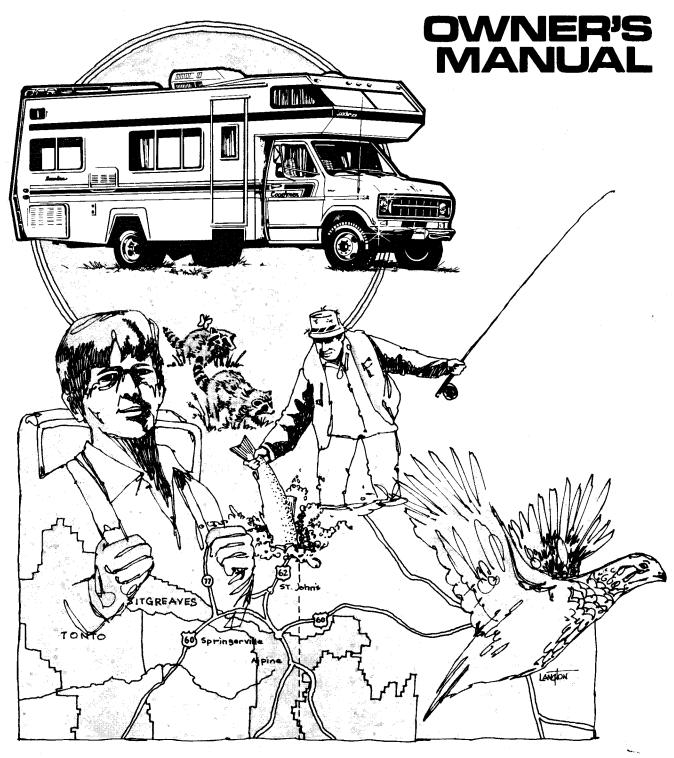




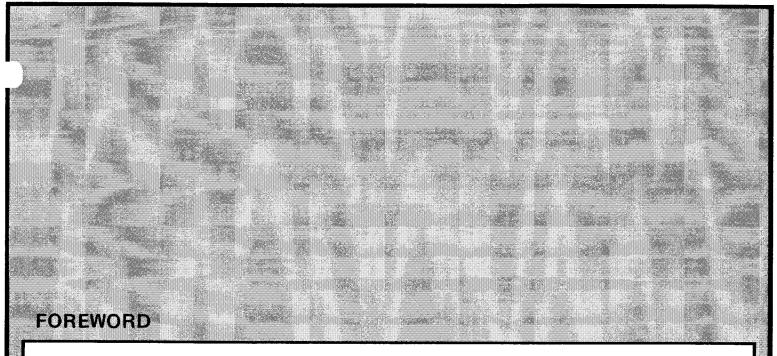
# LEPECHAUN MINI MOTOR HOME



## **TABLE OF CONTENTS**

INTERNATIONAL COACHMEN	APPLIANCES & ACCESSORIES
CARAVAN FRONT INSERT	LP GAS APPLIANCES
FOREWORD	FURNACE
TRAVEL BREDARATION 2	Lighting
TRAVEL PREPARATION	OVEN
HOME SECURITY	Lighting
IMPORTANT DOCUMENTS	Heing
LOADING 2	Heater Pilot Adjustment
GENERAL 2	REFRIGERATOR
LOADING DEFINITIONS	LP Gas Operation
EEDEDAL STICKER	WATER HEATER
GROSS AXLE WEIGHT RATING (GAWR)2	Robertshaw "UNITROL" Thermostat
GROSS AXLE WEIGHT (GAW)	ITT General Control Thermostat
GROSS VEHICLE WEIGHT KATING (GVWI)	Temperature Control
OVERLOADING	FLECTRIC APPLIANCES
WEIGHT DETERMINATIONS	ROOF AIR CONDITIONING
DDE TDID CHECK 2-3	Temperature Control
TIDE DDECCIDE	Air Volume Control
WHEEL LUGS	Cooling
ALITOMOTIVE COMPONENTS	Ean Only
LIGHTS2	12-VOLT DC CONVERTER
MIDDODS	WATER PUMP
TV ANTENNA	RANGE HOOD
WATER FILLS	GENERATOR
SEWAGE DUMP VALVES3	Pre-Start Check
CTED	Start
WINDOWS AND VENTS	Stopping
DOORS AND DRAWERS	REFRIGERATOR
10000	Electrical Operation
DECDICEDATOR	CARE & MAINTENANCE
CARGO	LP GAS SYSTEMS
EXTERIOR STORAGE AND ACCESS DOORS	GAS LINE CHECK
DRIVING3	Gas Line Checking Procedure
SPECIFICATIONS	REGULATOR PRESSURE
TURNING	LP TANK UPKEEP
PDAKING	LPG APPLIANCES
BULLING INTO TRAFFIC	FURNACE
OVERHEATING	RANGE
HOLDING ON ANTIPGRADE	Porcelain Surfaces
PARKING ON A GRADE	Chrome Surfaces
CET LID	OVEN
CIDE TO CIDE LEVEL NESS	WATER & DRAIN SYSTEMS
DINIETTE TADI E	SANITIZING WATER TANK
PEDESTAL TYPE	WATER PUMP
HINGE TYPE	DRAIN PIPING
DINETTE DED	AQUA MAGIC
UINCE TYPE	ELECTRICAL SYSTEM
CALICUO TVDE	BATTERY
EACING GALICHO PLATFORMS4	AM/EM/MPX STEREO RADIO AND
	8 TRACK TAPE PLAYER
TUDEE MAY DINETTE/SEAT/BED	ROOF AIR CONDITIONER
Changing Seat Direction	GENERATOR
CABINET BUNK	INTERIOR
DESCRIPTION & OPERATION OF SYSTEMS 4-7	TABLE & COUNTER TOPS
LD CAC CVCTEM	WOODWORK
ID CAC	VINYL FLOOR COVERING
ID CACDEALEDS	CAPPETING
ID CACTANK	CLOSET, DRAWERS & STORAGE COMPART
DOI 1/-h.m.	REFRIGERATOR
20% Valve	BODY
20% vaive	ROOF
	TIRE INSPECTION
F111 - The Teel :	STORAGE
1101110 1 0 0 0 0	SYSTEMS
	I P GAS SYSTEM
AR VOLT DO OLLACCIC CYCTEM	ELECTRICAL SYSTEM
40 VOLT ALTERNATING CURRENT (VAC/ STSTEM	FRESH WATER SYSTEM
Objection and the second of th	EXTERIOR
Generator	INTERIOR
Compress/Shoreline Interlocking Device	WINTERIZING
	WATER SYSTEM
A!liams Destents	UNAIN STOLEM
	FIRE SAFETY
FDFCUMATED CVCTEM	FIRE EMERGENCY
MATER TANK	FIRE EXTINGUISHER
42 Valt DC "Demand" Water Pump	Use
CITY WATER RECEPTACLE	EXITS
GRAVITY WATER FILL	EMERGENCY CONTACTS
SEWAGE SYSTEM	RV'ING COURTESY
TOILET	DOMANC

