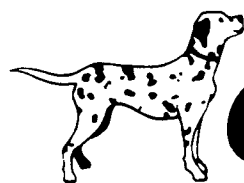


1974

**CAMPING TRAILER**

**OWNER'S  
MANUAL**



**Coachmen**  
INDUSTRIES, INC.





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# **Coachmen**

## **RECREATIONAL VEHICLE LIMITED WARRANTY**

Coachmen Industries, Inc., Middlebury, Indiana, warrants to the original retail purchaser only, for a period of twelve (12) months immediately following purchase, that this new Coachmen Recreational Vehicle (excluding Motor Home chassis, tires, tubes, batteries, and optional generators) manufactured by Coachmen Industries, Inc. and sold to the original retail purchaser by an authorized Coachmen dealer is free from defects in material and workmanship under normal use and with reasonable and necessary maintenance. Coachmen Industries, Inc. will repair or replace at its option any defective part or parts thereof which shall within the twelve (12) month period immediately following purchase by the original retail purchaser be returned freight prepaid to an authorized Coachmen dealer or a Coachmen factory-operated service center.

The repair or replacement of such defective parts under this warranty shall be made within 45 days from the time the replacement part or parts are in the hands of the authorized repairing dealer without charge for parts or labor.

Without regard to any alleged defect, Coachmen Industries, Inc. does not, under any circumstances, assume any responsibility for loss of use of the vehicle, loss of time, inconvenience or other consequential damage arising as a result of a breach of warranty, expressed or implied, including expenses for transportation, telephone, lodging, travel, loss or damage to personal property or loss of income.

The provisions of this warranty shall not apply to normal deterioration of soft trim and appearance items due to wear and/or exposure; nor shall this warranty apply to any Coachmen product which is used for commercial purposes or held for rental or hire, or is subjected to misuse, neglect or accident. All repairs and/or alterations must be performed by an authorized Coachmen dealership or factory-operated service center unless prior written approval has been obtained from Coachmen Industries, Inc.

Coachmen Industries, Inc. reserves the right to make changes in design and changes or improvements upon its products without imposing any obligation upon itself to install the same upon products theretofore manufactured.

This warranty is expressly in lieu of any other express warranties, written or verbal, made on the part of Coachmen Industries, Inc., who does not undertake responsibility to any purchaser of its products for any undertaking, representation or warranty made by dealers beyond those herein expressed. Any implied warranties as to this Coachmen Recreational Vehicle including any warranty of merchantability or fitness for a particular purpose are limited to the original retail purchaser for a period of twelve (12) months immediately following the date of purchase. This warranty is not assignable or transferable.

In the event that a satisfactory remedy is not obtained under the provisions of this warranty the purchaser has the legal remedies made available to him by the Magnuson-Moss Warranty—Federal Trade Commission Improvement Act Public Law 93-637, and any applicable state statutes.

## APPLIANCE AND COMPONENT IDENTIFICATION SHEET

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER
Camping Trailer	COACHMEN		
Refrigerator			
Range			
Furnace			
Tires			
Spare Tire (Opt.)			
Converter			
Door Key			

Should you need service on your unit, be sure that you identify the motor home and/or equipment and serial numbers when you contact the dealer for assistance.

NOTE: For your convenience we suggest you complete this page for easy reference.

### CAMPING TRAILER SPECIFICATIONS

MODEL	TOTAL WEIGHT	HITCH WEIGHT	LOAD CAPACITY	TIRE SIZE	TIRE PR	TIRE INFLATION
16' Casualine	990	110	300	4:80 x 12	B 1	60
18' Casualine D	1480	200	300	5:30 x 12	B	55
18' Casualine FG	1480	200	300	5:30 x 12	B	55
20' Casualine D	1610	190	300	5:30 x 12	C	80
20' Casualine SG	1610	190	300	5:30 x 12	C	80
20' Casualine DD	1610	190	300	5:30 x 12	C	80
20' Casualine RG	1610	190	300	5:30 x 12	C	80
18' and 20' Optional			20.5 x 800 x 10		C	50

**Notes:** Maximum load and inflations are based on normal highway speeds. Any additional weight added to the trailer other than noted above, must be deducted from load capacity. Pressure should be checked when tires are cold. Tires are not covered under tire manufacturer's warranty for road hazard or abnormal wear.

Total weight and hitch weight is with all systems dry and the following options installed:

1. Empty 20-pound LP bottle
2. Spare tire and wheel
3. 35-pound ice box

It is not necessary to carry maximum tire pressure when you are not loaded to maximum load capacity. However, never operate tire pressure under 55 psi (with exception of optional wide ovals).

All Canadian units meet CSA Standards.

## CHAPTER 1

### BEFORE TAKING DELIVERY

Your dealer has been trained and has the experience to properly condition and service each unit before making delivery. This service includes the following:

1. Checking the door and lock
2. Checking mouldings and caulking where necessary
3. Touching up scuffs and scratches
4. Cleaning the interior
5. Testing light fixtures, appliances and outlets
6. Checking water and gas systems
7. Checking running gear—brakes, wheel bearings, wheel lugs, and tire pressure
8. Checking heating and cooking appliances

This inspection and service should be performed before you take delivery. Do not hesitate to ask questions about anything you do not understand. Your dealer will be glad to give advice and demonstrate the operation of appliances and accessories.

