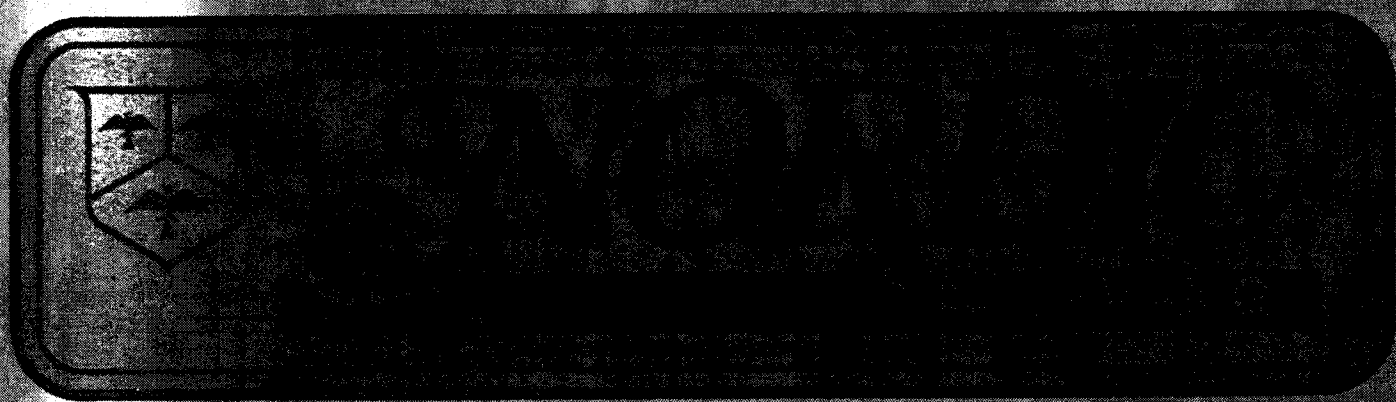
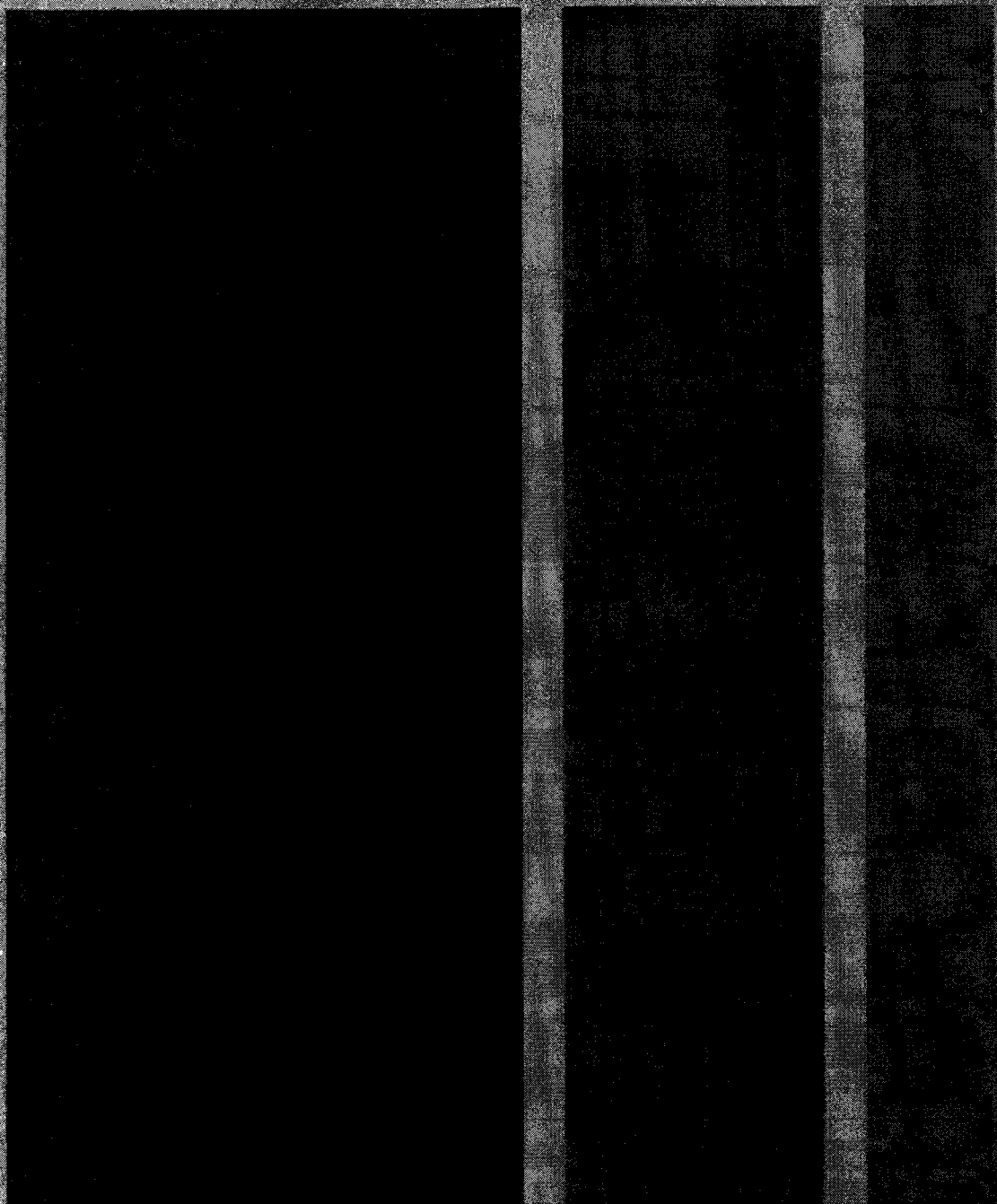


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Owner's Manual

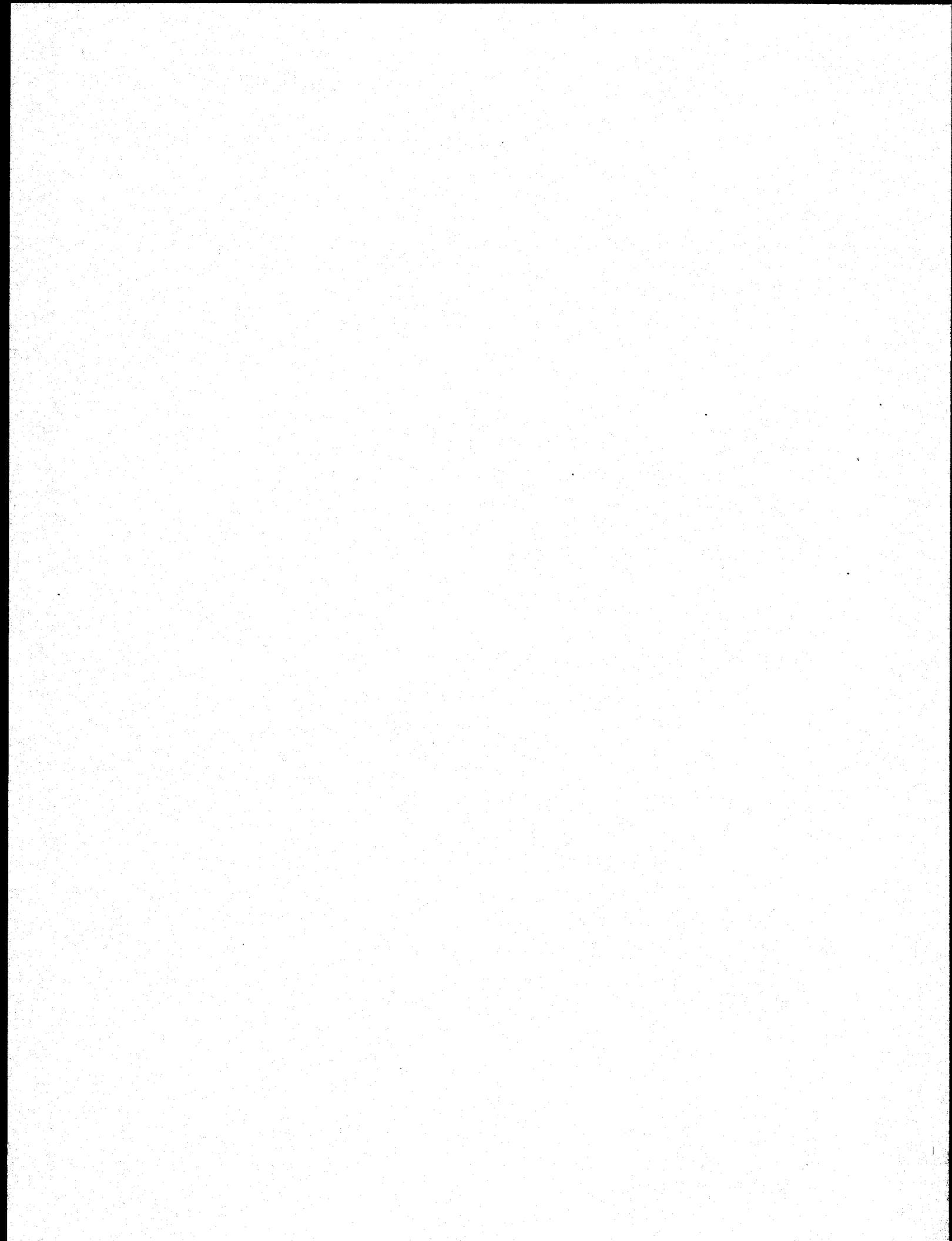


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INTRODUCTION

GENERAL

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

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

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

TOW VEHICLE SELECTION

GENERAL

Selection of an adequate tow vehicle is essential. If you plan to use an automobile or truck you already own, contact the vehicle manufacturer or representative for information. If you will be purchasing a new tow vehicle, be certain to tell your dealer the type and size of the RV you will be towing.

ENGINE SIZE

The engine must have enough horsepower to handle the tow vehicle, passengers, Nordic unit and all its cargo. Most automotive manufacturers offer a trailer towing package which may include: Larger alternator and battery, heavier ply tires, sideview mirrors, heavier electrical wires, larger engine and transmission cooling systems. Consult the tow vehicle manufacturer's owner's manual for recommendations.

NOTE: The use of heavier suspension components (springs, shocks, axles) or heavier ply tires DOES NOT increase the weight ratings printed on the tow vehicle's identification or certification plate. The Gross Axle Weight Rating (GAWR) of each axle is determined by the components within the axle system with the lowest load-carrying capacity.

