

ReSa

TABLE OF CONTENTS

1 – INTRODUCTION

About this Manual	1-1
Safety Messages Used in this Manual	1-1
Pre-Delivery Inspection	1-2
Before Driving	1-2
Front Axle Tire Alignment	1-2
Headlight Alignment	1-2
Service and Assistance	1-2
Reporting Safety Defects	1-3
Occupant and Cargo Carrying Capacity Label	1-3
Vehicle Certification Label	1-4
Specifications and Capacities	1-5
Owner and Vehicle Information	1-6

2 – SAFETY AND PRECAUTIONS

General Warnings	2-1
Driving Safety	2-2
Fuel	2-2
Carbon Monoxide Alarm	2-2
Carbon Monoxide Warning	2-3
Smoke Alarm	2-4
Fire Extinguisher	2-4
Electrical	2-4
Loading	2-5
Maintenance	2-5
Emergency Exits	2-5
Formaldehyde Information	2-6
Mold, Moisture, and Your Motorhome	2-6
Roof	2-7
Roadside Emergency	2-7
Jump Starting	2-8
Engine Overheat	2-8

3 – DRIVING YOUR MOTORHOME

Seats – Driver/Co-Pilot	3-1
Seat Belts	3-1
Child Restraints	3-2
Keys	3-3
Mirrors – Power Exterior	3-3
Hazard Warning Flashers	3-3
Air Conditioner/Heater – Automotive (Dash)	3-3
Radio – In-Dash	3-3

Table Of Contents

Rearview Mirror with Monitor System	3-3
Engine Cooling System	3-3
Tires	3-4
Suspension Alignment and Tire Balance	3-4
Lights	3-4

4 – APPLIANCES AND SYSTEMS

Refrigerator	4-1
Range Top (Electric)	4-2
Microwave Oven	4-2
Solar Charge Panel	4-3
Water Heater – Truma Combi G	4-4
Systems Monitor Panel	4-5
Roof Air Conditioning System	4-8

6 – ELECTRICAL

Electrical Cautions	6-1
Electrical System – House 120-Volt AC	6-1
Power Cord – External (Detachable)	6-1
Winnebago x ECOFLOW® Power Kit Pro Monitor Panel	6-2
Circuit Breakers – House 120-Volt AC	6-5
Electrical Outlets – House 120-Volt AC	6-5
Ground Fault Circuit Interrupter	6-5
Electrical Generator	6-6
Battery Access	6-9
Circuit Breakers and Fuses – House 12-Volt DC	6-10

7 – PLUMBING

Fresh Water System	7-1
Eco-hot system	7-3
Water Pump	7-3
Disinfecting Your Fresh Water System	7-5
Shower Hose Vacuum Breaker	7-6
Exterior Shower/Wash Station	7-6
Toilet	7-6
Drainage System (P-Traps)	7-7
Waste Water System	7-7
Waterline, Water Tank Drain Valves & Water Heater Bypass and Antifreeze Siphon Valves	7-9
Winterizing Procedures	7-11
Water System Drain Valve Locations	7-17

8 – ENTERTAINMENT

Access Port (Roof)	8-1
Satellite Internet System	8-1

9 – FURNITURE AND SOFTGOODS

Dinette Table (Portable)	9-1
--------------------------------	-----

Sleeping Facilities	9-2
Sofa/Sleeper Queen Bed	9-2
Bed Step	9-4
Front Cap Storage	9-4
Power Loft Double Bed	9-5

10 – MAINTENANCE AND STORAGE

Sealants – Inspection and General Information	10-1
Roof	10-1
Undercarriage	10-2
Exterior Automotive Paint Finish	10-2
Exterior Graphic Care	10-4
Plastic Parts – Cleaning	10-5
Exterior Lights	10-5
Interior Soft Goods	10-5
Cabinetry – Cleaning	10-6
Decorative Vinyl Wall Paneling – Cleaning	10-6
Tables and Countertops	10-7
Sink – Stainless Steel	10-7
Range and Refrigerator	10-7
Vinyl Flooring	10-7
Bathroom	10-8
Windows	10-9
Doors and Mirrors	10-9
Vehicle Usage In Cold Weather	10-10
Vehicle Storage – Preparation	10-10
Vehicle Storage – Removal	10-10
Chassis Service and Maintenance	10-11
Motorhome Maintenance Chart	10-12

11 – MISCELLANEOUS

Loading the Vehicle	11-1
Weighing Your Loaded Vehicle	11-1
Car or Trailer Towing	11-3
Trailer Wiring Connector	11-4
Towing Guidelines	11-4
Power Awning	11-5
Storage Compartment Doors	11-6
Power Roof Ventilator	11-6
Power Roof Ventilator (Bath)	11-7
Windows	11-7
Effects of Prolonged Occupancy	11-7
Tie-Down Rings	11-8

SECTION 1 – INTRODUCTION

Congratulations! We welcome you to the exciting world of motorhome travel and camping. You will find it convenient and enjoyable to have all the comforts of home and still enjoy the great outdoors wherever you choose to go.

Before sliding into the driver's seat, please become familiar with operations and features. In addition, spend some time with the dealer when you take delivery to learn all you can about your new motorhome.

ABOUT THIS MANUAL

This operator's manual was prepared to aid you in the proper care and operation of the vehicle and equipment.

Please read this manual completely to understand how everything in your motorhome works before taking it on its "maiden voyage". In addition, please become familiar with the New Vehicle Limited Warranty.

NOTE: This manual describes many features of your motorhome and includes instructions for its safe use.

This manual, including photographs and illustrations, is of a general nature only.

Some equipment and features described or shown in this manual may be optional or unavailable on your model.

Because of Winnebago Industries[®], continuous program of product improvement, it is possible that recent product changes and information may not be included.

The instructions included in this manual are intended as a guide, and in no way extend the responsibilities of Winnebago Industries beyond the standard written warranty as presented in this manual.

The descriptions, illustrations, and specifications in this manual were correct at the time of printing. We reserve the right to change specifications or

design without notice, and without incurring obligation to install the same on products previously manufactured.

The materials in your InfoCase contain warranty information and operating and maintenance instructions for the various appliances and components in your motorhome.

NOTE: Many of the instruction sheets and manuals for the various appliances and components have been incorporated into the Operator's Manual Supplement for your convenience.

Please read the FAQ in Section 1 of the Operator's Manual Supplement for more details.

Throughout this manual, frequent references are made to the vehicle chassis manual that is provided by the manufacturer of the chassis on which this motorhome is built.

Consult the chassis manual for operating, safety, and maintenance instructions pertaining to the chassis section of the motorhome.