**CAUTION:** Before moving this unit personally check the wheel lugs (see section on care and maintenance of running gear) for tightness.

## CHAPTER 2

### LPG SYSTEM

The gas system provides for cooking your meals, warming your trailer in cold weather and also operates the gas/electric refrigerator when you set the refrigerator on gas. LPG is convenient, safe in operation and in most cases, readily available. The gas is carried with you and can be used anywhere since no external hook-up is required. Do **not** connect your trailer to natural gas. Your appliances are designed to work on LPG.

LP-GAS (Liquified Petroleum Gas) is a true gas compressed into liquid form for easy transportation and storage. It is also known as butane, propane, or bottled gas. It is safe, economical, and because of its portability, provides modern living conveniences no matter where you travel.

The LP gas system in your Coachmen Camping Trailer consists of gas container(s), shut-off valves, a pressure regulator, furnace, gas/electric refrigerator and stove/oven. The furnace and refrigerator are optional.

Butane and propane are the two fuels used. Butane boils (makes vapor gas) at temperatures above 32

degrees F. Propane boils (makes dry gas) at temperatures above 44 degrees F. below zero.

**Note:** Two gas bottles are optional.

### LP Gas Tanks Should Not Be Overfilled

The LP gas tanks in your Coachmen Camping Trailer are designed with a substantial safety factor. This means they are tested to withstand pressures well in excess of what they normally would be subjected to in ordinary usage. Every LP gas tank has a safety feature built into it because they are designed to be filled only to 80% of capacity.

The other 20% volume provides vapor space which allows "expansion" room and vapor withdrawal through a service valve as the outside temperature rises. Fill the tank only to 80% full.

### How Much LP Gas Do I Have in My Tank?

The only accurate way to determine how much LP gas you have in a tank is to weigh the tank, then subtract the tare weight of the tank (which is stamped on the tank name plate) to arrive at the correct weight. A 20-pound tank is filled to roughly 80% when it weighs 20 pounds plus the tare weight. The same formula applies to a 30-pound tank.

To remove a gas tank, close the tank valve and disconnect the tubing nut, using a tight-fitting wrench. This nut has a left-hand thread. Always turn it clockwise to loosen and counter-clockwise to tighten. If you have the optional double tanks, loosen the bar handle located between the two tanks which holds the tanks in place. With single bottle, remove the regulator from the tank for refilling.

To re-install a tank, set the bottle on the mounting plate, connect the gas line, tubing nut, turn left-hand thread out and tighten with wrench. With double tanks, tighten the bar handle to hold the tank in place. With a single bottle, rotate the lever right or left, which disengages the top collar of the tank allowing you to tip the tank toward the unit and slide it off the retaining pin in the bracket.

**Never** open the valve on both tanks at the same time, as you will drain from both tanks unless you have an automatic changeover valve. **Always** close the gas valve on the tanks while traveling. (This is the law in many states.)

In selecting the proper fuel, temperature and climate will probably limit your choice. In sub-tropical areas, hot desert or any warm locale, butane is the best because it has a higher boiling point. That is, it converts from a liquid to a gas at any temperature over 32 degrees F. Below that point, butane will not function. In cold climates, propane would be the logical choice since its boiling point is way down to 44 degrees below zero. It is unlikely that many trailer owners will experience such low temperatures. In actual practice, many companies today are offering a mixture of butane and

propane. The boiling point would be somewhere between 44 degrees below zero and 32 degrees above zero F., a wide enough latitude to handle most every season. Local conditions will determine the selection of the LPG the supplier offers for your tanks.

Butane and propane as a gas are both heavier than air. That simply means that when released into the atmosphere, butane and propane will flow to a low point. Actually, both gases diffuse with air quite readily. Butane and propane are tasteless and odorless. That peculiar odor you often smell is an artificially introduced chemical which allows the detection of escaping gas.

Your dealer should have checked out your gas system before delivery. If you have any doubts, have an authorized LP Gas serviceman check your system for leaks. The gas system was inspected prior to leaving the factory; however, we strongly recommend another check. We recommend that a gas system check be made each time the gas bottles are refilled or anytime you smell gas.

Never allow an open flame or smoking near trailer during gas check-out procedure. Never check for leaks with an open flame. To check the gas system, shut off all knobs and controls on gas range, refrigerator, and furnace/heater. Make sure the valve on the tank is open. Then check each and every fitting, valve, or con-

nection with a soapy solution. Bubbles will appear where there is a gas leak. If a leak appears, tighten the fitting with a wrench until the bubbles stop. Be sure to check the fittings under the coach, as well as those inside the cabinets and adjacent to appliances. After you have made sure all fittings are tight, you are ready to use the system. Lighting of each appliance is discussed in the section dealing with appliances.

Anytime you light or relight a pilot, be sure the gas controlling device (knob, valve, etc.) has been in the "off" position for ten minutes or more. This should allow the dissipation of any gas which may have collected around the device.

### **Do Not Use the Range for Heating the Camping Trailer**

Anytime appliances are lighted, you should have a window or vent open for ventilation. The furnace heater and gas/electric refrigerator have sealed combustion chambers vented to the outside.