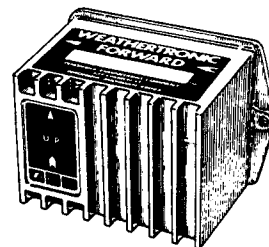
HITCH REQUIREMENTS

Your trailer fits a 2" hitch ball. Ask your Nordic dealer about the proper class of hitch to use. The selection of the hitch is important since it affects towing and handling characteristics. Read the information supplied by the hitch manufacturer to achieve best possible performance. The hitch weight for your unit is listed in the sales brochure; be certain your tow vehicle can carry the hitch weight.

NOTE: Installation of a Weight-Distributing (Mini-Equalizing) Hitch is recommended on any passenger car towing a Nordic Trailer.

BRAKE CONTROL AND VEHICLE OPTIONS

All units are equipped with electric brakes and must have a brake control installed in the camping trailer or tow vehicle to operate the brakes. Automotive air conditioning, automatic transmission, power brakes, power steering and cruise control are features that could make your trips more enjoyable.



**ELECTRIC
BRAKE
CONTROLLER**

LICENSES

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

INSURANCE

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

TRAVEL PREPARATIONS

GENERAL

Determine the various items of equipment, clothing, food and other supplies required for the length and destination of your journey. In a subsequent section, the importance of proper loading is explained, but at this stage you're more concerned with a quick getaway. One way to reduce loading time is to purchase dinnerware, flatware, pots, pans, and towels, which can remain in your unit at all times. After a trip, clean and launder the articles and replace them in your RV, ready for your next trip. The following is a guide to help in your travel preparation.

IMPORTANT DOCUMENTS

Carry your vehicle registration and insurance policy

card(s). If you are borrowing a vehicle, you should have a notarized letter of authorization from the owner with you.

SAFETY

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

EQUIPMENT

Fresh water hose (garden) and bucket "Y" type water hose fitting; 20-foot 3-prong power cord; 3-prong adapter with grounding wire; fuses; wheel chocks; leveling ramp or blocks.

TOOL CHEST

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

ADDITIONAL TOOLS

Hatchet, saw, shovel and 12-volt portable tire pump.

CLOTHING

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

SLEEPING GEAR

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

CAMP HYGIENE

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

PERSONAL HYGIENE

Toilet paper, soap, washcloths, towels, toothpaste, toothbrush, deodorant, and shaving kit.

FOOD AND WATER

Don't try to take a food supply for an extended trip. Take enough for two or three days and replenish supplies along the way. Take a basic supply of seasonings: sugar, salt, pepper and spices. Plan meals so that fresh or refrigerated

items are used before they spoil. Fill your fresh water holding tank before leaving.

MEAL PREPARATION

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

ENTERTAINMENT

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

PRE-TRAVEL CHECK

GENERAL

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

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

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

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

NOTE: Proper tire inflation is extremely important.

WHEEL LUGS must be tightened before departure, then every 50 miles for the first 200 miles during your initial trip and after each tire change. Thereafter, tighten lugs periodically and before using unit after a storage period.

WHEEL BEARINGS — See **MAINTENANCE** section.

HITCH should be inspected to be sure it has not loosened.

FRONT JACK must be raised as far as possible.

DOLLY WHEEL must be removed and stored.

WARNING: BE FAMILIAR WITH THIS MANUAL BEFORE YOU TAKE YOUR FIRST TRIP; READ WARNINGS ON LP GAS SYSTEMS PAGES 10, 11 & 16.

LP GAS BOTTLES and connections must be secured and the Service valve closed.

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

SAFETY CHAINS must be properly attached to the tow vehicle.

STABILIZING JACKS should be removed and stored.

PIGTAIL should be properly connected to the tow vehicle's electrical harness.

LIGHTS should be tested on the Nordic unit and the tow vehicle, including brake lights, turn signals, warning flashers, clearance lights, taillights and tow vehicle headlights. Be sure interior lights are turned off before lowering the roof.

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

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

WATER FILL hoses must be disconnected and the caps secured.

DRAIN OUTLET hose must be disconnected and the cap secured.

VENTS should be closed and secured.

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

REFRIGERATOR OR ICE BOX DOOR should be secured with the travel latch.

BUNK TRAYS must be folded and pushed in. Store bunk support rails inside of end bunk hatches.

EXTERIOR ACCESS DOORS AND HATCHES for storage and equipment should be closed and locked.

STEP must be stored for traveling. Lift outer edge and unhook, fold, and store.

ROOF should be lowered and the latches secured.

BOAT RACK — If your unit has a boat rack, the weight of the boat is not to exceed 135 lbs. Place the boat, with the bow facing forward, upside down on the boat rack and lash down securely so boat will not shift causing damage to the rack. DO NOT attempt to raise the roof with the boat on the rack.

DOOR should be locked.

TOURIST INFORMATION

Obtain current road maps and tourist information from each state through which you intend to travel. You also may want to purchase a tourist guide book.

If you will be visiting federally-operated national parks, monuments and recreation facilities, you may wish to look into the Golden Age Passport and the Golden Eagle

Passport. They can help families cut spending at those areas where fees are involved.

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

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

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

HOME SECURITY

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

TOWING HOOKUP COUPLER

Crank the front jack (Figure A - Page 12) clockwise to raise the coupler above the hitch ball. Maneuver the tow vehicle to position the ball directly under the coupler.

Raise the coupler lever to its fullest extent (Figure B). Crank the front jack counterclockwise to lower the coupler onto the hitch ball. Secure the connection by pushing the coupler lever down. For theft protection, you may purchase a padlock or similar locking device to insert through the coupler lever holes. After attaching the coupler to the hitch ball, adjustments may be necessary to eliminate hitch rattle. This is done by tightening the coupler adjustment nut located beneath the coupler (Figure C - Page 12).

FRONT JACK

Turn the front jack counterclockwise until the dolly wheel is off the ground. Turn the dolly wheel shaft (Figure D) counterclockwise and pull downward until the shaft releases, remove and store. Continue turning the crank

until the front jack is as high as possible to prevent it from hitting the ground while you are traveling.

SAFETY CHAINS, ELECTRICAL CONNECTION

Cross the safety chains under the "A" frame and attach them to the tow vehicle's hitch platform. Plug the tow vehicle's electrical harness into the camper's pigtail connection (Figure E). Leave enough slack in the chains and pigtail to permit the unit to turn freely. Safety chains should not be touching the ground.

HITCH BALL HEIGHT

When the loaded trailer is hitched to the tow vehicle, check the hitch ball height. It can be determined by measuring from the top of the curved portion of the coupler to the ground (Figure F - Page 12). A high hitch will transfer weight behind the axle causing the unit to fishtail. A low hitch will transfer additional weight to the hitch. See APPLIANCE IDENTIFICATION FORM section for proper hitch ball height.

FEDERAL STICKER

Found on the road side of your camping trailer the Federal Sticker lists the Nordic Serial Number, the Gross Axle Weight Rating (GAWR) and the Gross Vehicle Weight Rating (GVWR). Your tow vehicle also will have a Federal Sticker. The ratings are for the specific rim and tire sizes, which also are listed.

MFD BY **VIKING**
RECREATIONAL VEHICLES INC.

GVWR _____
GAWR FRONT _____ WITH _____ RIMS.
AT _____ PS _____

THIS VEHICLE CONFORMS TO ALL APPLICABLE
FEDERAL MOTOR VEHICLE SAFETY STANDARDS
IN EFFECT ON THE DATE OF MANUFACTURE
SHOWN ABOVE.

VEHICLE ID. NO. _____
TYPE: TRAILER

DEFINITIONS

GAWR — The allowable weight, including cargo, which can safely be supported by the axles.

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

GVW and GAW — are found by weighing the vehicle fully-loaded. GVW is the actual weight of the unit and all standard and optional equipment, cargo and passengers. GAW is the portion of the fully-loaded vehicle which is transferred to the axle.

You can weigh your vehicle at a grain elevator, sand and gravel dealer or government weighing station (they are listed in the yellow pages of your telephone book). The small fee involved is a worthwhile investment.

LOADING GENERAL

Distribute your cargo evenly from side-to-side and front-to-back. Store heavier items on or close to the floor. Lighter items may be stored in cabinets and drawers. A properly loaded unit will handle more safely. You also will conserve gasoline and prevent excessive wear on your tow vehicle's automotive system if the unit is not overloaded.

WEIGHT DETERMINATIONS

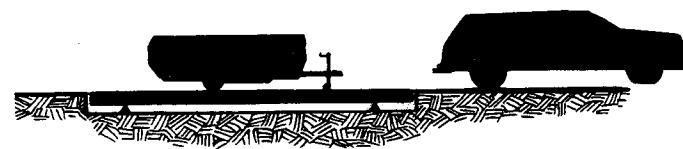
It is extremely important that you weigh your unit prior to leaving on a trip to determine whether your cargo load is within the allowable limits for the various suspension components of your Nordic unit and tow vehicle. Check the Gross Axle Weight Rating (GAWR) and the Gross Vehicle Weight Rating (GVWR) found on the Federal Stickers of the tow vehicle and Nordic unit.

WEIGHING

STEP 1 — The Gross Axle Weight of the Nordic trailer is extremely important. The unit should be weighed, fully-loaded for a trip and connected to the tow vehicle. If the GAW exceeds the GAWR listed on the Federal Sticker, shift or remove cargo to achieve proper tolerance.



STEP 2 — You can find the Gross Vehicle Weight of the Nordic unit by weighing it fully-loaded, disconnected from the tow vehicle, with the axle and front jack on the scale. If the figure exceeds the listed GVWR on the Federal Sticker, remove cargo to achieve proper tolerance.



STEP 3 — You can find the hitch weight by deducting the GAW (determined in Step 1) from the GVW (found in Step 2). If the hitch weight exceeds 15% of the GVW of the Nordic unit, move part of the cargo toward the rear. If it is less than 10%, move part of the cargo toward the front. Be certain, also, not to exceed the load rating of your hitch.



CAUTION: Extending the rear bumper or adding rear supports to carry tool boxes, bikes, motorcycles or other heavy equipment may seriously overload the trailer brakes, axle, wheels and tires. In addition, rear-end loads reduce the hitch weight and can cause severe fishtailing. **NEVER EXCEED THE GAWR FOR YOUR UNIT. NEVER TOW** with LESS than 10% of the trailer gross weight on the hitch.