. 10



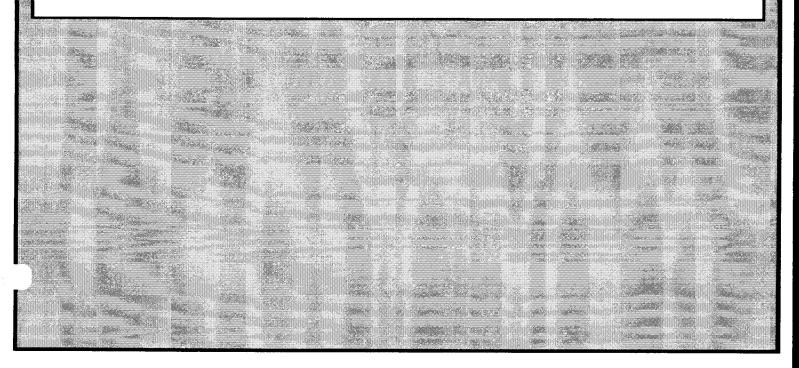
Welcome to Coachmen's ever growing family of happy RV owners. Hours of adventure, fun, relaxation and enjoyment are possible for you in your new Coachmen unit. Simply read and follow all publications contained in the "Coachmen Owner's Information" packet.

This information is intended to provide you with basic instructions which will enable you to operate and maintain the appliances, accessories and RV systems of your unit. Further information is contained in the appliance and accessory instruction booklets provided by various manufacturers.

Operating and maintenance instructions pertaining to appliances contained in our manual were obtained from and are being used with permission of 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 and/or obligation.

NOTE: The systems and equipment described in this manual are not identified as standard or optional due to the variety of appliances and accessories which may be standard, optional or not offered with a particular unit.



## TRAVEL PREPARATION

INFORMATION — Write to the Chamber of Commerce of each state through which you intend to travel for road maps, campground listings, points of interest and other tourist information. Purchase RV'ing "How-To" books and traveling guide books.

HOME SECURITY — Give a trusted neighbor, friend or relative, a house key and your travel itinerary. Make arrangements for someone to check your house at least once a week. If you intend to be away for more than two weeks, request police surveillance. Stop mail and newspaper delivery. Carry an extra set of vehicle and house keys on a separate key ring.

IMPORTANT DOCUMENTS — Carry your vehicle registration papers and other important documents within easy reach. If you are borrowing a vehicle from a friend, it is recommended that you carry a signed, notarized letter from him.

#### LOADING

#### **GENERAL**

Proper loading and weight distribution is essential for the safe handling of your unit. Store lightweight items in the overhead cabinets and heavier items on or near the floor. This will help lower the center of gravity of your unit, thus improving the handling of the unit. Lash down items that are too large to store in cabinets or closets. This will help prevent damage caused by sliding cargo.

Before loading your unit check the Chassis Manufacturer's Owner's Manual for the maximum weight ratings of each axle. This should be taken into consideration when distributing cargo throughout the unit.

NOTE: See the Chassis Manufacturer's Owner's Manual for the proper tire inflation pressure for the intended load. Improper tire inflation can cause premature tire failure.

## LOADING DEFINITIONS

FEDERAL STICKER — Contains the Chassis Serial Number, Front and Rear Gross Axle Weight Ratings, and the Gross Vehicle Weight Rating (found inside the driver's door).

GROSS AXLE WEIGHT RATING (GAWR) — The amount of your unit's total weight (including cargo and passengers) that can be safely supported by each axle (found on the Federal Sticker).

GROSS AXLE WEIGHT (GAW) — The portion of your unit's total weight (including cargo and passengers) transferred to each axle, obtained by actually weighing the axle.

GROSS VEHICLE WEIGHT RATING (GVWR) — The maximum permissable weight of your unit (found on the Federal Sticker).

GROSS VEHICLE WEIGHT (GVW) — The total weight of your unit when loaded with optional equipment, cargo, and passengers. Obtained by actually weighing the unit.

OVERLOADING — A condition caused by the weight supported by a particular suspension component (i.e., tires, springs, axle) exceeding the Gross Weight Rating of that component.

## **WEIGHT DETERMINATIONS**

It is extremely important that you weigh your unit prior to leaving on any trip to determine whether or not your unit is properly loaded.

To find the location of a weighing station in your area, look in the yellow pages of the telephone book under grain elevator, sand and gravel dealers, or a government weighing station.

Load your unit with all of the cargo and people that you plan to take on your trip. Your unit could already be improperly loaded; therefore, use extreme caution while driving to the weighing station.

Drive the unit onto the scale so that only the front axle is over the scale. Weigh the unit with all cargo and passengers in the traveling positions. Compare this weight to the Front GAWR shown on the Federal Sticker.

Pull forward so that only the rear axle is over the scale. Again, weigh the unit with all cargo and passengers in the traveling positions. Compare this weight to the Rear GAWR also shown on the Federal Sticker.

NOTE: If either of the aforementioned weights exceed the respective GAWR, your unit is improperly loaded. Redistribute or unload part of the cargo and relocate the passengers.

## PRE-TRIP CHECK

Before leaving your home, campsite, or rest area, check the following:

TIRE PRESSURE — Tire pressure must be as required in the Chassis Manufacturer's Owner's Manual.

WHEEL LUGS — Check the wheel lugs every 50 miles for the first 200 miles of your first trip and every time you change tires.

AUTOMOTIVE COMPONENTS — Perform the pre-trip check outlined in the Chassis Manufacturer's Owner's Manual.

 ${\sf LIGHTS-Check\ all\ exterior\ lights}.$ 

MIRRORS — Adjust rear view mirrors so that the driver can see both rear corners of the unit.

TV ANTENNA — Must be in its traveling position.

POWER CORD — Must be inside the unit with the hatch closed (Figure 7).

WATER FILLS — Must be closed (Figures 11 and 12).

SEWAGE DUMP VALVES — Close and lock Pump Valves. Secure Dump Valve Caps (Figure 13).

STEP — Must be in the traveling position.

WINDOWS AND VENTS — Close and secure all windows and vents.

 ${\sf DOORS}$  AND  ${\sf DRAWERS}-{\sf Close}$  and secure all doors and drawers.

LP GAS — Turn LP gas "OFF" at the POL Valve (Figure 6).