NOTE: For some floorplans, Winnebago Industries[®] makes modifications to the chassis, such as extending the wheelbase of the frame. Winnebago's Limited Warranty will apply to any chassis modifications made by Winnebago Industries[®].

SAFETY MESSAGES USED IN THIS MANUAL

Throughout this manual, certain items are labeled Danger, Warning, Caution, Notice, or Note. These terms alert you to precautions that may involve damage to your vehicle or a risk to your personal safety. Read and follow them carefully.

SECTION 1 – INTRODUCTION

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious personal injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious personal injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate personal injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

NOTE: A “Note” is not necessarily safety-related, but indicates a recommendation or special point of information that could assist in understanding the use or care of a feature item.

PRE-DELIVERY INSPECTION

This motorhome has been thoroughly inspected before shipment. Your dealer is responsible for performing a complete pre-delivery inspection of the chassis and all motorhome components.

As a part of the pre-delivery inspection procedure, the dealer is responsible for road testing the motorhome, noting, and correcting any problems before delivery.

BEFORE DRIVING

Familiarize yourself with State/Province and local regulations before traveling. There are many local rules that may impact your travels.

FRONT AXLE TIRE ALIGNMENT

We recommend that you have the front suspension and steering alignment checked and adjusted after you have fully loaded the vehicle according to your needs. Thereafter, have alignment inspected periodically to maintain vehicle steering performance and prevent uneven tire wear.

HEADLIGHT ALIGNMENT

Headlights on this motorhome were aligned at the factory in an unloaded state. We recommend you have the high and low beam alignment checked after fully loading the vehicle to your needs. Thereafter, have the alignment inspected periodically to maintain visibility.

SERVICE AND ASSISTANCE

Your dealer will be glad to provide any additional information you need, as well as answer any questions you might have about operating the equipment in your motorhome. When it comes to service, remember that your dealer knows your vehicle best and is interested in your satisfaction. Your dealer will provide quality maintenance and any other assistance that you may require during your ownership of this vehicle.

If you need warranty repairs while traveling, you may take your vehicle to any authorized Winnebago Industries® dealership and request their assistance.

See the Service Dealer Directory in your InfoCase.

REPORTING SAFETY DEFECTS

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Winnebago Industries, Inc.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Winnebago Industries, Inc.

To contact NHTSA, you may either call the Vehicle Safety Hotline toll-free at: 1-888-327-4236; (TTY: 1-800-424-9153)

or go to <http://www.safercar.gov>

or write to:

Administrator, NHTSA
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

You can also obtain other information about motor vehicle safety at <http://www.safercar.gov>.

If any weight exceeding 45.4 kg (100 lbs.) is added to your motorhome between final vehicle certification and first retail sale, the occupant and cargo carrying capacity must be corrected and a label similar to the one shown in the following photo will be affixed inside your motorhome.



OCCUPANT AND CARGO CARRYING CAPACITY LABEL

This label is affixed in the driver's area next to or near the Vehicle Certification Label. It contains vehicle occupant and cargo carrying capacity along with the number of seat belt positions in the vehicle. The label also provides the weight of a full load of water and advises that this weight, along with the tongue weight counts as cargo.

MOTORHOME OCCUPANT AND CARGO CARRYING CAPACITY
VIN:#####
THE COMBINED WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED:
XXX kg or XXX lbs
Safety belt equipped seating capacity:XXX
CAUTION:
A full load of water equals XXX kg or XXX lbs of cargo @ 1 kg/L (8.3 lb/gal) and the tongue weight of a towed trailer counts as cargo
RECREATIONAL VEHICLE OVERALL LENGTH: ___ M / ___ FT ___ IN AS MANUFACTURED

SECTION 1 – INTRODUCTION

VEHICLE CERTIFICATION LABEL

This label is affixed to the lower driver side armrest panel, driver door, or the driver side door jamb, depending on model. It contains vehicle identification numbers and other important reference information.

MANUFACTURED BY WINNEBAGO IND. INC.			INCOMPLETE VEHICLE MANUFACTURED BY																				
3			1																				
GVWR			2																				
4			LB																				
KG			5																				
GAWR:			SUITABLE TIRE AND RIM CHOICE			COLD INFLATION PRESSURE																	
FRT			6			7																	
LB			TIRE			RIM																	
KG			8			PSI																	
RR			9			KPA																	
LB			PSI			KPA																	
KG			PSI			KPA																	
THIS VEHICLE HAS BEEN COMPLETED IN ACCORDANCE WITH THE PRIOR MANUFACTURER'S IVD, WHERE APPLICABLE. THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.																							
SERIAL NO.			10			VIN			11			TYPE			12			COLOR			13		
XXXXX XXXX XX XX/XX/XX XXX-XXXXX			14			15			XXXXXX-XXX														

EXPLANATION OF DATA

1. Chassis manufacturer.
2. Chassis manufacture date.
3. Month and year of manufacture at Winnebago Industries®.
4. Gross Vehicle Weight Rating: Total permissible weight of the vehicle, including driver, passengers, total cargo carried (including all liquids), and equipped with all options.
5. Gross Axle Weight Rating: Total permissible weight allowed for the front and rear axles (listed in pounds and kilograms).
6. Suitable Tire Choice: Tires recommended to meet handling and safety requirements. When replacing any of the tires on your vehicle, always replace with a tire that meets these specifications.
7. Suitable Rim Choice: Wheel rims recommended to meet handling and safety requirements. When replacing any of the rims on your vehicle, always replace with a rim that meets these specifications.
8. Cold Inflation Pressure: Inflation pressures at Gross Axle Weight Ratings recommended (while cold) for the tires originally equipped on your vehicle. These pressure levels must be maintained to assure proper handling, safety, and fuel economy.
9. Rear Axle Wheel Configuration: Single or Dual as it relates to the inflation.
10. Serial Number: This is the serial number assigned to the completed vehicle by Winnebago Industries.
11. Vehicle Identification Number (VIN): This number identifies the chassis on which the motorhome is built. The 10th digit of the VIN designates the chassis model year (J=2018, K=2019, L=2020 etc.). This information is useful when ordering chassis repair parts.
12. Type: States the NHTSA designated usage classification for your motorhome. MPV signifies a Multi-purpose Passenger Vehicle.
13. Color: Signifies the color code number of the decor used throughout the vehicle. This number is necessary for ordering replacement cushions, curtains, carpet, etc.
14. Winnebago® model year and series/family name.
15. Model: Lists the Winnebago product model number of your vehicle.

