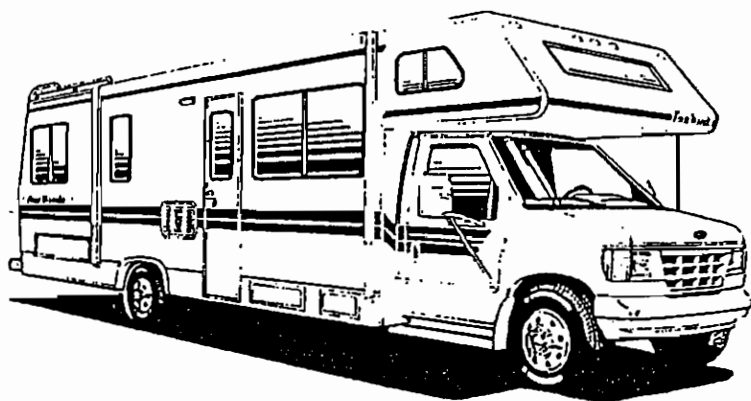
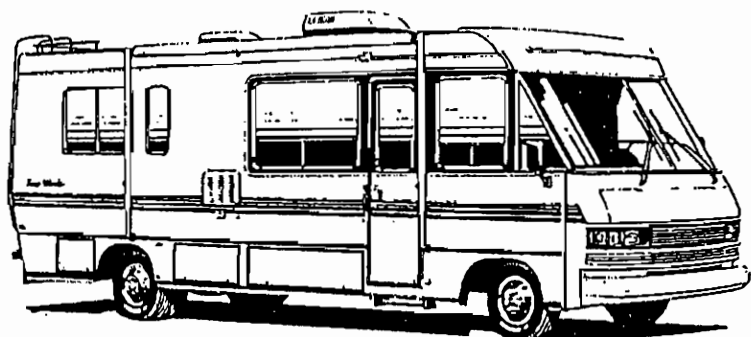


# OWNER'S MANUAL



***Four Winds  
International***

# INTRODUCTION

It's exciting taking ownership of a new purchase as substantial and full of nearly unlimited possibilities for the future as a motor home.

Thank you for choosing a **Four Winds International** product.

We take your choice seriously. That's why we've engineered this vehicle to meet and, in many cases, exceed federal and state regulations and requirements for vehicles of this type. Our primary concern has been to provide our customers with a beautiful recreational vehicle that is not only dependable and cost effective, but also safe.

To keep this vehicle at peak performance and to obtain the maximum pleasure from its use over an extended period, the owner must take a personal interest in its care and operation.

That is the purpose of this Owner's Manual. It outlines the operation of the unit's various systems and offers many helpful hints that will enable you to obtain the most pleasure from this traveling home.

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## NEW RECREATIONAL VEHICLE LIMITED WARRANTY

# WARRANTED COVERAGE

Four Winds International, Inc., will, for a period of one year from the date of retail purchase, or for the first 12,000 miles of usage, whichever comes first, make repairs that are necessary because of defects in material or workmanship. We will repair or replace any defective part at no cost to you. As a result of product improvements, design changes and unavailability of original brands, we may substitute parts or components with equivalent quality parts. This warranty covers the first retail purchaser of a Four Winds International product from an authorized dealer.

It is the owner's responsibility and expense to take the product to an authorized Four Winds International dealer or service facility.

## NON-COVERED ITEMS

Proper maintenance is the owner's responsibility and should be completed in line with manufacturer's guidelines.

Damage as the result of neglect, misuse, abuse, collision, alteration, improper maintenance and improper repairs.

Normal deterioration and wear of fabrics, carpets, counter surfaces and interior and exterior finishes.

Equipment that has been used for purposes that it was not designed.

Automotive chassis, including the engine, tires, batteries and optional automotive equipment as well as appliances, including range, oven, refrigerator, furnace, air conditioner and water heater, that are covered by separate manufacturer's warranties.

Any warranties stated by any person beyond those contained in this publication.

Four Winds International shall not be liable for incidental or consequential damages, such as expenses for transportation, lodging, loss or damage to personal property, loss of use of owner's product, inconvenience, or loss of income. Some states do not allow exclusion or limitation of incidental or consequential damages, thus, the previous limitation or exclusion may not apply to the owner of this vehicle.

Implied warranties, including any warranty of merchantability or fitness for a particular purpose, are limited in duration to the term of this written warranty. Some states do not allow limitations on how long an implied warranty lasts, thus, the previous limitation may not apply to the owner of this vehicle.

This warranty gives you specific legal rights. Rights vary from state to state.

Your satisfaction is our first concern. For further information or help, contact:

**FOUR WINDS INTERNATIONAL**  
701 County Road 15 • P.O. Box 1486  
Elkhart, IN 46515-1486

## WARRANTY NOTES

Commercial use of the motor home or use as a permanent dwelling will void the warranty.

The original purchaser must return the owner's registration card within ten (10) days of purchase to validate the unit's warranty.

## OWNER'S OBLIGATIONS

Four Winds International recommends that warranty service be performed by the authorized dealer from whom the purchase was made, however, when traveling, service can be performed by any authorized dealer.

The *Owner Registration Card*, needed to obtain any warranty service, should be carried in the vehicle at all times.

## CONTACT FOUR WINDS INTERNATIONAL SERVICE DEPARTMENT WHENEVER:

- 1) An authorized dealer cannot be located in your immediate area.
- 2) A question of warranty liability arises between the chassis and RV manufacturer.
- 3) A warranty repair of significance is required from a non-authorized Four Winds dealer.

Immediately upon purchase of this vehicle, be sure to fill out and send in all the applicable manufacturer's warranties for other warranted products included in the motor home. Most have deadlines similar to **Four Winds International**. It would also be wise to maintain an easy-to-find file of manuals and warranties for all these items in the vehicle.

It may occur that a warranty or service matter is not handled to the owner's satisfaction. In most cases this is an outcome of a misunderstanding and can be taken care of at the dealer level with proper communication. Talk over the problem with the dealership management.

If the problem cannot be resolved at this point, feel free to contact our Owner Relations Department. Our representative will attempt to provide a reasonable solution, most often resulting in a recommendation to the responsible dealer.

# Owner's Manual

## TO BEGIN

The best way to get acquainted with your new motor home is to first read this manual from cover to cover. It would be a good idea to read it while sitting in the vehicle so that you can look at and physically handle the various systems that will be described.

The reason for this is that the owner/operator will be familiar with the unit's systems prior to taking their first trip and will be able to handle most questions without having to search through an unfamiliar manual for answers. Or, at least, the new operator will be familiar enough with the manual and the vehicle to be able to quickly find the section in the manual that covers the system in question.

After becoming familiar with the vehicle's systems and going through test runs on items such as use of Liquid Petroleum Gas (LPG), it is time to take one or two short trips, including spending the night at a campground not too distant from your home . . . you might want to go back and get something you forgot or didn't know you needed.

## FIRST SHORT TRIPS

Bright  
Idea!



These short trips can be considered "shake down cruises" or "familiarization flights". The experience gained on these short trips will be worth time and money to you . . . time and money spent either needlessly taking something that takes up space or the time and money spent trying to obtain an item you hadn't counted on needing prior to leaving home base on an extended trip miles from home and in unfamiliar surroundings.

It is understandably upsetting having to purchase a needed item on the road knowing that one is sitting at home unused.

Not all RVers need the same equipment or supplies. For one thing, the United States presents a wide variety of climates and terrain. For another, personal needs and tastes come into play.

Our suggestion is to take a weekend trip to a camp location that is close to home. Be sure to have a note pad and pen available to write down items you feel will be needed in the future as well as equipment that you may need to learn more about.

Also, if most of your trips will be made in the summer and your shake down trip is made during some other season, there will be adjustments to take into consideration. Talk to other RVers and learn from their experiences.



**Check  
this  
out**

If you are an experienced RVer it is still necessary to thoroughly read this manual. New and improved equipment is coming onto the market every day and, at the same time, not every motor home manufacturer builds vehicles the same way.

This manual is packed with detail, however, after you have worked with the various systems during a couple of shake down trips, you will be capable of conducting a pre-trip check in less time than it takes to read this manual.

Because of different RV models **Four Winds International** manufacturers and the numbers of options available, your RV may not include all of the systems described in this manual.

## TRAVEL PREPARATION

Like any vacation trip, pre-planning will pay big dividends. A checklist is often helpful.

In addition to routine trip preparations such as having newspaper delivery stopped and mail held at the post office, there are now more vehicle-related preparations than there were with the old family car.

### CHASSIS CHECKS

As with any vehicle, the RVer needs to check the automotive systems prior to a trip. They include:

#### Under Hood:

- Fluid Levels (oil, power steering, radiator, transmission, windshield washer, etc.)
- Belts (tension and condition)

- Battery (electrolyte level if applicable, connections, charge)
- Hoses (clamps tight, condition, leakage)
- Seals, Gaskets (leaks)

#### Exterior:

- Tire pressure/condition and lug nut torque
- Spare tire, rim condition, and tools-including jack
- Headlights, running and safety marker lights including brake and turn signal and also any trailer light connections
- Rear view mirror adjustment
- Security of any auxiliary equipment such as TV and CB antennae, awning, etc.
- Windshield wiper blade condition
- Generator compartment
- Fresh and waste water connections/drains and supplies such as high pressure hose
- Liquid Petroleum Gas compartment/tank

#### Under Vehicle:

- Drive train condition, specifically leaks (U-joints, differential, transmission)
- Brakes including lines, pads/shoes, seals
- Engine area for pan gasket or other leaks
- Anything unusual hanging or tangled with road debris such as tree limbs
- Tank condition (gas, fresh water, waste water)
- Wheel cylinder seals (leakage)

#### Inside Driver's Compartment:

- Check operation of all systems, including: Wipers; Windshield; Horn; Brakes; Emergency Brake; Steering; Transmission; Heater; Defroster; Air Conditioner and Seat Adjustment.

- Also idle engine long enough to check cooling system (temperature gauge/light) and Alternator (charging) operation. Be sure to turn on headlights and climate controls to see if alternator handles the additional drain on electrical system (should not show discharge).

#### RV System Check:

As an RVer you now have the added responsibility to prepare the living quarters for a trip.

Preparations include:

- Filling fresh water tank. In winter be sure that system is freeze protected.
- Check list of food, utensil and clothing needs and to save weight and space do not take more than two or three days food supply.
- Check storage of all items, making sure that everything is secured and that heavy items are stored low so they do not fall.
- Check operation of stove and refrigerator.
- Check paper work such as Owner Registration Card, vehicle registration, proof of insurance, driver's license and names/phone numbers of individuals you are to contact during the trip, such as Ranger Stations.



#### **WARNING**

Pay careful attention to where and what type of flammable materials you store. Certain storage areas are clearly labeled **DO NOT STORE COMBUSTIBLE MATERIALS**. Examples of spark-producing areas, depending upon RV model, are: base kitchen cabinets, front dinette base, exterior refrigerator service compartment, as well as refrigerator cabinet. *Please use your discretion as to what potentially dangerous products your RV contains while traveling. Be sure all canister and bottle tops are secure and leak-free.*

#### **LOADING**

Total weight, Gross Vehicle Weight Rating (GVWR), and weight distribution are important to RVers.

You may be familiar with the term "weight and balance" in aviation, but probably never thought it applied to RVs. Safety and the long life of your RV demand your concern about these often neglected aspects of RV operation.

A vehicle that is loaded properly, taking into consideration GVWR and GAWR, the allowable weight that can be safely supported by each axle, will handle properly and will not over stress vehicle structures.