DRIVING GENERAL

Your camping trailer has been built to make towing easy, but get to know how your tow vehicle handles with the added weight and length of your Nordic unit. Before leaving on a trip, practice turning, backing, braking and accelerating. You may find little difference in the operation, but remember to allow extra room for the combined length of the tow vehicle - Nordic unit. The following are tips to help you in your driving.

PULLING INTO TRAFFIC

Check for oncoming traffic in all directions. Signal before entering the traffic flow. Accelerate slowly and smoothly.

TURNING

Pull several feet farther into the intersection before turning to allow sufficient clearance for the rear of your Nordic unit.

PASSING

Avoid sudden maneuvers when passing another vehicle. Remember that additional time and distance are required to pass safely. Wait until the road is clear of oncoming traffic for at least ½ mile. Check the outside rear-view mirrors and signal lane change and return to your original lane.

BRAKING

Allow a safe distance to stop; follow no closer than one combined tow vehicle - Nordic unit length for each 10 mph. Pump the brake pedal lightly to stop on wet or icy roads. If you start to slide, turn the steering wheel in the direction of the slide. **DO NOT** tromp the brake pedal — a panic stop may increase the slide and could cause your unit to jackknife. Do not rest your foot on the brake pedal while driving. "Riding" the brakes in this manner may cause overheating, excessive lining wear and possible brake failure.

UPGRADES

Reduce speed when climbing a steep upgrade. Shift the transmission to a lower gear to avoid engine overheating. If your engine does overheat, consult your tow vehicle owner's manual.

DOWNGRADES

Speed should be reduced; shift the transmission to a lower range to assist in braking on long or steep downgrades.

EMERGENCY STOPPING

DO NOT slam on the brakes if the coupler disconnects from the hitch — the camper may strike the tow vehicle. Steer toward the shoulder of the road and gradually reduce speed. The safety chains which must be crossed under the coupler and hooked to the hitch platform, will prevent the tongue from dropping to the road.

SWAYING OR FISHTAILING

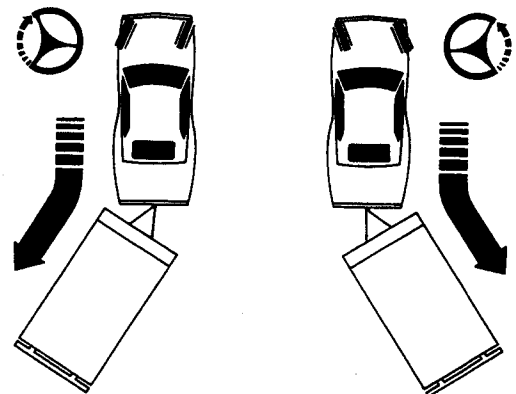
If your unit sways or fishtails, accelerate, then gradually slow down. If you have an automatic brake controller, apply only the brakes of your camping trailer. If your unit is still swaying, pull off the road and check tire pressure, cargo location, or tow vehicle front end alignment, suspension and lug nuts.

PARKING ON A GRADE

Parking vehicles on a grade is not recommended. If it is necessary, apply the brakes and have a passenger place wheel chocks against the tires of your Nordic unit. When in place, slowly release brakes until unit is stopped by chocks. Apply parking brake and place transmission in park position (place in gear for stickshift vehicles).

BACKING

When backing your camping trailer, place your right or left hand at the bottom of the steering wheel. To move your trailer to the left, move your hand to the left; to move the trailer to the right move your hand to the right. If the trailer starts to jackknife, stop, pull forward and start again. You may want to station someone behind the unit to help guide you.



FREEDING A STUCK VEHICLE

To pull your unit out of the mud, sand or snow, apply light pressure on the accelerator pedal and move the gear selector rhythmically between 1st gear and reverse. If possible, keep the front wheels pointed straight ahead. Avoid sharp turns which could cause the unit to jackknife. Once you start to move, do not stop until the tow vehicle and camping trailer are on firm ground.

CHANGING A TIRE

Change a tire on as level and firm a surface as possible. If you are on the roadside, activate the unit's hazard warning flashers. Set up flares and/or warning lights. Block opposite tire. Place scissor type or hydraulic jack on a block of wood directly UNDER THE FRAME, just behind the axle. DO NOT use a bumper jack; it may damage the sidewalls or the floor board. Raise the jack to take some of the weight off the old tire. Loosen the lug nuts. Raise the jack until the tire is off the ground then remove lug nuts, and pull off old tire. Place new tire on hub. Replace lug nuts and handtighten. Lower the jack until the tire just touches the ground. Firmly tighten lug nuts. Lower and remove jack. Stop at the nearest service facility and have the torque checked. Lug nuts should have a torque of 70 to 80 ft.-lbs.

CAMPING CAMPSITE SELECTION

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

COURTESY

Campsites are often close together and the walls of your trailer are not a barrier against loud noises, which may disturb your neighbors. Open fires may not be permitted. If you can build a campfire, clear the area of flammable materials; never leave a campfire unattended and always make certain the embers are completely extinguished.

LIVING AREA SETUP

Of course you'll want your camping trailer to be level for your own comfort (you don't want items sliding off counters and tables or out of cabinets). But more important, the unit must be level in order for your drainage system, which relies on gravity, to function properly. Place a small level on the roof of the unit to check levelness. Bubble levels are available from your Nordic dealer.

NOTE: Once the unit is level side-to-side and front-to-back, you may wish to permanently attach levels on the front and/or back and sides of the trailer. This will allow you to tell at a glance if you've stopped on a level site, and will help speed up the leveling process.

Check the trailer levelness from side-to-side. If it is off level more than 2", you may make a step leveling ramp using 1" x 6" or 2" x 6" boards of varying lengths. Pull

forward or back onto the leveling ramp until the tire on the low side is level. If the unit is off level less than 2", levelness can be achieved by adjusting the stabilizing jacks. You will have two or four stabilizing jacks, depending on the unit.

To install stabilizing jacks and level the trailer front-to-back, unhitch the trailer from the tow vehicle. Install the dolly wheel and crank the front jack down. Never rest the unit on the front jack without the dolly wheel attached, or without a board under it. If the ground is soft, also place a board under the dolly wheel. The jacks must be placed under the frame. Lower the front about 2" below level. Place a jack under each main frame member — NEVER THE FLOOR — at the rear of the trailer. Raise each jack until it touches the frame. If you have four stabilizing jacks, raise the front jack about 2" above level and place the jacks under the main frame members near the front of the unit. Check levelness from front-to-back and side-to-side. If the unit is off level, adjust the appropriate stabilizing jacks.

RAISING THE ROOF/LIFT SYSTEM

The 12V power unit for the Nordic camper roof is supplied from one of three sources; the tow vehicle, the converted power system (Shoreline), or the dealer installed optional battery pack.

To raise the roof and upper walls, unlatch the roof latches at each corner (See Figure J - Page 12), unlock compartment ahead of entrance door for access to switch, move toggle switch to up mode and push upward on roof slightly. Hold switch in up mode until roof is up and sidewalls are erected.

CAUTION: Your Nordic trailer may be equipped with sidewall latches at the upright posts at the doorway and the upright post above the galley on the road side. If your unit is so equipped, RELEASE THESE LATCHES BEFORE ATTEMPTING TO CLOSE THE UNIT. Permanent damage to the lift mechanism will result if this procedure is not followed.

To raise the roof when there is no power available, unlatch the roof latch at each corner, lift rear end of roof far enough to open bed end hatch, swing hatch down and reach up into unit locating the lever at the bottom of the motor base. Turn lever until it latches (see diagram). Remove crank from storage, open small hatch on rear roof end, insert crank and rotate clockwise. Release lever before using electric power.

CAUTION: The roof and sidewall raising mechanism in your Nordic trailer is a counterbalanced system. The roof hold-down latches MUST BE UNFASTENED BEFORE ATTEMPTING TO RAISE THE ROOF. Do not attempt to raise the roof with a boat on it. Snow must be removed from roof before raising the roof for winter camping.

Circuit protection is provided by an inline breaker that will trip if overloaded and automatically reset in 30 seconds. However, damage to the lift mechanism could result if these guidelines are not followed.

FOLDING BUNK SYSTEM OPERATION

To operate slide out folding bunk, remove support slide/rods from their storage area and insert as in diagrams (A & B, See page 13). Grasp bunk handles and pull bunk all the way out. Move the support slides as shown in diagram (C) to positively engage keeper. This assures that the bunk will not slide inward.

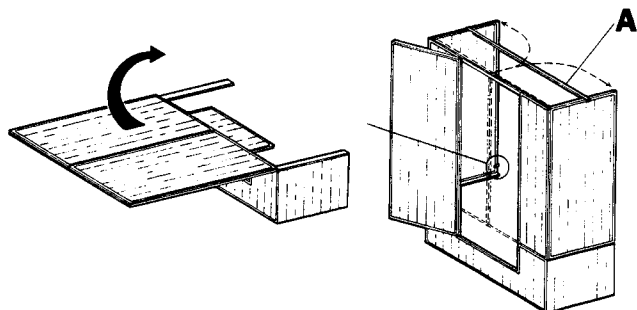
Lift outermost end of bunk roof and allow gas cylinders to push up end wall and rear of roof (1 - Page 14). Go inside and secure bunk roof to camper roof by lifting inner edge of roof upward until latch (A) engages strike (see drawing 2), swing bunk slide panels into position and latch with rollers (C) and positive lock (D - see drawing 3). Swing hold-down device up to bunk ceiling (see drawing B) install privacy curtain.

DOOR

THE LOWER DOOR MUST BE CLOSED WHILE RAISING THE UNIT; the upper door interlocks with the top edge of the lower door as the sidewall raises into place. When lowering the unit, **CLOSE THE DOOR** (upper and lower). Leaving the doors open or ajar while operating the lift system, will result in serious damage to the door assemblies.

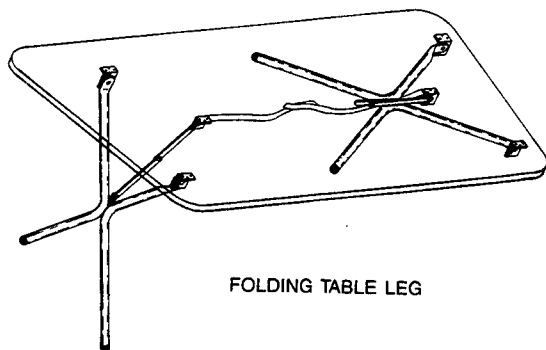
WARDROBE

To set up the wardrobe, carefully swing it toward the outside wall to an upright position, open door, push side panels outward and fasten them in place. Install hanger bar (A) in brackets provided. See drawing.