Each 20-pound tank contains approximately five gallons of LP gas. There are 103,000 BTU per gallon. Multiplying this out, there are over one million BTU's in two full 20-pound tanks. If you take the BTU input on each appliance, you can calculate just how long a bottle will last, depending upon your own rate of use.

## **CHAPTER 3**

### **APPLIANCES**

#### **Gas Bottles**

All Coachmen models have three-burner ranges except the 16', which has two. To light the range, push in the knob and turn it to the left. You will have to light it with a match since there is no pilot light. **Be sure a vent is open while operating the range.**

On all models, except the 16', an in-out range assembly is available. To move the range from inside to outside, use the following steps:

1. Remove the grill and burner cover
2. Remove the thumb screw from the bottom of the unit
3. Disconnect the flexible gas hose located under the tip-over galley
4. Carry the stove to the outside and install the brackets provided on the outside of the unit using the two stove legs supplied
5. Reconnect the gas hose to the quick disconnect of the side of the unit

#### **Gas Heater**

The heater has been engineered to perform efficiently with built-in safety features and spare requirements. Follow lighting instructions found on the heat-

er, or in the manufacturer's manual which is supplied with each trailer.

#### **Ice Box**

You should oil your latch every spring and fall to keep it working smoothly. To clean the inside of the ice box, use a mild liquid cleaner and water. During the winter, the ice box door should remain open.

#### **Gas/Electric Refrigerators (Optional)**

There is very little maintenance required for the refrigerator. If it does not function properly, the problem is probably minor. Most coiling problems can be corrected by leveling the refrigerator or by making a small adjustment.

The following are considered to be part of the normal appliance maintenance:

- Adjustment of burner
- Adjustment of thermocouple
- Cleaning of burner jet
- Cleaning of by-pass screw
- Cleaning of check ball seat in thermostat
- Adjustment of gas pressure

**Note:** Manufacturer's instructions and maintenance sheet are included with refrigerator.



## CHAPTER 4

### ELECTRICAL

#### Car/Wiring Connector

A connecting pigtail is provided to wire into your car's wiring system. Special connecting clips are available at most camping or automotive supply stores, which eliminates the need to strip and tape wires.

Be sure there is enough slack in wire to allow turning radius, but not so much as to drag on ground or hang low and catch on passing objects. See wiring and lights for wiring codes.

#### Lights and Wiring

Your camper is provided with a two-circuit electrical system: a 12-volt DC system and a 110-125-volt AC system. Do not connect for higher voltage.

The 110-volt system is grounded. However, to complete this job, you must be hooked up to a grounded supply. A three-wire grounded plug is provided for this purpose.

It is the trailer park operator's responsibility to provide a grounded power source. However, if you have any reason to doubt the effectiveness of the grounding provision at the campsite, you should always insure proper grounding by a grounding stake. You can easily improvise this by running a heavy copper wire (no. 8) from the frame of the unit to a metal tent peg driven into the ground. Make sure both connections are good.

All 110-volt circuits are protected with circuit breakers or fuses. Should your power supply be shut off by the circuit breaker, it may be the result of temporary overload. If, after resetting, the breaker again releases, you should then check with a qualified electrician for the cause.

The 12-volt system is grounded through your hitch and pigtail. If a battery pack is used, one wire must be run to the frame of the camper and the other wire connected to the 12-volt hot wire (yellow) in your 6-wire cable.

The 12-volt wiring code is as follows:

- Red — left turn
- Brown — right turn
- Green — tail and clearance lights
- White — ground
- Blue — brake hot
- Yellow — interior appliance
- Black — converter hot line

#### Bulb Numbers

- Clearance Lights — Monarch GE 1895
- Tail Lights — No. 1034 GE Automotive
- 12V Interior — No. 1141 Automotive

#### 12-Volt Electrical System

The clearance light, tail lights, brake lights, and turn signals operate automatically when the pigtail is connected and your automobile lights are in use. The 12v interior light operates by means of a switch on the light(s) and is powered by connecting the car pigtail, or through the converter when the trailer is connected to 110v supply. Be sure the 12v interior light(s) is OFF before closing your trailer. A light that is left on will scorch your folded canvas.

#### 12-Volt Converter (All Models Except 16' Casualine)

The 12v converter and operating panel is mounted in the dinette on all models. The converter is protected by a reset button, located beside the converter switch.

Listed below is the proper operation of the three (3) position converter switch when using the 12v interior light(s).

1. "BATTERY" position when 12v car connector is attached to towing vehicle.
2. "TRANS" position when plugged into 110v source.
3. "OFF" or center position when trailer is closed for traveling or storage.

#### Do Not Hook Other 12-Volt Lights or Appliances to the Converter Coupler

Hitch — Quick lock trailer coupler (All models equipped with 2" Ball).

To Unlock — Lift locking button to vertical and lift locking lever.

To Lock — Push locking lever handle down until locking button snaps into place.

The coupler has a safety pin hole for the locked position. The use of a safety pin is recommended.

On models equipped with surge brakes only, refer to coupler operation and adjustment.