## WEIGHT DISTRIBUTION

Heavy items should be stored centrally and as close to the floor as possible. If stored high, a heavy article could cause the vehicle to become top heavy or could become a dangerous falling object that might inflict vehicular damage or personal injury.

Lightweight items can be stored in overhead cabinets. In both cases, see that the items are secured to allow minimal movement. Loose cargo can cause weight shifts that could result in driving problems. It is common to hear of an eighteen wheeler roll-over having been caused by shifting cargo as the vehicle rounded a curve on an interstate cloverleaf.



Don't forget to leave some room for souvenirs and to calculate the added weight into your weight and balance figures. Rock collections are a bit heavier than dried flower collections.

## WEIGHING THE VEHICLE

When you have loaded the vehicle with your supplies and have filled the fuel, LPG and water tanks, take your vehicle to a public scale and find out its weight.

Determine both the GVWR and GAWR and compare to the Federal Vehicle Sticker attached to your RV.

Public scales are available at a variety of locations including grain elevators, sand and gravel dealers, moving companies and government weight stations. The attendants can help you determine both the GVWR and GAWR by weighing the entire vehicle and then each axle.

Warning



Exceeding the GVWR or GAWR specifications of your vehicle could result in serious damage to the suspension, frame or other components. Modifying the unit with heavier suspension pieces such as overload springs and heavy duty shocks does not alter the GVWR!

Also, altering the factory installed suspension could void the RV's chassis warranty!

WARNING



Adding a "porch" extension to the rear of an RV to create added storage space for such items as motorcycles isn't as simple as it may look. An owner cannot just add the weight of the "porch" and the items stored on it because there is a law of mechanics, the fulcrum, that causes an engineering problem.

The RV owner can't simply add the weights because the fulcrum affect actually multiplies the weight according to how far out from the axle the weight is distributed. This doesn't even include the structural problems that it can create in the vehicle since the fulcrum affect will be attempting to take weight off of the front axle . . . usually with the result that there is a chassis structural failure.



Public Scales are available in most areas and have personnel who can assist you in weighing your RV.

WARNING



You may have seen RVers using their unit's roof as a storage area. This must be considered with much care because of structural and safety considerations. Consult your dealer if you have any questions concerning placement of items on the unit's roof.



# DRIVING

Now that you have determined your vehicle's weight and balance you are ready to pull out onto the open road.

Once you get acquainted with your vehicle, you should find that it drives and handles much like a large passenger car with a few notable exceptions that include: length, height, width and weight.

The vehicle is equipped with more than adequate brakes, however, its stopping distance may be much greater than your automobile. Get used to it. Keep it in mind at all times and be alert to changing road conditions.



It would be helpful to take your new RV out to a stadium parking lot and spend some time getting the feel of the wider and longer vehicle.

Small fluorescent sports cones, available at sporting goods and toy stores, can be used to create turns and parking spaces. Dowels with small flags can be attached to make the cones more visible in the passenger's side view mirror. Practice parallel parking, backing and turns.

Afterwards, the cones can become an addition to your safety equipment.

Get your spouse to work with you, having them help guide you from both the passenger seat and from a position outside using hand signals.

**NOTICE:** Vehicles with overall body width greater than 96" are known as 'wide bodies' and have the advantage of more spacious interiors and innovative floor plans. Wide body vehicles are restricted to use on main highways in certain states. A vast majority of states allow for 102" body width on all highways and 102" body width is now allowed on all federal highways in the United States. Your dealer may be able to furnish more specifics.

If you are concerned about vehicle width, we invite you to consider other ~~the~~ vehicles offered in the standard 96" width.

**FOUR WINDS**

## CLEARANCE

The other vehicle characteristic that needs to be taken into consideration immediately is height. Read all "clearance" signs when approaching parking garages, drive-through windows and even underpasses on older highways. Also be careful of overhanging trees. Always use caution and when in doubt get out and look.

Don't forget any added equipment that may protrude higher than the standard factory height.

## ON THE ROAD

Passing and pulling out into traffic in your RV is going to be different than when driving your everyday vehicle. Generally speaking, it will take more time, thus, more distance to pass when it necessitates driving in an on-coming lane of traffic.

It will take more time to clear an intersection from a dead stop. Allow more distance between cars.

## ON-RAMPS

Merging with flowing traffic on an on-ramp will take more thought and pre-planning. Be aware of whether or not the on-ramp is down hill or up hill. An up hill ramp is going to detract from your vehicle's performance. Take this into consideration.

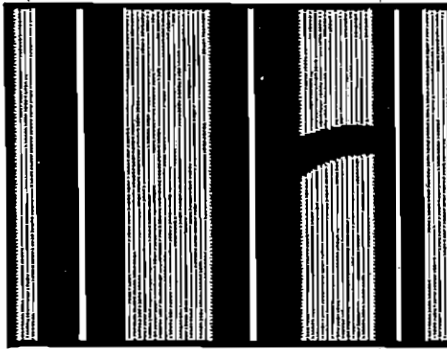
Gauge the flow of traffic well before the point where the ramp meets the traffic lanes. Check your side view mirror to see what the traffic is like behind you on the freeway and what's coming up behind you on the ramp.

Start your turn signal as soon as you are on the ramp. Yes, it's obvious you are going to merge, let's say, to the left, but the turn signal light can catch the attention of the drivers . . . maybe wake them up a bit. It also keeps you on your toes.

Plan for the RV to be at approximately the same speed by the time you pull into the traffic flow. It's better to be going too fast than not fast enough. Check out your "escape road", the shoulder in front of you, in the event something prevents you from merging with the traffic.

## OFF-RAMPS

Pay close attention to off-ramps. Does the ramp go up or go down? Does it go more or less at a reasonable angle or does it suddenly hook to merge with the access road at a 90-degree angle?



**A PARTICULARLY NASTY TYPE OF EXIT RAMP** — is the type that presents the driver with an acute angle as well as a short distance, making the driver have to execute an immediate 90-degree turn left or right. Most often these exit ramps will be found on rural stretches of interstate highways. These are extremely dangerous at night; be alert to the fact that the access road may have two-way traffic.

Does the exiting vehicle have to stop or yield? And, if access road traffic has to stop or yield, is there traffic and does it look like drivers are paying attention to the exit ramp?

How do you know if the traffic is paying attention? Is it slowing down or going along at a fast clip? Ever see a vehicle on an access road passing the interstate traffic? This is especially common in rural areas.

When in doubt always act as though the other driver is not aware of you or, for that matter, aware of where they are. You be prepared to stop, but always be careful of traffic behind you, such as a car following you off the ramp. Drive for them too. This is the idea of defensive driving.

When driving any vehicle that is a bit out of the norm, such as an RV or a vehicle towing a trailer, you must take the mental attitude similar to a motorcycle rider . . . just figure everyone out there is stupid and out to get you.

## TURNING

Because your RV is longer and wider than your other vehicles, a bit more attention must be paid to cornering. Practicing in a stadium lot is helpful, as indicated in an earlier section of this manual.

The main idea is to pull several feet past the apex of the corner before initiating the turn. This is to give extra room for the rear inside wheels to clear the inside curb. Instead of cutting corners, learn to use the entire roadway by bringing the vehicle closer to the center stripe of the street or road you are entering. However, do not swing "out" or over the centerline of the road you are turning off.

Because of the extra room your vehicle needs to clear the inside curb, you must be more fully aware of the traffic that you are turning into (what becomes the oncoming traffic after the turn). Note how close the vehicles are to the center line and especially if they are over the center line and into your lane.

## HILLS, DALES AND MAKING THE GRADE

Your RV adventures are going to take you to new and exciting areas of the country, including those areas with breathtaking views. In other words: hill country.

Driving in hilly or mountainous terrain isn't any more difficult than driving on the flat plains of Kansas if the driver uses the vehicle properly.

The main culprit of hilly or mountainous driving problems is overheating. And it's not just the cooling system that suffers this malady.

Preventing problems is as simple as following your chassis manufacturer's driving instructions for this type of terrain. The main thing to remember is to reduce speed and drive in the appropriate gear, usually something other than Drive.

On downgrades a lower gear helps to assist in braking, thus preventing overheating of the brakes and the possibility of poor brake performance.

The modern RV, unlike its forerunners, is equipped with front disc brakes that are more powerful and more fade resistant than the old drum and shoe combinations of the past. However, if abused, they can deliver less than satisfactory performance.

Upgrades are handled in the same manner: a lower gear and speed.

## OVERHEATING'S CHAIN REACTION

If your engine overheats it can affect the transmission on vehicles where the transmission on vehicles where the transmission has a cooler that utilizes the coolant radiator. And even if the transmission cooler is the type that has its own radiator, an overheating engine raises the entire under hood temperature and reduces the effectiveness of the separate transmission cooler as well as puts stress on hoses, belts and air conditioning.

### WARNING!

Do not operate the vehicle beyond the maximum listed speed for first or second gear. Increased engine speed can overheat the transmission, causing accelerated wear and possible premature transmission failure.



When making a prolonged climb on a steep or long grade it is helpful to turn off your unit's air conditioner. This aids in two ways: it takes a small load off of the engine at a critical time and also shuts down the production of hot air by the evaporator which is located in front of the coolant radiator.

## EMERGENCY ACTION

If the RV's engine does overheat, carefully pull well off the roadway, place the transmission into Park (P) and idle the engine with your foot lightly pressing the accelerator.

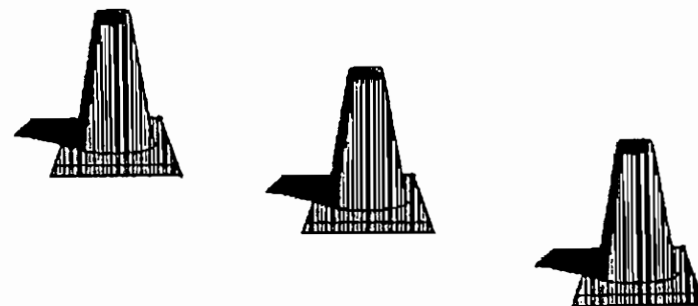
Check and make sure the air conditioner is off. In cooler climates and elevations, turning the heater and defroster on "full" can aid in lowering the engine's temperature. Yes, an overheating problem can take place during the cooler months of the year; keep monitoring the temperature gauge during all seasons.

Watch the temperature gauge and note if it is going "up" (hotter) or going "down" (cooling off).

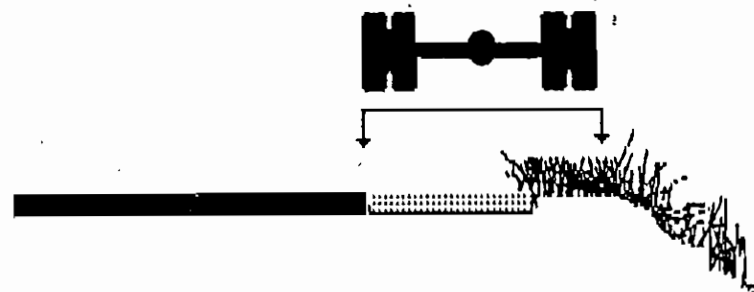
If the temperature is still climbing after a couple of minutes, turn off the motor.

Raise the hood and carefully check for the problem, noting any locations where steam or coolant is escaping, such as hose connections

around clamps, gaskets or seals, from the radiator core or its cap or midway on a hose. Also around the area where the spark plugs are located.



**Safety First** — whenever you make an emergency stop on the highway be sure to place out some type of safety markers . . . bright cones, reflecting triangles or flares.



