERIES should be recharged and water added, if needed. Disconnect cables and store in a cool, dry place. Check regularly and recharge as needed.

NOTE: *DO NOT store battery in an area where it could be exposed to extreme heat and sparks. Be sure the room is properly ventilated since batteries give off hydrogen fumes.*

WINDOWS should be masked with newspaper or similar material.

DRAPES should be removed and washed or dry cleaned.

COUNTERTOPS AND CABINETS should be cleaned.

REFRIGERATOR should be cleaned and the freezer and door propped open. Cover exterior panels and roof vent.

FURNACE should be cleaned and exterior vents covered.

RANGE/OVEN should be cleaned and range hood vent covered.

ROOF AIR CONDITIONER filters should be cleaned then replaced and the shroud should be covered.

CHASSIS should be prepared for storage by an auto dealer or service station.

BODY should be cleaned and waxed; locks and hinges oiled, and snow accumulation should be removed with a long-handled broom.

UNIT should be placed on wooden blocks or jackstands on a firm, level surface. Tires should be removed, partly deflated, hung on a wall, and covered to protect them from sunlight.

NOTE: *Drain the anti-freeze from the fresh water system before using your unit. Prepare for use as described in Sanitizing Water Tank, BASIC SYSTEMS section, and Water Tank, STORAGE section.*

FIRE SAFETY

Prevention is the best form of fire safety. Follow the instructions previously listed for the care, maintenance and operation of the various appliances in your vehicle. Make certain everyone in your party is familiar with emergency features of the unit, the locations of exits and the location and

operation of fire extinguishers. A chemical fire extinguisher has been furnished with your unit.

Follow the same rules of prevention that you would at home. DO NOT smoke in bed. DO NOT overload the electrical wiring. DO NOT use matches, candles or lighters to look into dark closets or drawers. DO NOT leave food cooking unattended. DO NOT permit children to play with the controls of LP gas or electrical appliances. DO NOT store flammable liquids inside your unit.

If a fire does start, get all members of your party outside. If it is a small fire, use the fire extinguisher. If the fire cannot be extinguished quickly, GET OUT. Close the LP gas Service valve and move a safe distance from the vehicle. Call the fire department. DO NOT use water on the fire and DO NOT re-enter the vehicle until officials declare it safe to do so.

VISITING CANADA OR MEXICO

GENERAL

Passports or visas are not required for entry into CANADA or MEXICO. However, tourist cards are necessary for MEXICO if you will be staying more than 72 hours or travel farther than 40 miles from the border. Cards can be obtained at the port of entry or from a Mexican consulate. You should carry your birth certificate, voter's registration card, baptismal certificate or similar proof of identity when entering either country. Naturalized U.S. citizens should carry their naturalization papers or other proof of citizenship. Persons under 18 years of age should carry a notarized letter from their parents or guardians giving them permission to travel in CANADA or MEXICO.

The information in this section is general in nature and subject to change by the Canadian or Mexican government. For specific information, including rules for re-entering the U.S. as well as points of interest and campsites, contact the consulate nearest the point at which you plan to enter the country.

VEHICLES

No special driver's license or permit is necessary in either country, but renew your license if it has or will expire during the trip. Proof of vehicle ownership is required at the border. If you are using someone else's unit, you should have a notarized letter authorizing its use. MEXICO requires a vehicle permit for every self-propelled vehicle. The permit can only be obtained from Mexican customs (Aduana) offices upon presentation of tourist card, vehicle registration, and title or notarized statement from owner.

CANADA requires a Canadian Non-Residential Interprovincial Motor Vehicle Liability Insurance card, which is only available from U.S. agents. All

provinces in CANADA require evidence of financial responsibility if visitors are involved in an accident. Limits vary from province to province. Contact your insurance agent for details. Your insurance policy is NOT valid in MEXICO. Temporary insurance must be purchased from Mexican companies whose offices are located near the border.