REFRIGERATOR — Lock refrigerator door with the Traveling Latch (Figure 1).

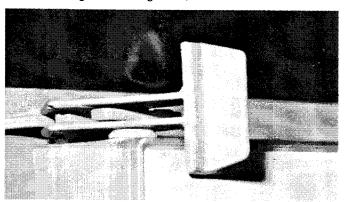


Figure 1

CARGO — Be sure all cargo is secured to prevent damage from sliding.

EXTERIOR STORAGE AND ACCESS DOORS — Close and secure all exterior storage and access doors.

### DRIVING

Remember your unit is longer, wider, taller and heavier than your family car. Your driving habits will have to be somewhat modified in order to compensate for this increase in size. Here are a few basic tips to consider.

SPECIFICATIONS — Know the clearance measurements of your unit as listed in the BROCHURE.

TURNING — Because the turning radius of your unit is greater than your passenger car, pull at least 2' further into the intersection before turning. On right turns, this procedure will prevent the rear wheels from hitting the curb. On left turns, the unit will swing wide of cars waiting at the cross street of an intersection.

PASSING — When you wish to pass a slower moving vehicle, remember that additional time and distance will be required to safely accomplish this maneuver. Always check the rear view mirrors and signal lane change before passing another vehicle. Shift transmission to lower gear range by depressing accelerator pedal briskly. When clear of the other car, signal lane change and return to your original lane.

BRAKING — Allow sufficient distance to safely stop your unit. Pump the brake pedal lightly to stop on wet or icy roads. DRIVE slow enough so that

you can stop your unit safely without risking a panic slide.

PULLING INTO TRAFFIC — Check for oncoming traffic in all directions. Signal before entering the traffic flow.

OVERHEATING — The engine could overheat while climbing and descending steep grades. If your unit's engine should overheat, pull well off the road. Shift to neutral (N) gear 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 find the problem before continuing with the trip.

Engine temperature problems may be avoided: climb long grades and descend moderately steep grades in second gear; climb steep grades in first gear; turn off auto air conditioner, if so equipped.

WARNING: DO NOT exceed 40 mph in second gear or 25 mph in first gear — excessive engine speed will overheat the transmission, which in turn may cause the transmission to fail.

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 one minute with the transmission in gear.

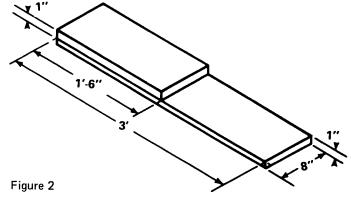
PARKING ON A GRADE — When parking on a grade; apply foot brake; shift the transmission to park; apply parking brake; release foot brake.

WARNING: If you do not follow the preceding procedure, you may not be able to move the transmission selector out of parking gear. If this torque lock condition should occur, you may have to have another vehicle nudge yours up the hill while you move the selector out of parking gear to neutral.

#### **SET-UP**

#### SIDE-TO-SIDE LEVELNESS

Your unit must be level from side-to-side for your refrigerator to operate properly. Check this by placing a carpenter's level on the floor. If your unit is not level, either place a leveling ramp (Figure 2) under the tire on the low side, or dig a shallow hole under the tire of the high side.



3

#### **DINETTE TABLE**

PEDESTAL TYPE — Insert top of support leg into the bracket located under the bottom surface of the table. Insert the leg into the floor base. Remove the table and the leg before setting up the dinette bed.

EXTENSION TYPE — Unfasten travel latch. Swing the table up, release table leg by depressing lever (Figure 3) and swing leg down to the locked position. Release the latch (Figure 4) located under the table. Pull out the sliding portion of the table. Insert leaf and push table together.

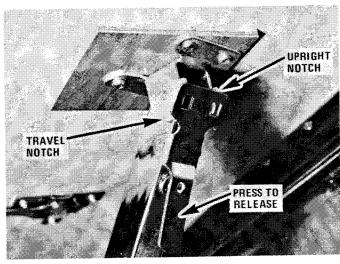


Figure 3

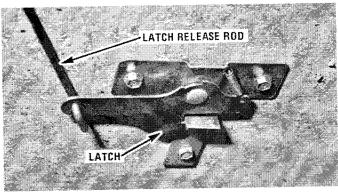


Figure 4

HINGE TYPE — Rotate back edge of table up to the wall brackets. Insert tabs, which are located on the back edge of the table, into the wall brackets. Pull the leg toward the table hinge, after the leg releases, swing it down to the locked position.

#### **DINETTE BED**

HINGE TYPE — Pivot the hinge table down to the dinette seat supports. Arrange cushions on top of platform.

GAUCHO TYPE — Remove table. Lift front edge of gaucho platform and slide it out. Arrange cushions on top of platform.

FACING GAUCHO PLATFORMS — Remove table. Slide each platform out as described above.

"U" TYPE — Remove the table pedestal. Place table on seat supports. Arrange cushions on top of platform.

## THREE-WAY DINETTE/SEAT/BED -

Changing Seat Direction — Pull out the handle (Figure 5). Rotate seat back rest so it faces 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.



Figure 5

Setting Up Dinette Bed — Remove the dinette table and leg. Pull outward on the handle (Figure 5). Rotate the seat back rest toward the table set-up position. Push the back rest toward a horizontal position. Push the handle back to the locked position. Repeat this procedure to assemble the other side of the bed.

CABINET BUNK — Open both end cabinet doors. Release latches — one is located on each inside end of the cabinet. Close and latch the cabinet doors. Swing cabinet face down so that it rests on its supports. Position reinforcing boards on top of the cabinet face. Arrange cushions on top of platform.

## DESCRIPTION & OPERATION OF SYSTEMS

#### LP GAS SYSTEM

The Liquefied Petroleum Gas (LPG) System of your unit will provide a safe, easy-to-use, fuel supply for your furnace, oven, range, refrigerator, and water heater providing you follow the instructions outlined in this section, APPLIANCE & ACCESSORIES, and CARE & MAINTENANCE. Failure to do so can result in personal injury as well as property damage.

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

LP GAS — LP gas is butane and propane fuels mixed to suit the geographic location of use. LP gas dealers have the proper mixture for their own

location. You must purchase a different mixture each time you plan to experience a climate change. Failure to do so could cause LP gas appliances to function improperly.

LP GAS DEALERS — You can find a listing of LP gas dealers in the yellow pages of your telephone book under "Gas - Liquefied Petroleum - Bottle & Bulk".

LP GAS TANK (Figure 6) — The LP gas for your system is stored in the LP gas tank located under the floor of your unit. The tank is equipped with:

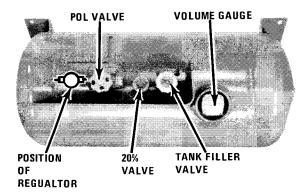


Figure 6

POL Valve — Turn this valve clockwise to turn on gas.