**Pulling Off In An Emergency** — can make bad situations worse if you are not careful. Your RV has a wider track (width between outside tire sidewall to outside tire sidewall) than your standard passenger car. Additionally, there is the added width of the RV body. Always be careful to note the width and condition of the shoulder alongside the roadway you are traveling. You should know the answers to these questions before you pull off the main highway:

- Is the shoulder paved or gravel?
- Is the shoulder wide enough to accommodate the RV's wheels?
- Has it rained recently and is the ground so soft the RV could get stuck?
- Will there be enough room to safely work on the RV? Will you be completely out of the traffic lane?
- Is there enough room on either side to safely change a flat?

- If the surface under the vehicle solid enough to support the RV on a jack?
- Will the RV be placed at a dangerous angle with the possibility of rolling down an embankment?

**DANGER!**



Be very careful with a hot engine. If a hose has started to split or a clamp worked itself loose, pushing on it may cause it to completely come apart and spray boiling coolant under high pressure all over the engine compartment and you. **UNDER NO CIRCUMSTANCES REMOVE THE RADIATOR CAP WHILE THE VEHICLE IS THIS HOT.**

Third degree burns can result from coming in contact with this hot coolant.

Also check under the engine to see if steam or coolant is leaking below, from the bottom radiator hose for instance or the bottom of the radiator. Also check to see that the engine's oil pan is not damaged (a hole in it). Lack of oil can cause an engine to overheat no matter how well the coolant system is working.

After the engine has cooled down substantially, check to see if the water pump belt(s) is still there and, if so, if the tension is sufficient. Determine whether or not the water pump has been leaking coolant . . . indicating that it needs to be replaced.

When quite sure that the engine has cooled down to a manageable point, check the fluid level in the radiator, noting the level in the coolant catch tank.

## GETTING BACK ON THE ROAD

If coolant level in the radiator is low and everything else seems to be operating correctly and there are no obvious leaks, add coolant or, in an emergency, water to the proper level. Replace the radiator cap and start the engine.

Let the engine idle for a few minutes and watch for the engine temperature to slowly rise to what you consider normal. If the temperature gauge starts to rapidly climb above normal, shut down the motor, Contact a service facility before proceeding.

If the engine temperature remains just above normal and seems to level off there, drive to the nearest service facility and have the coolant system checked. Keep a sharp eye on the coolant temperature while driving and pull off again if the engine begins to overheat again.

Although overheating can be an indication of major problems, it can just as easily be caused by something as simple as a defective radiator cap that allows coolant to escape in the form of steam at higher altitudes. Check with a service facility if you have any cooling system abnormalities while traveling.

## PARKING

When parking on a grade, only recommended in an emergency if at all possible, first apply the foot brake, then set the parking brake prior to shifting the transmission into Park (P).

At the time of departure, take the vehicle out of Park (P) prior to releasing the parking brake. It is possible that the transmission might not be able to be taken out of the Park (P) position if the parking brake is released first; this is caused by the vehicle moving slightly and, thus, putting a pressure on the transmission that "locks" the vehicle in Park.

If this occurs, you may need another vehicle to assist you in relieving the pressure on the shift lever.

On any grade, up to down, that is anything more than just slight, it would be wise to have a passenger place wheel chocks behind the tires of the vehicle.



When holding (stopped) on an up grade **DO NOT USE THE TRANSMISSION** to maintain your position. **DO NOT** have the vehicle in gear with no brakes applied, using only pressure of the gas pedal to "idle" to a standstill.

This practice could easily damage the transmission from overheating and could also overheat the engine.

Take your foot off the gas pedal and apply the foot brake. If the vehicle is having difficulty idling at this angle, use the parking brake and place the vehicle in either Park (P) or Neutral (N). When pulling away from, for instance, a traffic light or stop sign, place the transmission into Drive (D), then ease off the brake while increasing throttle pressure.

## TRAILER TOWING

Trailer packages that include high quality tow hitches are available as an option on **Four Winds International** RVs. They are designed to meet Class specifications for your particular vehicle.

**Four Winds International** accepts no responsibility for damage to the chassis and other components resulting from towing loads greater than its designated class specifications.

Towing an object such as a boat and trailer or small storage trailer behind an RV results in added driving considerations.

If the trailer being towed starts fishtailing (swaying back and forth), carefully accelerate until the fishtailing stops. Then very cautiously slow down, either using only minimal braking action or just by coasting to a stop. **NEVER APPLY HEAVY BRAKING. HARD BRAKING WILL ONLY MAKE MATTERS WORSE.**

Note if the trailer fishtails at a lower speed. If it doesn't, you can proceed cautiously, keeping the unit's speed below the point where fishtailing begins. If the trailer continues to fishtail even at low speeds, pull off the road.

The major culprit in fishtailing is usually some abnormality of the wheels or tires. Check tire pressures and condition. Be sure to check the inside sidewalls and entire tread of each.

If these check out, then check distribution of cargo, and condition of the trailer hitch.

Check to see if the hitch is broken, the hitch ball has come loose, and that the trailer's tongue attachment/tie-down is in proper order.

Next, check trailer wheel bearing clearance by pulling/pushing in/out on the top of each tire. If there is excessive movement, almost any in fact, then the wheel bearings and axle nuts must be checked.

Stand behind the trailer to check that the wheels are in the proper alignment, most often straight vertical. If the wheels seem to have more camber, narrower top to top than bottom to bottom, giving a "leaning" affect, check the axle/s and bearings.

If all the above seems to check out, try driving the unit again to see if the fishtailing continues. If the fishtailing continues at even low speeds, very carefully drive to the nearest service facility. If the fishtailing is so violent it causes a dangerous situation, park the unit and get assistance.



When purchasing a new or borrowing an unfamiliar trailer it would be best to take a drive around the area of your home prior to setting out on a longer trip.

Include a stint at highway speeds to confirm the trailering characteristics of your RV and the particular trailer you are using.

In some cases the problem causing fishtailing can be on the pulling vehicle. These problems include front end alignment and suspension wear.

Other problems that can contribute to fishtailing are poorly designed trailers or trailers with a different cargo than hauled before.

**TONGUE LENGTH AND TONGUE WEIGHT** contribute much to good trailering characteristics. Twelve to eighteen inches of additional tongue length can make a world of difference in a trailer's "attitude".

Weight distribution of the trailer cargo has a great influence on handling qualities. For instance, a fishing boat with a small engine tows well; however, buy a new, larger, heavier outboard motor for the boat and trailering becomes a nightmare.

These types of problems can be corrected easily at home, but out on the road they are nearly impossible to correct.

## SAFETY



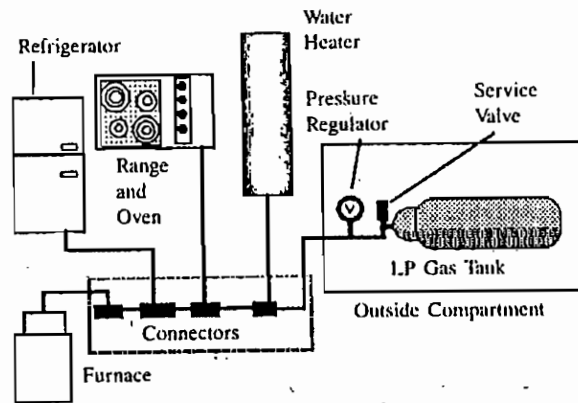
**WARNING!**

**DO NOT POUR GASOLINE OR STARTING  
FLUIDS INTO THE CARBURETOR.**

**FAILURE TO COMPLY WITH THIS WARNING COULD RESULT  
IN SERIOUS PERSONAL INJURY.**

## LIQUID PETROLEUM GAS

Liquid Petroleum Gas (LPG) is probably the system you need to familiarize yourself with the most; LPG is often an item RVers do not handle in their normal day-to-day activities at home.



Typical LP Gas System



LPG CONTAINERS ARE NOT TO BE PLACED OR STORED INSIDE THE VEHICLE AT ANY TIME. These containers are equipped with safety devices that are designed to automatically relieve excessive pressure by discharging LP to the atmosphere.

Always store LPG tanks in their proper place and regularly check that they are secured properly.

DO NOT FILL CONTAINERS TO MORE THAN 80 PERCENT OF TANK CAPACITY. Over-filling a tank can result in an uncontrolled/automatic gas flow that can cause a fire or explosion.

A properly filled container will contain approximately 80 percent of its volume as LPG. If a tank is over-filled ask the LPG service personnel to bleed out the excess.

Be sure that all burners and pilot flames are out and the Service Valve CLOSED when filling your vehicle's LPG container, the same way you do when filling your RV's fuel tank. **DO NOT SMOKE.**

## LPG LINE SAFETY CHECK

After each refill and on a regular basis, such as once a month or after a set number of traveling miles, check the LPG lines for leaks.

To check the lines turn off all range burners and pilot lights and then open all doors and windows. Open the LPG Service Valve and use a propane gas leak detector solution at all connections. Do not use any solution that contains ammonia or chlorine. **BUBBLES INDICATE A LEAK.**

Tighten any leaking connection with two open end wrenches. Check for bubbles. If the leak continues, get in touch with your **Four Winds International** service department.

### DANGER!

IF YOU SMELL LP GAS (SOMEWHAT LIKE ONIONS OR GARLIC) WHILE USING YOUR RV, EXTINGUISH ANY OPEN FLAME, PILOT LIGHT, BURNER, AND SMOKING MATERIAL.

DO NOT TURN *ON* OR *OFF* ANY ELECTRICAL SWITCHES THAT MIGHT CAUSE A SPARK.

### WARNING!



EVACUATE THE VEHICLE LEAVING THE DOOR OPEN AND TURN OFF THE LPG SUPPLY AT THE CONTAINER. OPEN THE REMAINING DOORS AND LEAVE THE AREA UNTIL THE LPG ODOR CAN NO LONGER BE DETECTED.

CHECK THE SYSTEM AS DESCRIBED EARLIER.

After refilling an LPG container, do not relight burners or pilot lights while at the LPG station. Drive some distance away from the refilling location. This will get you and your RV away from any residual fumes located at the service site.



In the same way, it is suggested to turn off all burners **Check This Out** and pilots while filling the RV's gas tank.

## SHORT TERM STORAGE

Close the LPG container's Service Valve. Extinguish all pilots and close all appliance gas valves including the range, oven, water heater, refrigerator, and furnace. Light a range burner to eliminate any LPG in the lines, turning the burner off all burners and pilots while filling the RV's gas tank.

## EMERGENCY EXITS

Make sure each member of your family is completely familiar with the vehicle's emergency exits. If traveling with guests, be sure to go over the use of the emergency exits.

## FIRE EXTINGUISHERS

Also be sure that each member of the family and all guests know the location of all fire extinguishers. Always immediately replace a used or partially used fire extinguisher.

Check the fire extinguisher when taking the vehicle out of storage, prior to each trip, and on a regular schedule during any long trip.

## FIRE SAFETY AND THE SMOKE ALARM

Each Four Winds International is equipped with a modern Smoke Alarm, however, it will do no good if it is not in working order. Check the alarm by pressing the TEST button each time you bring the vehicle out of storage, prior to each trip and, if an extended trip, once each week while in use.

Prevention is the best form of fire safety and this is especially the case in an RV with its unique blend of automotive equipment and living space.

Be very careful of any open flames inside the RV. Candles, potpourri steamers, fondue sets, and food warmers are all to be carefully monitored.



After refilling an LPG container, do not relight burners or pilot lights while at the LPG station. Drive some distance away from the refilling location. This will get you and your RV away from any residual fumes located at the service site. In the same way, it is suggested to turn off the pilot lights.



Use of any fuel burning apparatus, including wood, charcoal or gas grills, inside the vehicle could lead to asphyxiation because of the resulting deadly carbon monoxide and lack of proper ventilation.

