



## RAMP MODEL FEATURES

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## INTRODUCTION

This manual is intended to be supplemental to the primary 'Owner's Manual' supplied with your new RV which is included within the Owner Information Packet. Throughout this manual you may find reference directing you to the primary owner's manual for further information and instruction. The contents of this manual will provide you with information specific to your ramp model RV and will not include the basic functions of the RV. Please refer to your primary owner's manual for basic RV features, functionality, and warranty coverage. Read through the entirety of this manual prior to using your RV as some functionalities explained within are dependent upon learning operating procedures of other functions to operate them successfully. Many of the installed components manuals can be downloaded at the following website: <https://support.lci1.com/documentation/>

## SAFETY INFORMATION

Shown below are various hazard warnings you will find throughout this manual. They are used to alert you to potentially dangerous or hazardous situations. When you see these symbols, please read them carefully, and follow their instructions to help prevent damage to your recreational vehicle and for your personal safety as well as others nearby.

### **DANGER**

- ***DANGER** indicates an immediately hazardous situation that, if not avoided, will result in death or serious injury.*

### **WARNING**

- ***WARNING** indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.*

### **CAUTION**

- ***CAUTION** indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.*

### **NOTICE**

- ***NOTICE** is used to address particularly important information that is not necessarily injury related and may include situations involving property damage or issues which may void warranty.*

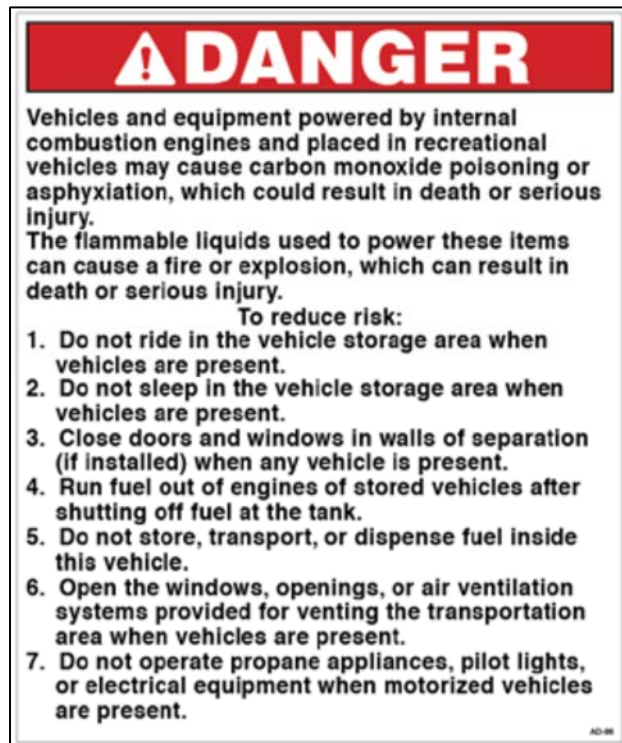
Please be advised that this ramp model RV has many potential 'pinch points' in different areas that may cause injury if not made aware of. Some but not all of these might include the ramp door, patio railings, patio side step, electric bunk lift system, roof access ladder, and patio doors. Please familiarize yourself and any users that may operate this equipment in an effort to minimize potential injury.

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## **CARGO AREA SAFETY**

The following label has been placed on the interior near the main entry door that reads:



### **DO NOT REMOVE THIS LABEL**

#### **Cargo Area Ventilation System**

The cargo area of your ramp model RV is equipped with special 'ram-air' venting at each sidewall (one located high and the other located low), that provides for fresh air flow to the cargo area while traveling. When used properly the two vents, as a system, create a flow of fresh air that effectively ventilates gasoline and exhaust vapors from the interior cargo space. Keep in mind however that gasoline, oils and exhaust vapors may permeate interior items such as curtains, fabrics, bedding, and even paneling and cabinetry materials. Venting the cargo area may not remove or prevent petroleum odors from eventual build-up in your RV. The best method is to keep the cargo area well ventilated from the very beginning of ownership.

#### **Using the ram-air vents**

The vents must be opened from the interior. Move the handle either forward or rearward in the desired direction. The handle will stop in either position and will be locked in place until closed. The ram-air system works most effectively when the forward vent is opened toward the front of the RV to create a scooping effect while the rear vent is positioned with the opening toward the rear. These vent positions create an air flow that scoops fresh air into the cargo area and draws vapors out the rear vent.

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## CARGO LOADING AND RAMP USAGE

### Weight Distribution

Loaded RV's must remain within GVWR and GAWR limits. However, proper load distribution is of particular importance for cargo ramp RV's. Cargo ramp RV's are designed to carry a variety of vehicles and cargo in the cargo storage area. These cargo items are typically heavy, and consideration must be given to how they are loaded. Because the greatest storage area is at the rear of the vehicle the biggest concern is maintaining the correct hitch weight percentage. Vehicles loaded incorrectly can have too little weight resting on the hitch and can become unstable when towing. Refer to the *'Distributing Your Load'* section of the *'On The Road'* chapter in your primary owner's manual for more specific information. Also consult with your tow vehicle manufacturer for their recommendations regarding tow vehicle and its proper set-up.