SPECIFICATIONS AND CAPACITIES

Elora / Resa

	19DC
	Standard RAM ProMaster 3.6L Cutaway Chassis
Feature Number	1KJ
Length	20' 4"
Exterior Height ¹	10' 3"
Exterior Width	7' 6"
Awning Length	8'
Interior Height	6' 6"
Interior Width	6' 8"
Freshwater Tank Capacity ²	30 gal.
Water Heater Capacity	2.6 gal
Cassette Toilet Capacity ²	4.7 gal
Holding Tank Capacity - Gray ²	30 gal.
Wheelbase	159"
GVWR	9,350 lbs.
GAWR - Front	4,629 lbs.
GAWR - Rear	5,291 lbs.
GCWR ⁴	11,500 lbs.
Fuel Capacity	24 gal

Notes:

All information is based upon the most recent data available. Visit the Winnebago Industries, Inc. web page – www.winnebagoind.com – for the most current product information.

¹ The height of each model is measured to the top of the tallest standard feature and is based on the curb weight of a typically equipped unit. The actual height of your vehicle may vary by several inches depending on chassis or equipment variations. Contact your dealer for further information.

² Capacities are based on measurements prior to tank installation. Slight capacity variations can result upon installation.

³ Capacities shown are the tank manufacturer's listed water capacity (W.C.). Actual filled propane capacity is 80% of listing due to overfilling prevention device on tank.

⁴ Actual towing capacity is dependent on your particular loading and towing circumstances which includes the GVWR, GAWR, and GCWR as well as adequate trailer brakes. Refer to the chassis operator's manual of your motor home for further towing information.

SECTION 1 – INTRODUCTION

OWNER AND VEHICLE INFORMATION

OWNER INFO

Owner's Name(s) _____

Address _____

VEHICLE INFORMATION

Motorhome Model Number _____

Motorhome Serial Number _____

Chassis Vehicle Identification No. (VIN) _____

Vehicle Mileage at Delivery _____

Selling Dealer Name _____

Address _____

YOUR WINNEBAGO INDUSTRIES® DEALER /SERVICE CENTER

Name _____

Address _____

Contact _____ Phone _____

CHASSIS SERVICE CENTER

Name _____

Address _____

Contact _____ Phone _____

RV INSURANCE POLICY

Company _____

Policy Number _____

Agent _____ Phone _____

SECTION 2 – SAFETY AND PRECAUTIONS



GENERAL WARNINGS

- Only seats equipped with seat belts are to be occupied while the vehicle is moving.
- Make sure all passengers have seat belts fastened. Lap belts should fit low on the hips and upper thighs. The shoulder belt should be positioned snug over the shoulder.
- For pregnant women: Never place the shoulder belt behind your back or under your arm. Adjust the lap belt across your hips/pelvis, and below your belly. Place the shoulder belt across your chest (between your breasts) and away from your neck.
- Child restraints should be installed properly according to manufacturer's instructions. See "Child Restraints".
- All moveable or swiveling seats should be placed and locked in travel position while the vehicle is moving.
- Never let passengers stand or kneel on seats while the vehicle is moving.
- Sleeping facilities are not to be utilized while vehicle is moving.
- Examine the escape window and be familiar with its operation.
- Inspect the fire extinguisher monthly for proper charge and operating condition. This should also be done before beginning a vacation or any extended trip.



WARNING

Operating, servicing and maintaining this vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to www.P65Warnings.ca.gov/passenger-vehicle.



SECTION 2 – SAFETY AND PRECAUTIONS

DRIVING SAFETY



WARNING

This motorhome has been designed, manufactured and tested with concern for the protection of it's occupants. We recommend you perform the following inspections for your safety and the safety of your passengers before starting your vehicle.

3. **WHEELS** - Inspect for damage and check lug nuts for tightness.
4. **TIRES** - Inspect for wear and damage and check for recommended air pressure.
5. **LIGHTING** - Test for proper operation of all interior and exterior lights including dash lights, headlights, tail lights, brake lights, clearance lights, and turn signals.
6. **EXITS** - Inspect release mechanism on emergency exit window, test both locks on main entrance door for ease of operation and instruct passengers how to use both means of exit.
7. **SEAT BELTS** - Direct passengers to designated seats, be certain swivel seats are locked into position, and require use of a seat belt. See operator's manual for occupancy and weight restrictions.
8. **APPLIANCES** - Turn off and latch or lock doors where provided.
9. **LOOSE PARCELS** - Store securely.
10. **UTILITY SUPPLY LINES** - Disconnect all electrical, sewer and water lines and secure properly.
11. **ENTRANCE DOOR STEP** - Assure step is in retracted position for traveling.

Read your motorhome and chassis owner's manual for further precautions.

- Do not attempt to adjust the driver's seat while the vehicle is moving.
- Do not adjust tilt steering in a moving vehicle.
- Do not operate the cruise control on icy or extremely wet roads, winding roads, in heavy traffic, or in any other traffic situation where a constant speed cannot be maintained.

- Use care when accelerating or decelerating on a slippery surface. Abrupt speed changes can cause skidding and loss of control.
- Driving through water deep enough to wet the brakes may affect stopping distance or cause the vehicle to pull to one side. Check brake operation in a safe area to be sure they have not been affected. Never operate any vehicle if a difference in braking efficiency is noticeable.
- Adverse weather conditions and extremes in terrain may affect handling and/or performance of your vehicle. Refer to your chassis manual for complete and related information on driving your vehicle.
- **Doors** - Verify all interior and exterior doors are shut and/or stowed and latches are in place where provided.

FUEL

- Do not place or store gasoline or other flammable liquid containers inside the vehicle.
- Never smoke while refilling vehicle fuel tank.
- Portable fuel-burning equipment, including wood and charcoal grills and stoves shall not be used inside the recreational vehicle. The use of this equipment inside the recreational vehicle may cause fires or asphyxiation.

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) avoids 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. Failure to comply could result in death or serious injury.

CARBON MONOXIDE ALARM

Your motorhome is equipped with a Carbon Monoxide (CO) Alarm, which has a sensor that is designed to detect toxic carbon monoxide gas fumes resulting from incomplete combustion of fuel. It will detect CO gas from any combustion



source such as the furnace, gas range/oven, water heater, refrigerator, chassis engine, and electric generator engine.

To reduce the risk of carbon monoxide poisoning, test this alarms operation after the motorhome has been in storage, before each trip, and at least once per week during use by pressing the Test/Reset button on the alarm.



Carbon Monoxide Alarm



WARNING

Failure to replace this product by the “REPLACE BY DATE” printed on the alarm cover may result in death by Carbon Monoxide poisoning.

Replacement

When replacing this alarm, we recommend replacing only with the same model, or with one that is also listed for RV application. We recommend obtaining a replacement from your Winnebago Industries® dealer.

Further Information

Please read the information provided by the manufacturer, which is included in your InfoCase for further information.