In the event of a fire, evacuate the vehicle immediately with the exception of one individual that can handle the fire extinguisher. IF THE FIRE CANNOT BE HANDLED IMMEDIATELY WITH THE FIRE EXTINGUISHER, EVACUATE THE VEHICLE AND STAND WELL CLEAR BECAUSE OF THE POSSIBILITY OF EXPLOSION AND FLYING DEBRIS. If at all possible, shut off the LPG Service Valve.

## ELECTRICAL SAFETY

Your RV has been designed to meet strict federal and state building and safety codes. These codes cover the electrical system and include circuit breakers and fuses to protect the unit from electrical circuit overloads.

Do not add additional fixed appliances to the system without first consulting your dealer's service department. They can help you make a safe installation. Otherwise, you will be defeating the purpose of the circuit breakers and fuses and will more than likely suffer numerous electrical breakdowns and create possible fire hazards.

Care must be taken when using an outside power supply. The cord is equipped with a three-pin plug that provides proper grounding for the RV unit.

The third, round, pin is the ground. DO NOT TRY TO CIRCUMVENT THIS GROUNDING MECHANISM. Do not use an adapter or cheater in order to use a non-grounded, two-pin receptacle.

If only a two-pin receptacle is available, use a proper grounding adapter that has a pig-tail conductor which is used to ground the system externally.





### NEVER OPERATE THE RV WITH A "HOT SKIN".

If even a small shock is felt by touching the unit's skin while standing on the ground, immediately disconnect the 120 volt external power line and track down the problem.

The ground should be a continuous circuit from the RV's skin and frame to the outside power receptacle's earth ground.

## COLD WEATHER OPERATION SAFETY TIPS



As stated previously, DO NOT USE ANY PORTABLE WOOD, CHARCOAL, OR GAS BURNING GRILLS INSIDE THE RV. THE DANGER OF ASPHYXIATION IS HIGH. THIS BURNING OF FUELS ALSO DEPLETES THE CONFINED AREA OF OXYGEN.

At the same time, do not use the range's burners or stove for comfort heating. The furnace, refrigerator and water heater are engineered to provide proper ventilation of poisonous gases.

If your unit's furnace does not provide adequate heating for the climate in which you operate, check with your dealer to see about the possibility of replacing the present heater with a higher capacity unit.



In cold weather operation where the furnace is being put to use, an RVer may find frost or condensation on the inside of closets and cabinets.

Leave these doors open to help circulate the air so the moisture can be absorbed. Part of the reason for this occurring is that an RV is very tightly constructed and is small in area compared to your home.

# UNIT SYSTEMS

Your new RV from **Four Winds International** offers virtually all the comforts of home while out on the road. These systems are of the most modern design available, just as the similar systems in your home, however, the RV's systems may be of different design, and construction than those found in your home.



Check  
This Out!

Be sure to read all related literature, such as manuals and warranty brochures, that have been supplied by the manufacturers of the systems incorporated into your new RV. This will assure you of uncomplicated, long-lasting service.

## LIVING QUARTERS

Construction of your **Four Winds International** RV is the best in the industry when it comes to strength and energy conservation. These new building techniques greatly reduce air exchange between the inside and outside, thus creating a very airtight vehicle.

This creates some problems that can easily be resolved by airing out the vehicle on a regular basis, especially in warm, humid conditions and after storage. Also, during prolonged cold weather where the heating system is in use, other procedures should be followed as detailed in the last suggestion in the Safety portion of this manual.

## CONDENSATION

Condensation can be more of a problem in the well-built RV than in the average home. Bathing, dish washing, cooking, washing and drying clothes, and the use of unvented gas burners all contribute to the added moisture level.

A few easy procedures can help reduce the problem and include closing the door to the bathroom and opening the window vent during bathing and for a short period afterwards; using the overhead vent while cooking, and making sure the clothes dryer is vented to the outside of the unit. Also, don't hang wet clothing up inside the RV to dry.

Taking care to keep down the amount of condensation will help prevent your unit's insulation from becoming damp and dropping its efficiency.





During the Summer always try to park in a site that will be shaded during the hottest part of the day. Window awnings are very helpful in keeping inside temperatures down.

Also, during hot weather, be aware that air conditioners need to operate on voltage of 110 to 120 and anything lower can result in overheating of the motor and excessive wear resulting in shorter life for the unit. Dim lights and a poor, narrow television picture are indicators of a low voltage source. Use a voltmeter to check outside electrical sources.

## TABLES AND BEDS

A variety of table and bed types are included in the full line of Four Winds International RVs. The following instructions should cover most installations, however, if you have any question about a particular installation in your unit, feel free to ask your dealer to demonstrate its operation.

**Swing-Up Table:** While in the bed configuration, pull the table top towards you and then up and then push the top towards the wall, placing the brackets at the rear of the table top into the wall supports.

Lower the leg and adjust to the desired height.

**Pedestal Table:** Using this table type is as simple as placing the table leg or legs (many models utilize two legs) into the floor-mounted base plate(s) and then placing the table top support plate(s) onto the leg(s).

## BEDS

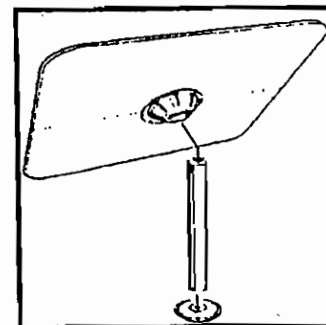
**Overhead Bed:** To ready for use just pull down on the front edge of the bed until completely lowered. If not in use push up to the travel position. Some overhead beds have support straps of various materials. These must be unfastened before the bed is pulled down.

**Cabover Bed:** Place the cut-out sections on the support.

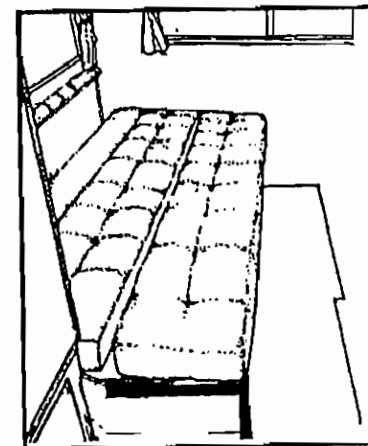
**Day Bed:** Grasp the front edge of the couch platform and slide out. Place cushions on the platform.

**Dinette Bed:** Remove pedestal table and place table top on supports located on dinette seat front supports. Place cushions on top of table. An alternate type of dinette bed utilizes the swing-up table top which is dropped down to the front seat supports after the table leg is placed in the up position.

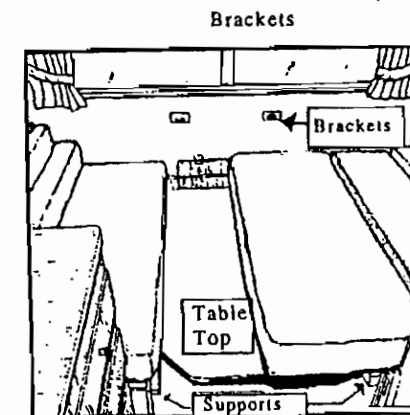
Pedestal  
Type  
Dining  
Table



Typical  
Day Bed

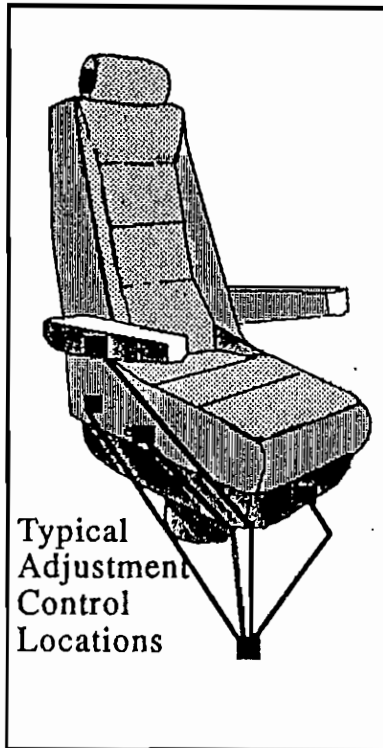


Typical  
Dining  
Table  
Bed



## DRIVER AND PASSENGER CHAIRS

Several types of driver and passenger chairs are used in **Four Winds** vehicles. Some offer front to back adjustment only (lever most often at bottom front of cushion), while others offer a swivel feature (lever on left side below seat cushion). For specific information on the chairs supplied with your vehicle, contact your dealer.



Typical  
Adjustment  
Control  
Locations

If the vehicle is equipped with electrical seat controls, the control panel will be located below the seat cushion on the door side.

This panel will control forward/rearward motion, rear seat angle and front seat angle. Recline lever will be located separately.

## GENERAL SYSTEMS

### ELECTRICAL

As pointed out earlier, your new **Four Winds International** RV combines the best of two worlds: home and mobility. One of the general systems that helps make your travels more pleasurable is the electrical which is actually a dual system.

The electrical system is made up of a 12-volt direct current (DC) source and a 120-volt alternating current (AC) source. The two provide electricity while you are traveling and camping under various conditions.

The 12-volt DC system is supplied either through on-board batteries, a power converter or the 12-volt automotive system under the hood. The automotive system recharges the on-board batteries when needed.

To power your RV while camping at a location that offers external power, you're equipped with a 120-volt exterior receptacle that accepts an auxiliary power cord.

### 12-VOLT SYSTEM

Some care must be taken to maintain your RV's 12-volt system. Most **Four Winds International** units are equipped with a Monitor Panel that lets you check the condition of the RV battery. Check the condition of the battery regularly to stay ahead of any power problems.

The automotive chassis alternator keeps your battery charged along with the auto battery.

To reduce the load on the 12-volt system, always try to use an external 120-volt AC source.

Your RV automatically converts the 120-volt power to 12-volts for those components that need it, such as the water pump, range hood light, and fan.

Monitor battery condition more often if you are putting a high demand on the 12-volt system.

## 120-VOLT SYSTEM

The 120-volt system supplies many of the major appliances as well as the interior and exterior electrical outlets that can be used to power other items. It also supplies power to the optional roof-mounted air conditioner.

The system, as noted above, feeds directly into a power converter that distributes the appropriate voltage to the individual components through circuit breakers. The converter is located in various places in our RV line, check with your dealer for the location of your RV's converter. Note that the circuit breakers can be reset after being tripped.

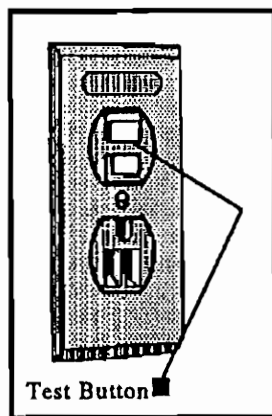
## OTHER CIRCUIT BREAKERS

RV occupants are also protected from severe electrical shocks by a ground fault interrupter (GFI) in the bath and exterior electrical receptacles. The GFI breaker is very sensitive and will break the circuit if it senses a ground fault. If a break takes place, remove any appliance from the receptacles and reset the breaker on the bath receptacle. If it will not reset, check with your dealer.

The GFI safety system should be tested at least once a month. Testing consists of taking a test light, a night light will work, and placing it in the bath receptacle. Push the "test" button on the receptacle.

The test light should go out. If the light does not go out or if the *test* button does not come out, returning it to its original position, do not use the outlets. Get in touch with your dealer.

### Ground Fault Interrupter



## EXTERNAL 120-VOLT POWER

Your RV is equipped with an exterior 120-volt power cord used to connect your unit with an outside power source. This is referred to with the nautical term: Shoreline Connection, a heavy duty power cable with a three-prong grounding plug that fits into a receptacle at the campsite. This line is connected directly to your converter. The shoreline is stored in a hatch on the exterior of the RV.