CB RADIO

CB radio operation in Canada requires a temporary license which can be obtained by writing Regional Director, Telecommunications Regulation Branch, Department of Communications, 20th Floor, 2085 Union Ave., Montreal, Quebec H3A 2C3, Canada. MEXICO currently prohibits the use of CB radios.

HUNTING AND FISHING

Each province has its own laws and license requirements. You must provide a written description and the serial number of each gun at the border. Revolvers, pistols and fully-automatic firearms are prohibited in CANADA. A license must be obtained from the province in which you intend to hunt or fish. Further information can be obtained by writing the Department of Lands and Forests, Wildlife Branch, in the province you intend to visit. Hunting and fishing laws in MEXICO are extremely complicated. Request further information from Secretaria de Comunicaciones, Estados Unidos Mexicanos, Mexico DF.

DOGS AND CATS

CANADA requires a certificate, signed by a licensed veterinarian in the U.S. or CANADA, attesting that a dog has been vaccinated for rabies in the past 12 months. The certificate must contain a description of the dog and date of vaccination. Puppies under 3 months old need no certificate. There is no restriction on the entry of healthy cats.

A certificate, signed by a licensed veterinarian, describing the pet and attesting that it has had a rabies shot in the past 6 months, is required in MEXICO. A fee is charged for the required verification of the certificate by a Mexican consulate.

COACHMEN WARRANTY

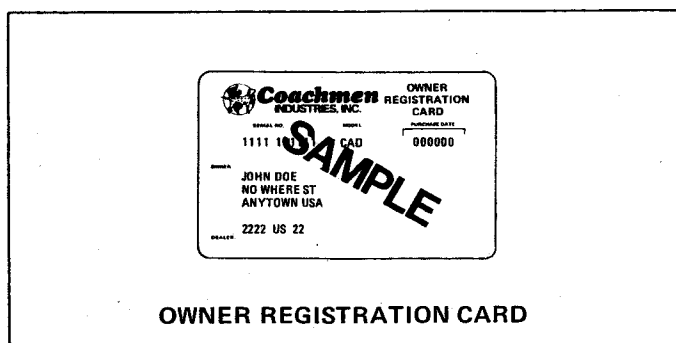
GENERAL — Every Coachmen product is backed by our position as an RV industry leader, achieved through years of experience in producing units noted for their quality and dependability. Our one-year limited warranty, a pioneer in the RV industry, demonstrates our confidence in Coachmen products and is a commitment to customers' continued satisfaction.

Every effort has been made to provide you with a safe, dependable recreational vehicle. Your Coachmen RV complies with applicable federal and state regulations and the requirements of ANSI

A119.2, the nationally-recognized "Standard for Recreational Vehicles — Installation of Plumbing, Heating and Electrical Systems". The Recreation Vehicle Industry Association (RVIA) periodically inspects Coachmen production and assists in maintaining strict compliance with installation and safety standards for those systems. Similar periodic inspections are made by representatives of the Canadian Standards Association (CSA) and various states. You, the owner, must perform periodic inspections of the systems and provide a program of preventive maintenance as described in the Owner's Manual and instruction booklets.

WARRANTY SERVICE — Coachmen recommends that warranty service be performed by the authorized dealer from whom you purchased your RV because of the dealer's continued and personal interest in your satisfaction. But if you are traveling or in the event that you move, service under the Coachmen warranty will be performed by any authorized Coachmen dealer in the United States or Canada. Whenever possible, make an appointment to avoid unnecessary delays.

Always carry your Owner Registration Card, which must be presented to obtain warranty service (carry your Temporary Owner Registration until you receive the plastic card from Coachmen). The card is proof of purchase and provides the date of retail sale, which are necessary to determine warrantability. Subsequent owners covered under terms of the warranty will be provided an Owner Registration Card for the unexpired term of the warranty. If you cannot locate an authorized dealer, contact Coachmen Service, P.O. Box 1000, Middlebury, Indiana, 46540, telephone 219/825-8239.