CARBON MONOXIDE WARNING



WARNING

Avoid inhaling exhaust gases, as they contain carbon monoxide, which is a colorless, odorless, and poisonous gas. Death or serious injury can result.

The best protection against carbon monoxide entry into the vehicle body is a properly maintained engine exhaust and ventilation system. It is recommended that the exhaust system and body be inspected by a qualified motorhome service center:

- Each time the vehicle is serviced for an oil change.
- Whenever a change in the sound of the exhaust system is noticed.
- Whenever the exhaust system, underbody, or rear of the vehicle is damaged.

To allow proper operation of the vehicle’s ventilation system, keep front ventilation inlet grill clear of snow, leaves, or other obstructions at all times. **DO NOT OCCUPY A PARKED VEHICLE WITH ENGINE RUNNING FOR AN EXTENDED PERIOD.**

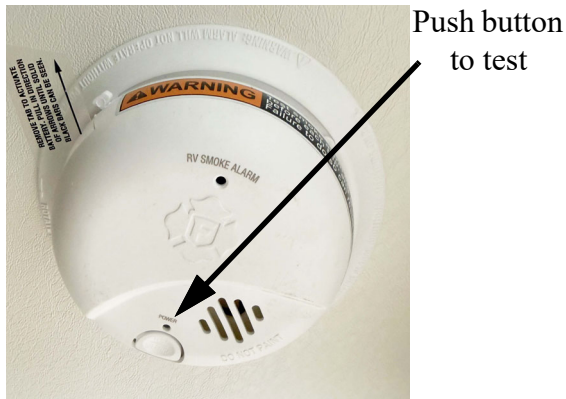
Do not run engine in confined areas, such as a garage, except to move vehicle into or out of the area.



SECTION 2 – SAFETY AND PRECAUTIONS

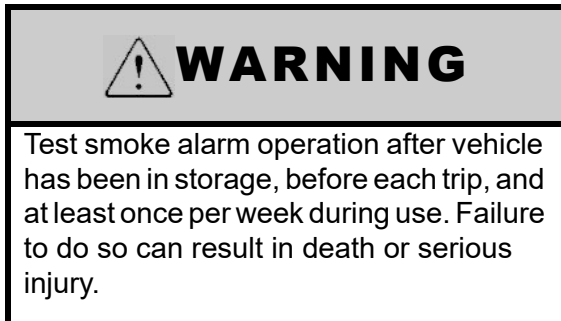
SMOKE ALARM

Your motorhome is equipped with a Smoke Alarm (located on the ceiling in the galley area.) The Smoke Alarm is powered by a 9-volt battery and has a sensor that is designed to detect smoke.



Smoke Alarm

The following label is affixed to the Smoke Alarm.



Replacement

When replacing this alarm, we recommend replacing only with the same model, or with one that is also listed for RV application. We recommend obtaining a replacement from your Winnebago Industries® dealer.

Expiration and Further Information

See the manufacturer's information in your InfoCase for smoke alarm expiration and further instructions.

FIRE EXTINGUISHER

A dry chemical Fire Extinguisher is located near the main entrance door.

We recommend that you become thoroughly familiar with the operating instructions displayed on the side of the Fire Extinguisher and in the information supplied in your InfoCase.

We also recommend that you inspect the Fire Extinguisher for proper charge at least once a month in accordance with National Fire Protection Association (NFPA) recommendations as stated on the label.

If the extinguisher is past its expiration date or charge is insufficient, the Fire Extinguisher must be replaced.

NOTICE

Do not test the fire extinguisher by discharging it. Partial discharge can cause leakage of pressure or contents, which would render the unit inoperative when needed. When using the fire extinguisher, aim the spray at the base of the fire.

Replacement

If for any reason you must replace the Fire Extinguisher, the replacement must be the same type and size as the one originally supplied in your motorhome. We recommend obtaining a replacement only from your Winnebago Industries® dealer or a reliable RV parts supplier.

ELECTRICAL

- Careless handling of electrical components can be fatal. Never touch or use electrical components or appliances while feet are bare, while hands are wet, or while standing in water or on wet ground.



- Improper grounding of the vehicle can cause personal injury. Do not plug the utility power cord into an outlet which is not grounded and do not adapt the plug to connect to a receptacle for which it is not designed.
- Do not attach an extension cord to the utility power cord.
- Do not use any electrical device that has had the ground pin removed.
- Avoid overloading electrical circuits. Replace fuses or circuit breakers with those of the same size and amperage rating only. Never use a higher rated fuse or breaker.
- Use caution when handling or working near electrical storage batteries. Always remove jewelry and wear protective clothing and eye covering. Avoid creating sparks.
- Do not mix different construction types of tires on the vehicle, such as radial, bias, or belted tires, as vehicle handling may be affected. Replace tires with exact size, type, and load range.
- Refer to the chassis manual for complete maintenance precautions and recommendations.

EMERGENCY EXITS

Escape Window

The escape window is secured by red safety latches at the bottom or side of the window.

To open, lift all latches up and toward the center of the window, then push outward near the bottom of the window.



Escape Window bottom latch example
(Lift all red safety latch handles towards the center of the window and push window OUT)
-Typical View

LOADING

- Store or secure all loose items inside the motorhome before traveling. Possible overlooked items such as canned goods or small appliances on the countertop, cooking pans on the range, or free-standing furniture items can become dangerous projectiles during a sudden stop.
- Be aware of GVWR, GAWR, and individual load limit on each tire or set of duals (See “Loading the Vehicle” in *Section 12 - Miscellaneous*).
- Never load the motorhome in excess of the gross vehicle weight rating or the gross axle weight rating for either axle.

MAINTENANCE

- Do not remove the radiator cap while engine and radiator are still hot. Always check coolant level visually at the see-through coolant reservoir.
- Never get beneath a vehicle that is held up by a leveling system (if equipped), or a jack only.
- Always release the air prior to getting under the vehicle (if equipped).



SECTION 2 – SAFETY AND PRECAUTIONS



Escape Window side latch example
(Lift all red safety latch handles towards the
center of the window and push window OUT)
-Typical View

FORMALDEHYDE INFORMATION

Some of the materials used in this recreational vehicle emit formaldehyde. Eye, nose, and throat irritation, headache, nausea, and a variety of asthma-like symptoms, including shortness of breath have been reported as a result of formaldehyde exposure. Reaction to formaldehyde exposure may vary among individuals. Elderly persons and young children, as well as anyone with a history of asthma, allergies, or lung problems may be at greater risk. Research is continuing on the possible long-term effects of exposure to formaldehyde. Inadequate ventilation may allow formaldehyde and other contaminants to accumulate in indoor air. Ventilation to dilute the indoor air may be obtained from a passive or mechanical ventilation system. Always be sure to thoroughly ventilate your recreational vehicle before and during each use. High indoor temperatures and humidity may raise formaldehyde levels. When a recreational vehicle is in areas subject to high temperatures, an air conditioning system can be used to control indoor temperature levels. If you have any questions regarding the health effects of formaldehyde, consult your doctor or local health department.