20% Valve — This is a very important safety feature. This valve must be open when filling the tank.

Tank Filler Valve — Turn counterclockwise to remove the cap. Insert the gas nozzle to fill the tank.

Volume Gauge — Used in place of remote gauge on some units.

Pressure Regulator — A devise used to regulate the LP gas pressure of your system. Your Coachmen dealer knows how to adjust the regulator to the proper pressure.

Filling The Tank — Turn off the range burners. Turn Oven Control Knob (Figure 17) to "PILOT OFF". Turn the refrigerator Elec/12V/Off/Gas Selector (Figure 19) to "OFF". Turn the Water Heater Gas Control Dial to "OFF". Close the Furnace POL Valve (Figure 15).

Open the 20% Valve (Figure 6) and remove the Tank Fill Cap. Fill the tank until LP gas appears at the 20% Valve. Close the 20% valve and replace the fill cap.

**CAUTION:** Overfilling the LP tank can adversely affect the LP gas system (i.e. regulator malfunction).

NOTE: After every third refill, and prior to every camping season, check the gas system connections for leaks as outlined in CARE & MAINTENANCE.

USING LP GAS — Because there is always some leakage of LP gas when refilling the tank, you should drive at least a mile away from the LP gas dealer and wait 30 minutes before you relight the range burners or furnace pilot light. LP gas is odorless

but an additive gives it a distinctive garlic odor. If this scent is present after waiting, DO NOT RE-LIGHT THE APPLIANCE. Open the windows, doors, and roof vent. If the scent does not dissipate after waiting an additional 30 minutes, follow the instructions contained in the CARE & MAINTEN-ANCE Section — Gas Line Connection.

Before lighting any appliances, open the POL Valve (Figure 6). If the LP Gas System is not in use, we recommend that the POL Valve be closed.

#### **ELECTRICAL SYSTEMS**

Your unit is equipped with three electrical systems; the 12-Volt DC Chassis System, a 120-Volt Alternating Current (VAC), and a 12-Volt DC Interior System.

12-VOLT DC CHASSIS SYSTEM — The Chassis Electrical System includes the taillights, turn signals, running lights, and the engine ignition system. Power for the chassis system is provided by the automotive alternator and battery. For further information see the Chassis Manufacturer's Owner's Manual provided in your "Owner's Packet".

12-VOLT ALTERNATING CURRENT (VAC) SYSTEM — The 120-Volt, 60-Cycle, Alternating Current (120 VAC) System of your unit is installed to provide current for your refrigerator, air conditioner, 12-Volt DC Converter, as well as the additional appliances you may wish to use. Electricity for this system is provided by either the Shoreline Connection, or the RV generator.

Shoreline — Your Shoreline Power Cord (Figure 7) has a 30-amp., 3-pronged plug to be attached to the Shoreline Supply Receptacle on the campsite.

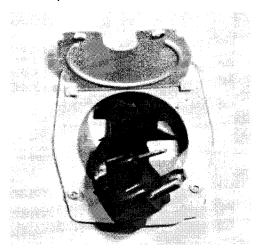


Figure 7

NOTE: Be sure the receptacle is grounded. If in doubt, attach a No. 6 - AWG wire to the frame and stake it to the ground with an 8" copper or brass stake.

Generator — A generator may also be provided to be used in place of the Shoreline. See APPLIANCES & ACCESSORIES for operating instructions.

Circuit Protection — Your 120 VAC System is equipped with a Breaker Box (Figure 8) containing: Generator/Shoreline Interlocking Device, Shoreline Circuit Breaker, Generator Circuit Breaker, and circuit breakers for your appliance circuits. These breakers will break the circuit if it becomes overloaded.

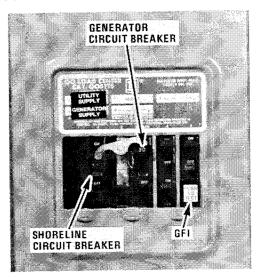


Figure 8

If a circuit breaker "trips", unplug all of the appliances on that circuit. Wait a short period of time to allow the breaker to cool. Reset the breaker by pressing down to the "OFF" position (Figure 9) and then pressing it upward to the "ON" position.

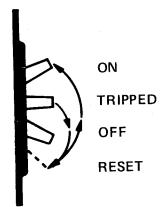


Figure 9

NOTE: If, after unplugging all appliances, the breaker continues to "trip", take your unit to your Coachmen dealer.

Generator/Shoreline Interlocking Device — The Generator/Shoreline Interlocking Device has been provided to prevent the simultaneous use of your generator with your Shoreline.

12-VOLT DC SYSTEM — In addition to your chassis system, a 12-Volt DC System has been provided for the operation of your furnace, refrigerator, interior lights, and other 12-Volt DC appliances. Power for this system is provided by either the auxiliary battery, or 12-Volt DC Converter.

Auxiliary Battery — The unit is equipped with an auxiliary battery to replace the 12-Volt DC Converter when a 120 VAC service is not available.

The battery is charged by either the 12-Volt DC Converter, or the engine alternator (when engine is running).

Circuit Protection — The 12-Volt DC System is protected by a Fuse Block (Figure 10). Should a circuit become overloaded, that fuse will blow.

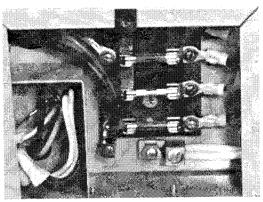


Figure 10

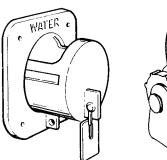
Turn off or unplug all of the 12-Volt fixtures on the blown circuit. Replace the fuse.

NOTE: If the fuse continues to blow, contact your Coachmen dealer.

#### FRESH WATER SYSTEM

The fresh water system of your unit is comprised of a water tank, 6 gallon water heater, two water fills, and a 12-Volt DC "DEMAND" Water Pump.

WATER TANK — The water tank of your unit is used to store water when a pressurized water source is not available. The water tank is filled through the Gravity Water Fill (Figure 11).





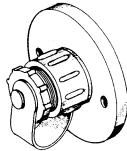


Figure 12

12-Volt DC "Demand" Water Pump — The 12-Volt DC "Demand" Water Pump is used to pump water from the water tank, through the water system, to the water heater and faucets.

CITY WATER RECEPTACLE — The City Water Receptacle (Figure 12) is used when a pressurized water source is available. Connect the City Water Receptacle to the pressurized source with a hose certified for use with potable water.