TABLE

The table in the Nordic trailer utilizes folding legs. They provide four point stability and portability when required. To unfold legs, unfasten hook and loop fastener and swing legs down into locked position. See drawing.



DINETTE SEATS

To turn facing dinette seats into a bed, reverse table unfolding procedure and replace table on seat braces. Arrange cushions on top.

INTERIOR MAINTENANCE

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

CARE OF PRIVACY CURTAINS AND DRAPES — Curtains may be machine washed and dried in cool dryer. Curtains and drapes slide along tracks.

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

CARE OF WARDROBE AND DRAWERS — Clean wooden surfaces with household furniture polish. Wash plastic surfaces with warm water and liquid soap. **DO NOT** use abrasive cleansers.

CARE OF FLOORING — Sweep and damp mop vinyl floors.

BASIC SYSTEMS

GENERAL

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

ELECTRICAL

GENERAL

Your camping trailer contains two separate electrical systems, providing you with the power while you are camped or traveling. There is a 12-volt direct circuit system, similar to the one in automobiles, and a 120-volt alternating current system, similar to the one in homes. Your 120-volt system requires an external source of 120-volt electricity. This is provided either by a connection to a campsite or household receptacle. The 120-volt system should be used whenever a 120-volt hookup is available to reduce the 12-volt load on your tow vehicle's battery. Power is supplied by the Shoreline connection to the 120-volt receptacles. The 12-volt system is supplied by your automotive battery and is used when you are on the road or in campsites which do not provide 120-volt hookups.

NOTE: The interior lights in your camping trailer operate only from a 12-volt source. Energy is supplied by the

automotive battery through the camper's electrical connection, or by the power converter which changed 120-volt AC into 12-volt DC. Without the converter, the only 12-volt power source to your camper is from the tow vehicle's automotive battery, through the electrical connection.

120-VOLT SYSTEM

The 120-volt system supplies power for the refrigerator, power converter for the 12-volt system and the 120-volt receptacles located in the camping trailer, which are used to operate regular household appliances.

When you use the external 120-volt hookup, the electrical power source is connected directly into the main electrical service panel and is distributed through a circuit breaker.

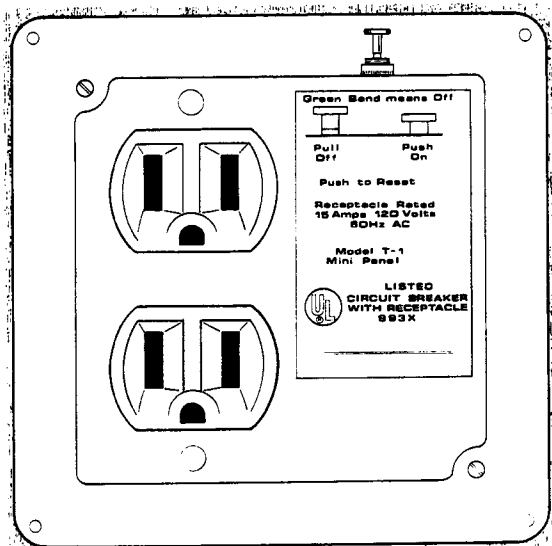
12-VOLT SYSTEM

The 12-volt system which includes the automotive battery plus the 12-volt converter, supplies power to the exterior and interior lights, porch light and refrigerator. The 12-volt energy is supplied by the automotive battery (through the pigtail connection) or the power converter.

The automotive battery and alternator supply 12-volt power to the engine ignition system, the dashboard lights and accessories, headlights, taillights, backup lights, clearance lights, turn signals and warning flasher lights.

CONVERTER

The power converter transforms 120-volt AC into 12-volt DC. The converter supplies power to all the 12-volt systems, except the refrigerator. The 12-volt circuits are protected by thermal circuit breakers. These devices are designed to break under an overload condition, and automatically reset themselves when the overload ceases to exist. If the breaker keeps interrupting the current even when there is no apparent overload, contact your Nordic dealer.



FRESH WATER SYSTEM GENERAL

Fresh water for your unit is supplied either by the vehicle's fresh water tank or an external pressurized source. Both supply water to the sink.

CITY WATER

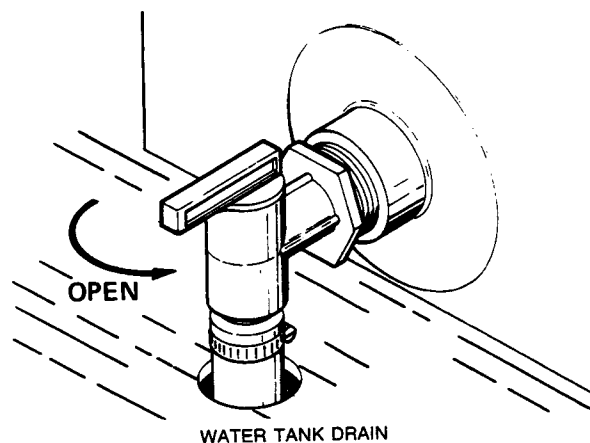
Connect a hose to a "city" pressurized water faucet and to the vehicle's water inlet (Figure G - page 12). When using the city water hookup, the water tank is bypassed. You cannot fill the water tank through the city water inlet.

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

WATER TANK

Open the gravity water fill by pulling out the spout (Figure H - Page 12). Use a hose or vessel to fill the water tank. Water will flow out the water spout when the tank is full.

SANITIZING WATER TANK — Sanitizing your unit's water tank before initial use, after a period of nonuse, and whenever the tank is suspected of being contaminated. Open the drain cock and let the water drain out. When the tank is empty, close the drain cock. Mix 3 gallons of water with $\frac{1}{4}$ cup of liquid household bleach. Pour solution into the tank through the gravity water fill. Wait three (3) hours. Drain and flush the tank with fresh, potable water. If a chlorine taste lingers, pour 1 quart of vinegar and 5 gallons of water into the tank. Wait several days before draining the tank. Flush the tank with fresh, potable water.



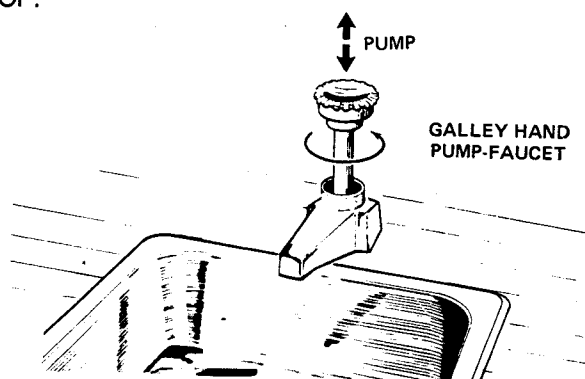
FAUCETS

Your unit is equipped with either a galley type hand pump or house type faucet. Dual control faucets (water heater equipped units only) operate just as those in a house, providing hot or cold water with a mixing feature.

GALLEY HAND PUMP

Water to the galley hand pump-faucet is supplied by either the water tank or pressurized hookup. To draw water from the tank, pump the handle. Simply raise the handle for water when using a pressurized connection. TO AVOID TRAVEL DAMAGE,

PUSH KNOB DOWN AND SCREW IT CLOCKWISE TO ITS STOP.



SINK

Clean the sink with non-abrasive cleanser. Stainless steel cleanser. Stainless steel cleaner may be purchased at most grocery stores

SHOWER

Your unit may be equipped with a shower, consisting of a shower receptor, faucets and flexible hose showerhead. These items can be kept looking like new with a minimum of effort. Never use abrasive cleansers on plastic or metal surfaces and wipe down shower stall with a damp cloth after each use.

LEAKS

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

DRAINAGE SYSTEM GENERAL

The Drainage system of your trailer consists of a sink drain and a trap. The latter maintains a water barrier to prevent odors (caused by drain water) from entering the RV.

Remove protective cap from drain fixture. (Figure 1 - Page 12) and attach garden hose to the outlet. Some campsites will have septic service for the disposal of sink water at each site. If the site is not so equipped, collect water in a bucket or container and dispose of as required by the park rules. To avoid contaminating your water system, use different hoses for fresh and drain water. Hoses of different colors will help you to avoid interchanging. The same is true for buckets or vessels used for fresh water and drainage; paint or mark them to prevent contamination.

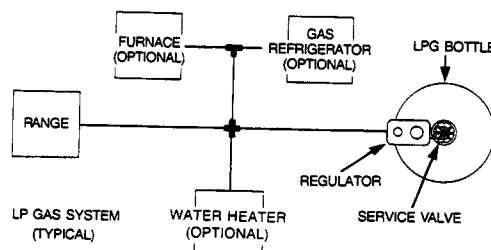
CAUTION: DO NOT pour boiling water down drain as it may damage your flexible drain hose.

DRAIN CARE

Use clear water to clean exterior pipe surface. DO NOT use harsh drain cleaner chemicals or solvent in drains.

LP GAS SYSTEM GENERAL

The Liquefied Petroleum (LP) Gas System in your unit, furnishes fuel for heating and cooking. LP gas is stored in a bottle or bottles on the "A" frame of your unit. Under pressure in the bottle, the LP gas turns to vapor; it is the latter which burns. Each bottle has a 20% vapor level gauge which allows space in the bottle for vapor expansion. The high pressure of the vapor in the bottle is reduced in two stages through a regulator. The tank pressure will vary with temperature and altitude, but may be 100 pounds per square inch or more. It is reduced to about 12 pounds psi in the first stage, then to about 6 1/4 ounces psi in the second stage. The LP gas is propane or a blend of propane and butane, depending upon your locale.



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

NOTE: Viking Recreational Vehicles, Inc. is not responsible for personal injury or property damage resulting from improperly maintained LP gas appliances and systems. LP gas burns readily and with intense heat.

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

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

The following label has been placed in the vehicle near the range area:

WARNING: For your safety, if you smell gas:

1. Extinguish any open flames, pilot lights and all smoking materials.
2. Do not touch electrical switches.
3. Shut off the gas supply at the tank valve(s).
4. Open doors and other ventilating openings.
5. Leave the area until odor clears.
6. Have the gas system checked and leakage source corrected before using again.