MOLD, MOISTURE, AND YOUR MOTORHOME

What is Mold?

Molds are part of the natural environment. They are as old as the Earth itself and mold spores are almost everywhere at some level waiting to grow. Mold plays a part of nature by breaking down dead organic matter, such as fallen leaves and dead trees. Indoors however, mold growth should be avoided. Molds reproduce by means of tiny spores. Those spores are invisible to the naked eye and float throughout the outdoor and indoor air. Because of the nature of the use of a motorhome, it is natural for a motorhome to be introduced into an environment with mold spores.

Mold is a plant and requires its own special environment to grow. That environment includes organic materials, nutrients, moisture, and proper temperature.

How Can I Avoid Mold?

To reduce the ability for mold to grow, you must reduce what constitutes its growth environment. Mold can grow with the smallest of a nutrient base. Just small amounts of dirt or dust on the carpet can be enough to allow the mold process to begin. Keep the environment as clean as possible. Vacuum the carpet. Clean food spills thoroughly and quickly. Avoid grease buildup near the stove or sink. Clean the exhaust fan above the stove often.

Minimize moisture in your motorhome and keep humidity low. Clean spills quickly. Do not allow condensation to build up. You can open windows and vents to minimize condensation. Use of the air conditioner can assist in removing moisture from the air. Avoid leaks, but if leaks do occur, make repairs promptly.

Avoid bringing mold into your motorhome. Plants, cloths, books, and other household items may already have mold present. It is easy to transfer mold into your motorhome environment.

Monitor your motorhome. Periodically check those hidden areas in corners, closets, and cabinets to assure mold is not present.



What if I Find Mold?

If mold develops, clean the area with a concentrate of soap and bleach. Items that contain mold that cannot be cleaned should be removed from the vehicle.

Can Mold Harm Me?

The effects of mold and airborne mold spores may cause irritation to some people. Experts disagree on the level of exposure that may cause health concerns.

If Mold Is Present, What Will Winnebago Industries® Do?

If Winnebago Industries determines that mold is present in the motorhome as a result of a manufacturing defect reported to Winnebago Industries within the limited warranty period, Winnebago will clean the affected area(s) and/or replace affected items as it deems necessary. This is the extent of coverage provided by Winnebago Industries. Winnebago Industries, however, will not assume responsibility for mold deemed to be a result of a motorhome users lack of timely and appropriate action to mitigate circumstances should a problem occur.

If Winnebago Industries determines that mold is present due to conditions it determines is not a result of a manufacturing defect found within the warranty period, Winnebago Industries will not provide any financial assistance to the repair of the condition.

ROOF

 WARNING
STAY OFF ROOF. Surface may be slippery. Falling could result in death or serious injury.

Walking or working on the roof should be left to qualified service personnel using proper safety equipment in a safe environment. You should only walk or work on the roof if you are qualified and have created a safe environment.

For your safety, it is not recommended that you store or carry items on the roof.

ROADSIDE EMERGENCY

Because of the size and weight of this vehicle and its tires, and the possible complications involved in tire changing, we strongly advise obtaining professional road service to change a flat tire whenever possible. However, if an emergency requires you to change the tire yourself, please exercise extreme caution and read all tire changing information in the chassis manual.

Never get beneath a vehicle that is held up by a jack only.

If You Get A Flat Tire

- DO NOT panic.
- Grip the steering wheel firmly and steer the vehicle as straight as possible. Avoid quick maneuvers. You may need to counter-steer to compensate for “pull” created by the failed tire.
- DO NOT stomp on the brake. This abruptly shifts the vehicle’s weight forward, making it nose-dive and pull toward the blown-out side.
- DO NOT jerk your foot off the accelerator. Just ease back on the accelerator slowly and gently to continue momentum. The deflated tire will slow the vehicle.
- If you must change lanes to get to a safe stopping place, use your signals to warn other motorists and change lanes smoothly and carefully after you are certain the lane is clear.
- Let the vehicle coast to a stop, gently steering to a safe stopping place off the traffic lanes of the road. Do not worry about damaging the tire or wheel rim by driving on it. A tire or wheel replacement is cheaper than damaging the vehicle or injuring yourself.



SECTION 2 – SAFETY AND PRECAUTIONS

- When you have come to a stop, activate your hazard flashers to warn other motorists, then exit the vehicle carefully.
- Set out flares or other warning devices.

Check your tires for proper inflation before each trip and at least once a month with an accurate tire gauge.

Recovery Towing

When calling a professional towing service, we recommend that you advise them of your motorhome length and approximate front axle weight listed on your Vehicle Certification Label. This will allow the towing operator to determine the proper towing equipment to use.

Winnebago Industries® does not assume responsibility for damage incurred while towing this vehicle.

NOTE: Consult your chassis manual for towing instructions or precautions provided by the chassis manufacturer.

NOTICE

Do not lift on bumper. Damage will result to front end body parts.



WARNING

Stay out from beneath the motorhome while it is suspended by the towing assembly. Do not allow passengers to occupy a towed vehicle. Death or serious injury can result.

NOTICE

Do not attempt to push start this vehicle. Damage to the transmission or other parts of the vehicle will occur.

ENGINE OVERHEAT

If you see or hear steam escaping from the engine compartment or have any other reason to suspect an extreme engine overheating condition, pull the vehicle over to the roadside as soon as it is safe to do so, stop the engine, and get all passengers out of the vehicle.

NOTICE

Operating a vehicle under a severe overheating condition can result in damage to the vehicle.

For information on what to do in case of overheating, consult the chassis manual.

JUMP STARTING

To jump start the engine using another vehicle, see the chassis manual for connecting jumper cables to the automotive electrical system.

SECTION 3 – DRIVING YOUR MOTORHOME

The information in this section refers only to features installed or adapted to the dash and driver compartment area by Winnebago Industries®. It also includes passenger seating in the living area of the motorhome.

Further Information

See the chassis manual in your InfoCase for all original chassis related controls, instrumentation, switches, and other features. This includes items such as cruise control, climate controls, gauges, wipers, lights, front seats, and three-point safety belts, etc.

SEATS – DRIVER/CO-PILOT

The driver and co-pilot seats may be independently adjusted to suit individual preference.

Further Information

Refer to the chassis manual provided in your InfoCase for instructions on seat adjustments.