NOTE: If water pressures exceeding 60 psi are expected, use a pressure regulator to protect your water system from rupture.

NOTE: Because of a built-in check valve, the water tank cannot be filled through the City Water Receptacle.

GRAVITY WATER FILL — The Gravity Water Fill (Figure 11) is used to fill the unit's water tank. Pull the fill spout outward with the handle. Fill the water tank by pouring water into the top of the fill spout.

#### SEWAGE SYSTEM

Your unit has been equipped with a system for holding sewage until it can be emptied into a sewage disposal system. This system consists of a toilet, drains and pipes, and holding tank(s).

TOILET — The toilet in your unit is a marinetype toilet draining directly into the holding tank.

To flush the toilet, step on the large plastic pedal. If you desire more water in the bowl, depress the small foot pedal until a satisfactory water level is attained.

DRAINS AND PIPES — If your unit is equipped with a Gray Water Holding Tank, the drain lines will terminate into the tank; otherwise, the drain lines will terminate at the Termination Valve (Figure 13).

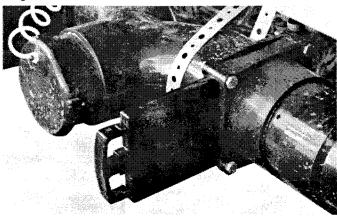


Figure 13

HOLDING TANK(S) — Your unit has one, possibly two, holding tanks to be used when sewage disposal is not available.

When sewage disposal facilities are available, connect the Termination Valves to the sewage disposal facilities with the Bumper Sewer Hose (Figure 14).



Figure 14

NOTE: While hooked up to sewage disposal facilities for any length of time, DO NOT leave the Termination Valve open. This will help prevent a solid waste build-up in the Holding Tank. Dump your Holding Tank when it is one-quarter full.

#### APPLIANCES AND ACCESSORIES

This section will help you become familiar with the operations of the appliances and accessories in your unit. The two basic types of appliances are: LP gas appliances, using LP gas as the primary mode of operation; and electrical appliances, using electricity as the main source of power.

#### LP GAS APPLIANCES

The appliances using LP gas as the primary mode of operation are: Furnace, range, oven, and refrigerator.

NOTE: The refrigerator is a multi-mode appliance. (See Electrical Appliances for electrical operating instructions.)

Prior to attempting to use any of these appliances, open the POL Valve (Figure 6).

FURNACE — Close the Furnace POL Valve (Figure 15). Adjust the thermostat to its highest setting (Figure 16). Wait 5 minutes with the blower running. Set the thermostat to its lowest setting.

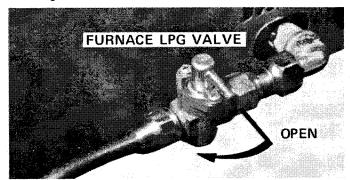


Figure 15



Figure 16 🕍 👢

Open the Furnace POL Valve. (NOTE: Furnace POL Valve must be completely open for proper operation). Set the thermostat to desired temperature. Allow 15 seconds for burner ignition.

If burner does not light, set the thermostat to the "OFF" position. Wait 15 seconds.

Return the thermostat to the desired temperature and wait 15 seconds for ignition.

If, after repeating this procedure three times, the furnace fails to light, return the thermostat to the "OFF" position. Close the Furnace POL Valve and notify your Coachmen dealer.

NOTE: Do not attempt to repair your furnace yourself. LP gas can kill.

#### RANGE -

Lighting — Turn the Control Knob counterclockwise to the full "ON" position. Hold a lighted match close to the burner. The flame may be adjusted by turning the Control Knob clockwise.

#### OVEN -

Lighting — Depress and turn the Oven Control Knob (Figure 17) counterclockwise from "PILOTS OFF" to "OFF". Open the oven door and hold a lighted match next to the "CONSTANT PILOT" area (Figure 18).

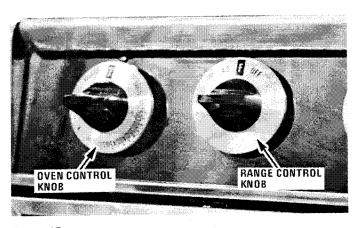


Figure 17

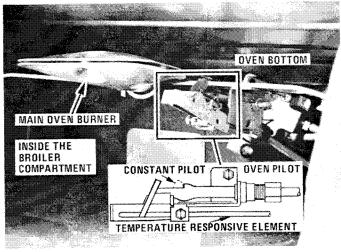


Figure 18

Using — After the pilot is lit, turn Oven Control Knob to the desired temperature. Ignition will take place about 45 seconds after the thermostat is set.

NOTE: Turning the screw clockwise will prepare your oven for natural gas, which will cause your oven to function erratically on LP gas.

Heater Pilot Adjustment — Turn the Oven Control Knob to 350°. Remove the knob and turn the pilot adjustment screw either direction until the flame envelops the Temperature Responsive Element.

#### REFRIGERATOR -

LP Gas Operation — Pull the "OFF/12V/ELEC/GAS" Selector outward and turn it counterclockwise to the "GAS" position. Turn the gas thermostat to the highest number on the dial.

Pull out on the LPG Valve (Figure 19) and wait 10 seconds. Push in on the Lighter. You may have to depress the Lighter several times until you see a light in the Reflector. After the gas has ignited, hold the LPG Valve another 5 seconds, then release.

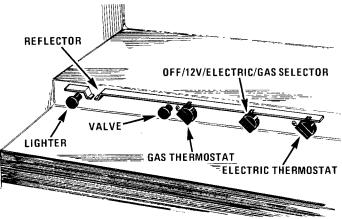


Figure 19

WATER HEATER — The water heater is an LP gas appliance capable of heating 6 gallons of water to a pre-set temperature.

Lighting — Turn the Lighting Control Dial (Figure 20) to "OFF". Wait 5 minutes to allow accumulated gas to escape.

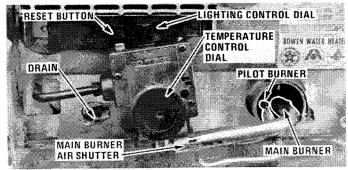


Figure 20

Your unit may be equipped with either the Robertshaw "UNITROL" Thermostat (Figure 20), or the ITT General Control Thermostat (Figure 21).

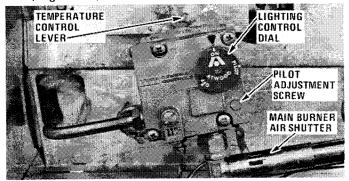


Figure 21

Robertshaw "UNITROL" Thermostat — Turn the Lighting Control Dial to "Pilot". Press and hold the Reset Button while you apply a lighted match to the Pilot Burner (Figure 20).