CLIMATE DIFFERENCES

The appliances will not function if the LP gas does not vaporize. Butane will not vaporize below 32 degrees F.

(the freezing point of water), but propane will continue to vaporize down to 44 degrees below zero. Propane has become the main type of LP gas used in RV's in recent years. Your LP supplier will have the correct type or blend for your locale. If your travels will take you into an area where climate differs, ask your LP dealer for his recommendations. The names of LP suppliers can be found in the yellow pages of your telephone directory under "Gas — Liquefied Petroleum — Bottled & Bulk". Many campgrounds now have LP fill facilities as do some service stations.

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

LP GAS LINE CHECK

Always check the gas line connection after each refill and inspect other connections regularly, at least every 30 days or 5,000 miles of travel. To check, turn off all burners and pilot lights. Open the LP gas bottle Service valve and use soapy water, a bubble solution or approved leak detector to test all line connections. Do not use products that contain ammonia or chlorine. Bubbles indicate a leak. Tighten the connections with two open end wrenches until bubbles stop. If leak persists, contact your Nordic dealer.

FILLING THE LP GAS BOTTLE

Before removing an LP gas bottle, be certain all burners and pilot lights are OFF. Close the Service valve and turn the gas line connector clockwise to disconnect. For double bottles, turn the spinner nut counterclockwise enough to raise the "T" bar from both bottle handles, and remove empty bottle. Transport empty LP gas bottles in an upright position.

Take your bottle(s) to an authorized LP supplier for filling. He will connect the fill nozzle to the gas line connector. The Service valve and the 20% vapor level gauge must be open. Filling should be stopped as soon as liquid appears at the liquid level gauge. Close the Service valve or the 20% gauge; they are designed to be closed leak-tight by hand. If you cannot hand-tighten properly, the valve may need repair or replacement.

A warning label has been located near the LP-Gas container. This label reads:

DO NOT FILL CONTAINER(S) TO MORE THAN 80 PERCENT OF CAPACITY

Overfilling the LP-Gas container can result in uncontrolled gas flow which can cause fire or explosion. A properly filled container will contain approximately 80 percent of its volume as liquid LP-Gas.

Avoid overfilling by insisting that the LP gas bottle never be filled beyond 80% of capacity. If the bottle is overfilled, have the LP gas dealer bleed out the excess. Overfilling does not allow sufficient space for the liquid to expand. This can produce excessive pressure which can cause LP gas leaks, creating potential fire or explosion hazard. **DO NOT smoke, strike a match or ignite a lighter when the LP gas bottle is being filled. A spark or flame could ignite fumes.** Be certain all burner and pilot flames are out and the Service valve is closed when filling your tow vehicle's gasoline tank.

Reinstall a single bottle by placing it in the support brackets, insert the bolt through bracket, (see diagram page 12). Nut A should be tightened until ring is tight around gas bottle, then nut B should be tightened against nut A to prevent them from vibrating loose. Reinstall a double bottle on the bottom support plate. Tighten the spinner nut so the "T" bar holds both bottles in place. Reconnect the gas line and check for leaks.

LP BOTTLE CARE

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

WARNING: LP-Gas containers shall not be placed or stored inside the vehicle. LP-Gas containers are equipped with safety devices which relieve excessive pressure by discharging gas to the atmosphere.

REGULATOR PRESSURE

Each LP gas bottle, or pair of gas bottles, will have a regulator. If you have double 20 lb. bottles, open only one bottle's Service valve. When the bottle is empty, close the Service valve and open the other bottle. You can check the volume of LP gas by weighing the bottle, comparing the known weight by an empty and filled bottle. The Tare (empty) Weight is stamped on the LP gas bottle handle.

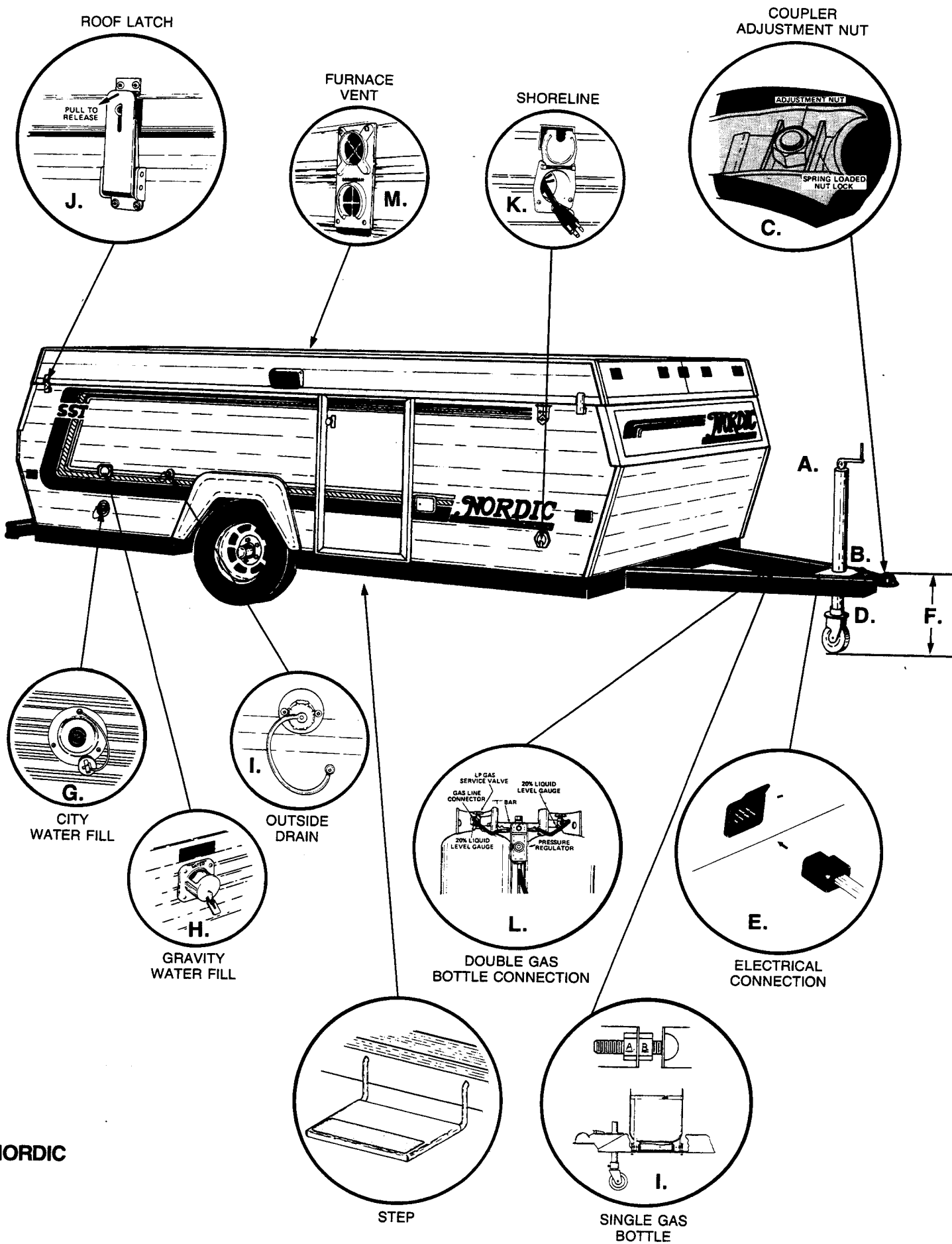
Also stamped on the bottle is its Water Capacity in pounds. Multiply the Water Capacity by .42. The result will be the LP capacity in pounds (allowing for the 20% vapor space). Add the LP weight to the Tare Weight to get the total weight of a filled bottle.

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

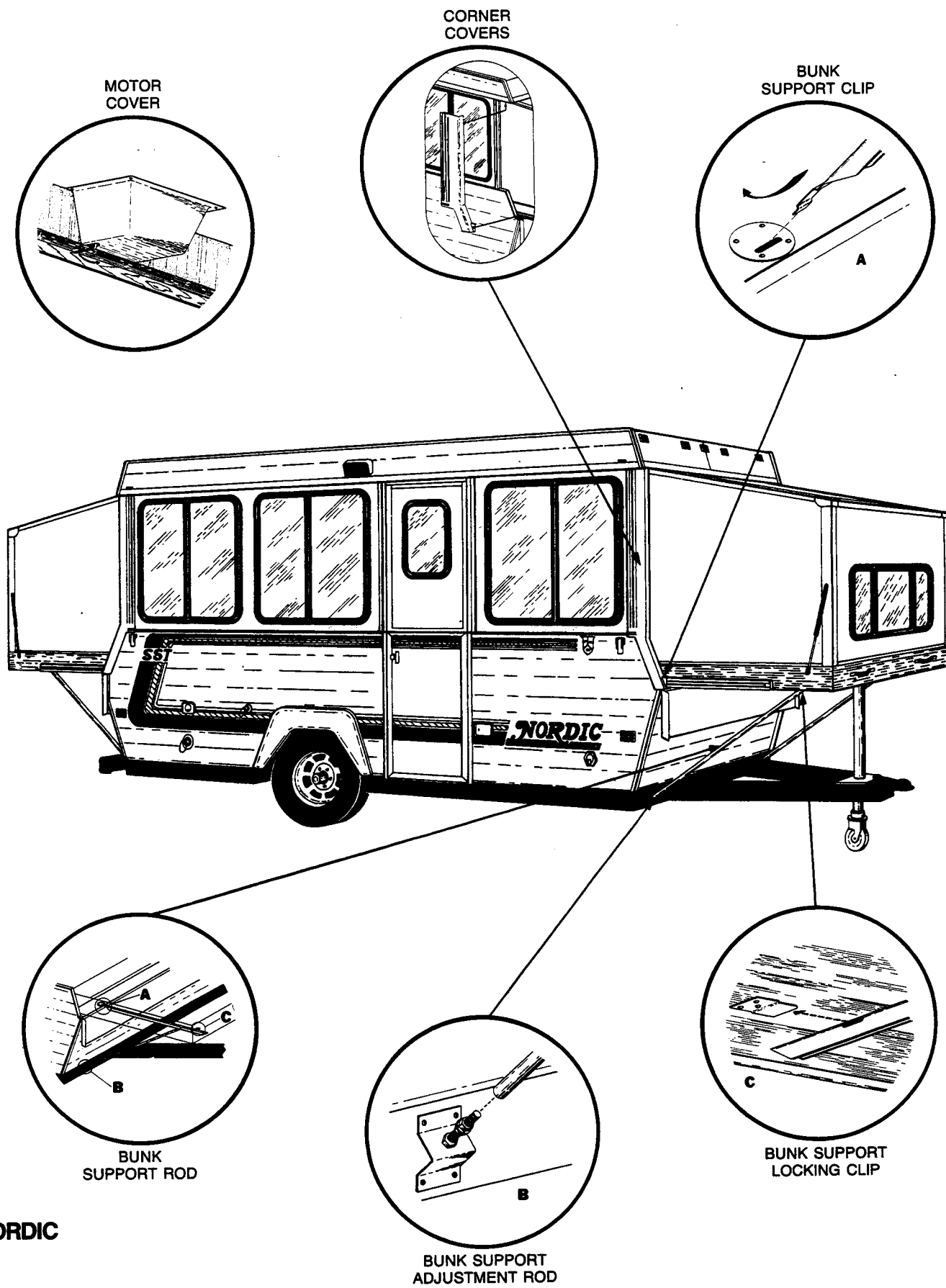
LP-Gas regulators must always be installed with the diaphragm vent facing downward. Regulators that are not in compartments have been equipped with a protective cover. Make sure that regulator vent faces downward and that cover is kept in place to minimize vent blockage which could result in excessive gas pressure causing fire or explosion.