WARNING

Assure seat is in its forward and locked position for travel. Do not adjust seat while vehicle is in motion. Failure to comply may result in injuries.

SEAT BELTS

Seats intended for occupancy while the vehicle is in motion are equipped with seat belts for the protection of the driver and passengers.

Lap/Shoulder Belts

The lap belts must be worn as low as possible and fit snugly across the hip area. Always sit erect and well back into the seat. To gain full protection of the safety belt, never let more than

one person use the same safety belt at any one time, and do not let the safety belts become damaged by pinching them in the doors or in the seat mechanism. After any serious accident, any seat belts which were in use at the time must be inspected and replaced if necessary.

1- Insert tab into buckle slot until it “clicks” and is locked



Seat Belt - Typical View

To Fasten:

Be sure belt is not twisted. Grasp each part of the belt assembly and push tongue into buckle. Adjust to a snug fit by pulling the loose end away from the tongue.

To Release:

Press button in center of buckle and slide tongue out of buckle.

SECTION 3 – DRIVING YOUR MOTORHOME



WARNING

Snug and low belt positions are essential. This will ensure that the force exerted by the lap belt in a collision is spread over the strong hip area and not across the abdomen, which could result in serious injury.

Only seats equipped with seat belts are to be occupied while vehicle is in motion. Swivel seats must be in the locked, forward facing position while vehicle is in motion.

Refer to the chassis manual provided in your InfoCase for instructions on proper fastening, adjustment, and releasing of lap/shoulder belts.

Seat Belt Care and Cleaning

- Be careful not to damage the belt webbing and hardware. Take care not to pinch them in the seat or doors.
- Inspect the belts and hardware periodically. Check for cuts, frays, and loose parts. Damaged parts should be replaced. Do not remove or modify the belt system.
- Keep belts clean and dry. If the belts need cleaning, use only a mild soap and water solution. Do not use hot water. Do not use abrasive cleaners, bleach, or dyes. These products may weaken the belts.
- Replace any belt assembly that was used during a severe impact. Replace the complete assembly even if damage is not apparent.

CHILD RESTRAINTS

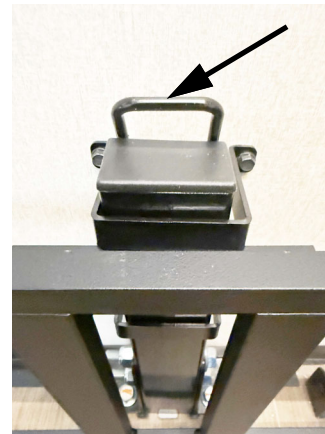
–If Equipped

A properly installed and secured child restraint system can help reduce the chance or severity of personal injury to a child in an accident or during a sudden maneuver. Children may have a greater chance of being injured in an accident if they are seated in a child restraint system which is not properly secured.

A child restraint system is designed to be secured in a vehicle seat by a lap belt or the lap belt portion of a lap-shoulder belt.

When purchasing a child restraint system, follow these guidelines:

1. Look for the label certifying that it meets all applicable safety standards.
2. Make sure that it will attach to your vehicle and restrain your child securely and conveniently so that you are able to install it correctly each time it is used.
3. Be certain that it is appropriate for the child's height, weight, and development. The instructions and/or the regulation label attached to the restraint typically provides this information.
4. Review the instructions for installation and use of the restraint. Be sure that you understand them fully and can install the restraint properly and safely in your vehicle.



Child seat tether loop

These are located behind the seats in the rear of the motorhome.

-Typical View

Further Information

See the child seat manufacturer's specific instructions for proper attachment and adjustment of the tether and seat belts.

KEYS

Your motorhome is supplied with several keys. In addition to the chassis manufacturer's ignition key, you receive keys for the entrance door and exterior compartment doors.

Keys have an identification number, either a small metal tag or stamped into the key head. These numbers are recorded on the vehicle's component model/serial sheet, which is included in your InfoCase. In case keys are lost or stolen, your dealer or a locksmith can provide you with duplicate keys or modify the locks.

MIRRORS – POWER EXTERIOR

Always adjust mirrors for maximum rear visibility before traveling. Make sure the seat is adjusted for proper vehicle control and that you are sitting back squarely into the seat.

Further Information

Refer to the chassis manual provided in your InfoCase for further information, including mirror adjustment and heated mirror operation.

HAZARD WARNING FLASHERS

The hazard warning flashers provide additional safety when the vehicle must be stopped on the side of the roadway and presents a possible hazard to other motorists. When the flashers are on, it serves as a warning to other drivers.

Further Information

Refer to the chassis manual provided in your InfoCase for instructions on activating, operating, and canceling hazard warning flashers.

AIR CONDITIONER/HEATER – AUTOMOTIVE (DASH)

See the chassis manual for operating information on driver and passenger comfort controls – air conditioner, heater, defroster, and ventilation.

NOTE: The dash air conditioner is not designed to cool the entire interior of the motorhome, but is intended only to provide cooling for the cab area.

RADIO – IN-DASH

The radio in your vehicle is chassis-supplied. Refer to the chassis manual for complete features, programming, and operating instructions.

REARVIEW MIRROR WITH MONITOR SYSTEM

–If Equipped

The rearview camera in your motorhome is chassis supplied. Refer to the chassis manual for complete operating instructions.

ENGINE COOLING SYSTEM

Do not remove the radiator cap while engine and radiator are still hot. Always check coolant level visually at the see-through coolant reservoir.

NOTE: Your chassis engine cooling system is filled with special extended-life coolant. See the chassis manual for the correct type of coolant. The coolant system MUST be refilled or topped up with the same type of coolant as equipped to maintain the special long-life properties.

Further Information

Refer to the chassis manual in your InfoCase for information and precautions on filling, servicing, and checking the fluid level.

SECTION 3 – DRIVING YOUR MOTORHOME

TIRES

Improper tire pressure can result in tire overloading and abnormal wear and also affects handling, ride characteristics, and fuel economy.



WARNING

Make sure all replacement tires are of the same size and rating as those shown on your Vehicle Certification Label.

SUSPENSION ALIGNMENT AND TIRE BALANCE

The front suspension and steering system of this vehicle was factory aligned using highly accurate equipment prior to delivery to the dealership. However, alignment should be checked and adjusted after you have fully loaded the motorhome according to your personal needs. Thereafter, the alignment should be periodically inspected to help prevent uneven tire wear.

Any excessive or abnormal tire wear may indicate worn or misaligned suspension or steering, unbalanced tire, or other tire/suspension problem.