**Note:** Coupler is not pre-adjusted at factory.

## CHAPTER 5

### ACCESSORIES

#### Roof Latches

The roof latches are adjustable for more (or less) tension when securing the roof in travel position. Turn the clamp screw to tighten or loosen the latch so it is comfortable to engage, yet tight enough to compress the weather seal. Too much tension will cause undue stress on the latch. The roof need move no more than one-quarter inch from the down position to seal.

#### Table Beds

The dinette table(s) converts into beds by folding

the support leg under table top, raising the table top until the wall fastening disengages, and placing the table top between the seats on the ledges provided. The seat back cushions fit on top of the table to make a bed. The table leg folds by grasping the latch mechanism at the top of the leg and pulling down toward the floor.

When the table top is mounted on the wall, it may be moved from side to side to make entering the dinette seats more convenient. Sliding the table all the way to one wall increases countertop work space. To slide a table just raise the end slightly and push sideways.

When traveling, the table should be in the down position and fastened to the small section of wall bracket provided.

## CHAPTER 6

### RUNNING GEAR/BRAKES

#### Care and Maintenance of Running Gear

It is **VERY IMPORTANT** that the following items be checked by the dealer when a unit is new and by the owner prior to moving the trailer from the dealer's lot.

1. Tires inflated to recommended pressure.
2. Wheel lugs securely tightened. **Recheck at first 50 miles, 150 miles and 300 miles.**
3. Wheel bearings properly lubricated.
4. U-bolt nuts securely tightened.

For safer trailering, re-check items every 1000 miles or twice a season.

In an emergency, tires may be changed by (1) lowering the front jacks as far as possible, (2) placing the stacker jack under the rear of the frame at the corner, (3) cranking the front jack up until the wheel leaves the ground. It is recommended that a scissors jack or other suitable jack be placed under the frame when necessary to change tires. A bumper jack is not recommended because of the possibility of damage to the trailer side panels. It is suggested you carry a lug wrench of the correct size to periodically check the lug bolts. Wheels and tires should be checked often for wear, bearing lubrication, tire pressure and general condition. Under-inflated tires can cause a tendency to sway, shorten the life of the tread and decrease the load limit. Over-inflation can create a bouncy, rough ride exposing the contents of the trailer to breakage and increase the hazard of blowouts.

Wheel bearings should be checked often for lubrication and, if needed, a good grade of wheel bearing grease should be used for the packing of these bearings. Check rims and hubs for road damage, as a bent or

damaged wheel will create an uneven tire rotation and could bring about the loss of a wheel or trailer damage.

## CHAPTER 7

### LIFT SYSTEMS/CANVAS

#### Lift Systems

Your Coachmen tent camper will be equipped with one of two systems. The lift systems operate similarly with a few variants as listed below:

##### A. The Multiplex Outside Arm System:

The rear or the roof is always opened first. The rear latches are unbuckled and the pins removed from the "L" brackets. The rear of the roof is raised, and the pins placed in the forward holes on the rear "J" brackets. These brackets are located on the box of the trailer at the rear of each side. The pins are moved to the rear holes in the rear "J" bracket. When in this position, the pins and brackets hold the arms and roof rigid. The bunks are pulled halfway out and the bunk support rods removed from under the mattress. The canvas bow is flipped over and the tension leg of the bow placed in the bracket located on the bunk. Do not pull the bunk all the way out until you are ready to place the support rods under the bunk.

Next, enter the camper and rotate the tip-over galley and wardrobe into the upright position. The table is set up and the door removed from under the mattress and placed into position. It is held in place by two nylon turn buttons at the top.

**Note:** The canvas must remain attached to the unit when opening and closing. Do not remove the canvas from the lower aluminum rail.

#### To Close the Unit:

Remove the door, lower the table to the sleeping position, flip the tipover galley and wardrobe to the down position. Remove the bunk bow support leg and fold the bow to the center of the unit and engage the support leg in the nylon keeper. This is to prevent canvas damage or puncturing the mattress. Remove the bunk support rods pushing the bunk into the closed position. Remove the pins from the front "J" bracket and remove the first nine (9) inches of the canvas from the lower aluminum rail. Move the rear "J" bracket pins to the forward holes. Close the front of the roof making sure the lower edge of the roof has cleared the front edge of the box. Place the pins into the cast aluminum tie down hinge.

Next, remove the pins from the rear "J" bracket and close the rear of the roof. When the roof is about six (6) inches from the box, be sure all the canvas has been tucked into the interior of the camper. Buckle the rear latches and replace the pins into the "L" brackets.

#### **Helpful Hints:**

When you flip the bow over, reach into the camper from the side of the bunk flap. Use the same procedure to retrieve the bunk support rods from under the mattress.

When one person is closing the unit, place the pins into the hole provided in the hinge of the multiplex arm. This will allow the arm to remain in the semi-broken position. One person can then pull the roof down.

#### **Crank-Up System**

First, disengage all corner hold down latches. The crank-up system operates by simply inserting the cranking lever into position in the cranking mechanism located on the front left hand side of the unit. By cranking clockwise the roof is raised. To lower it, crank counterclockwise.

When securing the unit for travel and lowering the roof, make sure all canvas material is securely and completely tucked under the roof before lowering. When the roof has been lowered to a point approximately 18 inches from the bottom, again double check to see if all canvas is under the roof. Repeat this step about 3" from the bottom, then secure the roof.