The system is protected by circuit breakers in the converter section. If a breaker is tripped, unplug any appliances on that circuit, let the circuit cool down for a few moments and then reset the breaker. If the breaker continues to trip, contact your dealer.

An optional means of external 120-volt power is a power generator. This gasoline-powered unit can be operated at remote campsites or while the vehicle is being driven. The unit utilizes fuel from either its own gas tank or from the chassis tank.

Some RVs are equipped with remote starters inside the living quarters; and there is also a start/stop switch on the generator. There is an automatic transfer switch included in the unit's circuitry that prevents use of both the shoreline and generator at the same time. Each time the generator is started there is a short delay.

In order to use your 110-volt electrical system, your shoreline (power cord) should be plugged into either an external power source or the generator slater receptacle located in the shoreline storage compartment. 110-volt current is made available to you through the electrical outlets placed throughout the vehicle. **TO CONSERVE BATTERY POWER, USE OF THE SHORELINE IS RECOMMENDED WHENEVER POSSIBLE.**

The electrical generator, like all other combustion engines, emits carbon monoxide gas and, therefore, precautions should be carefully taken whenever the unit is in use. Carbon monoxide is colorless and odorless.



Be sure that there is no opportunity for the exhaust of the unit to be pulled into the RV's interior. Provide plenty of air circulation, close the unit's windows if possible, and don't park next to any object that would tend to block fumes and direct them into or under the vehicle or allow them to accumulate.

Be very careful not to cause your generator fumes to collect in some other vehicle or living area such as a tent or garage near your RV.

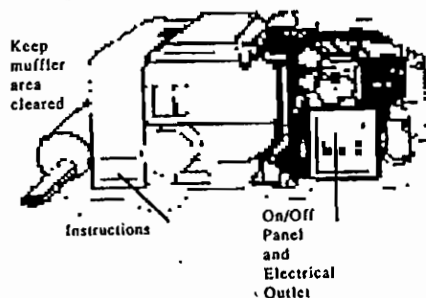


Also be alert to the fact that a generator does more than generate electricity . . . it generates noise. This noise is well isolated from the interior of your RV, but may not be as quiet as you think. Check out the area around your unit to see if the noise will disturb your neighbors. Are they using generators? Is there a designated area for RVs with generators? Can you park the vehicle so as to place the generator away from others?

## GENERATOR START UP AND SHUT DOWN

Prior to starting the generator, check to make sure it is free of obstructions at the air intake and exhaust. See that there are no combustible materials, such as paper or leaves, in the compartment. Have all appliances turned *OFF* prior to starting the unit.

Press the *start/stop* switch to start and hold until the engine begins to run.



**Auxiliary Power Generator**

Break in the generator gradually the first usage, adding electrical load a little at a time. Run the unit at  $\frac{1}{2}$  load for the first 30-minutes,  $\frac{3}{4}$  load for another 30 minutes, and then full-load for a while.

To shut down the unit, press the start/stop switch to stop and hold down until the unit stops. **Read your owner's manual from the generator's manufacturer for other operating details as well as warranty facts.**

## GENERATOR CARE

### WARNING!



**DO NOT POUR GASOLINE OR STARTING FLUIDS INTO THE CARBURETOR.**

**FAILURE TO COMPLY WITH THIS WARNING COULD RESULT IN SERIOUS PERSONAL INJURY.**

Carefully read the *generator's owner's manual* to learn more about your unit, but remember that, like the vehicle's automotive equipment, the best form of insurance is preventive maintenance and frequent checks of oil level and condition.

## CHASSIS 12-VOLT POWER

The primary point to keep in mind about the unit's 12-volt system is that the automotive chassis alternator supplies power to both the automotive systems as well as any auxiliary battery and directly to the RV living quarters while the vehicle's motor is running.

Thus, of primary concern to you is the condition of the vehicle's electrical system and especially the alternator.

The alternator compensates for electrical usage in the vehicle . . . the power drawn by the appliances, lights, fans and other 12-volt powered items as well as the charging of the automotive and auxiliary batteries.

If the alternator isn't keeping pace with the draw on the unit's electrical system, while driving down the road, it means you're working in a negative mode: more power is being used than the unit is putting out.

This means that you are taking power out of the batteries. If you draw too much power from the batteries there may not be enough power left in the battery to start the RV or run any of the appliances when you stop for a break or for the night.

So, always keep an eagle eye on the alternator's output. Also check the monitor panel frequently to see that the auxiliary battery is up to full charge.

The alternator will charge at a higher rate right after the vehicle's been started, replacing the power used to start the vehicle, but the charging should quickly go back to "normal" and hold its own even when you turn on lights or appliances.

When stopped at a campsite that allows you use of the shoreline, the 120-volt electrical system will recharge your auxiliary battery.

Some monitor panels will show a battery as being fully charged unless there is a draw on its system.



When checking auxiliary battery condition, turn on several interior lights to place a load on the battery. Under heavy usage in warm weather, check the fluid level of those batteries that require attention to fluids quite often. Low battery fluid level is very harmful to the battery's longevity.

If the alternator shows a discharge while the motor is running, turn off appliances and lights to see if a charge comes on or if the alternator indicates "neutral". Then apply a drain on the system to see if a discharge returns.

If a discharge persists, contact your dealer.


Sometimes, especially in hot weather, the alternator may show a marginal condition while idling with the air conditioner in use. Note if the system goes more to normal while the vehicle is at speed. If the marginal condition continues and you are in a constant stop-and-go traffic situation, such as in a populated area, it may be a benefit to turn off the air conditioner.

## OVERHEATING & ELECTRICAL PROBLEMS

Engine overheating often accompanies this situation, placing a heavy burden on all the under-hood systems. Check with an authorized dealer if the condition persists.

Not all electrical charging problems are caused by a faulty alternator . . . it's more likely something else is causing the trouble. It could be a faulty voltage regulator (most are now placed within the alternator), especially if the problem seems to come and go. Or it could be a loose fan belt or even dirty battery connections. Or the battery could be bad.

A marginal battery condition isn't always a problem when operating in moderate climates, however, get the vehicle either very hot or very cold and the need for fully-charged batteries becomes quite evident.

 Never be cheap about batteries. Always get the best quality and the highest rating suggested by the chassis manufacturer, it will pay off in the long run.

## CONVERTER AND FUSES

The power converter alters 120-volt AC into 12-volt DC power to supply power to the 12-volt RV components. Each 12-volt system has its own fuse. If a system blows a fuse, turn off or unplug all appliances on the blown circuit and replace the blown fuse with a fresh one of the same ampere rating.

Never fit a higher ampere rating fuse even if the system keeps blowing the standard fuse. Check with the dealer if the system continues to blow fuses. Fitting a higher-rated fuse could cause damage to the circuit or appliances and could cause a fire.

The various circuits are listed on the converter's door.

## CLIMATE CONTROLS

Your RV is equipped with the finest in climate controls, a furnace for cool weather with the option of a roof-mounted air conditioner for the warmer weather.

Although the furnace operates on LPG, it is ignited by an electric starter. These starters vary from model to model, check the owner's manual for this unit for the particulars on starting up this furnace.

The unit works on 12-volts and, although it actually needs less than 12-volts, it may not operate correctly if the battery charge level is too low.

## FURNACE START-UP

*Follow the instructions in the furnace owner's manual when starting the furnace.* The first air from the furnace will be at room temperature, however, the air will quickly warm as the unit operates the first few moments.

If the RV is cold, it may take several minutes or even hours before the furnace can adjust the temperature because of the need to warm all the wall and cabinet surfaces inside the unit.

Once at the comfort setting, the furnace will automatically maintain the desired temperature.



DO NOT TRY TO HASTEN THE WARMING OF YOUR RV BY TURNING ON THE OVEN OR RANGE. DO NOT USE ANY FUEL BURNING HEATERS. THERE IS A GOOD CHANCE DANGEROUS LEVELS OF CARBON MONOXIDE WILL BUILD UP INSIDE THE UNIT. ALSO, THESE FORMS OF HEAT PRODUCTION ALSO INCREASE THE HUMIDITY INSIDE THE VEHICLE AS WELL AS CONSUME OXYGEN. See the notes under *Condensation*.

## FURNACE SHUT-DOWN

For complete shut-down of the furnace: turn OFF the LPG valve and adjust thermostat to OFF or its lowest setting.

Check under *LPG System* for other information on shut-down



To help prolong furnace life, turn the thermostat to OFF when switching from one power source to another, such as from shoreline to 12-volt.

Read the *furnace owner's manual* for more information that can help you conserve energy and keep the unit in top performance.

## FURNACE MAINTENANCE

Prior to cool weather it is best that the furnace be checked and cleaned by an authorized dealer. The dealer will clean out dust, lint and other built-up matter from the heat exchanger, ducts and blower. The furnace's LPG systems should also get attention.

## ROOF AIR CONDITIONER

This unit may be equipped with an optional roof-mounted air conditioner or it may be wired to accept any one of several units offered on the market as a retrofit. Either way, be sure to read the owner's manual supplied by the manufacturer.

The roof air conditioner will operate on 120-volts, thus your system will only run when connected to an outside 120-volt source through the shoreline or by use of an optional power generator. The power generator can be used while traveling or camping.

When starting up the air conditioner, close all windows and doors and draw any curtains or blinds to help lower the amount of sunlight warming up the interior.

Remember to utilize shade, whenever possible, when parking the vehicle. Don't forget the SAFETY ASPECTS of power generator usage.

Some roof-mounted air conditioning units are equipped with heaters. See the *owner's manual* for proper operation and remember that these roof-mounted heaters are meant to be used for moderately cool temperatures or in conjunction with the unit's furnace.

# WATER

## FRESH WATER

Two methods for providing fresh water are supplied in the RV. One is from the vehicle's fresh water holding tank with an electric pump and the other is from an onshore high pressure city water faucet connected to the RV by a hose to the exterior fresh water inlet.



Most long-time RVers use a specially manufactured high pressure water hose for handling drinking/cooking water, even though any type of high pressure hose will work.

These hoses are made with the fact in mind that they are to be used by RVers; the interior of the hose is made with specialized materials. These hoses are available at RV centers as well as hardware and department stores.

Some campsites have water systems with excessive water pressure which can damage your RV's pipes. Always check line pressure if there is any doubt concerning excessive water pressure.

## WATER TANK

Water tanks are located in a variety of places on RVs because of weight and balance needs of various designs. Check out the location for this unit. Most are located under couches/chairs, beds, and floors.

Filling the tank is accomplished with the exterior fresh water inlet by use of a hose or a container. The tank is full when water flows out of the inlet.

## CLEANING

The fresh water tank should be sanitized after each long storage, at the opening of travel season or in the event the tank is contaminated with a foreign substance, liquid or undrinkable water. You may find yourself at a camping location that can only offer non-drinking water for use in your tanks for bathing. Bottled water will have to be used for drinking and cooking.

## SANITIZING WATER TANK

To sanitize your tank and system mix 2.5 cups of household bleach with ten gallons of clean water. Pour the mixture into the water tank through the exterior inlet.

Turn *ON* the water pump and open the water faucets and then turn *OFF* when the water begins to flow. LET STAND THREE HOURS.

After the three hour wait, open the faucets and let all the water drain completely out. Some water will remain in the hot water heater.

Fill the water tank through the exterior water inlet and turn *ON* the hot water faucet and the water pump.

Let the water run until the system is completely flushed; remember, the hot water tank needs to be well flushed. Repeat the process with the cold water line which will not take as long as the hot water.

A slight chlorine taste may linger and if this is objectionable, mix a solution of one quart of vinegar to five gallons of water and add it to the tank. Let this stand for three hours and repeat the flushing described above.