Alignment can be affected by worn steering/suspension parts or by incidents which happen during driving, such as hitting a curb, pothole, or railroad track, etc. Improper alignment can cause tires to roll at an angle and wear unevenly. It may also cause the vehicle to “pull” to the right or left. Have your dealer inspect your vehicle’s suspension and steering components periodically for misalignment or wear.

Out-of-balance tires will not roll smoothly and can lead to vibrations and uneven tread wear, such as cupping and flat spots. Tires may need to be balanced if uneven wear is detected or if ride comfort decreases noticeably.

Further Information

Refer to the chassis manual provided in your InfoCase for further information.

LIGHTS

All exterior lights should be checked for proper operation each time the vehicle is prepared for a trip. Any bulbs which fail to light should be checked and replaced, when necessary, with a new bulb of the same size. A failure of more than one light, such as both taillights not operating, may indicate a burned out fuse. Check fuse and replace with one of the same rating when necessary. If a fuse is not the cause of the problem, the wiring system should be checked immediately by an authorized service center.

Further Information

Refer to the chassis manual in your InfoCase for further information.

SECTION 4 – APPLIANCES AND SYSTEMS

The appliances installed in your motorhome are manufactured by reputable RV appliance makers and have been tested by independent laboratories to meet all applicable standards and codes set for RV appliances.

See *Section 2 - Safety and Precautions* of this manual for any safety and precautions you need to take regarding the operation of your appliances.

REFRIGERATOR

The refrigerator in your motorhome can operate from either of two energy sources available to the motorhome:

- 120-Volt AC Electric-through 12V converter power
- 12-Volt DC Electric



WARNING

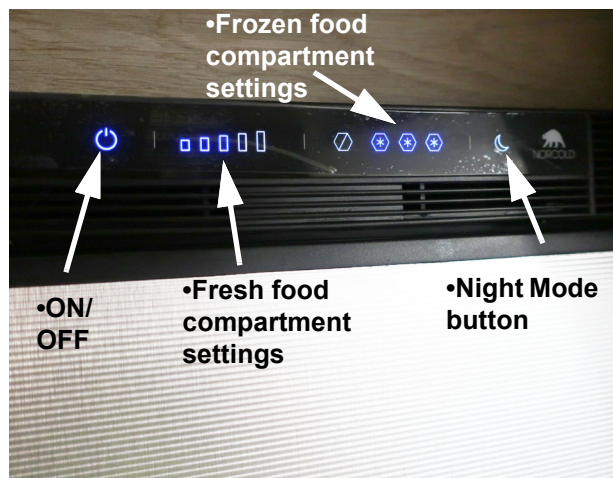
Do not let children play inside the motorhome unattended. Unlike your home refrigerator/freezer that one could push open the door from the inside, your motorhome refrigerator has a travel latch and when engaged would trap a child inside resulting in suffocation leading to death or serious injury.

Basic Refrigerator Operation

There are 4 operation buttons on the upper portion of your refrigerator (shown in the picture). They are the **ON/OFF** button (displayed as a power icon), the **Fresh Food Compartment Temperature** setting (displayed as bar icons), the **Frozen Food Compartment Temperature setting** (displayed as a snowflake icons), and a **Night Mode** button (displayed as a half-moon icon).

1. **ON/OFF** button- push and hold for a few seconds to switch on the refrigerator. After a few seconds the control panel will change to stand-by and locked mode. The blue light indicates that the refrigerator is still in function. Hold for a few seconds to turn off when not in use. For optimal performance, switch on the refrigerator 4 hour before placing food inside.
2. **Fresh Food Compartment** settings- Press the bars icon and hold for a few seconds until it starts blinking. Slide or press the icons to select the desired cooling level (1-5).
3. **Frozen Food Compartment Setting** button- Press the snowflake icon and hold for a few seconds until it starts blinking. Slide or press the icons to select the desired cooling level (1-4). The first setting is off, press and hold for a few seconds to activate. The energy consumption will be considerably less. This mode can be used to maximize off-grid time. The lowest mode (1 snowflake illuminated) is suited for making ice cubes, and saves energy compared to the higher settings. The highest setting is for keeping products frozen for a long period of time. Please refer to the information on the frozen food package. This mode is also for storing ice cream products. This setting uses the most energy.
4. **Night Mode** button- the blue light will indicate when the night mode is active. The cooling unit will then run at low speed, reducing the noise and power consumption.

SECTION 4 – APPLIANCES AND SYSTEMS



The 4 refrigerator buttons shown at the top of the refrigerator
-Typical View

See the manufacturer's user guide provided in your InfoCase for information on adjusting refrigerator/freezer temperatures to best suit your needs.

Further Information

Refer to the manufacturer's user guide provided in your InfoCase for complete operating instructions, safety precautions, and maintenance information.

RANGE TOP (ELECTRIC)

The range in your motorhome operates on electricity and will provide most of the functions of the range in your home.

The range is stored in the drawer in the countertop. **DO NOT use the stove while it is in the drawer.**

To operate, remove the stove from the drawer and plug into a 20 AMP GFI protected outlet. Those are the outlet above the countertop or on the rear face of the cabinet (both are on a protected circuit). Ensure that the stove is cooled down completely before you place it back into storage.

Refer to the appliance manufacturer's user guide provided in your InfoCase for complete range features and operating instructions.



The range top is located in the drawer inside the countertop- remove from drawer before use
-Typical View

NOTE: See the appliance manufacturer's user guide provided in your InfoCase for complete operating instructions and safety precautions.



WARNING

Portable fuel-burning equipment including wood and charcoal grills and stoves, shall not be used inside the recreational vehicle. The use of this equipment inside the recreational vehicle can cause fires or asphyxiation. Failure to comply could result in death or serious injury.

MICROWAVE OVEN

Refer to the manufacturer's user guide located inside the appliance for complete operating instructions.

NOTICE

Do not store items in oven.
If oven would turn on stored items can
ignite resulting in fire and or property
damage.

SOLAR CHARGE PANEL

The roof-mounted Solar Charge Panel uses the sun to help keep your house batteries charged. A Solar Charge controls are located on the EcoFlow monitor panel to show you when the Solar Charger is actively charging the house batteries. Monitoring can also be done using the EcoFlow App on your smartphone.

The solar charging system installed in your motorhome has a maximum input rating of 30 Amps. Every solar panel connected to the system needs to be accounted for, this includes all roof mounted panels and the ground level single solar port.



Solar Charge Controls
(Located on the EcoFlow monitor panel)
-Typical View

Exterior Solar Port -If Equipped

The Exterior Solar Port (located at ground level) is for using a portable solar panel, it has a maximum input rating of 20 Amps. To maximize the efficiency, the charger should be rated Max input of 24V/20A. The exterior Solar Port is connected to the EcoFlow PowerHub which operates as the solar charger. When connecting a portable solar panel, a separate solar charge controller is not needed and will reduce the effectiveness of the portable solar panel.