### WARNING

- *Exceeding the GAWR or GVWR of your tow vehicle or RV can cause undesirable handling characteristics and may create a safety hazard. Do not install any type of weight carrying rack, frame, or hitch to any part of the chassis, or body component of the RV unless specified by Outdoors RV. Add-ons such as these may void your warranty on structural components.*
- *Do not store or carry propane containers, gasoline, or other flammable liquids inside your RV.*
- *Consult with your tow vehicle manufacturer for their recommendations regarding tow vehicle and its proper set-up.*
- *Move cargo and/or vehicles to maintain proper balance. Do not exceed GVWR (total weight rating) or GAWRs (axle weight ratings) of the trailer or tow vehicle.*
- *Please check with your tow vehicle manufacturer for your towing specifications.*

### Cargo Placement

Large heavy items should be loaded where they can be securely tied down. Once you have the heavy items located, check the hitch weight. If the hitch weight is significantly more or less than as outlined above and in the *'Distributing Your Load'* section of your primary owner's manual, make the necessary adjustments to get close. Then other smaller items can be brought in and placed accordingly to bring the hitch weight into the recommended range. Smaller items should be located so that they do not move during travel. Don't forget that it is possible to load one side heavier than the other. Doing this can create a very hazardous situation when cornering as well as potentially overload the tires. Top heavy loads can cause problems not only in cornering but also in hard braking. They tend to make the RV 'dive' in hard braking conditions. This suddenly increases tongue weight and can decrease tow vehicle front axle loading just when you need steering and brakes the most. Never place heavy objects or add-on devices hung on the rear or placed across the tongue A-frame. These locations place heavy objects where they will dramatically affect handling in corners or bumps.

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## Ramp Loading Awareness

The cargo loading ramp gives you complete access to the cargo area. When lowered, the loading ramp allows you to easily load rolling cargo such as bicycles, motorcycles, ATVs, golf carts or side-by-side UTVs. This section outlines safety precautions you should be aware of when loading and unloading cargo and vehicles.

Use caution when using the loading ramp of your RV. There are a few potentially hazardous conditions you should be aware of:

### WARNING

- *The following conditions could lead to a potentially hazardous situation that, if not avoided, could result in death or serious injury. Take the time to read and understand these situations and the following safety items...*

- **Ramps and Inclines:** With the ramp down and in loading position you may experience steep inclines that will transition to near flat as you enter the RV. Use caution while walking across this transition.
- **Dissimilar Surfaces:** Your loading ramp has a textured surface that provides additional traction while walking up and down the inclined surface. This textured surface, as you will notice, is a bit different feel than that of the flooring material on the cargo area floor and again in the kitchen area. Be aware of these surface transitions as they may potentially cause you to lose your footing. Additionally the textured surface of the ramp, however 'gritty' it may feel, may become slightly slippery when wet or oily.
- **Awkward, Heavy, or Unbalanced Loads:** Carrying objects or driving vehicles up and down the incline of the ramp may cause a feeling of un-balance. Proceed up the ramp cautiously until you are completely onto the main floor of the RV.
- **Trailer Creep:** This is a potential situation where the tongue jack may come off the ground and the RV begins to roll when loading extremely heavy objects. See '**Loading Procedure**' for instruction preventing this scenario.
- **Ramp Maximum Capacity:** The ramp maximum capacity is **3000 lbs.** in the ramp position with the load evenly distributed and a maximum **1000 lbs.** per wheel contact. **Exceeding load limits may lead to collapse and possible injury and will void the ramp warranty.**

## Safety Items to Consider While Loading Motorized Vehicles

- Inspect ramp assist cable connections for wear and latching mechanism for proper operation before each trip. Have adjusted or repaired as required before using.
- Wear protective equipment while loading and unloading vehicles into and out of the RV. This includes but not limited to a motorcycle helmet, leather boots, appropriate gloves, and eye protection.
- Never allow people or pets to stand in the path of equipment when loading or unloading. Keep bystanders away from the ramp when loading or unloading.
- Keep body parts completely clear of the ramp door hinge pinch area at all times.
- Verify operation of parking brakes on any vehicles you are loading or unloading.
- Inspect ramp and floor surfaces for water or oils that may cause slippery situations.

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## **Loading Ramp Operation**

Your loading ramp incorporates two compression latch handles, one on each side of the ramp which serve to provide ramp securement while traveling and as a grab handle when lowering the ramp. The compression latches can be locked from the exterior as well.

Opening the ramp first requires that you release the compression latches (unlock if necessary). Pull each handle outward then rotate 90 degrees to unlatch. At this time you may then open the ramp door.

Before closing the ramp, ensure that the compression handle latch (inside) is rotated to clear the ramp frame and that the ramp support cables are tucked inside and out of the way.