OWNER REGISTRATION CARD

Warranty Period — The warranty period shall begin on the date the recreational vehicle is delivered to the first retail purchaser.

Who Is Covered — The first retail purchaser and subsequent owners during the unexpired term of the warranty, provided terms of the warranty are met.

What Is Covered — Coachmen warrants to owners that an authorized Coachmen dealer or Coachmen Service Center will make repairs made necessary by defects in material or workmanship during the warranty period. Such repairs will be made without charge for parts and labor to the owner.

What Is Not Covered — The Coachmen warranty does not cover the motor home chassis, tires, tubes, batteries or optional generators, repairs or adjustments required because of neglect, accident, misuse, failure to follow service and use instructions, normal wear and/or exposure, unauthorized repairs or unauthorized modifications to any part of the systems or body that might cause defective performance. Coachmen does not assume responsibility for loss of use of the recreational vehicle, loss of time, inconvenience or expense due to equipment failures (refer to the warranty statement for other exclusions and limitations).

Other Warranties — Be certain to complete and submit to the appropriate manufacturers the warranty forms for motor home chassis, tires, tubes, batteries, and optional generators, which are not covered by the Coachmen RV Limited Warranty. If service or parts are required for these products, refer to the furnished list of factory-authorized service centers. If the list is not available, write or call the manufacturer concerned to obtain the location of the nearest authorized service center.

OWNER RELATIONS

Owner's satisfaction and goodwill are of primary concern to Coachmen. We recognize that our continued success as a leading manufacturer of recreational vehicles depends upon your complete confidence in our products and service. A pleasant and effective relationship through our dealers is as important as maintaining the technical excellence of our product. Your authorized Coachmen dealer will assist you in providing service, maintenance, selection of options and instructions concerning the operation of your recreational vehicle.

Occasionally, a warranty or service matter may not be handled to your satisfaction. Often it is the result of a misunderstanding and can be resolved at the dealer level. Discuss the situation with the dealership management. If you cannot find satisfaction at the dealer level, we invite you to contact Coachmen Owner Relations Department, where we will make every effort possible to provide an agreeable solution. In most instances, we will eventually refer you back to the local dealer with our recommendations.

Write or telephone Owner Relations at:

Coachmen Service
P.O. Box 1000
Middlebury, Indiana 46540
Telephone: 219/825-8239
Attn: Owner Relations Department

TRAVEL RECORD

[illegible]

MAINTENANCE RECORD

[illegible]

APPLIANCE IDENTIFICATION FORM

Should your unit or one of the appliances require warranty service, you will have to identify the manufacturer, model designator and serial number. Fill in this form as soon as possible. It will help you meet our identification requirement. Depending on your unit, certain items listed below may not be offered as either optional and/or standard. Most of this information can be found on the Recreational Vehicle Data Card attached to the inside of one of the kitchen cabinets.

EQUIPMENT	MANUFACTURER	MODEL DESIGNATOR	SERIAL NUMBER
Mini Home Body	<u>COACHMEN</u>	<u> </u>	<u> </u>
Mini Home Chassis	<u> </u>	<u> </u>	<u> </u>
Keys — Door	<u> </u>	<u> </u>	<u> </u>
Exterior	<u> </u>	<u> </u>	<u> </u>
Other	<u> </u>	<u> </u>	<u> </u>
Range/Oven	<u> </u>	<u> </u>	<u> </u>
Furnace	<u> </u>	<u> </u>	<u> </u>
Toilet	<u> </u>	<u> </u>	<u> </u>
Converter	<u> </u>	<u> </u>	<u> </u>
Refrigerator	<u> </u>	<u> </u>	<u> </u>
Electric Water Pump	<u> </u>	<u> </u>	<u> </u>
Water Heater	<u> </u>	<u> </u>	<u> </u>
Roof Air Conditioner	<u> </u>	<u> </u>	<u> </u>
Automotive Air Conditioner	<u> </u>	<u> </u>	<u> </u>
Radio	<u> </u>	<u> </u>	<u> </u>
TV Antenna	<u> </u>	<u> </u>	<u> </u>
Generator	<u> </u>	<u> </u>	<u> </u>