## WATER PUMP

An on-demand water pump is part of the water system. Turn on the pump when water is needed. The pump's on/off switch is located near the kitchen sink and, on some vehicles, near the bathroom. At first the pump will be heard constantly until a pressure is built. Once a pressure is built the pump will automatically shut off.

When a faucet is turned on the pump will start up again and continue until some time after the faucet is turned off. The pump is not needed when the RV is hooked to a pressurized city water source.

The pump is on the 12-volt system. If the pump does not work, check the system's fuse.

If the pump continues to run with the faucet closed, check to see if the water tank is empty or there might be a leak in the system, thus not letting pressure build up to shut off the pump.

## SINKS, LEAKS, AND WATER PURIFICATION

Maintenance of the sinks is as simple as using a stainless steel or ABS cleaner. Do not use an abrasive cleaner.

Check for leaks quite often if traveling over bumpy roads that promote loosening of connections.

Water purification can be accomplished by adding a purification solution to the water tank or by the addition of an optional water purifier connected to the cold water line beneath the sink. Talk to an authorized dealer about the options.

If a water purifier is added to the water line be sure to bypass it when winterizing or sanitizing the water system.

## GREY WATER STORAGE

Grey Water Storage is where all your water lines empty. These, in most cases, include the kitchen sinks, bath sink and bath/shower. If this is the system in your unit, there will also be a Black Water Storage or holding tank for the toilet. Some RV systems are comprised of only one storage tank that collects both the grey and black water.

The drainage system also, like the system in a home, includes vents that carry odors out through the roof of the vehicle. The vents also equalize the air pressure between the outside and tank so that the system can work properly when draining sinks and when draining the storage tank.

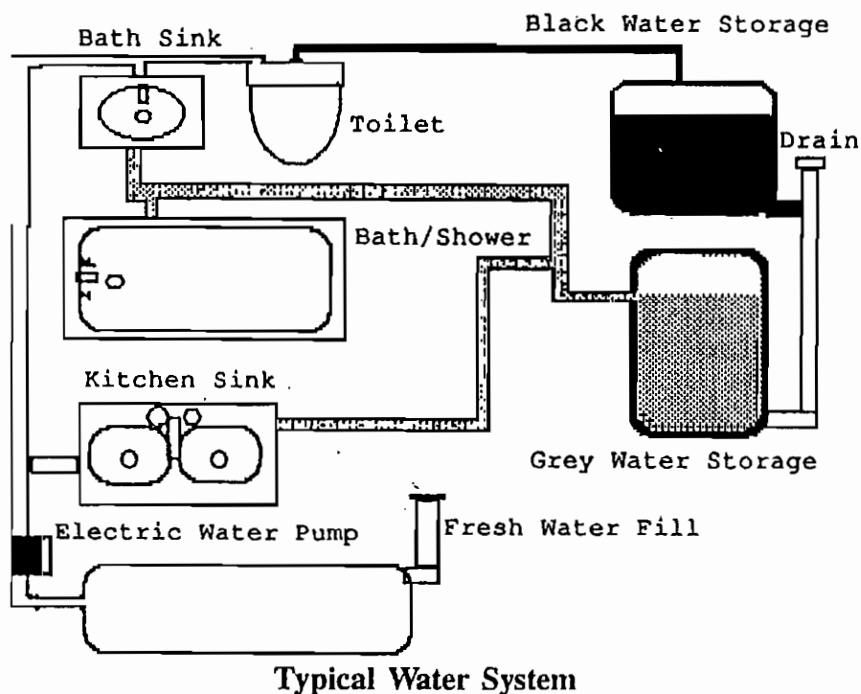
## TOILET

Read over the *toilet manufacturer's manual* prior to its first usage. It's a good practice to flush the unit after taking it out of storage and after emptying the grey water tank.

To control odors, check your local RV supply center for several different types of holding tank treatments.

Several different models of toilets are found on **Four Winds International** units. Familiarize yourself with the operation and maintenance of the unit in this RV.





Do not use an abrasive cleaner on the toilet and do not use a highly acidic or concentrated household cleaner. Check with an authorized dealer if there are questions.

## HOLDING TANKS

The waste system in your RV is made up of either one holding tank or two holding tanks (black and grey).

The tanks do not need a lot of care, however, common sense does dictate some changes from home habits. Do not place facial tissues into the toilet or any other similar solid. Dispose of these in waste basket.

It is highly recommended that biodegradeable toilet tissue be used in the system to prevent accumulation of solids in the tank. RV supply centers and retailers who offer septic tank supplies carry this product.



Frequent emptying of the holding tank will help prevent problems. **USE ONLY DESIGNATED DUMPING STATIONS.** Many service stations along major highways, public rest stops, and most camp grounds offer dumping facilities.

To empty the holding tanks, make sure the RV is level since gravity is used in the process, and remove the black water/sewage drain hose from its storage area. Remove the black water drain cap and fit the hose to the drain's termination connection. Pull open the gate.

## CLEANING THE HOSE

After draining the tank, close the gate and go inside the unit. Flush two gallons of water through the toilet. Return to the dump point and pull the gate open again. This helps flush out the tank and clean the hose at the same time. You may want to repeat the process again.

After draining the tank, push the gate back to the closed position. Remove the drain hose and replace the drain cap. Clean the hose with available water and replace it in storage. Dumping the Grey Water holding tank is the same procedure; however, it is not necessary to flush the system unless it is desired by the owner. Be sure to put the gate back to the CLOSED position when finished.



## LIQUID PETROLEUM GAS

The Liquid Petroleum Gas (LPG) system furnishes fuel for several appliances in the RV. These include the furnace, hot water heater, range, oven, and refrigerator. The LPG system is a standard in the RV world because of its portability, reliability and efficiency.

The LPG system has been covered in the front of this manual under **SAFETY**


The LPG system in this vehicle is designed to meet stringent Federal and State regulations and has been tested prior to delivery.



The LPG system uses PROPANE. DO NOT USE ANY FUEL MIXTURE THAT CONTAINS ANY AMOUNT OF BUTANE. Check with the LPG dealer to make sure of the content of the LPG that he supplies.

The LPG is stored in a tank at high pressure. The tank is equipped with an automatic cut-off that leaves approximately 20 percent of the tank's capacity for vapor expansion. As noted in the front of the manual, there is an automatic safety device on the tank that will free any excess pressure . . . DO NOT STORE AN LPG INSIDE YOUR RV.

If you fill an LPG tank at a cold temperature and take it to a much warmer temperature, the gas will expand and the tank will more than likely release the excess pressure — AUTOMATICALLY!

The LPG system contains a series of pressure regulators that bring the high pressure in the storage tank down to a usable pressure at the various appliances it fuels. If the gas pressure at the range or oven seems higher than normal, have the regulators checked by an authorized LPG service representative. Have the pressure checked and adjusted at the beginning of each new travel season. LPG is heavier than air, thus if it is allowed to leak it will settle to the lowest point available. Because of this, if you don't necessarily think that it is in a "low" position.  DO NOT USE A MATCH OR LIGHTER TO SEARCH FOR AN LPG LEAK IN A DARK CORNER OR CABINET!

Follow the suggestions in the *SAFETY* section on what to do in the case of an LPG leak.

## COLD WEATHER USAGE

Since the appliances use the vapor of the LPG and that vaporization rate depends upon temperature, you may find that at low winter temperatures the RV's LPG system can not meet the demand placed upon it. The LPG will continue to vaporize as low as 44 degrees Fahrenheit below zero, but long before that temperature the demand may exceed the vaporization rate.

If the RV is utilized in very cold climates, check with the authorized dealer or gas supplier about the limitations temperature places on appliance usage.

Always ask the LPG supplier to add anhydrous methanol before refilling the LPG tank in cold weather.

## PRESSURE REGULATOR FREEZE-UP

If moisture gets into the LPG pressure regulator freeze-up may occur. Despite precautions by fuel manufacturers and suppliers, this can happen.

Two ways of preventing the problem include keeping the storage tank valve closed when not in use, ESPECIALLY WHEN THE TANK IS EMPTY, and see about having the LPG supplier add methyl alcohol to the tank.

## START-UP AND SHUT-DOWN

As mentioned in the front of this manual, whenever starting up the LPG system after a long period of storage or after refilling the storage tanks, air in the lines will need to be bled before the LPG will ignite. It may take several tries to light the range.

At the same time, when shutting down the LPG system for storage, do not forget that even after shutting off the LPG SERVICE VALVE, LPG will remain in the lines. Light the range burners to eliminate any gas that remains in the line. Then turn the burner control to *OFF*.

## FILLING LPG TANKS

Read over the SAFETY tips at the opening of this manual on filling the LPG tank.

Two things to remember when filling:

1. THE SERVICE VALVE MUST BE CLOSED!
2. THE 20% LIQUID LEVEL GAUGE VALVE MUST BE OPEN!

REMEMBER: Do not overfill the tank! 80% is the capacity. Anything over 80% will be automatically bled off to the atmosphere and this action can't be stopped!

# APPLIANCES & ACCESSORIES

Each of the appliances has its own manufacturer's manual and warranty papers. Be sure to completely familiarize yourself with the operation and safety features of each one of these.



IT IS NOT SAFE TO USE COOKING APPLIANCES FOR COMFORT HEATING. THESE APPLIANCES NEED OXYGEN TO WORK, THUS DEPLETING THE RV'S CLOSED SPACE OF OXYGEN AND REPLACING IT WITH POISONOUS CARBON MONOXIDE.

The RV operator must provide proper ventilation when utilizing the cooking appliances. Turn on the overhead vent if so equipped. Open a window. The danger of asphyxiation is greater when the appliances are used for a long period of time.

## PILOT LIGHTS

Several types of pilot lights are used within the appliance industry. *Read the manufacturer's manual to familiarize yourself with the units in this RV.*

Note that some appliances, the eye-level range/oven for instance, must have two pilots lit with the range pilot having to be lit first. Also the control knobs must be in the "pilot on" position when lighting the pilots. **CHECK THE OWNER'S MANUAL FOR DETAILS.**

## APPLIANCE CARE

Clean the appliance surfaces with household cleaners remembering these points:

1. *Do not use cleaners with abrasives.*
2. *Do not use cleaners on aluminum gas tubing or heating elements and thermostat sensing bulb.*

## WATER HEATER

The water heater is an LPG fueled system that heats between six and ten gallons of water to a set temperature. The heater may be equipped with either a match or electronic ignition. Read the manufacturer's manual for specific details on the unit provided in this RV.



Check the manual on details of start-up and shut-down. **NEVER LIGHT THE HEATER IF THE HOT WATER TANK IS EMPTY.** Remember: before lighting the hot water tank, **OPEN the LPG SERVICE VALVE.**

Several types of thermostats are supplied with the heaters. Familiarize yourself with the unit supplied in this RV. Items you need to be familiar with are: Pilot Light Adjustment, Burner Adjustment and Draining the Tank.



In some rare cases Hydrogen Gas can be produced in a hot water system served by a heater that hasn't been turned on for more than two weeks.

Hydrogen Gas is extremely flammable! It is recommended that prior to lighting any pilots you turn the hot water faucet on and let water run through for several minutes. If hydrogen gas is present you will hear air escaping through the pipe along with the water. Do not smoke or create any flames while doing this.

## WATER HEATER CARE

The care of the water heater is similar to that given the fresh water tank. You may desire to flush out the tank using water or compressed air. Use either the water inlet or outlet or the relief valve port, however, care must be taken when replacing the relief valve to assure that it is tight. Use a non-toxic pipe compound.

The line to the water heater is equipped with shut-off valves to enable by-passing the tank. They are used when winterizing the water system with antifreeze to reduce the quantity needed. By shutting off the top and bottom valves and opening the center valve, the water heater will be by-passed and can be drained by itself. The antifreeze can then be circulated throughout the remainder of the water system.