ITT General Control Thermostat — Turn and hold the Lighting Control Dial to the "Pilot" position as you hold a lighted match to the Pilot Burner.

Release the Lighting Control Dial after the pilot has burned about 30 seconds. Adjust the Lighting Control Dial to the "ON" position.

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

#### **ELECTRIC APPLIANCES**

The appliances using electricity as a primary mode of operation are: roof air conditioner, converter, water pump, range hood, generator, and the refrigerator. Prior to operating any of these appliances, read DESCRIPTION & OPERATION OF SYSTEMS.

ROOF AIR CONDITIONING — Your roof air conditioner is operated from the Control Panel attached to the ceiling. The panel consists of three controls; Temperature Control (Figure 22), Air Volume Control (Figure 23), and Mode Selector (Figure 23).



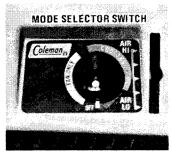


Figure 22

Figure 23

Temperature Control — Turn the control clockwise for colder air and counterclockwise for warmer air.

Air Volume Control — Slide the Air Volume Control Lever upward for greater volumes of air and downward for less air.

Mode Selector Switch — Turn switch to desired mode of operation.

Cooling — Use to cool the interior temperature of your unit.

Turn the Mode Selector Switch to "COOL-ING". Adjust the Air Volume Control Lever to the greatest output for the fastest cool down. Turn the temperature to the desired setting. As in the Elect-A-Heat Mode, the cooling mode will keep the temperature within a few degrees of the Temperature Control setting.

NOTE: When operating with the cooling mode in areas of high humidity, keep the Air Volume Control set at maximum output to keep condensation to a minimum.

Fan Only — This mode of operation is used to recirculate the air inside your unit. In addition to circulating the air, it also filters the air. The fan and filters operate during each mode of operation, but this particular mode has no heating or cooling function.

12-VOLT DC CONVERTER — Your 12-Volt DC Converter has no operating instructions. For a description of the function of your converter see DESCRIPTION & OPERATION OF SYSTEMS.

WATER PUMP — Your water pump is a 12-Volt DC appliance with a switch located above the kitchen counter top. To activate the pump, turn the switch "ON". After the pump switch is turned "ON" a built-in pressure switch will cause the pump to run until it builds pressure in the line. After the pressure reaches a certain point, the pump will automatically turn off until the pressure drops.

RANGE HOOD — The range hood is a 12-Volt DC appliance used to draw carbon monoxide (by-product of burning LP gas), smoke, and cooking fumes out of the unit. The fan is activated by a Rotating Knob Switch (Figure 24), located on the front of the hood. On some models there is also a light activated by a Rotating Knob Switch (Figure 24), located next to the fan switch.

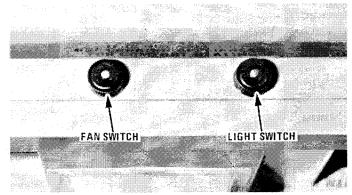
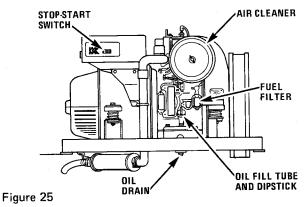


Figure 24

GENERATOR — Your generator is a gasoline powered appliance. When adjusted properly, it will produce 120-Volts, 60-cycle, alternating current. See CARE & MAINTENANCE for proper adjustment specifications.

Pre-Start Check — Prior to starting your generator: check the engine oil level; make sure the air intake and exhaust outlets (Figure 25) are clean and free of obstructions; clean the generator compartment; clean sediment and water from the fuel filter (Figure 25). Make sure the "Shoreline/Generator Interlocking Device" (Figure 10) is switched to "SHORELINE OFF" and "GENERATOR ON".



Start — Press the "STOP/START" Switch to the "START" position and hold until the generator starts and then release. The switch will return to a neutral position.

Use — After the generator has started, switch the "Shoreline/Generator Interlocking Device" to "SHORELINE OFF" and "GENERATOR ON".

NOTE: The "Shoreline/Generator Interlocking Device", has been installed to prevent operation of both power sources at the same time. Operation of both sources at the same time will cause a great deal of damage and a strong possibility of personal injury.

Stopping — About 5 minutes prior to stopping the generator, switch the "Shoreline/Generator Interlocking Device" to "SHORELINE ON"/ "GENERATOR OFF". Let the generator run approximately 5 minutes to allow it to cool down.

After the generator has cooled, press the "STOP/START" Switch to the "STOP" position and hold until the generator stops.

#### REFRIGERATOR -

Electrical Operation — Turn the "OFF/12V/ELEC/GAS" Selector (Figure 19) to either the "12V" or "ELEC" positions. Turn the Electric Thermostat to the coldest setting.

## **CARE & MAINTENANCE**

To insure long, trouble-free service from your unit, the following maintenance procedures must be followed. (See your Chassis Manufacturer's Owner's Manual for the proper care and maintenance of the automotive portions of your unit.)

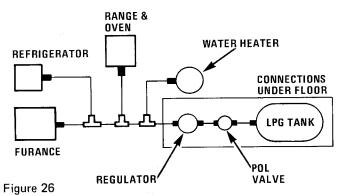
NOTE: To insure that the proper procedures and parts are used, and that the unit is well cared for, return the unit to your Coachmen dealer periodically for maintenance work.

#### LP GAS SYSTEM

GAS LINE CHECK — Check the LPG lines and connections regularly before, during, and after each camping season, or after every third refill, whichever is more frequent.

Gas Line Checking Procedure — Turn off all LP gas appliances (range, oven, furnace, and

refrigerator). Open all windows, doors, and roof vents to allow the gas to dissipate. Turn on POL Valve (Figure 6). Apply a soapy water solution to all Gas Line Connections (Figure 26). Bubbles indicate a leak. Tighten leaking connections until bubbling stops. Repeat the testing procedure. If the garlic odor persists after all connections have been tested, contact your Coachmen dealer.



NOTE: Coachmen technicians checked your LP gas system prior to shipment. However, leaks may develop while your unit is in transit. We recommend that you recheck it before your first trip.

REGULATOR PRESSURE — Check the LP gas pressure at the beginning of each camping season and after every third refill. Correct line pressure is 11" water column. Your Coachmen dealer has the necessary equipment to perform these checks.

LP TANK UPKEEP — Periodically inspect the LP tank for rust and general appearance. Sand off rust and paint with rust preventative paint.

#### LPG APPLIANCES

FURNACE — The furnace does not require routine maintenance or cleaning. The carbon deposits that may form on the inside of the combustion chamber, may be removed with a vacuum sweeper.