SPECIFICATIONS

FUSES

Interior — 15 amp., 12VDC

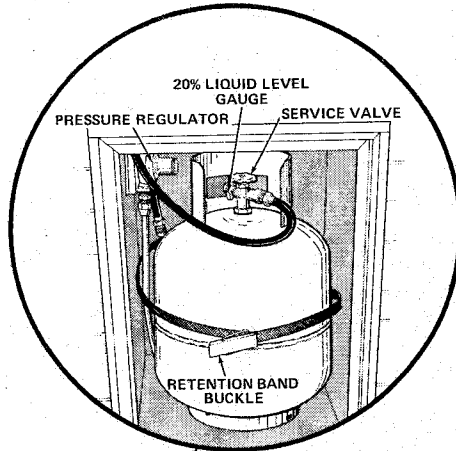
LIGHT BULBS

Interior 12VDC (Except dome light inside driver compartment)	— 1141
Range Hood	— 25 Watts, 12VDC
Turn, Tail and Stop	— 1157
Backup	— 1156
License Plate	— 1157
Clearance	— 57
Patio	— 1003

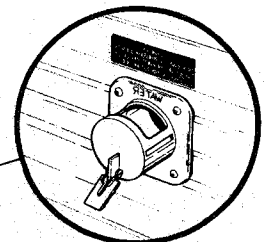
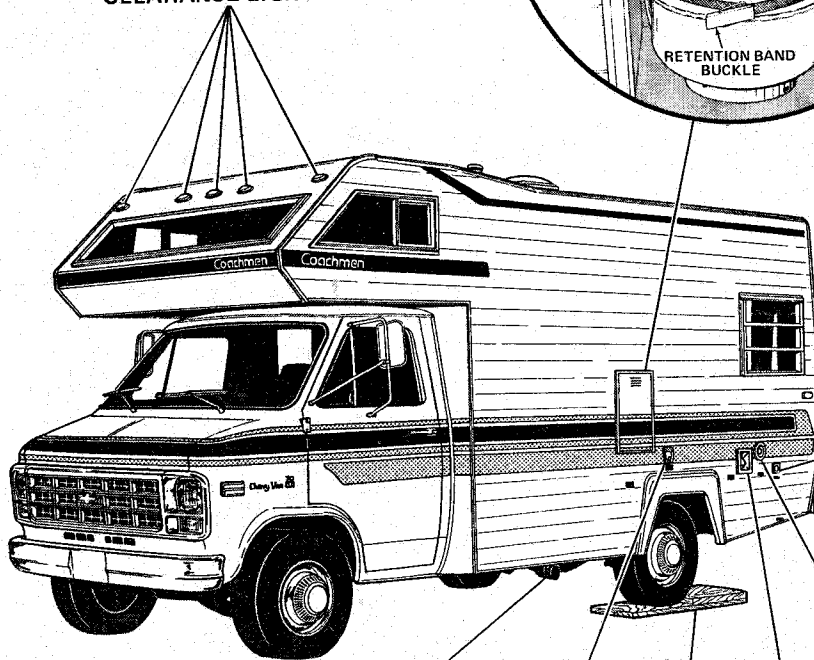
MISCELLANEOUS

See the brochure for the exterior dimensions, weight ratings and wheel/tire ratings which pertain to your unit.