## **Loading Procedure**

### **⚠ CAUTION**

- ***Ramp Maximum Capacity: The ramp maximum capacity is 3000 lbs. in the ramp position with the load evenly distributed and a maximum 1000 lbs. per wheel contact. Exceeding load limit may lead to collapse and possible injury.***

1. Hitch the RV to the tow vehicle before loading and unloading heavy objects into the cargo area. Select a parking site where the ramp bumpers, when ramp is opened, will rest on a flat surface. You will want to minimize twisting or bending of the ramp framework. This bit of preventative awareness will extend the life of your loading ramp greatly.
2. Set the tow vehicle parking brake and locate wheel chocks in front and behind the RV tires on at least one axle, both sides of the RV. DO NOT use the emergency breakaway switch on the RV.
3. Lower the rear stabilizer jacks on the RV.
4. Fully raise electric bunk/sofa assembly. Refer to '***Bunk Lift Operation and Safety***' further on in this manual.
5. Remove and store the carpet kit and any tables that may be installed. Locate and ready all necessary tie-down straps.
6. Unlock the loading ramp and lower it to the ground.
7. You may then swing out the patio railing and open the patio doors to allow full access into the cargo area. See corresponding sections for additional information on operating the patio feature.
8. Depending upon the cargo you expect to carry you may need to plan ahead for positioning your cargo to make best use of tie-down ring locations and to verify that you will be able to fit everything into place.
9. Use extreme caution when loading or unloading ATVs, UTVs, motorcycles or other motorized vehicles. These machines are generally heavy and may be hot from operation and/or covered with dirt, oil, or other substances that may make them slippery.
10. Make sure that the door seals and hinge area are free of any debris such as mud or snow before closing the loading ramp.



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## **Loading Motorized Vehicles**

Always follow the instructions in the owner's manual for the motorized vehicles you will be hauling. If not available, the following suggestions provide you with a generalized procedure for loading.

1. Follow the '***Loading Ramp Operation and Procedure***' listed above.
2. Shift vehicle into its lowest gear before ascending ramp.
3. Approach straight on, not at an angle. If you are off to one side and the ground is uneven where the ramp touches the ground, an unbalanced situation can occur.
4. Align front wheels with ramp so that the vehicle will be driven straight in.
5. The operator should apply slight throttle smoothly and climb the ramp at low speed. Too much or sudden increases in throttle will cause the vehicle to be harder to control and may cause the vehicle to impact cabinetry inside the RV or flip over backwards.
6. Stop when you have reached the location in which you have planned to secure your vehicle with the cargo tie-down rings.
7. After loading, close fuel valves on gasoline powered vehicles. Put in park. Turn ignition key off. Set parking brake. For manual clutch vehicles, leave parked in reverse or low gear with brake set.

## **Cargo Tie-Down Rings**

The cargo area of your ramp model RV is equipped with cargo tie-down rings that must be used when transporting heavier items that will likely roll or tip while traveling. *Tie-down straps are not included with your RV and must be purchased separately.* Cargo tie-down rings are rated at **2500 lbs.** maximum loading capacity however structural limitations to the RV floor may reduce that maximum rating. ***Do not over tighten tie-down straps as this may cause damage to the attachment hardware, floor structure and cargo.*** Use tie-down straps rated in excess of the weight of the cargo to be secured. Be sure to attach and secure each tie-down strap so that it cannot come loose, unfastened, opened or released while the RV is in motion. Also use edge protection whenever a tie-down strap could be damaged or cut at the point where it touches a sharp or rough edge of any cargo item.

Top heavy items will likely need additional strapping as they are very likely to tip over when turning, braking or accelerating. It is important to use enough tie-down straps to secure your load so that it will not move in any direction. Keep handlebars, mirrors, etc. away from interior walls. Interior walls and cabinet finishes can be damaged by items working loose and rubbing. This type of damage is not covered under warranty.

## **Secure the Load**

Some vehicles or equipment may benefit by locating tire 'chock' blocks in front and rear of its tires to help minimize any shifting. Adding tire chocks is strictly an additional safety precaution and does not reduce the need for strapping the cargo in securely.

Secure the vehicle with tie-downs straps. A minimum of four straps, (one at each corner) is recommended. The attachments points you select on your equipment must be strong enough to support the weight of the equipment. If securing ATV, UTV, motorcycle or other vehicle, refer to your vehicles owner's manual for specific securement locations. Any attachment to a decorative piece of chrome or plastic will usually not be a good tie-down point and may cause damage to your equipment and RV.

While transporting, motorized cargo with manual transmissions should be left in first or reverse gear. Vehicles with automatic transmissions should be left in the 'Park' position.

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The vehicles ignition key should be turned off and removed, the parking brake set, the run/stop switch in the stop or off position and the fuel lever turned to the off position.

### **NOTICE**

- *Any damage to the RV caused by inadequately secured cargo will not be considered for warranty coverage.*
- *Exceeding the Cargo Carrying Capacity of the RV or its loading ramp may void warranties.*

### **Unloading Motorized Vehicles**

The safest method of unloading is to push the vehicle to the ramp, allowing it to roll down the ramp while carefully braking to ensure control of the vehicle. If you loaded your vehicle forward, front in, that means that you will unload it in reverse. Driving a motorized vehicle in reverse down the ramp is not recommended. A slight turn of the handlebars or a slip of the wheel can cause your vehicle to fall, tip or roll sideways. If you are on the vehicle you can be injured or killed.

Unload the vehicle safely as follows:

1. Be sure the back tires of the vehicle are aligned squarely with the ramp, and there are no people, pets or obstructions in the unloading area at the end of the ramp. Ensure that the ground surface will support the vehicle, and that the vehicle cannot roll away uncontrolled.
2. Stand at the front of the vehicle.
3. Push the vehicle backward in line with the ramp.
4. As the rear tires start down the ramp let it roll slowly backwards, braking enough to control the speed but not so much as to skid and lose control.