#### **Canvas**

Canvas is porous to allow moisture to evaporate and prevent dampness and mildew from accumulating inside your camper. The sewn seams may leak through the needle holes until the thread has been wetted a few times and expands to seal the seams. A piece of wax (candle) may be used to seal a seam as well as to lubricate and waterproof a zipper. Setting up your trailer and pre-wetting with a hose will condition your canvas for future foul weather use while camping.

Prolonged use of cooking stove for heating of the camper can cause moisture to form on inside of the vinyl tent ends. It is not recommended to use stove for overnight heating.

At times, the moisture in the camper will manifest itself as droplets of water collecting on the underside of the bunk and canvas. This is the result of a drop in temperature of the outside air which causes condensation of the moisture in the trailer.

Condensation can be controlled by using the optional roof ventilator and slightly opening the bunk and windows or other windows. This will allow an up-draft of air across the bunk end canvas and greatly aid in the removal of the moisture-laden air.

The roof ventilator is available as an option for all models from your Coachmen dealer.

#### **Canvas Attachment**

The canvas sidewalls of your camper are attached to the roof and body by special aluminum extrusions. The canvas stays installed during set up and take down procedure.

The extrusion can be tightened to securely hold the canvas in place by lightly tapping along the edge with a small block of wood and a mallet.

If you should need to remove the canvas for repairs or eventual replacement, it will slip out of the extrusions by merely removing screws at each corner of the roof. This "permanent" attachment that can be easily removed is rain proof, wind proof, and dust proof. If the canvas appears to be tight in the rail, open the rail slightly with a screwdriver.

#### **IMPORTANT — PLEASE READ**

Information and suggestions for better care of your vinyl camper tent.

##### **A. Self Sealing Seams**

Some moisture may show in the seams of your Vinyl Breathable tent during the first wettings. This will disappear after a few rains. It will allow the "Quarapel Treatment" of the thread to fill the stitch holes along with normal shrinkage of the fabric at the stitch holes.

Also, the stitches in your new tent may seem like you can "see through" them; this is just the reflection of light coming through the dacron thread fibers and has no effect on water repellency.

##### **B. Vinyl Canvas Care and Usage Suggestions**

1. Certain insecticides will destroy water repellency of the window flaps. Avoid spraying directly on the tent. Protect tent from contact with cooking oils, detergents, grease, lubricating oils, fuel oil, kerosene or gasoline.

2. Moisture condensation sometimes forms under the vinyl bunk ends during heavy rain or dewy morning conditions. This will disappear upon contact with the sun quite quickly and can generally be avoided during wet, cold weather when heat is on by opening a window on the down wind side to permit air circulation. This condition is very similar to your own home in winter.

##### **3. Cleaning of the Tent**

Use a soft bristle brush to remove dust accumulation on the inside part of the tent. Use only a very mild **non-detergent soap** and water to remove soil from outside tent with only light

scrubbing. Be sure not to scrub seams with harsh brush. Frequent washings are better than less often using harsh cleansers.

#### 4. Prevention of Mildew

Mildew is a parasitic growth associated with dampness which can be most injurious to canvas. The most common symptoms are discoloration and a musty odor. Although tent canvas is treated, mildew resistant care must be exercised to help avoid mildew conditions. With proper care, there are many tents in constant use year after year.

- Never close camper wet for any period of time.
- Wash off any drippings or foreign matter on canvas from the trees with clear water. Keep tent clean at all times.
- If mildew is apparent, it should be treated promptly with a light solution of Naptha soap and water. Do not use a brush—a soft cloth is recommended. Also, Lysol spray is good.

#### 5. Care and Usage of Fiberglass Screening

When possible, fiberglass screening should be loosely folded, not crushed when opening and putting away tent. Be careful camper top does not come down and crush or cut fiberglass screening.

#### 6. Care and Usage of Nylon Zippers

The zippers used in your tent are nylon or metal and are the finest zippers available today. When opening or closing the windows of your tent, be sure to hold the flap up where it belongs and use the zipper to close the gap, don't pull and tug on the zipper to close the flaps on windows.

## CHAPTER 8

### CARING FOR YOUR TENT CAMPER

#### Special Tool Requirement

Before removing any part or parts of your trailer, due caution should be exercised in the selection of tools. You will note that screw heads throughout the trailer are not the familiar standard or Phillips head type. The screw fasteners used by Coachmen are designed for efficient use with impact or power-driven tools. Should you need to remove any trailer part fastened with this type of screw, you should always use a squarehead screwdriver which is available through your Coachmen dealer or most automotive parts supply stores.

#### Cleaning

The exterior of the camper is baked enamel pre-finished aluminum. No strong abrasives should be used in cleaning. Regular washing with mild soap and clear water is recommended. Touch up any nicks or scratches as they develop. It is a good idea to occasionally wax your unit.

The interior of the camper is of a rich-grained pre-finished plywood paneling. Give the walls and cabinetry the same care you would any fine wood furnishing found in your home. The ceiling is of durable vinyl-covered insulboard. Should it become soiled, almost any cleaning agent can be used to clean it.

To clean the gas range, use of a warm detergent solution and a soft cloth is all that is necessary to keep your range looking like new. This should be done as soon as the range cools.