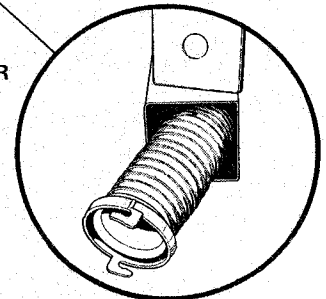
LP GAS BOTTLE
FIGURE 17



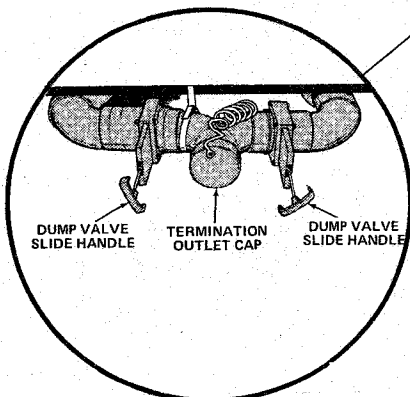
CLEARANCE LIGHTS



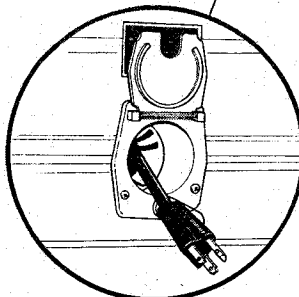
GRAVITY WATER FILL
FIGURE 12



SEWAGE DRAIN HOSE
FIGURE 13



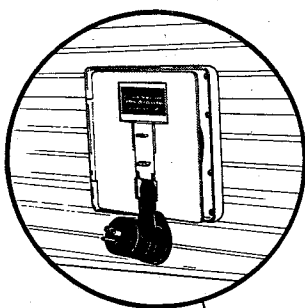
TERMINATION OUTLET
FIGURE 14



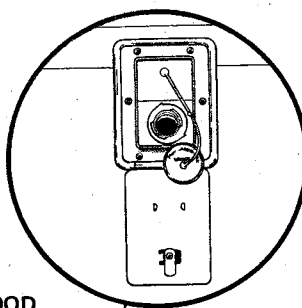
SHORELINE
FIGURE 5

STEP LEVELING RAMP
FIGURE 2

SHORELINE
FIGURE 4



GRAVITY WATER FILL
FIGURE 11



SEWER VENT

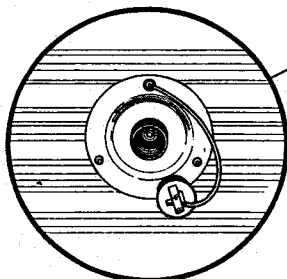
RANGE HOOD
VENT

LUGGAGE RACK
(OPTIONAL)

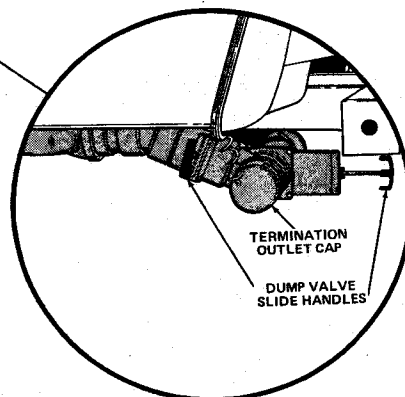
ROOF VENT

LADDER
(OPTIONAL)