### ***ON-BOARD FUEL STATION***

#### **Fuel Transfer System**

The fuel transfer system allows you to store gasoline for use in motorcycles, snowmobiles, ATV's or other vehicles and equipment while at a campsite. This system consists of a fuel tank, fuel tank fill neck with cap, fuel gauge, fuel transfer pump, fuel transfer master shut-off switch with timer, and fill hose with nozzle.

This system also includes, as required by C.A.R.B. (California Air Resources Board), a charcoal carbon canister which contains and recycles gasoline vapor emissions that may otherwise escape into the atmosphere. The fuel pump master switch, which is located near the fuel station compartment, also contains a fuel gauge to allow monitoring the fuel level in the tank.

To fill the on-board fuel tank, remove the filler cap and fill the tank with the grade of gasoline required by your equipment. **Note: This fueling system is designed to be used with unleaded fuel only. ECI fuel systems are not meant to be used with unleaded gasoline with more than 15% ethanol blend.** When replacing the fuel fill cap, be sure it seats squarely and firmly onto the fill pipe neck.

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## Fuel Transfer System Safety

### DANGER

- *All pilot lights, appliances, and their igniters (see operating instructions) shall be turned off before refueling of motor fuel tanks and/or propane containers.*
- *Before dispensing fuel, turn off all engines, fuel-burning appliances, and their igniters (see operating instructions).*
- *Do not dispense fuel within 20 ft (6.1m) of an ignition source.*
- *Can cause ignition of flammable vapors, which can lead to a fire or explosion and result in death or serious injury.*

Static electricity related incidents when refueling are extremely unusual. They appear to happen most often during cool or cold and dry climate conditions. In rare circumstances, these static related incidents have resulted in a brief flash fire occurring at the fuel fill point. You can minimize these and other potential fueling hazards by following safe refueling procedures.

A build-up of static electricity can be caused by reentering a vehicle during refueling. If you return to the fuel fill pipe during refueling, the static may discharge at the fill point, causing a flash fire or small sustained fire with gasoline vapors. If you cannot avoid getting back into the vehicle, always touch a metal part of the vehicle with a bare hand, such as the door, or some other metal surface, away from the fill point upon exiting the vehicle.

Here are some additional refueling safety guidelines when refueling your vehicle or filling gasoline storage containers:

- Turn off vehicle engine: Disable or turn off any auxiliary sources of ignition: the RV furnace, water heater, cooking appliances, and any pilot lights. Turn off main propane valve.
- Do not smoke, light matches or lighters while operating the refueling system, or when using gasoline anywhere else.
- Never jam or otherwise try to lock the refueling lever 'open' on the nozzle.
- Do not re-enter your vehicle during refueling. If you cannot avoid reentering your vehicle, discharge any static build-up BEFORE reaching for the nozzle by touching something metal with a bare hand, such as the body or frame, away from the nozzle.
- In the unlikely event a static caused fire occurs when refueling, leave the nozzle in the fill pipe and back away from the vehicle. Turn off the fuel pump master switch immediately.
- Do not over-fill or top-off your vehicle tank, which can cause gasoline spillage.
- Never allow children under licensed driving age to operate the pump.
- Avoid prolonged breathing of gasoline vapors. Use gasoline only in open areas that get plenty of fresh air. Keep your face away from the nozzle or container opening.
- Never siphon gasoline by mouth. Never put gasoline in your mouth for any reason. Gasoline can be harmful or fatal if swallowed. Contact an emergency medical service provider immediately.
- Keep gasoline away from your eyes and skin; it may cause irritation.
- Remove gasoline soaked clothing immediately.
- Use gasoline as a motor fuel only. Never use gasoline to wash your hands or as a cleaning solvent.

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## **Fuel Transfer System Operation**

1. Lower the RV tongue jack to the ground. This will help to reduce the possibility of static discharge while refueling.
2. Close any vents and/or windows in the vicinity of the fueling station to prevent fuel vapor from entering the RV.
3. Turn the fuel transfer pump switch ON. This will provide power to the fuel pump. It also sets an internal timer that allows the pump to operate up to 5 minutes. When the pump stops, it will be necessary to reset the pump switch by turning it off then back on to allow an additional 5 minutes of run time.
4. Remove the fuel hose and nozzle from its compartment.
5. Place the nozzle into the equipment fuel filler and squeeze the handle to allow fuel to flow. Be careful not to overfill the equipment fuel tank.
6. When finished, release the nozzle handle and return the nozzle and hose to its compartment and shut off the pump switch. Wipe up any spilled fuel.
7. Lock the fuel transfer nozzle compartment door to prevent unauthorized use. The nozzle compartment must be locked at all times when not dispensing fuel.
8. See Digital Controller supplemental user instructions included in your Owner's Information Packet.

It is recommended that the fuel pump be operated at least once a month to keep the system functioning properly.

## ***GASOLINE GENERATOR***

Your ramp model RV includes a 4.0 KW (4000 watts) gasoline generator intended for use when camping 'off-grid' or remote areas where no 120 volt service is available. Gasoline fuel for the generator is supplied from the On-Board Fuel Station. See additional literature included in your owner information packet for specific operation and maintenance.