Grease spatters and dirt that are allowed to become hard will eventually bake on and become very difficult to remove.

Burner caps may be cleaned by removing them from the burner heads and washing them along with the dishes. Be sure they are clean and dry before replacing them on the heads.

If any parts are stopped up, clean with a toothpick. Do not use metal instruments as they may distort or enlarge the ports.

**CAUTION:** Never use steel wool to clean burner caps or brighten chrome trim as it will dull the finish. Do not use a wet or damp cloth to clean the porcelain surface while it is still hot.

Cushion covers are made of high quality fabrics and Scotch-guarded for soil resistance. If cleaning becomes necessary, use a foam type upholstery cleaner, and do not remove covers from cushions.

**Note:** Zippers are used on covers for better fit, and their presence is not an indication that covers should be removed and cleaned separately. To guard against shrinkage, do not remove covers, but clean as indicated above. Do not wash by hand or machine or dry clean.

The vinyl floor covering should be cleaned with clear water and a mild detergent, if needed, to lift stubborn stains. An occasional waxing will prolong the beauty of the floor covering.

In most cases, normal home cleaning methods will apply to the cleaning of the entire camper interior. Avoid using harsh chemical cleaners or cleaning fluids.

#### Periodic Inspection and Maintenance

Careful regular inspection and maintenance on your part is important if you wish to obtain the best possible service from your camper. A brief inspection once a month will help you prevent any serious difficulties.

Maintain the proper tire (given earlier in the manual) pressure. Look for such things as chips or scratch-

es on paint, both inside and out. Take immediate steps to repair these.

Actually, you will find your Coachmen camper to be relatively carefree. If you will take precaution on the minor things, you will enjoy many, many years of traveling and still enjoy a unit that looks nice and gives you pride of ownership.

### Winter Storage

The most important part of winter storage is water system drainage. Make certain all water supply tanks are empty of water. Blow out the system with an air hose. Open all taps and leave open. Leave plug off drain pipe. Pour antifreeze into all drain systems.

You should block up the trailer to take weight off wheels during long periods of non-use. Do this by lowering the dolly all the way down and putting the rear jack down. Now raise the front dolly until both tires are slightly off the ground. Block all four corners with wood and relieve pressure from blocks.

If you can get your coach inside a garage or other building, naturally, this is ideal. However, if this is not possible, it is recommended that you cover the coach with plastic sheeting. This is not necessary, but it will keep the camper new-looking much longer. If stored outside periodically, remove any excessive accumulation of snow.

Pack or seal all vent openings to prevent birds and insects from nesting in your camper. **Be sure to unseal all openings before using the unit again.** Oil or grease the hitch coupler.

### Sanitizing Water Systems

To insure the complete sanitation of your potable water system, it is recommended that the following procedures be followed on a new system, one that has not been used for a period of time, or one that may have become contaminated.

1. Prepare a chlorine solution using one gallon of water and  $\frac{1}{4}$  cup of Chlorox or Purex household bleach (5% sodium hypochlorite solution). Pour one gallon of solution into tank for each 15 gallons of tank capacity.
2. Complete filling of tank with fresh water. Pump the faucet until all air has been released from the pipes and entire system is filled.
3. Allow to stand for three hours.
4. Drain and flush with potable fresh water.
5. To remove any excessive chlorine taste or odor which might remain, prepare a solution of one quart vinegar to five gallons water and allow this solution to agitate in tank for several days by vehicle motion.
6. Drain tank and again flush with potable water.

## CHAPTER 9

### WEIGHTS OF RV SUPPLIES AND EQUIPMENT

Proper weight distribution within your camper is an important consideration and more recently controlled by Federal law. In addition to your unit's weight and center of gravity as shown in Chapter 3, you must consider what effect the personal items you are carrying in the camper have on the performance of your unit. Consider your (GVWR) Gross Vehicle Weight Rating and your (GAWR) Gross Axle Weight Rating. Are you loaded properly? The following chart lists weights of supplies and equipment you are likely to carry along. Add them up, consider their location and add that to the basic weight of your unit.

#### CAMPER AND MISCELLANEOUS GEAR

ITEM	WEIGHT IN POUNDS
Air Mattress	5
Aluminum Camp Cot	7
Aluminum Camp Cot w/Mattress	22
Army Cot	15
Auto Hand Vacuum	5
Ax	3-6

Battery	37-50
Battery Box (for boat)	3
Battery Charger	10
Bicycle	45
Binoculars	1½-5
Booster Air Shocks	14
Broom	2
Bucket/Wastebasket	2
Camera	3
Camera Outfit, Polaroid	7
Camp Folding Stool	1
Camp Folding Table	16
Camp Stove	18
Camper Fan	4
Camper Fold-away Steps	18-19
Camper Generator, 1100 Watt	70
Camper Stabilizer	8
Camper Sundeck & Ladder	19
Canopy	18
Canteen (2-quart)	1
Catalytic Heater	8
Chain Saw & Case	18
Charcoal	10
Charcoal Fluid Igniter	1
Chess/Checkers/Games	1
Clothes Line (50 foot)	1½
Clothes Pins (package)	½