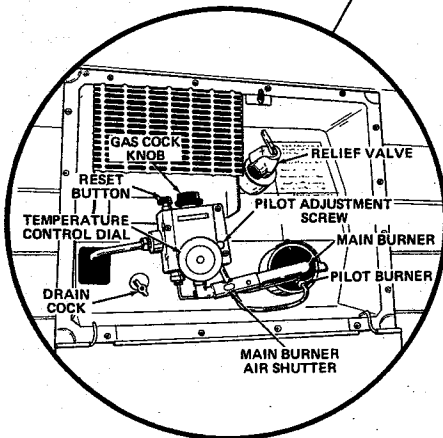
GASOLINE FILL



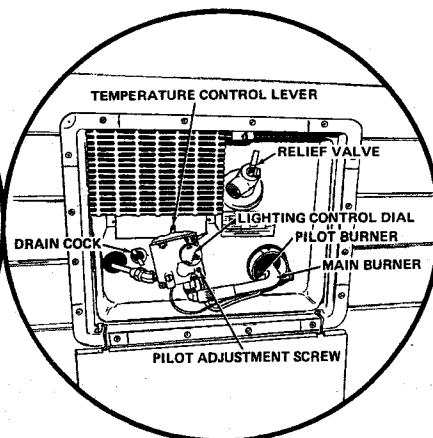
CITY WATER FILL
FIGURE 10



TERMINATION OUTLET
FIGURE 15



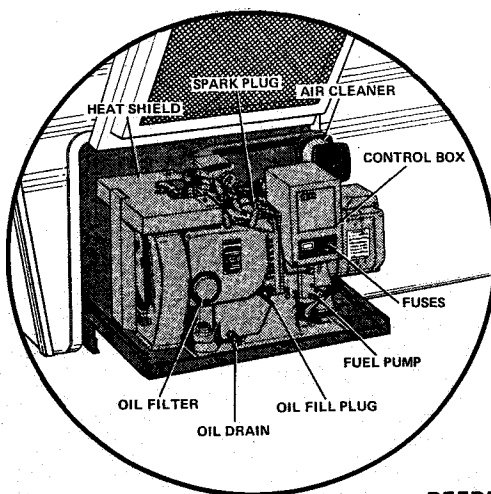
WATER HEATER (ROBERTSHAW)
FIGURE 18



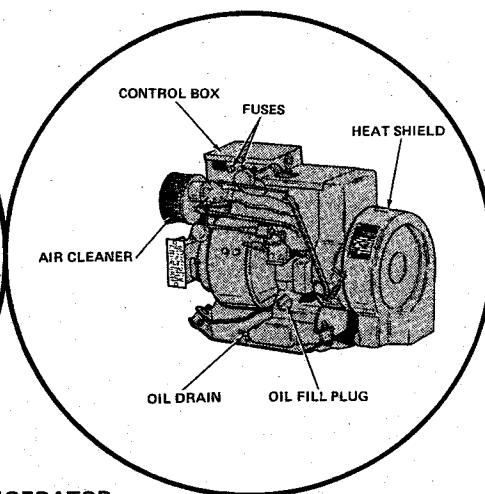
WATER HEATER (ITT)
FIGURE 19

COACHMEN MINI MOTOR HOME

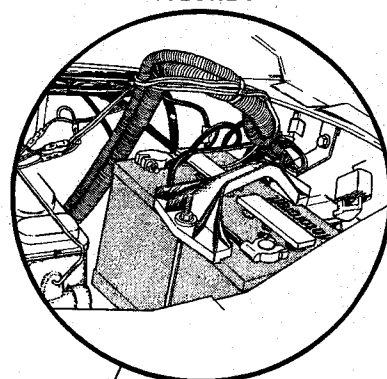
GENERATOR
FIGURE 8



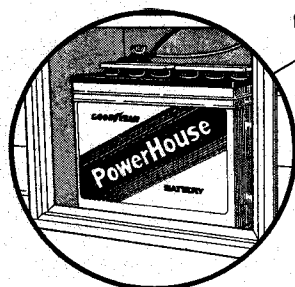
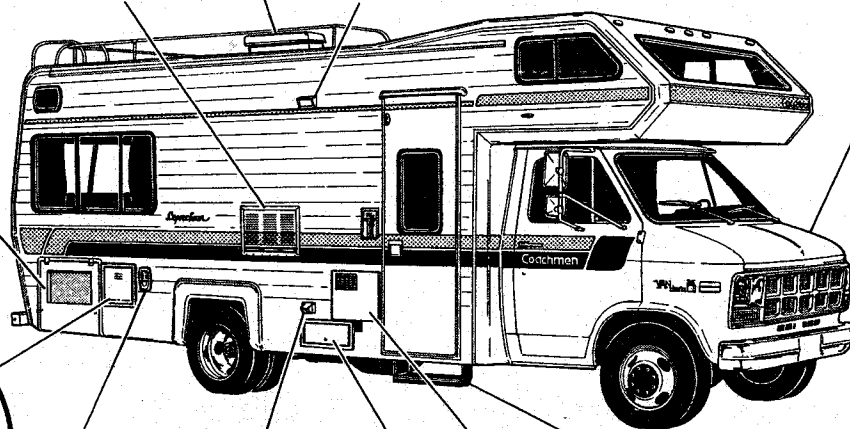
GENERATOR
FIGURE 9