## ***ELECTRIC BUNK LIFT SYSTEM***

The electric bunk lift system provides a sleeping and seating arrangement that can be raised out of the way for convenient transporting of ATV's or other equipment and lowered again for use when needed. The components of the bunk lift system include the sofas, bunk platform with mattress and bunk access ladder. There are several sub-components of each which will be discussed in the following paragraphs. Please refer to additional user literature included in your owner information packet.

### **Maximum Load Ratings for Bunk Lift Mechanism:**

**Static (Stationary) Load = 600 Lbs. (Per Bed)**

**Dynamic (Moving) Load = 450 Lbs. (Entire System)**

**NOTE: Ratings apply to lifting mechanism only and do not imply any load rating for bed or sofa platforms.**

The bunk lift system is electrically operated but also incorporates a manual over-ride operation in the event of electrical failure. Please refer to additional user literature included in your owner information packet for manual over-ride procedure.

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## Brake Release

The electric bunk lift assembly is driven by a single motor in the upper rear door side corner of the assembly. This motor is equipped with a brake release lever that is used for manual over-ride operation. This lever must remain in the 'on' position unless performing a manual over-ride. Bunk and sofa(s) may drift downward if the brake lever is not in the 'on' position which may damage objects or vehicles placed below. See picture below for identification.

Bunk lift motor with brake lever shown in the 'on' position.



## Sofa Safety and Features

The bunk lift sofas can be adjusted to different positions based on your intended use. Review the following information for specific features and safety information.

At each end of the sofa you will find a yellow 'Sofa Lock Operation' label. The sofa lock is used when lowering the sofa from its sleeping position into the storage position (against the wall) and back again into sleeping position. Refer to the instruction label located along each end of the sofa mechanism for operation.



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The sofas have one locking pin at each end. The locking pin is temporarily removed when folding the sofa into the storage position against the wall of the RV. Locking pins **MUST** be installed at all other times. Remove only to pivot sofa unit up or down then immediately reinstall. This bracket is shown with the sofa in the seating/sleeping position and locking pin securely in place.



This image shows a sofa in its storage position against the wall with the locking pin in place as indicated with the red arrow.

If desired, the entire sofa assembly can be removed from the bunk lift by removing the screw at the top of the sofa bracket as indicated with the yellow arrow. After removing the screw, the sofa assembly must be lifted vertically to disengage the bracket from the bunk lift trolley mechanism. The bunk lift system will operate normally without the sofas attached.



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## Bunk Safety and Features

### NOTICE

- *Ensure that motor brake release is set to the 'on' position at all times unless manual over-ride is being performed. Bunk and/or sofas may drift downward and may damage objects or vehicles placed below if they are not fully locked into up or down positions.*

### Automatic Bunk Lock-Up System

This feature automatically locks the bunk in the up position when raised all the way and its locking/release tabs are located at each column just above each sofa trolley bracket. See additional literature on Happijac Bed Lift in your Owners Information Packet for specific operation details.



Figure 1. The picture above shows the locking tab in the 'Release' position.



Figure 2. The picture above shows the locking tab in the 'Locking' position.

## Bunk Lift Operation

### To Lower the Bunk and Sofas For Sleeping

**(Assumes Bunk and Sofas locked in upper position)**

1. To lower the bunk and sofas, first remove all cargo from the bunk lift area and that the sofas are in their horizontal sleeping position.
2. **CAUTION: Make sure nothing is sitting on the bunk prior to lifting. Damage could occur to the ceiling or bunk assembly. This damage will not be covered under warranty.**
3. Lower sofas a few inches to position all four locking tabs into the 'Release' position (Fig.1 above)
4. Using the bunk lift control switch, raise the bunk and sofas up until you hear the bunk trollies disengage from the locking mechanism.
5. Lower the bunk and sofas. The bunk will automatically stop at its pre-set location. The sofas will continue down until the trollies contact the lower limit switch stopping their travel.
6. If you plan to use the sofas as a lower sleeping area you must lower the support legs for each sofa backrest before any amount of weight is placed upon the sofa assembly.
7. Attach bunk ladder to bunk hooks and lower to floor for bunk access. Bunk and sofas are now ready for use as a sleeping area.

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Bunk and sofas lowered into sleeping arrangement with bunk ladder attached. Note yellow 'Sofa Lock Operation' label at end of sofas.



### **To Raise the Bunk and Sofas For Storage (Assumes Bunk and Sofas lowered in sleeping arraignment)**

1. Remove ladder and set aside.
2. Flip locking tabs into their 'Locking' position (Fig. 2 above)
3. **CAUTION: Make sure nothing is sitting on the bunk prior to lifting. Damage could occur to the ceiling or bunk assembly. This damage will not be covered under warranty.**
4. Using the bunk lift control switch, lift sofas and bunk to the top until you hear the locking mechanism engage the bunk into its locked position.

### **To Lower Sofas Only For Seating Use (Assumes Bunk and Sofas locked in upper position)**

1. To lower sofas only for seating use, the bunk will remain in the up position supported by the locking mechanism.
2. With the bunk locked in the up position, use bunk lift control switch to lower sofas down until the trolleys contact the lower limit switch stopping their travel. The bunk will not lower as long as it is fully locked in the up position.
3. Roll sofa backrests into their upright seating position. Lower sofa seat legs into position. Sofas are now ready for seating use.