Compass	¼
Double Bass Drum Set (15 pc.) with cases	110
Electric Cable (100 feet)	10
Electric Fan 12"	10
Envelopes/Stamps	¼
Extension Rear Bumper	123
Extinguisher	5-17
Film, 4 rolls	1
First Aid Kit	3
Flag/Reflector Kit	7
Flare	½
Flashlight	1
Floor Mats	11
Front Tire Carrier	7
Funnels (water, fuel)	½
Gas Lantern	6
Gas Stove (2 burner)	11
Gasoline Emergency Can (5 gal.)	11
Grease Gun and Grease	14-15
Ground Cloth	1
Guide Book	2
Hammer	1-2
Hand Saw	2-3
Hand Spotlight	2
Hatchet	2-3
Hiking Pack	3
Insect Fogger	7
Inverter, 12-volt	13
Iron	2½-4
Ironing Board (portable)	2
Jack	10-15
Lantern	6
Laundry Bag	1
Level	1
Maps (8)	1
Mess Kit (aluminum)	2
Mosquito Repellent (can)	1½
Movie Camera (8 mm)	4-8
Oil Paints	5-11
Easel	6
Padlock & Chain	1
Picnic Blanket	3
Playing Cards (2 decks)	¼
Portable Toilet	20-30
Power Intercom	4
Propane (20-gal. bottle)	45
Propane Cylinders (disposable)	2
Radio, 2-way, 6-watt	7-8
Radio, portable	6-16
Refrigerator	100
Rope (100 ft., 5/8")	14
Roof Top Camper Air Conditioner	150
Sewer & Water Hook-up Kit	10
Sewing Machine	20-50
Shovel	4-5
Shovel (folding)	3
Spare Oil (10-qt can)	20
Stake Pocket Camper Hold-Downs (2)	9
Stereo Tape Player	10
Swing-Out Spare Tire Carrier	17
Tape Recorder	4-20
Tarp (10' x 12')	20
Television, Battery-Powered	10

Television, Portable B/W	20
Television, Portable Color	61-76
Tent, pup	12
Tent, large	70-80
Tire Chain Kit	3
Tire Gauge	½
Tire Iron	4
Tire Repair Kit	4 oz.
Thermos (1 qt. steel)	3½
Thermos (2 qt. plastic)	5
Tool Kit (65 piece mechanic)	15-21
Trailer, Cycle	225
Trailer, Tent	425-832
Trailer, Utility ¼ton	195
Travel Information	¼
Truck Washing Brush	3
Tune-up Kit	20
Two-Suiter Case	11
Typewriter	11-24
Umbrella	2
Vacuum	10-36
Water Heater	68
Water Purification Tablets	¼
Water/Tire Pump	6
Week-end Case	7
Writing Pad	¼

## CLOTHING

ITEM	WEIGHT IN POUNDS
Blouse, Shirt	1½
Coat, lined	4
Culotte	¾
Dress, Skirt	¾
Jacket, lined	2½
Jeans, Slacks	1-2
Pajamas	1
Raincoat	3-4
Shoes	1-3
Shorts	½-¾
Sunglasses	¼
Sweater	1
Swimsuit & Pullover	1½
Windbreaker	¾

## SPORT ITEMS

ITEM	WEIGHT IN POUNDS
Anchor (boats up to 14 ft.)	10
Semi-V Aluminum Boat	118-257
Boat Trailer	135-240
Canoe (aluminum)	65-75
Fishing Boat (fiberglass)	125
Fishing Kit with light tackle box	6
Fishing Motor (electric)	9-23
Jon Boats (10-16 ft. aluminum)	62-250
Outboard Motors up to 5½ hp	42-54
Remote Gas Tank (for boat)	5
Rubber Boat (8 persons)	85
Rubber Boat (2 persons)	15
Safety Vest (adult)	3
Safety Vest (child)	2

Tackle Box (large)	8
Oars	10
Cartridges (20)	2
Duck Decoys	9
Gun Case	2
Gun Cleaning Kit	3
Hunting Bow	4
Arrows (6)	1
Hunting Knife	8 oz.-1
Rifle (30.06)	7-12
Scope	1
Shotgun	9
Shotgun Shells (5)	1
Golf Bag	6-13
Golf Cart	16
Golf Irons (8)	11
Golf Set (child's)	11
Golf Woods (4)	7
Bat/Ball/Glove	6
Boots	3-5
Mini-Bike	84-170
Scuba Gear (with tank)	71
Skates	3-4
Snow Skis, Bindings, Boots & Poles	23-27
Water Skis	15-16
Tennis Racket with Cover, Press, Balls	3
Pool Table (8-ft)	306

### BASIC KITCHEN ITEMS

ITEM	WEIGHT IN POUNDS
Abrasive Pads (package)	¼
Bags, Disposable (package)	1½
Basin/Rack (plastic)	2
Bottle Opener	¼
Can Opener (crank)	1
Coffee Pot	1-3
Cookbook	3
Cookware Set (8-piece aluminum)	11
Cookware Set (8-piece stainless steel)	15
Cooler (48-quart)	15
Cups, Disposable (40)	¾
Cutting Board	1½
Dinnerware (45-pc. plastic)	16
Dish Cloth (12" x 12")	1/8
Dish Towel	¼
Dishes (53-piece for 8)	40-60
Foil (cooking)	½
Fry Pan (skillet - 15")	13
Glasses (8 plastic)	1-3/4
Juice Container (plastic)	¼
Knives (kitchen)	1½
Matches (carton)	½
Mixer (portable)	3-5
Oven-Broiler	10-18
Plate Scraper	¼
Plates (40 disposable)	½
Pots & Pans (10 pieces)	14
Pot Holders	1/8
Soap/Detergent (box)	1
Spatula/Pancake Turner	½
Sponge	¼
Stirring Spoon	¼
Table Covering (plastic)	½
Tableware (50 pc. stainless)	7