RV BATTERY (FORD, DODGE)
FIGURE 7



REFRIGERATOR VENT
REFRIGERATOR ACCESS DOOR
PORCH LIGHT



RV BATTERY
FIGURE 6

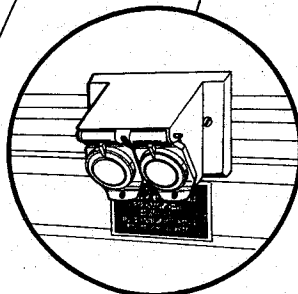
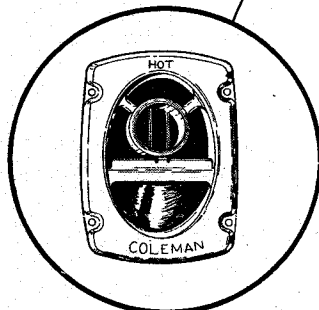
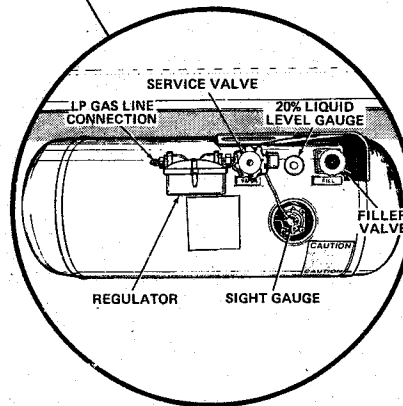