Check the LP gas regulator at the beginning of each season, or whenever a problem is indicated. Correct line

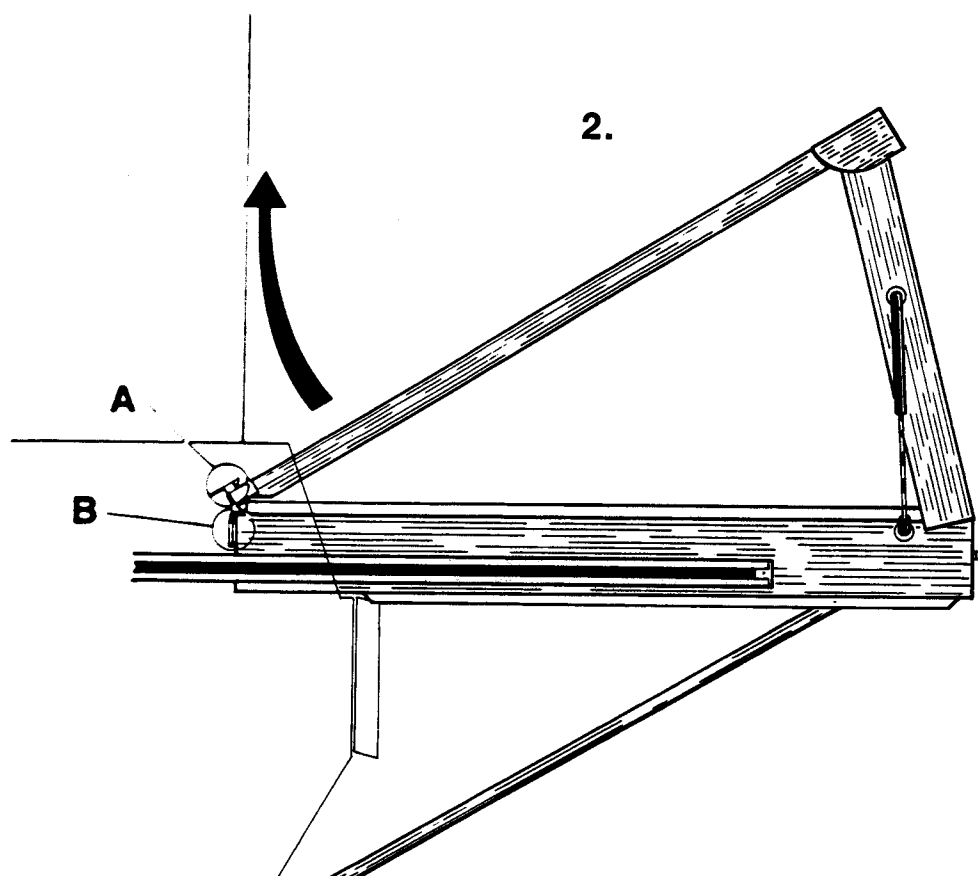
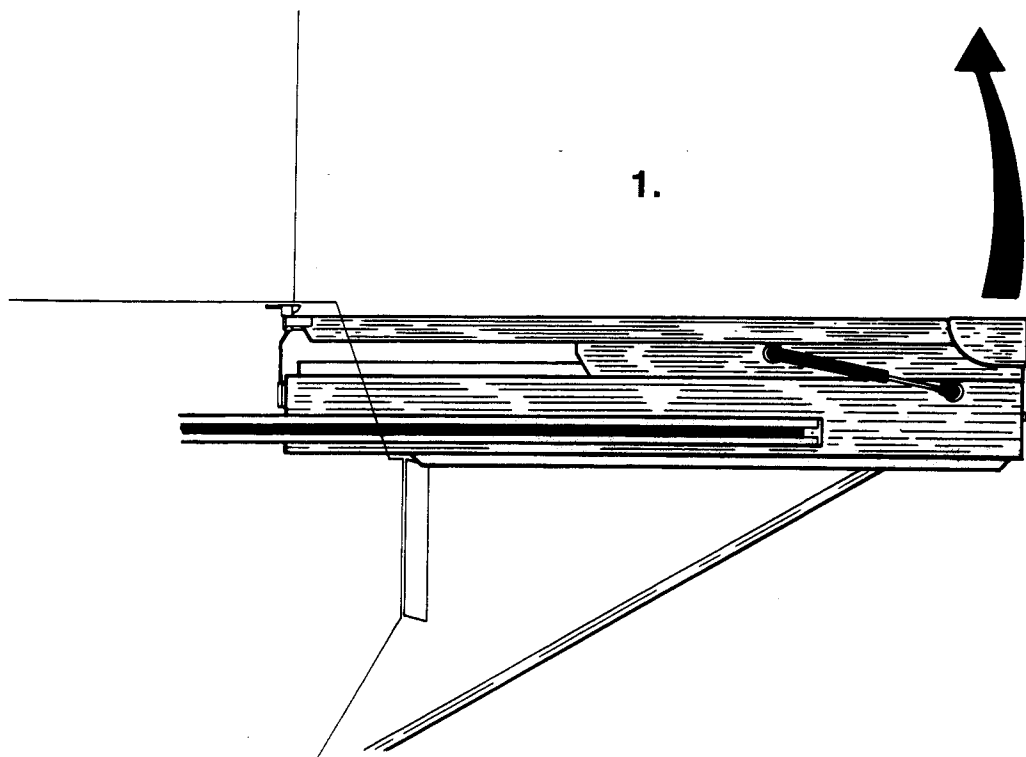
(LP Gas System continued on page 16)



NORDIC

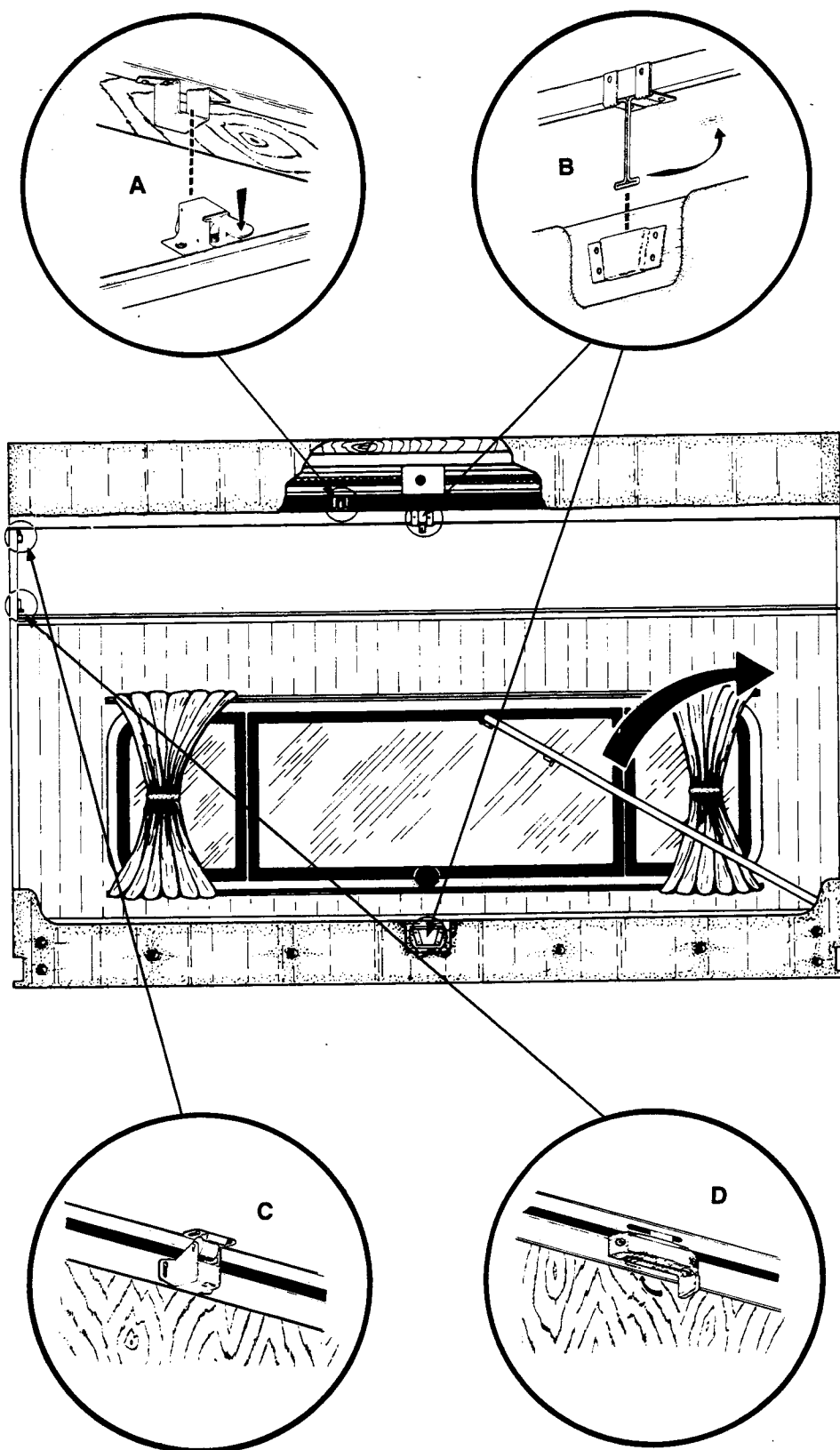


NORDIC



**OUTSIDE
BUNK SET-UP**

3.