#### RANGE -

Burners — Use a toothpick to clean clogged burner orifices. DO NOT use a metal object, such as an ice pick, screwdriver, wire, etc., to unplug burners. These objects will distort the openings, which in turn will affect burner operation.

Porcelain Surfaces — Allow the range top to cool off, then clean with dishsoap and hot water. Porcelain may craze with hairline cracks if you attempt to clean with water while hot. Use a non-abrasive cleaner to remove stubborn stains.

Chrome Surfaces — Use a damp cloth to clean chrome surfaces. Grease spatters, which may bake onto the surfaces, may be removed with chrome polish.

OVEN — Clean the oven with commercial cleaner after each trip. DO NOT apply cleaner to aluminum gas tubing, thermostat sensing bulb and electrical components.

#### **WATER & DRAIN SYSTEMS**

SANITIZING WATER TANK — Sanitize your unit's water tank: before initial use; after a period of nonuse; when tank is suspected of being contaminated.

Open the Water Tank Drain Cock (Figure 27). This device is attached directly to the water tank. After the tank is empty, close the cock. Mix 3 gallons of water with three-quarters cup Clorox or Purex household bleach. Pour solution into the tank through the Gravity Water Fill (Figure 11). Wait three hours. Drain and flush tank with fresh, potable water. If chlorine taste lingers, pour 1 quart of vinegar and 5 gallons of water into the tank. Wait several days before draining tank. Flush tank with fresh, potable water.

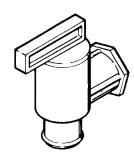


Figure 27

WATER PUMP— The water pump does not require routine maintenance or cleaning.

If water pump fails to start when you turn on the switch, check the fuse. Depending on your model, the fuse will either be located inside the converter (Figure 10) or in an in-line fuse holder next to the pump.

If the pump continues to operate whether the faucets are opened or closed, check the water tank — it is probably empty.

DRAIN PIPING — Use clear water to clean exterior pipe surfaces. DO NOT use harsh detergents or lacquer thinner. DO NOT pour harsh cleaner chemicals or solvents into the drains.

AQUA MAGIC — Use AQUA BOWL CLEANER as directed on bottle. If the slide valve does not move freely, apply silicone spray.

WATER HEATER — See STORAGE and WIN-TERIZING Sections in this Manual.

#### **ELECTRICAL SYSTEM**

BATTERY — Check the liquid level at least once a month. It must be above the plate. Add either distilled or other mineral-free water. Keep terminals free of dirt and corrosion. Use a hydrometer to check battery charge. When specific gravity is below 1.225, recharge the battery until 1.260 is indicated.

WARNING: If the battery must be "Quick Charged", turn off the electrical portion of the refrigerator.

AM/FM/MPX STEREO RADIO & 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 head, 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.

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

ROOF AIR CONDITIONER — Remove and clean the filter at least once every two weeks if air conditioner, or Chill Chaser are used extensively. Wash in soap and water. DO NOT operate air conditioner for extended periods of time without a filter.

GENERATOR — The following procedures, along with those procedures specified in the Generator Manufacturer's Manual, should be completed in order to maintain your generator in top operating condition.

Daily or before each start up — Check oil level. Clean cooling air inlets and outlets. Remove loose dirt from generator compartment.

Change oil every 50 hours or six months, whichever occurs first. If operating in dirty, dusty conditions, change oil more frequently. Drain oil from crankcase. Use oil specified in the Generator Manufacturer's Manual. Remove the air cleaning element. Clean by tapping it against a flat surface.

Every 100 to 200 hours (depending on operating condition) take your unit to an authorized service center for the manufacturer's recommended maintenance.

#### INTERIOR

SINKS — Clean the kitchen and bathroom sinks with non-abrasive cleanser. Stainless steel cleaner may be purchased at any grocery store. ABS cleaner, such as AQUA K-7, may be purchased from your Coachmen dealer.

TABLE AND COUNTER TOPS — Clean the table and counter tops with warm water and liquid dishsoap.

WOODWORK — Clean woodwork with commercial household furniture polish. DO NOT use water to clean wooden surfaces. Scuffs may be covered with commercial furniture wax and stain mixture. Scratches may be covered with PUTTY STIC.

VINYL FLOOR COVERING — Sweep and damp mop the vinyl floor covering regularly. Use a mild detergent and wax occasionally.

CARPETING — Vacuum the carpeting as required. Use commercial carpet shampoo as required.

CLOSET, DRAWERS & STORAGE COMPART-MENT(S) — Remove clothes, linen, can goods and other food items. Clean wooden surfaces with commercial household furniture polish. Wash plastic drawers in warm water and liquid dishsoap.

REFRIGERATOR — Remove food, water and ice after each trip. Clean the interior of the refrigerator with warm water and liquid dishsoap and wipe dry. DO NOT use abrasive cleaning material because it will scratch the surfaces.

If you do not intend to use your unit for an extended period, prop open the door. This will help prevent musty odors within the refrigerator.

To defrost the frozen food compartment: remove frozen food and ice; turn off the thermostat; place a pan of hot water inside the compartment; dry the interior with a clean soft cloth.

#### **EXTERIOR**

BODY — Wash the dust and dirt, road tar, bird and tree droppings, insects and other foreign material from the exterior surfaces. Use a mild soap in either cold or lukewarm water.

WARNING: To avoid marring the body surfaces: DO NOT use abrasive cleaning compound or cloth; DO NOT wipe surfaces with a dry cloth; DO NOT wash or wax unit in the hot sun. Wait until the body surfaces have cooled before washing or waxing.

ROOF — Coat all roof seams, roof edges and around vents with top quality roofing cement at least once each season. Coat awning rails and window seams with silicone.

TIRE INSPECTION — Inspect tires before each trip. Replace tire when its tread is worn to 1/16" depth in two or more adjacent grooves, or to the level of tread indicators which are molded into the bottom of tread grooves. Each morning, check the tire pressure and condition. Note that heat, which is generated by surface friction, will increase a tire's air pressure by approximately 6 to 9 lbs. psi; therefore, do not bleed air out of a hot tire. See the SPECIFICATIONS section of your Chassis Manufacturer's Owner's Manual for correct tire air pressure. When purchasing a new tire, be certain it is the same size and has the same ply rating or load range as the old tire. DO NOT mix radial ply with bias or biasbelted tires.

CAUTION: Before your initial trip and after each time you change a tire, tighten the lug bolts to the specified torque every 50 miles for the first 200.

## **STORAGE**

In addition to the procedures described in CARE & MAINTENANCE, we suggest that you perform the following storage procedures.

#### SYSTEMS

LP GAS SYSTEM — Turn off the LP gas at the POL Valve (Figure 6).

ELECTRICAL SYSTEM - Turn off all breakers.