**NOTE:** BE SURE TO KEEP COMBUSTION CHAMBER AND IGNITION SYSTEM FREE OF SPIDER WEBS AND INSECTS. OBSTRUCTIONS IN THIS AREA CAN CHANGE GAS FLOW AND ALTER COMBUSTION PATTERN. FIRE CAN RESULT. CLEAN AND SPRAY AREA WITH WD 40 OR SIMILAR AGENT.

## REFRIGERATOR

The refrigerator is also fueled by the LPG system as one of either two or three methods of power. The refrigerator can be run on LPG and 120-volt electricity or can be run, on some models, additionally with 12-volt power.

Completely cover the operation of your RV's refrigerator by reading its owner's manual and warranty papers.

In general, however, all units operate on a gravity flow system; thus, the unit must be level for it to operate properly. If you are going to be stopped for more than 30-minutes on an unlevel surface, turn off the unit. A small level inside the freezer would be useful for checking.

## REFRIGERATOR CARE

After each outing remove all food and ice from the refrigerator, defrost, and clean the shelves, trays and evaporator. Wipe interior dry with a soft cloth. **DO NOT USE HARSH OR ABRASIVE CLEANERS OR STRONG CHEMICALS.** If the unit will not be used for some time, turn off the power and leave the door slightly open for air circulation.

Defrost the unit by removing all food and ice and turning thermostat to OFF. Time can be shortened by placing hot water in the ice trays or a small pan inside the unit. When defrosted, empty the drip tray and dry with a soft cloth. Replace food and turn thermostat to MAX until the temperature has reached its normal operating level. Turn thermostat to your normal setting.

# OPTIONAL EQUIPMENT

If this vehicle is delivered with optional equipment, ask the dealer to go over the operation of the various items. Some may not come with any manufacturer's literature, but always ask if there is printed material supplied. Since the optional equipment may be a dealer-added item, the printed matter may not have been placed aboard the RV by the installer.

## LONG-TERM STORAGE AND WINTERIZATION

The first section covers storage of several weeks, but not for a season:

LPG should be shut down. See LPG section for specifics, but remember to turn off LPG in lines after shutting OFF the SERVICE VALVE on the LPG tank.

WATER HEATER should be drained by using the drain plug or drain cock that is located in the water line near the water heater tank. Open all hot water faucets to allow air pressure equalization while draining.

Because of the design of the water tank and its location, some water may remain in the tank even when water does not come out of the drain plug.

Use an air hose to force the remainder of the water out of the tank. WATER TANK should also be drained by opening all the water faucets and the drain plugs, valves or caps in each line. When water stops flowing, close plugs.

**WATER PUMP** also needs to be drained by removing the outlet hose and then turning the pump ON. A small amount of water, less than a cup, will be forced out and can be taken care of with a towel. Replace the water hose.

**ELECTRICAL SYSTEM** can be completely shut down by turning off all circuit breakers at the Power Control Box.

**DOORS AND WINDOWS** should be closed and secured with drapes/shades pulled down to block sunlight. Leave a roof vent or window slightly open to allow air to circulate, but not enough to let rain or snow enter.

This next section covers long term storage over a period of months and cold weather storage.

**COLD WEATHER** storage and long term storage are often the same, however, remember that **COLD WEATHER** storage concerns must be taken into consideration even if you use the RV during the winter on a regular basis.

**FRESH WATER SYSTEM** care is of primary importance during cold weather storage. Drain the water tank and water heater. If you will be using the unit during cold weather **BE SURE TO ADD A NON-TOXIC, APPROVED RV WATER ANTI-FREEZE** to prevent a freeze-up if you leave water in the tanks. The local RV supply center can help you with the choice of product.

**LONG TERM WATER SYSTEM STORAGE** over the winter needs the addition of about six gallons of **NON-TOXIC RV WATER ANTI-FREEZE** to the fresh water holding tank.

Turn on the faucets and the water pump and let run until anti-freeze starts to flow from the faucets in both the kitchen and bath. Pour anti-freeze down each sink to displace any water in the P-traps.



**REMEMBER: AUTOMOTIVE COOLING SYSTEM ANTI-FREEZE IS TOXIC!** It would be very difficult, if not impossible, to clean up the system for human use if automotive anti-freeze contaminated your fresh water system.

**WATER HEATER** can have anti-freeze added to the remaining water after the tank is drained (see above) so that air pressure is not needed to completely vacate the system. Open a hot water faucet and shut when anti-freeze flows from it.

**WATER PUMP AND WATER TANK** are handled the same as above under short term storage.

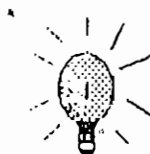
**TOILET** is used to also prepare the waste water tank by pouring a gallon of fresh water anti-freeze into it. Gravity will allow this to flow to the holding tank. Check the manufacturer's manual for instructions on winterizing the toilet's water supply line or, if the manual does not offer this information, ask your dealer for details.

**LPG**, as noted earlier, also needs to have anhydrous methanol added to the storage tank to help it operate properly at low temperatures. Adding a moisture absorbing product may also be needed to prevent valve freeze-up. **LPG GAS REGULATOR** should be covered for long term storage to prevent moisture build-up in the vent.

**INTERIOR** items that need to be taken care of during a long term storage include the emptying of the **REFRIGERATOR** of foods and ice. Also clean and defrost as noted earlier. Leave open so that air can circulate. Remove any foods in cabinets that would be damaged in a freeze or not be usable after a long period of storage. Leave cabinet and closet doors slightly open to help air circulation.

**HOLDING TANKS** should be emptied, cleaned, and sanitized. The dump valves should be checked and lubricated if needed. Valves should be closed.

**RV BATTERY** should be fully-charged and have the proper fluid level, if applicable. The battery cables should be disconnected. If the RV has an additional battery besides the under hood automotive unit, they both should be checked regularly during the storage period and re-charged when necessary, avoiding a prolonged period of discharge. Batteries can be taken out of the RV and stored in a dry, cool area that provides adequate ventilation to disperse any hydrogen fumes produced.



To help prevent fading of window treatments as well as provide an added measure of insulation, place cardboard or foam insulation board over the windows, either from the outside or inside.

The RV windshield can be protected with a manufactured cloth cover or with heavy duty black plastic sheeting secured by the closed driver and passenger doors.

EXTERIOR VENTS can be covered with heavy duty black plastic sheeting.

EXTERIOR SURFACES should be given a thorough cleaning with a mild soap and waxed to create a barrier between the surface material and harsh winter elements. Lubricate locks, hinges and exposed bolt/nut fasteners.

Outside rear view mirrors can also be covered with heavy duty black plastic sheeting.

TIRES can be protected from the sun's ultra-violet rays, if you have a substantial number of sunny days during the winter months, by using tire "mittens" that look and work somewhat like a spare tire cover.

This type of protection may be suitable year round for RV owners who live in extremely sunny sections of the country such as the Southwest. Tires can "rot" on a recreational vehicle faster than they will wear the tread out. The tire's outside sidewalls are the most vulnerable to this aging process.

## RV MAINTENANCE

Like any new vehicle owner, the new RVer takes pride in his unit and keeps it looking great. A spic and span RV may bring pride, however, more importantly, it will help prolong the life of the vehicle and its components. Thus, vehicle maintenance is an on-going task.

The primary reason for maintenance is catching small problems prior to their becoming major problems. Read all the manufacturer's manuals that were provided with the vehicle. Become completely familiar with all the workings of the unit. Note any changes in sound, color, temperature and "feel" of the various systems.

Preventative maintenance is that work done on a routine basis before something breaks or begs attention. The key word is ROUTINE. At the very minimum check everything on the vehicle at least ONCE A YEAR.

The automotive manual will suggest routine maintenance intervals for its various systems (coolant, lubricating, suspension, etc.) REMEMBER: THESE ARE MINIMUM INTERVALS TAKING INTO CONSIDERATION THAT THE VEHICLE IS OPERATING UNDER "NORMAL" CONDITIONS. If your unit is operated under harsher conditions, such as on dirt or gravel roads, the maintenance interval will have to be shortened accordingly.

Use in dusty conditions means more frequent oil and filter, including air filter, changes. Usage on rocky roads will mean closer inspection and more maintenance of the suspension, steering, and tires as well as a closer, more frequent inspection of the undercarriage for rock damage.

## HEAT IS A REAL KILLER

Extreme heat is very hard on hoses, belts and other items under the hood. More frequent and closer inspection of these items will be needed to avoid cooling problems on the road.

Unlike the past, the new hose and belt lines do not show wear the same way these items did in the past. Few belts fray anymore. Manufacturers suggest that all hoses and belts be replaced once every three to four years, no matter what they "look" like. The main culprit in all of this is engine heat. Engines are operating at much higher temperatures than in the past and this tends to "cook" hoses into old age quicker.

Other "victims" of under-the-hood heat are the spark plug wires. Today's electronic ignition engines need very good spark plug wires in order to perform at their peak and give good mileage and power.

Wheel bearings should receive a good amount of attention since they are asked to handle a big load.

Cleaning, checking, and repacking should be done once a year. If the vehicle is subjected to numerous low water crossings, then check them more often.

## NOTHING LASTS FOREVER

Despite the fact that you may have never added water or otherwise fooled around with the vehicle's cooling system, it will need to have its anti-freeze replaced about every two years or less. Yes, anti-freeze wears out. The main protection that suffers is corrosion protection. Talk to your dealer about this aspect of maintenance.

INTERIOR AND EXTERIOR maintenance is basically checking the equipment to see that it functions properly, is lubricated if necessary, and is protected from the elements. This means taking care of paint chips and scratches on the exterior before they have the chance to work into the bare metal and start corrosion.

Touch-up paints are excellent for this purpose as is keeping a good coat of wax on top of a clean vehicle. Removal of road tar, mud, tree sap, and bird droppings should be accomplished as soon as practical to avoid permanent damage from chemical reactions of the foreign matter with the finish of the RV.

A high quality wax will place a barrier between this road dirt and the vehicle surface, but after a long period of time some things, like tree sap and droppings from a bird that had berries for lunch, will get through even this.

## CLEANING

Frequent washing is suggested to cleanse the vehicle of road salts, especially heavy in a state like Florida, near oceans, or where snow and ice are a part of winter. Be sure to clean UNDERNEATH the vehicle and the wheelwells.

Like your home, the interior of the vehicle should be thoroughly cleaned from time to time, including carpets, window treatments and upholstery. Use the same mild cleaning products you use on your fine furniture in the home.