**INSIDE
BUNK SET-UP**

pressure is 11 inches of water column. Your Nordic dealer or LP gas supplier can perform this check.

LP GAS REGULATOR FREEZE-UPS

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

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

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

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

WARNING: Do not bring or store LP-Gas containers, gasoline or other flammable liquids inside the vehicle because a fire or explosion may result.

APPLIANCES AND ACCESSORIES RANGE

GENERAL — Your Nordic trailer will have a three-burner range, which is a LP gas appliance.

LIGHTING THE RANGE — Be certain the LP gas bottle Service valve is OPEN. Light a match and hold it close to the range burner, then turn the burner's control knob to full ON.

Air in the line may cause a blowing sound and may extinguish the match. When the line is free of air, the burner should light readily. Adjust the burner flame with the control knob.

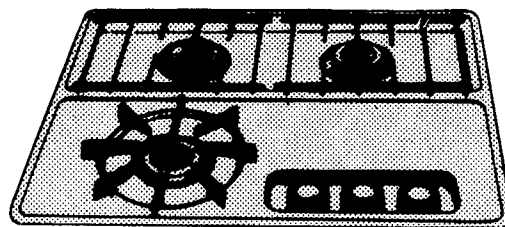
WARNING: It is not safe to use cooking appliances for comfort heating.

Cooking appliances need fresh air for safe operation.

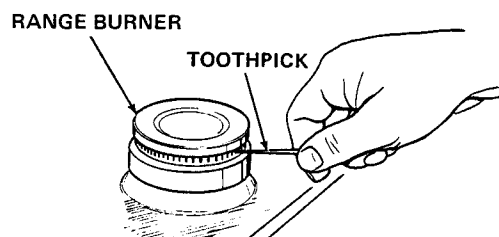
Before operation:

1. Open overhead vent and
2. Open window.

This warning label has been located in the cooking area to remind you to provide an adequate supply of fresh air for combustion. Unlike homes, the amount of oxygen supply is limited due to the size of the recreational vehicle, and proper ventilation when using the cooking appliance(s) will avoid dangers of asphyxiation. It is especially important that cooking appliances not be used for comfort heating as the danger of asphyxiation is greater when the appliance is used for long periods of time.



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



NOTE: Prolonged use of the range or furnace may cause moisture to form on the inside of the canvas and vinyl walls. Condensation may also form on the inside of the camper during heavy rain or when the outside temperature drops. This condition can be controlled by opening a window on the down-wind side of the camper or opening a roof vent.

GAS WATER HEATER

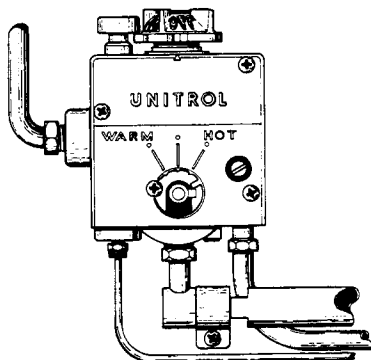
TO LIGHT:

1. Turn gas cock to off position, wait five minutes.
2. Turn to pilot position, press reset button and light pilot, hold down until pilot remains lit. Turn to on position.
3. Set temperature indicator to desired temperature.
4. If pilot goes out, repeat steps 1 and 2 and 3.

MAKE SURE WATER HEATER IS FILLED WITH WATER BEFORE POWER IS TURNED ON. EVEN MOMENTARY OPERATION OF HEATER WITHOUT WATER WILL BURN OUT THE ELEMENT.

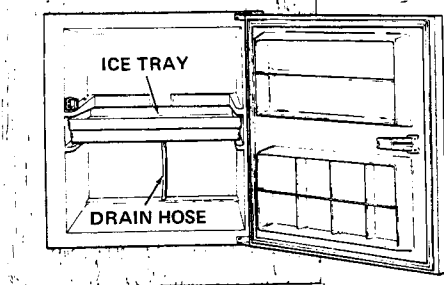
NOTE: Always open both the cold and hot water faucets when filling vehicle water tank to allow air pockets to be forced out of the water heater. When water flows from the heater faucets, close both faucets.

Refer to the manufacturer's Owner's Manual for adjustment and storage information.



ICE BOX

Place ice in the top tray. Make sure the hose, located near the back of the tray, is not bent or clogged. Water drains through this hose and onto the ground as the ice melts.



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

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

12V/GAS REFRIGERATOR

The gas controls are located at the rear of the refrigerator and are accessible through the lower ventilator in the wall of the vehicle.

(a) LP Gas Operation — Lighting the Burner (See figure 7)

1. Open the lower vent at the rear of the refrigerator (on the outside of the vehicle) then turn on the gas valve (A) so that its handle is in line with the gas valve body.
2. Turn the gas thermostat knob (B) to setting No. 4.
3. Push in the plunger (C). Wait 5 seconds. Push button (D) several times in succession. A click should be heard

each time it is depressed. Continue to press in the plunger (C) for a further 15 seconds. After burner lights, release it and check that the burner is lit by looking at the flame through the opening (Figure 8 - F). If the burner has not lit, repeat the lighting procedure. The ice-tray shelf should show signs of cooling after about an hour.

NOTE: If the gas has to be re-lit when the ice-making compartment is still cold, the thermostat knob (B) must first be turned to MAX and returned to its normal setting only after the burner is lit. The refrigerator has a flame failure device which will automatically shut off the gas to the burner if the flame is blown out.

- (b) Before taking the vehicle on any road, turn off the gas cock (Figure 7 - A), and if required, use the 12V facility to operate the cooling unit. Whenever possible, the cabinet should be precooled, together with contents, by starting up and running the refrigerator on gas for several hours, or overnight, before switching to 12V and starting on a journey.
- (c) Temperature regulation settings 3 or 4 on the thermostat knob should provide adequate cooling for most conditions.

DO NOT ATTEMPT TO OPERATE THE REFRIGERATOR BY BOTH GAS AND ELECTRICITY AT THE SAME TIME. ALWAYS ENSURE THAT ONE METHOD OF OPERATION IS TURNED OFF BEFORE USING THE ALTERNATIVE.

NOTE:

- If the refrigerator has been out of use for an extended period, make sure all air vents are free from obstructions before starting up. Also, check connections for gas leaks, using soapy water.
- Never cover or partially cover the air vents with cardboard or anything else.
- Remember to level the vehicle when stopping for more than about an hour otherwise the cooling unit could be permanently damaged due to overheating if it is left on.

For recommended maintenance, refer to appliance instruction booklet.

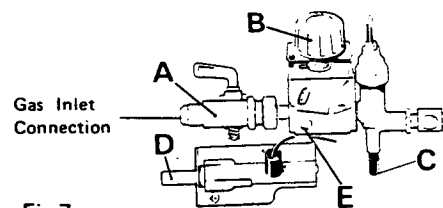


Fig.7

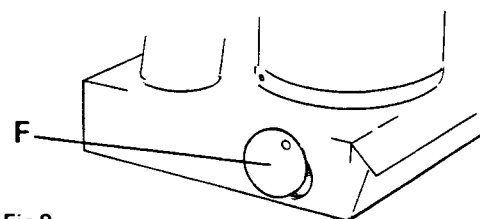


Fig.8

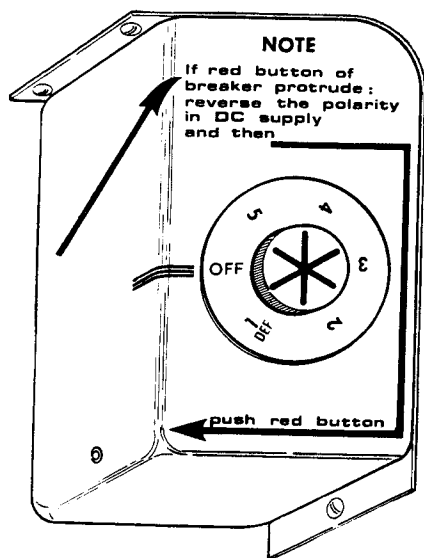
12V/110V OPERATION

The refrigerator is controlled by the thermostat dial, which also serves as the ON/OFF switch. Turn the dial clockwise from OFF and the refrigerator is switched ON just before the dial reaches the "1" position. The interior temperature drops as the dial is changed to higher settings, with "5" being the coldest. Turn the refrigerator OFF by turning the dial counterclockwise to OFF. Regulate the temperature according to the types of food stored. To avoid excessive drain of your battery, it is advisable to keep the thermostat set at "3" when the ambient temperature is in the 70-degree to 90-degree F. range. At the same ambient temperature range, use "5" when frozen food is stored in the freezing compartment.

A built-in relay automatically switches your refrigerator to the correct power supply. It will run on 12-volt DC from your automotive battery when the pigtail is connected to the pigtail socket. When you connect the shoreline to 120-volt power, the relay automatically changes to 120-volt AC. The latter mode saves on power consumption and will help keep your battery in good condition.

Never put hot foods into your refrigerator; never employ a "quick charge" to your battery unless from the pigtail socket, and never use a commercial 12-volt DC to 120-volt AC, 60 hertz inverter or converter for operating your refrigerator on AC, since these devices do not hold the required constant frequency.

For additional details on operation, care and troubleshooting, see the refrigerator manufacturer's Owner's Guide.

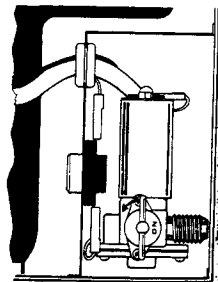


NOTE: Keep items to be stored in your RV refrigerator or ice box in your home refrigerator or freezer until you are ready to leave. This will reduce the cooling load on your RV refrigerator or ice box and help keep perishable foods fresh longer. Always store food in sealable containers or suitable wrapping. During travel, use the door latch.

FURNACE

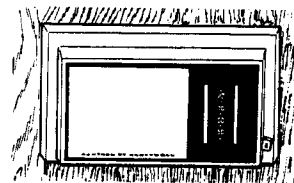
Turn the furnace Gas Control Valve ON, then set the

thermostat to the desired temperature. The furnace functions automatically according to the setting.