Thermos (1 gallon aluminum)	4
Toaster	1-9
Tongs	½
Toweling, Paper (per roll)	½
Trash Caddy	2

### BASIC OUTFIT FOOD AND BEVERAGE CHECKLIST

ITEM	WEIGHT IN POUNDS
Apple (large)	½
Bacon/Sausage	1
Baking Soda (box)	1
Banana (large)	½
Beverage (can)	1
Bread	1
Breakfast Cereal (box)	½
Butter/Margarine (carton)	1
Catsup (bottle)	1½
Chili (can)	1½
Cocoa	1½
Coffee (1 lb.)	1
Cookies (package)	1
Cooking Oil (quart)	1½
Corned Beef Ham (can)	1½
Crackers	1
Egg (fresh or hardboiled)	1/8
Flour/Pancake Mix (box)	1
Fruit (1 lb. can)	1½
Fruit Juice (can)	1
Jelly/Jam	1½
Macaroni/Spaghetti (can)	1½
Milk (dried)	1½
Milk (pint, carton)	1
Mustard (bottle)	1½
Napkins (package)	¼
Olives (jar)	1
Orange (fresh, large)	½
Peanut Butter	1½
Pickles (jar)	1
Pork & Beans (lb. can)	1½
Potatoes/Rice	4
Poultry/Meat/Fish	4
Salad Dressing	1½
Salt & Pepper (container)	½
Soup (can, condensed)	3/4
Spam (can)	1
Spices (assortment)	1
Stew (can)	1½
Sugar (box)	1
Syrup	1
Tea (box of bags)	¼
Vegetables (lb. can)	1½
Vegetables (fresh)	1½
Water (per gallon)	8.4

### BATHROOM SUPPLIES

ITEM	WEIGHT IN POUNDS
Bath Cap	¼
Bath Towel (22" x 24")	3/4
Chemicals (Toilet)	1

Cosmetic Case	5
Facial Tissue (box)	3/4
Hand Mirror	1
Hand Soap (bar)	1/4
Hand Towel (16" x 25")	1/2
Shampoo (tube)	1/4
Shaving Cream (can)	1
Shaving Kit	2
Sponge	1/4
Suntan Oil	1/4
Toilet Paper (roll)	1/2
Toothbrush Holder	1/4
Toothbrush & Toothpaste (tube)	5/8
Wash Cloth (12" x 12")	1/8

### BEDDING

ITEM	WEIGHT IN POUNDS
Blanket (twin)	2-5
Pillow	1-2
Pillowcase	1/2
Sheet, disposable	10 oz.
Sheet, twin	1-2
Sleeping Bag (cold weather)	13
Sleeping Bag (double)	16



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International Coachmen Caravan  
MEMBERSHIP APPLICATION  
For New Coachmen Owners

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone (AC \_\_\_\_\_) Number \_\_\_\_\_

Occupation \_\_\_\_\_

Employer \_\_\_\_\_

Spouse's Name \_\_\_\_\_

Participating Children's Names and Date of Birth

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

What prompted you to buy a Coachmen ☐ Advertising  
☐ Dealer Promotion  
☐ Friend

I traded ☐ Purchased without trade ☐

Type of unit traded - Travel Trailer ☐ Truck Camper ☐ Motor Home ☐  
Fifth Wheel ☐

I own a Coachmen ☐ Travel Trailer ☐ Truck Camper ☐ Motor Home ☐  
Fifth Wheel ☐

☐ Enroll me as a member in the International Coachmen Caravan.

International Coachmen Caravan  
Renewal Application for Other  
Than First Time Owners

Date of purchase of new unit \_\_\_\_\_

National and/or Chapter number \_\_\_\_\_

Are new numbers needed Yes \_\_\_\_\_ No \_\_\_\_\_

Type of unit traded - Travel Trailer ☐ Truck Camper ☐ Motor Home ☐  
Fifth Wheel ☐

Type of unit purchased \_\_\_\_\_

If chapter member or joining a chapter, have president or secretary of chapter  
sign here.

Send application (and dues, if applicable and if joining the International  
Coachmen Caravan) to:

International Coachmen Caravan  
c/o Coachmen Industries, Inc.  
P. O. Box 30  
Middlebury, Indiana 46540

FOR OFFICE USE ONLY		
	Date	Check No.
Paid	_____	_____
Paid	_____	_____
Paid	_____	_____
Paid	_____	_____
Paid	_____	_____
Paid	_____	_____

Caravan No. \_\_\_\_\_

Date Sent \_\_\_\_\_

# CAMPING TRAILER OWNER'S MANUAL

Serial No. \_\_\_\_\_



COACHMEN DRIVE  
MIDDLEBURY, INDIANA 46540