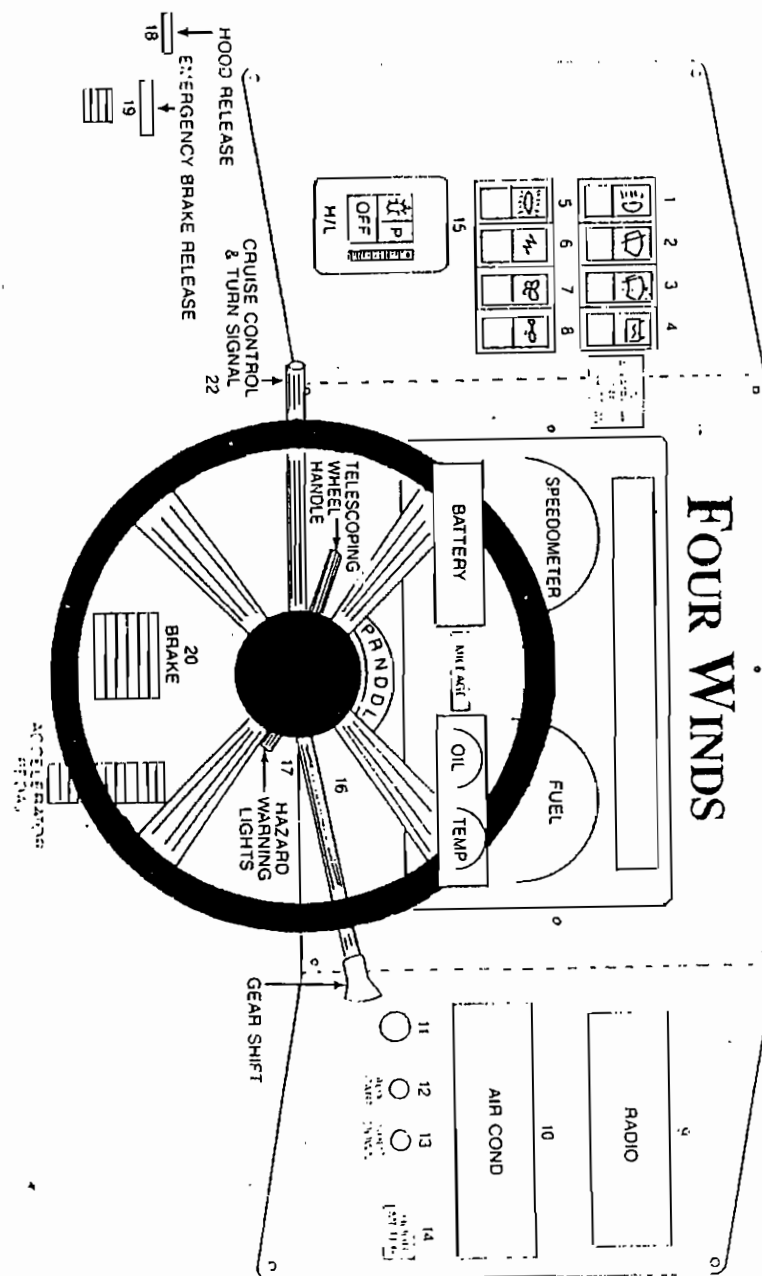
## CHASSIS INSTRUMENT PANEL

Thoroughly familiarize yourself with the controls and gauges of the vehicle by reading the manufacturer's manual.

The vehicle is equipped with the latest automotive technology and the gauges to monitor its performance. The dash is designed for convenience and comfort, but also for safety and reliability.

The reliability aspect places a responsibility on the vehicle owner. The owner must frequently check the readings of the gauges to note any deviation from "normal" performance perimeters. For instance, a higher than normal temperature recorded on the coolant gauge could possibly indicate trouble.

The gauges do not do any good if they are not watched and headed. DO NOT PUT OFF CHECKING OUT ANY DEVIATION FROM THE NORM.



## CHASSIS INSTRUMENT PANEL — CLASS "A"

NO.	FUNCTION	NOTES
1	Fog Light Switch	(when equipped)
2	Windshield Wiper Switch	(operates both left and right)
3	Windshield Washer Switch	(pump operation)
4	System Shut Down Switch	(battery disconnect)
	NOTE: Switch Must Be ON When Coach Is In Operation, Otherwise Leave In The OFF Position. Switch Must Be In The ON Position To Facilitate Charging Of The Auxiliary Battery.	
5	Aisle Light Switch	(when equipped)
6	Generator Operation Switch	(remote start switch)
7	Defroster Fan Operation	(located in front overhead)
8	Horn Switch — Roof Mounted Horns	(when equipped)
9	Radio — AM/FM Stereo Cassette	
10	Air Conditioner And Heater	(chassis operated)
11	Cigarette Lighter	
12	Auxiliary Start Indicator (Red)	SEE: Battery Isolator Controller Notes For 12 & 13!
13	System Shut Down Indicator (Green)	
14	Generator Hour Meter	(registers running hours)
15	Chassis Headlight And Dash Dimmer Switch	
16	Chassis Horn	
17	Instrument Gage Cluster (Chevrolet)	
18	Hood Release — Inside Operation Prevents Theft. (Open Prop Is Located Inside Grill Assembly Under Hood!)	
19	Parking Brake — Foot Operated And Release.	
20	Service Brake — Main Chassis Brake	
21	Accelerator	
22	Cruise Control Switch	
23	Steering Wheel Tilt Controller	
24	Automatic Transmission Gear Selector	
	Clock — located in overhead (Not Illustrated) only visible when chassis ignition switch is ON!	

NOTE: BATTERY ISOLATOR CONTROLLER performs two important functions. First, it provides a method of charging and isolating dual batteries in an RV. It also provides automatic auxiliary starting from the house batteries when the chassis battery is unable to provide sufficient starting power.

It operates as an isolator by sensing the level of voltage on the chassis 12 volt system. When this voltage goes above 13.3 volts for approximately 12 seconds, as happens when the engine is running normally (normal alternator output voltage is approximately 14.4 volts), it will close the isolator relay providing charging current to the house battery. When the ignition switch is turned off, the relay will open immediately. If the voltage should drop below 12 volts for more than two seconds while the ignition is on, the relay will drop out. This might happen when the alternator is not able to supply sufficient current to all of the loads. When the chassis voltage goes above 13.3 volts again, the relay will again close in about two (2) seconds to re-try and charge the battery. The resultant flickering of lights would alert the owner of the system overload.

SYSTEM SHUT DOWN INDICATOR (Green) — used in conjunction with switch #4. When the system shut down switch (#4) is off, the entire 12 volt system is disconnected from the house battery. When the system shut down switch is on and the 12 volt system connected, the green indicator light will be on.

As an automatic auxiliary starter, the controller operates by sensing the levels of both the house and chassis batteries. If, when starting, the chassis battery voltage falls below 9 volts for ½ second, and the house battery is above 11.5 volts, ~~the RED AUXILIARY START INDICATOR LIGHT #12 will come ON and~~ the relay will be closed and held until the starter switch is released. This parallels the house and chassis batteries, providing the needed boost for starting.

If the chassis battery is fully dead then "Jump Starting" will be required. A release button is located on the left side of the battery isolator controller. This button must be depressed while the ignition switch is activated disconnecting the house battery 12 volt system. Two persons are required to perform this function.

## ROUTINE DRIVING CHECKS

The pre-trip check has been discussed earlier in the manual; be sure to re-check the vehicle on any extended travel.



Not only check the vehicle daily, routinely check it during the trip. Whenever taking a break, always take a walk around the vehicle to see if all systems are normal at highway temperatures. These are primarily tires and engine.

Prior to getting back into the vehicle make another visual check of the unit, paying close attention to tire pressure (is a tire developing a slow leak?) the area under the engine compartment (any fluids leaking?) and the trailer hitch/ball if being utilized.



When pulling into a parking space prior to taking a break, always note as you pull in the condition of the ground where you will be parking and where the engine will be directly above. If you do not pay attention to this, when you get out and see a pool of transmission fluid, oil or coolant under your vehicle you will not know for sure if it is your vehicle's or some previous vehicle's mess. Panic can set it.

## TIRE CHANGE

The chassis manufacturer's manual should spell out the best method for jacking their vehicle up for a tire change. However, remember that this vehicle is much heavier and bulkier than most any other vehicle you may normally drive day to day. Keep this in mind while working around it.

Be sure to change the tire on as **LEVEL** and **SOLID** a surface as possible. Try not to change a tire on grass, gravel, dirt, sand, or even thin, old asphalt.

Because of the height of the unit, changing a tire on a slope is very dangerous, especially if the flat tire is on the high side of the grade.

If the area available to change the tire is too soft or too much of a grade, the best advice is to call a tow truck and take the RV to a safer location. Driving on a flat tire will surely ruin the tire and maybe the tire rim as well. This could also damage other parts of the unit near the wheel well.

Also be careful of strong gusts of wind that might push the vehicle off a jack. This includes 18-wheel trucks passing close to your vehicle at Interstate speeds.

As soon as you have discovered a tire has gone flat, slowly, gently pull the vehicle off to the side of the roadway. **DO NOT APPLY BRAKES TOO QUICKLY OR TOO HARD.** If possible, coast to a stop with only slight pressure on the brakes. Do not make sudden moves. Put your turn signal blinker on in the direction you will be exiting the lane.

If caught on an inside lane of a multi-lane highway, pull off onto the left shoulder. If traffic is almost non-existent, you may attempt, with the help of your traveling companions as spotters, pull across lanes of traffic onto the right shoulder. **HOWEVER, THIS IS A VERY DANGEROUS MOVE.**

Once stopped, immediately turn on your hazard light, turn off the motor and headlights, set the parking brake, place the transmission into "PARK", check the rear view mirrors for traffic, vacate the vehicle, and quickly place out flares or reflective markers, especially at night. Also, get your passengers out of the vehicle and a safe distance away from it.

**THE LAST THING YOU ARE CONCERNED ABOUT IS THE FLAT TIRE.** It will still be there after you've made the scene safe for your vehicle and passengers.



**EACH YEAR HUNDREDS OF DRIVERS ARE KILLED AND INJURED BY PASSING VEHICLES WHILE THEY ARE CHANGING A TIRE OR LOOKING OVER A DISABLED CAR. HUNDREDS OF PASSENGERS ARE KILLED AND INJURED EACH YEAR WHEN THE DISABLED CAR THEY ARE SITTING IN IS HIT BY ANOTHER VEHICLE.**

Being on the shoulder is no protection. In the last few years nearly half a dozen Texas Highway Patrol Law Enforcement Officers have been killed by drunk drivers who drove into them while they were parked or standing on the shoulder working a crash site or handing out a traffic ticket . . . some at mid-day!

## CHANGING THE FLAT

After locating the flat tire, sometimes it is difficult to tell while at the wheel which tire it is, block the **OPPOSITE** tire with a chock. Jack the vehicle up according to the chassis manufacturer's directions. Keep in mind that the jack should never be used to hold up the vehicle while someone works under it. Even when changing a tire, never sit with your legs stretched out under the vehicle!

Once the spare is on and the lug nuts are lightly tightened, let the jack down and then re-tighten the lugs with the wheel on the ground. If you do not have a torque wrench, have the lug torque checked at a service station as soon as practical.



Also have the flat tire fixed or replaced as soon as possible. Never be without a spare tire.

## FINALLY

We're proud that you've chosen **Four Winds International** as the manufacturer of YOUR home away from home. We feel that we have put all our knowledge and craftsmanship into products our customers can be proud of for many years down the enjoyable roads they will take them.

If we can be of service to you, feel free to contact our dealer or us.

## IMPORTANT PHONE NUMBERS

Hometown RV Dealer:

Home:

Office:

Hometown Insurance Representative:

Home:

Office:

Regional/National Office:

Personal Physicians:

Home:

Office:

Home:

Office:

Neighbor:

Bank:

### FOUR WINDS INTERNATIONAL

781 COUNTY ROAD 'S • PO BOX 1486  
ELKHART, IN 46515-1486

## SUBSEQUENT OWNER REGISTRATION CARD

DATE OF PURCHASE	FOUR WINDS SERIAL NO.	MODEL	YEAR	MILEAGE
CHASSIS SERIAL NUMBER		CHASSIS MANUFACTURER		
THIS PRODUCT WILL BE WARRANTED IN THE NAME OF: <b>SUBSEQUENT OWNER</b>				
SUBSEQUENT OWNER'S NAME (LAST, FIRST, MIDDLE)		<b>DEALER</b>		
REGULAR MAILING ADDRESS — STREET OR P.O. BOX		REGULAR MAILING ADDRESS — STREET OR P.O. BOX		
CITY	STATE	CITY	STATE	ZIP
COUNTY	TELEPHONE (AREA CODE)	TELEPHONE (AREA CODE)		

TYPE OR PRINT ALL ENTRIES