Remove the battery and store in a warm dry place.

NOTE: Do Not store the battery in an area where it could be exposed to extreme heat or sparks.

FRESH WATER SYSTEM — Drain the water system at the Drain Cock (Figure 27). Drain the water heater.

#### **EXTERIOR**

Cover the unit or store it in a garage or shelter.

#### INTERIOR

Close and secure all doors and windows. Open a roof vent slightly to allow air circulation.

NOTE: Be sure not to open the roof vent far enough to allow rain to come in.

#### WINTERIZING

When planning to store your unit in cold climates, we recommend that you perform the following procedures in addition to those contained in CARE & MAINTENANCE and STORAGE. Be sure to check the Chassis Manufacturer's Owner's Manual for automotive winterizing instructions.

WATER SYSTEM — Pour three gallons of nontoxic, plastic pipe anti-freeze, into the Gravity Water Fill (Figure 11). Add three gallons of water.

Open all faucets and the water heater Drain Cock. Turn on the pump.

Allow the anti-freeze solution to circulate throughout the system.

NOTE: Be sure to flush the toilet until antifreeze is present in the bowl.

DRAIN SYSTEM — When circulating the antifreeze solution through the water system, fill all of the sinks and the toilet to about one-half full.

After circulating all of the anti-freeze solution through the fresh water system, remove the drain plugs to allow the anti-freeze solution to circulate through the drain system.

NOTE: DO NOT USE AUTOMOTIVE ANTI-FREEZE TO WINTERIZE YOUR RV SYSTEMS.

#### FIRE SAFETY

Fire safety is a major subject in the RV industry. We at Coachmen feel that fire prevention is the key to fire safety.

#### **FIRE PREVENTION**

To prevent fires, your unit has been engineered to comply with federal and state regulations, and approved by the Recreational Vehicle Institute (as well as your own state agencies). This, unfortunately, is not enough if you, as the owner, fail to maintain your unit as described in the CARE & MAINTENANCE section. It is extremely important that you take special notice of your LP gas system, and maintain it properly.

Fires can also be prevented by adjusting personal habits, such as not smoking in bed; overloading electrical circuits; leaving meals cooking on the range; tampering with the electrical circuitry or fuses; etc.

#### **FIRE EMERGENCY**

The prevention of personal injury is the primary concern in case of fire. We recommend that you, and all members of your party familiarize yourselves with the emergency features of your unit.

FIRE EXTINGUISHER — A chemical fire extinguisher has been provided with your unit. Be sure that everyone knows its use and location.

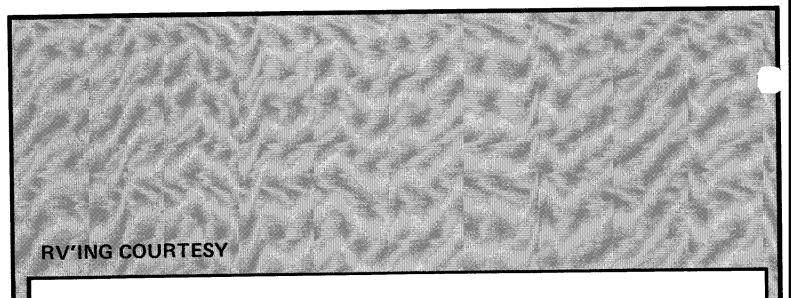
Use — The fire extinguisher has been provided for small fires only. Contact your local fire department for instructions on its use.

EXITS — In case the fire cannot be extinguished by one extinguisher, GET OUT. This is accomplished through the main door.

CAUTION: Do not attempt to extinguish any fire with water. To do so could cause adverse effects of your efforts.

## **EMERGENCY CONTACTS**

DOCTOR	NAME		NAME		
	ADDRESS		ADDRESS		
	PHONE	(AC )	PHONE	(AC	)
RELATIVE	NAME		NAME		
	ADDRESS		ADDRESS		
	PHONE	(AC )	PHONE	(AC	)
NEIGHBOR	NAME		NAME		
	ADDRESS		ADDRESS		
	PHONE	(AC )	PHONE	(AC	)
FRIEND	NAME		NAME		
	ADDRESS		ADDRESS		
	PHONE	(AC )	PHONE	(AC	)
POLICE	PHONE	(AC )	PHONE	(AC	)
FIRE	PHONE	(AC )			
INSURANCE	NAME		NAME		and the second s
AGENT	ADDRESS		ADDRESS		
	PHONE	(AC )	PHONE	(AC	)



While on the road, parked at a rest area, or set up at a campsite, you will be representing all RV'ers. The general public will relate your actions to all other RV'ers. Help promote recreation vehicles by observing the following suggestions.

#### **DRIVING**

Comply with all driving regulations of each state through which you drive.

Pull well off the road, as soon as possible, when four or more vehicles line up behind you waiting to pass.

DO NOT litter the highways - use trash bags.

Contact local or state police for regulations which pertain to overnight roadside or rest area parking before you park in a questionable location.

## **CAMPING**

Before parking on private property, obtain permission of owner or caretaker.

Be considerate of your neighbor. Radio, tape deck or TV volume and parties to the wee hours of the morning should be regulated so you do not disturb your neighbors.

Comply with rules and regulations which are posted at commercial or government operated campgrounds.

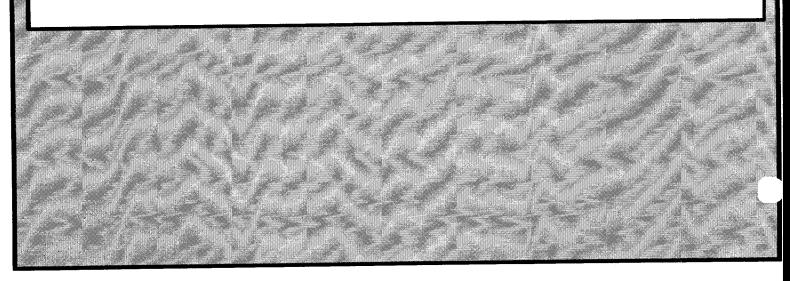
Depending on the state and the season, a campfire permit may be required.

When building a campfire, exercise caution: remove grass and brush from immediate area; never leave fire unattended; and make sure the fire embers are completely extinguished before departing campsite.

DO NOT ruin natures beauty by chopping down or damaging trees and shrubbery. When building a campfire, pick up branches and brush from ground.

Pick up broken glass, paper and other refuse, whether it is yours or someone elses, before departing your campsite.

Empty gray water and waste water holding tanks at designated dumping stations. DO NOT dump them on the ground or in rivers or other water resources.



っ



COACHMEN DRIVE MIDDLEBURY, INDIANA 46540