Sofas lowered into dinette/seating arrangement.





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## **To Position Sofas In Storage Position Against Wall (Assumes Bunk is locked in upper position)**

1. To position sofas in the storage position for transporting taller items, the bunk will remain in the up position supported by the locking mechanism.
2. Sofas must be lowered approximately 12" to provide clearances for pivoting sofas against wall.
3. Following procedures in the '**Sofa Safety and Features**' section above, position the sofas in the storage position against the wall. Ensure that all sofa locks and locking pins are securely in place.

This configuration could be used when transporting taller items when maximum width is not required. If additional width is needed you may also remove one or both sofas from the RV. See '**Sofa Safety and Features**' section above.



Sofa shown in the storage position.  
Note sofa lock in its 'locked' position  
and locking pin securely in place.

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## To Position Sofas for Maximum Cargo Width

1. Follow procedure above... **'To Raise the Bunk and Sofas For Storage'**



**NOTE: Prior to travel, the bunk should always be in the upper 'Locked' position or fully down with the sofas in the bed position. Sofas can be in the up and flat position against the bunk or can be folded down against the wall with their locking pins in place and sofa locks in the 'lock' position dependent upon whether you need additional cargo space. You may also travel with sofas in the seating if there is no cargo in the way.**

### Operating precautions:

- **CHECK** to be sure the bunk is fully secured in the locking mechanism (when in the upper position) or fully down before towing the RV.
- **CHECK** to be sure the locking pins are securely fastened at both ends of each sofa regardless of sofa position.
- **ALWAYS** raise the bunk and sofas to the FULL UP or FULL DOWN position when the RV is being towed to avoid damaging the bunk and/or sofas as a result of bouncing. If additional cargo height is needed you may secure sofas in the STORAGE position (against the wall) with backrest travel lock placed in the LOCK position and locking pins secured (See accompanying photos).
- **NEVER** operate the bunk lift with any items other than bedding on the bunk mattress.
- **NEVER** travel with any items other than bedding on the bunk. Loose items can become projectiles.
- **NEVER** operate the bunk lift while any person(s) are on the bunk platform or sofas.
- **ALWAYS** ensure that the area above, below and adjacent to the bunk lift is free from obstructions before operating.
- **ALWAYS** check before operating bunk lift to ensure bedding is not over-hanging the ends of the bunk where it could become entangled or caught up in the mechanism.
- **ALWAYS** use care when loading cargo or vehicles in the area of the bunk lift to avoid damage to the bunk lift mechanism.
- **ALWAYS** properly secure loads in the cargo area to avoid damage to the bunk lift mechanism.

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## ***ROOF ACCESS LADDER***

### **Ladder Operation**

The roof access ladder which is located at the driver side of your ramp model RV is a stow-able ladder that unfolds away from the sidewall to provide access to the roof. Remove the travel safety pins, pull ladder toward you and down until the ladder is firmly in place. ***Before driving away ensure that the ladder is stowed in the folded position against the sidewall and both travel safety pins are fully inserted.***

## ***PORTABLE AIR COMPRESSOR SYSTEM***

The portable air compressor system allows you to air up tires and can be used to blow compressed air. The system includes air hose, tire chuck with built-in pressure gauge, air compressor pump and misc. fittings. The air compressor pump is equipped with an air filter that must be inspected or replaced periodically to ensure that it does not become clogged with dust and/or debris. See additional literature supplied in your owner information packet.

## ***ELECTRICAL SYSTEM***

The electrical system in your ramp model RV is based on the primary 12V/120V systems outlined in the main 'Owner's Manual' included with your RV.

### **Secondary Fuse Panel Location**

Additionally your ramp model includes an auxiliary fuse panel located adjacent to the main fuse/breaker panel. Look for the label below reading 'SECONDARY FUSE PANEL LOCATION'. This auxiliary fuse panel will be located behind the access panel that this label is attached to.

SECONDARY FUSE PANEL  
LOCATION

The following fuses are located on this auxiliary panel:

- Electric Bunk – 15 amp
- Rear Awning – 15 amp
- Fuel Pump – 20 amp

### **Dinette Lighting**

The dinette lighting located in the base of the electric bunk is powered through a removeable coil cord that appears similar to a residential phone hand set cord. However this cord ***IS NOT*** the same cord that is used with a residential telephone. Do not attempt to replace it with a phone cord if it becomes damaged. See your Outdoors RV Dealer for replacement. This cord is removable should you decide you would like to remove the bunks entirely from your RV.