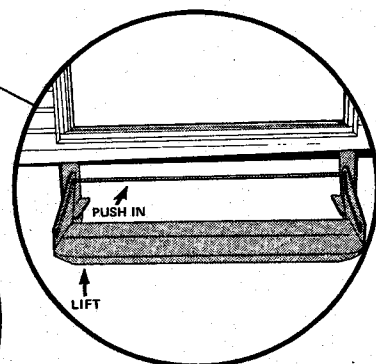
FIGURE 3



FURNACE INLET/EXHAUST
FIGURE 20



LP GAS TANK
FIGURE 16



DOOR STEP
FIGURE 1

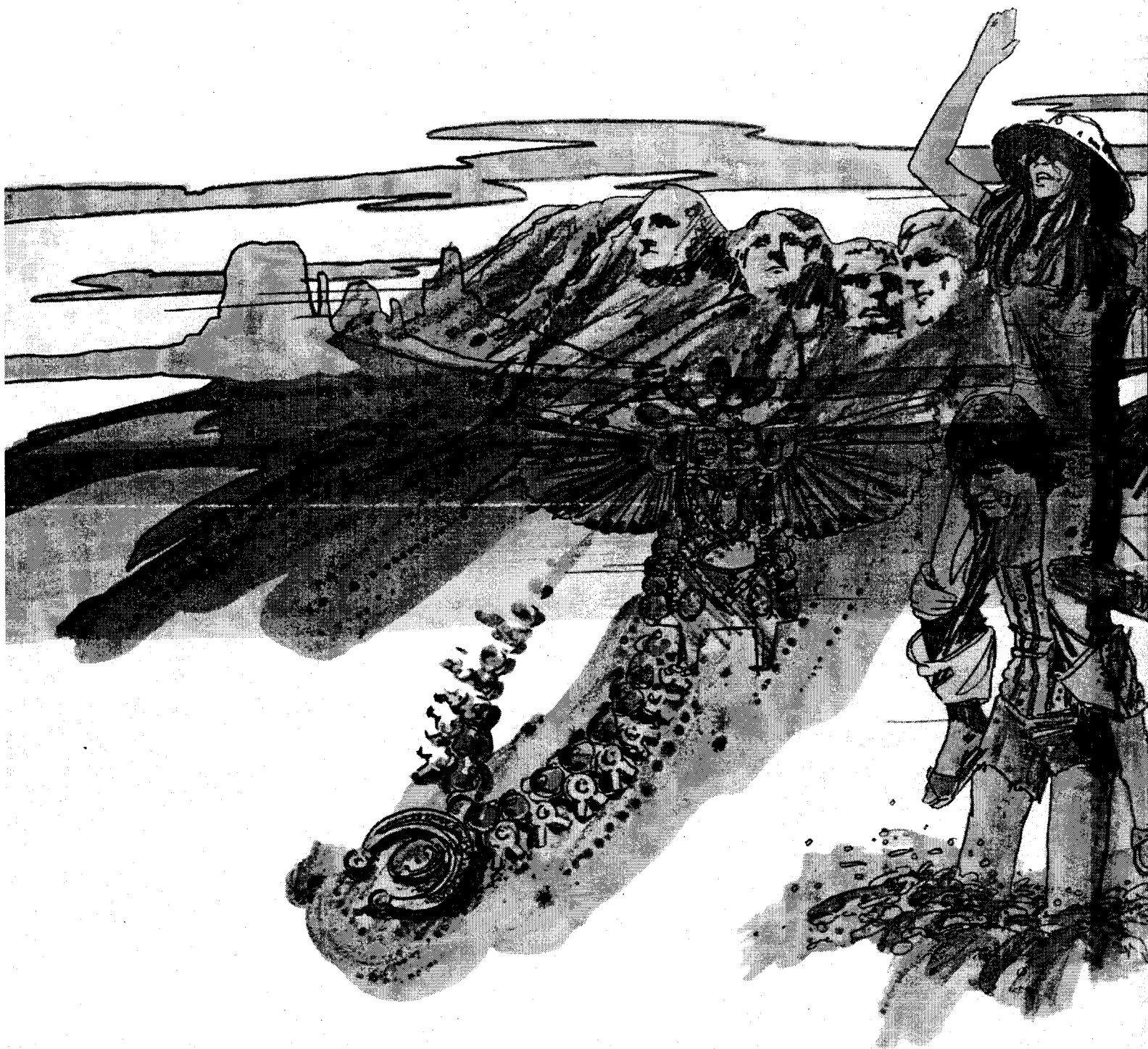
VEHICLES SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY; SOME ITEMS SHOWN ARE OPTIONAL OR MAY NOT BE AVAILABLE ON CERTAIN MODELS.

YOU'VE CHOSEN COACHMEN ALL-AROUND VALUE!

As a new Coachmen owner, you've made a sensible choice among recreational vehicles. Your Coachmen is built with care and craftsmanship, and your choice of Coachmen is backed by . . .

- Coachmen Industries, Inc., the world's largest full-line manufacturer of recreational vehicles.
- A coast-to-coast network of happy-to-serve-you dealers.
- Coachmen's famous "Buck-Stopper" customer service. Your Owner Registration Card is your ticket to fast, dependable, one-stop service nationwide and in Canada.
- The International Coachmen Caravan Owner's Club, to bring you the most pleasure in owning an RV.
- Traditional high trade-in value for any recreational vehicle built by Coachmen!

COACHMEN — AMERICA'S #1 SELLING NAME IN RV'S.



Coachmen

RECREATIONAL VEHICLES

P. O. BOX 30 • MIDDLEBURY, INDIANA 46540

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