NOTE: if the furnace does not light after the third attempt, turn the gas control knob to OFF and contact your Nordic dealer. DO NOT attempt to repair or adjust the furnace yourself.

CARE OF FURNACE — The furnace requires only routine cleaning. Soot, which may form on the inside of the combustion chamber, may be removed with a vacuum sweeper. Check the furnace Inlet/Exhaust Cover on the outside of your unit (Figure M - Page 12) periodically to be certain it is free of objects which might block the openings.



WARNING: DO NOT use catalytic or open flame heaters in your Nordic unit. This includes wood and charcoal grills and stoves. The use of this equipment inside the vehicle may cause fires. These devices either portable or permanently installed, consume oxygen from the interior space and may contaminate the air with toxic fumes. These fumes may cause nausea, dizziness or death.

MAINTENANCE GENERAL

Recreational vehicle owners are noted for the pride they take in the appearance of their units. Proper maintenance will do more than keep your Nordic unit looking nice. It can help insure trouble-free operation and maximum efficiency of the various appliances and components. Failure to properly maintain the vehicle or its components also may constitute a breach in your warranty obligations. Negligence, misuse or installation of unauthorized equipment could affect the operation of your unit and may void your warranty. See the various manufacturer's manuals for specific maintenance instructions.

CONDENSATION

Condensation can be a problem in modern, tightly constructed, recreational vehicles. When the unit is tightly closed, especially in cold weather, the relatively small air

volume in the RV can absorb only a certain amount of moisture. When the saturation point is reached, the moisture is released in the form of condensation. (Certain amounts of condensation should be expected, especially on cool surfaces such as windows and metal door frames). However, excess condensation can damage walls and ceilings. Bathing, dishwashing, appliances and unvented gas burners, all add moisture to the air. You can control this by allowing the moisture to escape to the outside. Use your roof vent when cooking; don't hang wet clothes in your unit to dry. In hot weather, air conditioning can help make you more comfortable because it removes excess humidity from the air, while lowering the air temperature.

AIR QUALITY

State of the art construction and energy conserving methods have made indoor air quality a matter of increasing concern. Air infiltration and air exchange rates have been substantially reduced. Thus, certain airborne contaminants, which were previously dissipated by normal air infiltration and air exchange, tend to accumulate in your recreational vehicle. These contaminants may be generated by building products emissions, smoking, cooking, fuel burning appliances and usual human activity. Adequate ventilation will reduce the level of air contaminants. Such periodic airing is required on a regular basis.

CARE OF ACRYLIC-GLAZED WINDOWS

CLEANING INSTRUCTIONS — Although acrylic glazing will withstand severe shock without breaking, its surface may be marred by careless handling. A few simple precautions are necessary to preserve its finish. Dust and clean acrylic with a soft damp cloth or chamois, wiping the surfaces gently. Use pure soap and lukewarm water, if cleaning agents are necessary. Dry the surfaces, after washing and rinsing, by blotting with a damp cloth or chamois. Wax the surfaces sparingly for protection and to obtain the highest degree of polish. Apply a good commercial wax in a thin, even film with a soft clean cloth. Polish the waxed surfaces lightly with clean cotton flannel or jersey. After polishing, wipe gently with a damp cloth to ground any electrostatic charges which may attract dust particles. Do not use boiling water, strong solvents such as alcohol, acetone, carbon tetrachloride, etc., or window cleaning fluids which may contain such solvents, as they will soften the acrylic. Do not subject windows to hard direct blows. Acrylic is highly shatter-resistant and will stand up under most impacts, but is not unbreakable. Do not use cloths containing grit or abrasive particles or kitchen scouring compounds to clean or dust the windows. Unlike most other materials, a scratch on the surface of acrylic can be removed. A minor scratch may be rubbed out with a household wax; a deep scratch can be buffed out.

BODY

Wash dust and dirt, road tar, bird and tree droppings,

insects and other foreign material from exterior surfaces. Use a mild soap in cold or lukewarm water. Apply automotive type wax at least once a year.

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

FRAME

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

ELECTRIC BRAKES

After a break in period of 200 miles, brakes should be adjusted. Inspect and adjust brake drums, lining and shoes at the beginning of each camping season or before an extended trip.

WHEEL BEARINGS

Check wheel bearing lubrication at the beginning of each camping season or before an extended trip. Inner and outer bearings should be packed with a lithium-based, multi-purpose, extreme pressure NLGI #2 grease. Apply a modest amount of grease directly to the bearing. Work it in until all rolling elements are coated with a layer of the lubricant. A little grease may be applied to the hub cavity. Check for damage to rims and hubs.

CAUTION: DO NOT overfill the hub cavity with grease. Excessively packed wheel bearings can overheat, depriving the bearings of lubrication and causing premature failure.

LIFT SYSTEM

Periodically, the slides and pivots of the lift system should be lubricated with silicone spray.

STORAGE GENERAL

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

LP GAS SYSTEM

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

WATER TANK

Open the water tank drain cock and empty tank. Close the drain cock when the tank is empty.

ELECTRICAL SYSTEM

Turn off the circuit breaker at the service box. Remove battery if so equipped, and store in a dry place above freezing temperature.

EXTERIOR

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

Do not allow snow to collect on the roof.

If you will not be using your trailer for an extended period, block it up to prevent tire damage.

WINTERIZATION

GENERAL

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

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

CAUTION: DO NOT use automotive antifreeze in the fresh water system; it is poisonous.

FRESH WATER SYSTEM can be winterized by briefly opening the faucet and pumping water, with the sink drain closed. Close faucet and stop pumping when antifreeze pours out.

DRAINAGE SYSTEM should be winterized by removing the sink drain plug to allow antifreeze to circulate through the line. Pour an additional 2 cups of RV antifreeze into each drain.

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

DRAPES should be removed, washed and dried in a cool dryer.

COUNTERTOPS AND CABINETS should be cleaned.

REFRIGERATOR/ICE BOX should be cleaned and the door propped open. Cover exterior panels.

FURNACE should be cleaned and exterior vents covered.

RANGE should be cleaned.

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

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

FIRE SAFETY — Prevention is the best form of fire safety. Follow the instructions previously listed for the care, maintenance and operation of the various appliances in your vehicle. Make certain everyone in your party is familiar with emergency features of the unit, the locations of exits and the location and operation of fire extinguishers. A chemical fire extinguisher has been furnished with your unit.

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

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

VISITING CANADA OR MEXICO

GENERAL

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

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

VEHICLES

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

CANADA requires a Canadian Non-Residential Inter-provincial Motor Vehicle Liability Insurance card, which is only available from U.S. agents. All provinces in CANADA require evidence of financial responsibility if visitors are involved in an accident. Limits vary from province to province. Contact your insurance agent for details. Your insurance policy is NOT valid in MEXICO. Temporary insurance must be purchased from Mexican companies whose offices are located near the border.

CB RADIO

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

HUNTING AND FISHING

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

DOGS AND CATS

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

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

GENERAL INFORMATION

PERMANENT DWELLING

Your new recreational vehicle is designed as temporary living quarters for recreational camping, travel or seasonal use and not as a permanent dwelling place. Usage as a permanent accommodation is a breach of warranty and we are not liable for any damage that results because of such misuse.

WARRANTY

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

Every effort has been made to provide you a safe dependable recreational vehicle. Your Nordic complies with applicable federal and state regulations and the requirements of ANSI A119.2, the nationally-recognized "Standard for Recreational Vehicles — Installation of Plumbing, Heating and Electrical Systems". The Recrea-

tional Vehicle Industry Association (RVIA) periodically inspects Viking production and assists in maintaining strict compliance with installation and safety standards for those systems. Similar periodic inspections are made by representatives of the Canadian Standards Association (CSA) and various states. You, the owner, must perform periodic inspections of the systems and provide a program of preventive maintenance as described in the Owner's Manual and instruction booklets.

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

Always carry your Owner Registration Card, which must be presented to obtain warranty service (carry your temporary Owner Registration until you receive the plastic card from Viking). The card is proof of purchase and provides the date of retail sale, which are necessary to determine warrantability. Subsequent owners covered under terms of the warranty will be provided an Owner Registration Card for the unexpired term of warranty. If you cannot locate an authorized dealer, contact Viking RV Service, 580 W. Burr Oak St., Centreville, MI 49032, phone (616) 467-6321.

OWNER RELATIONS

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

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

Write to Owner Relations at:

Viking Recreational Vehicles, Inc.
P.O. Box 488
Centreville, MI 49032
Attn: Owner Relations Dep't.

APPLIANCE IDENTIFICATION FORM

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

| EQUIPMENT | MANUFACTURER | MODEL DESIGNATOR | SERIAL NUMBER |
|------------------------------|--------------|------------------|---------------|
| Trailer | Viking | N- | |
| Furnace | | | |
| Range | | | |
| Converter | | | |
| Refrigerator | | | |
| Water Heater | | | |
| Door Key | | | |
| Exterior Compartment Keys | | | |

SPECIFICATIONS

PIGTAIL COLOR CODE

| | | |
|--------|---|------------------------|
| WHITE | — | Ground |
| BROWN | — | Right Stop |
| YELLOW | — | Right Turn |
| RED | — | Left Stop |
| BLACK | — | Left Turn |
| BLUE | — | Brakes |
| ORANGE | — | Converter |
| GREEN | — | Clearance & Taillights |

HITCHBALL HEIGHT

N-20 — 15½" —

BALL DIA.

2"

TIRES

B78 x 13 (C) Load Range 50 psi

LIGHT BULBS

| | | |
|------------------|---|------|
| Porch Light | — | 1003 |
| Clearance | — | 194 |
| Turn | — | 1141 |
| Interior | — | 1141 |
| Taillight & Stop | — | 1157 |

THERMAL BREAKER SIZE:

Interior Lamps 15 amp Fuse; Lift System 20 amp, Battery Circuit 20 amp.

MISCELLANEOUS

See the advertising brochure for the exterior dimensions, and weight ratings.

EMERGENCY CONTACTS

Doctor Name _____

Address _____

Phone (AC) _____

Relative Name _____

Address _____

Phone (AC) _____

Neighbor Name _____

Address _____

Phone (AC) _____

Police Phone (AC) _____

Fire Phone (AC) _____

Insurance
Agent

Name _____

Address _____

Phone (AC) _____

Name _____

Address _____

Phone (AC) _____

ADDITIONAL NOTES:

1950