# Ramp Model Features

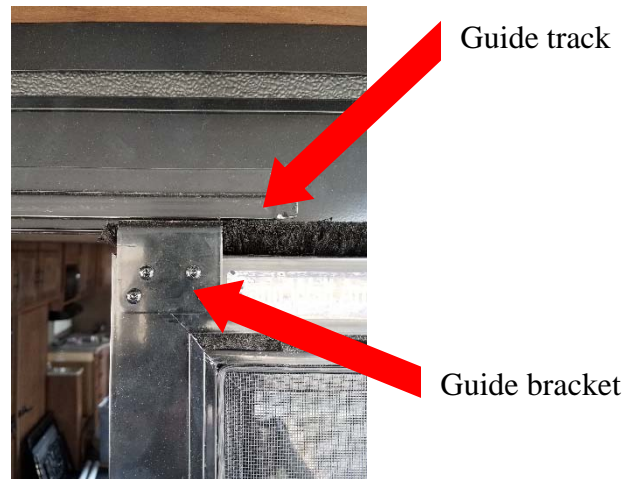
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## FULL-VIEW PATIO DOORS

### Operating Procedure

The patio doors equipped on your ramp model RV provide additional ventilation and lighting as well as full access to the cargo area. Door glass can be raised and lowered similarly to a residential screen door. The glass can also be removed for cleaning and stowing if desired. Remember to always lower all glass panels to their lowest position before travel. The patio doors can be opened two different ways, outward for loading the cargo area or by sliding the panels for normal passage onto the ramp. At the top of each door set on the interior side you will find a bolt latch with release strap that locks each side into their closed position. Pull the release strap to unlatch and open doors outward from their closed position. When returning the doors to their closed position, ensure that each door has been positioned onto its sliding guide track located on the exterior at the top of each door before attempting to latch. When properly latched doors will slide open and closed for normal passage onto the ramp. For security purposes the doors can be locked from the inside only.

Shown at the right is the top of the patio door positioned with its guide bracket in the guide track (viewed from ramp side). When closing the patio doors from the open loading position, be sure that the guide bracket is positioned in the track otherwise the door may become damaged while attempting to latch it closed.



### NOTICE

- *Doors must be latched, and all glass panels in down position during travel.*

## IN-FLOOR STORAGE COMPARTMENT

The in-floor storage compartment provides a heavy-duty steel storage space perfect for tie-down straps, tools, or equipment that you may not want store in other areas of your RV. The compartment is strong enough that it can be driven on with four-wheelers and side-by-sides without risk of damage. **DO NOT STORE GASOLINE OR FLAMMABLE LIQUIDS IN THIS COMPARTMENT OR INSIDE YOUR RV AT ANY TIME.**

# Ramp Model Features

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## REAR AWNING

The rear awning is electrically operated and includes the ability to manually close in the event of power failure. This awning also includes a built-in LED light strip to provide ambient patio lighting. Additional support documentation can be downloaded on the Dometic website.

## PATIO FEATURE

The ramp door as equipped will allow you to convert the ramp area into a living space that will extend your camping experience into the Outdoors with the convenience of easy access into the interior living space of your RV. Please refer to additional user literature included in your owner information packet.

This feature includes two ramp support cables (one long, one short), a conveniently storable/removeable patio railing and stowable side-entry steps with built-in handrail and support leg.

Refer to '*Patio Set-up Procedure*' for additional operating instruction.

### NOTICE

- **Ramp must be supported by both cables and the properly adjusted support leg at side-entry step while in the patio position.**

### WARNING

- ***Patio Maximum Capacity:* The patio has a maximum capacity of 10 persons or 1500 lbs. maximum. The total weight of the patio must remain within the 1500 lb limit.**
- ***Stabilizer jacks must be used when the ramp door is in the patio position.***
- ***Support jacks on the patio door must be used where applicable.***
- ***Exceeding load limit may lead to collapse and possible injury.***

## Patio Railings

Patio guard railings are included with the patio feature. The railings are equipped with quick-detach brackets at each side in the event that you choose to leave the railings at home (See following pictures). Before traveling it is advised that the railings be secured with their travel strap to minimize additional movement. Refer to '*Patio Set-up Procedure*' for additional operating instruction.

## Ramp Model Features

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Safety pin shown in place



Remove safety pin from bracket set prior to removing railing.



Patio railings shown fully installed with safety pin in place.

Patio railings can be quickly removed from the RV if you choose to leave them behind. Unfold railings from their stowed position, remove safety pins, then lift railing assemblies until they separate from their component bracket on the ramp door column.

Patio railings may be latched into the fully open position while loading cargo. The latch above is shown in the 'latched' position. Pull up on the ring to disengage the latching pin then turn the ring and pin 1/4 turn.

### Patio Side Step

Patio side entry steps are also included with the patio feature. The step assembly includes a built-in, reversible handrail as well as adjustable stabilizing footpads and ramp support jack. **The step assembly must be secured into place on the ramp with support leg attached and adjusted properly before using the ramp in the patio position.** Refer to '*Patio Set-up Procedure*' for additional operating instruction.

# Ramp Model Features

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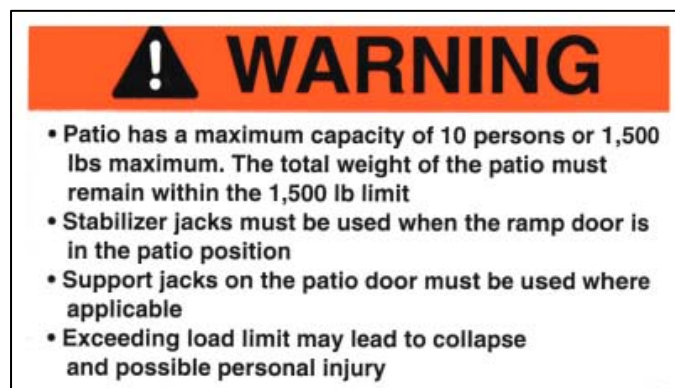
## Patio Set-up Procedure

1. Refer to photos on the next few pages for step-by-step set-up instructions.
2. Before patio kit is set-up, the RV must be relatively leveled with all stabilizer jacks in contact with the ground.
3. Following the procedures outlined in '*Loading Ramp Operation*' and the '*Loading Procedure*' section, unload any vehicles or equipment transported in the cargo area.
4. Locate and ready the ramp support cables at each side of the ramp opening on the inside. They may be tucked between the patio doors and railings.
5. Raise or lower ramp to its near horizontal position, attach end of ramp support cable to the clevis pin bracket at both side of the ramp. Do this on each side of the ramp. Ensure that the clevis pin safety clip is securely latched (Fig 1). Adjust cables as necessary to provide a near level ramp. Ramp does not need to be perfectly level (Fig 2).
6. Locate and attach support leg to its bracket and lock into upright position (Fig. 3). Adjust support leg height so that ramp is fully supported by leg and side cables. Support leg can be removed by pressing release button (Fig. 3.1).
7. Locate step assembly, remove hand railing from its storage location by removing knob screws then bring step assembly into place. This may require two people for ease of set-up. Latch step securely into each bracket set located along the edge of the ramp door on the passenger side. Ensure that the step is positively latched into each bracket set. Remove locking pin from both sides of step and unfold steps into down position. Resecure locking pins into nearest holes. Adjust each step foot to provide a stable and near level installation. Step assembly does not need to be perfectly level (Fig 4-6).
8. Locate hand railing. Insert railing into railing pockets at either side of step as desired. Secure with supplied knobs. Knobs should be hand tightened only. Do not use tools. (Fig 6).
9. From atop the ramp you will now unfold and extend the patio railing and latch each keeper leg into position. Ensure that each keeper leg is securely latched into place before allowing people on the ramp patio. The passenger side patio railing contains a sliding 'gate' that extends rearward across the path of the step to provide a security railing for small children, pets, etc. This gate can be latched against the rear railing (Fig 7-12).
10. If you choose, you may now extend the rear awning to complete set-up of the patio feature.

## Patio Set-up Quick Reference

The following pictures on the next few pages will provide a quick-reference for patio set-up.

The warning label to the right is located along the door side inner edge of the ramp. Failure to follow this warning may result in injuries and/or loss of warranty coverage.



## *Ramp Model Features*

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1. After ramp is lowered, ensure that cable ends are securely pinned in place.



2. Ramp angle can be adjusted slightly with the cable turn-buckles. Twist turn-buckle to lengthen or shorten cable as required to operate patio doors without binding.



3. Secure support leg to its attachment point. Ensure that the leg is fully engaged into its latch point. Adjust leg foot height so that ramp is fully supported by leg and side cables.



3.1 Support leg is removed by pushing inward on this release button and pulling outward on leg.



4. Secure side step to brackets along edge of ramp. Note adjustable feet on each side.



5. Be sure that both sides of the step are fully latched into their brackets (front shown).



## *Ramp Model Features*

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5.1 Be sure that both sides of the step are fully latched into their brackets (rear shown).



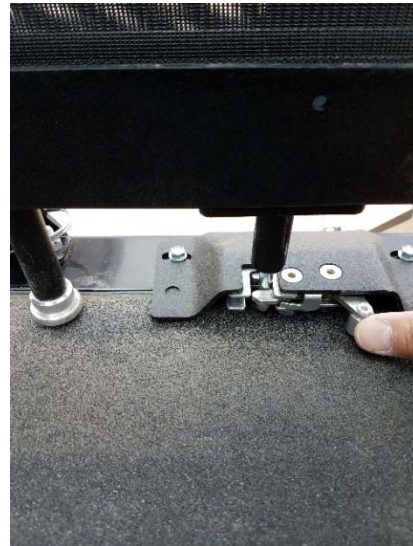
6. Remove step retainer pins and lower steps into their horizontal position for use. Re-insert retainer pins at both sides before using steps. Adjust step feet as necessary. Secure handrail with knobs.



7. Remove railing travel strap and raise gate latch rod to unfold patio railings.



8. Unfold railings. Secure the right side railing first. Latch railing keeper leg into keeper base.



9. Position keeper leg so that it aligns with entrance to keeper base. Push leg into base opening until securely latched. Leg is easily released by pushing against the lever with your foot or finger as shown. Repeat at each keeper leg/base.

## *Ramp Model Features*

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10. Unfold the left side railings. Extend the inner railing toward the rear until all the keeper legs align with their mating keeper bases. Secure keeper legs as outlined in step #9.



10.1 Inner railing being extended toward rear corner.



10.2 Extended fully to rear corner. Finish latching rear railing panel at corner nearest side step.



10.3 Secure rear railing end flap into support leg latch.

## *Ramp Model Features*

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11. Side step and railing set-up complete. Right side railing 'gate' can be extended across the path of the stairs to enclose the patio.



12. Gate shown in the closed position. Raise and pivot gate latch rod up and over notch provided for latching.



13. Reverse procedure for disassembly. Note that step attachment is released by pressing lever as shown above.