Exterior Solar Port
(Located on the driver's side exterior of motorhome).
-Typical View

NOTE: The Solar Charge Panel is not intended to make the coach battery system "maintenance free." The solar panel will not completely compensate for continuous low amperage draw from components such as the propane gas leak detector (if equipped), the dash radio clock, and the radio station memory circuitry, for example. Although the Solar Charge Panel can help to extend battery life, the motorhome shoreline should be plugged in routinely to "top off" the batteries. We also recommend following regular battery inspection and maintenance, especially in cold weather. See "Battery Care" in the Electrical chapter in this manual.

SECTION 4 – APPLIANCES AND SYSTEMS

Further Information

Refer to the manufacturer's user manual provided in your InfoCase for complete operating instructions.

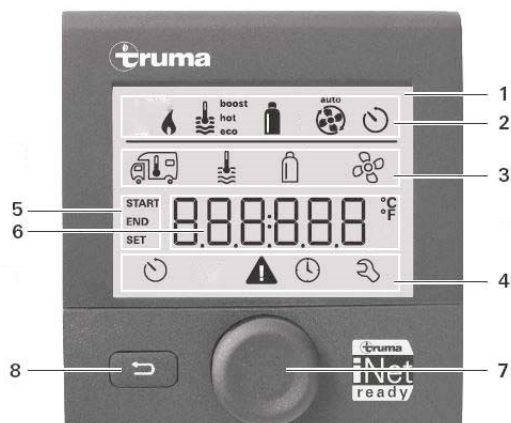
WATER HEATER – TRUMA COMBI G

–If Equipped

The Gas Water Heater operates from the chassis gas tank. In Comfort mode, the recirculation pump inside the water heater recirculates the hot water in the lines to ensure instant hot water at any faucet. To conserve the chassis gas and power, choose the Economy mode.

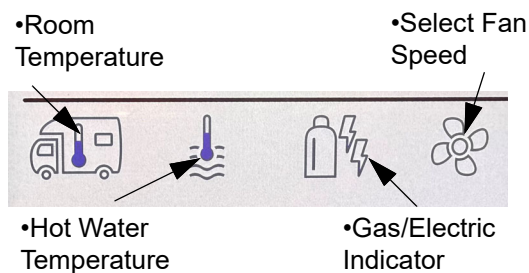
See the Water Heater manufacturer's operation manual provided in your InfoCase for complete operating instructions, safety warnings, decalcification instructions, and maintenance information before operating the Water Heater.

1. **Be sure the Water Heater is filled with water before starting the Water Heater.** To fill the Water Heater, turn the Water Pump switch ON and open water faucets anywhere in the motorhome. When water begins to flow steadily from the faucet, the Water Heater is full. Close all water faucets.
2. **Turn on the Water Heater:** Turn “ON” the Water Heater on the Truma panel.
3. **To select an operating mode,** rotate the switch to the operating mode of your choice.



Control Panel
(Located near monitor panel)
-Typical View

1. Display
2. Status Line
3. Menu Line (top)
4. Menu Line (bottom)
5. Time Switch Display
6. Settings/Values
7. Rotary Push Button
8. Back Button



Menu Line (top)
-Typical View

See the Water Heater manufacturer's operation manual provided in your InfoCase for complete operating instructions.

To conserve gas and power, use the “ECO” switch position. This will maintain a temperature above 41°F (5°C) in the Combi G water heater.

For maximum comfort (rapid availability of hot water at the faucet), use the “Comfort” switch position. This will maintain a temperature above 102°F (39°C) in the appliance and the hot water lines in the motorhome.

- **To turn off the Water Heater.** Turn the water heater OFF at the Truma panel.

Decalcification

Lime scale occurs especially as a result of precipitation from “hard” water. The appliance must be decalcified regularly depending on water hardness and hot water consumption.

See the Water Heater manufacturer’s operation manual provided in your InfoCase for complete decalcification instructions and frequency.

Further Information

See the Water Heater manufacturer’s operation manual provided in your InfoCase for complete operating instructions, safety warnings, decalcification instructions, and maintenance information.

SYSTEMS MONITOR PANEL

The Systems Monitor Panel provides a convenient, central location for checking the condition of all utility systems in your motorhome.

From the touch screen menu, you can check the fresh water and holding tank levels, the chassis battery and coach battery conditions, start the generator, the roof air conditioner, or turn on

the water pump. The System Monitor Panel is located on the wall to the left of the refrigerator next to the EcoFlow® system Monitor Panel.



System Monitor Panel
-Typical View

Freezing Temperature Warning Screen

The freezing temperature warning is displayed when the outside temperature is 40 degrees (Fahrenheit) or lower as measured in the tank pressure/temperature sensors. Once the “Ok” button is pressed, the message will not appear again for 24 hours.



Freezing Temperature Warning
Screen
-Typical View

Water And Holding Tank Levels

Select the “Levels” icon on the main menu to view the Water tank, Gray holding tank, and Chassis Battery levels. The temperature of the tanks is in the upper corner.

NOTE: If the motorhome is not on a leveled surface or “leveled” the accuracy of the sensors can be affected. Holding tank levels reading 0-5% may indicate empty, and 95-100% may indicate full.

SECTION 4 – APPLIANCES AND SYSTEMS



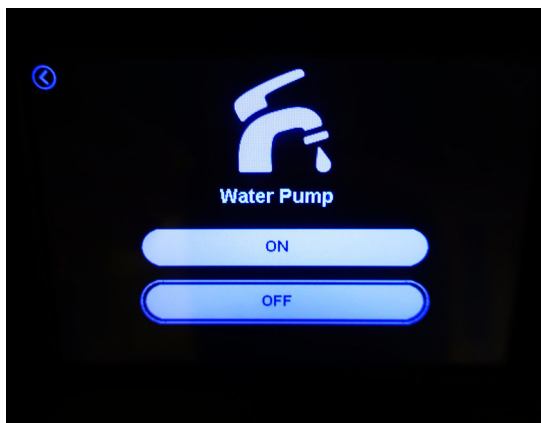
Select the Tank Levels icon on the main menu to view the Water and Holding Tank levels screen.
-Typical View

Tank Capacities

See “Tank Capacities” in *Section 1 - Introduction*.

Water Pump ON/OFF

When use of the self-contained water system is desired, select the Water Pump icon from the main menu and turn the Water Pump ON. Water will be available as soon as a faucet is opened.



Select the Water Pump icon on the main menu to access the water pump ON/OFF button.
-Typical View

Refer to *Section 7 - Plumbing* for additional information on the water pump and initial start-up.

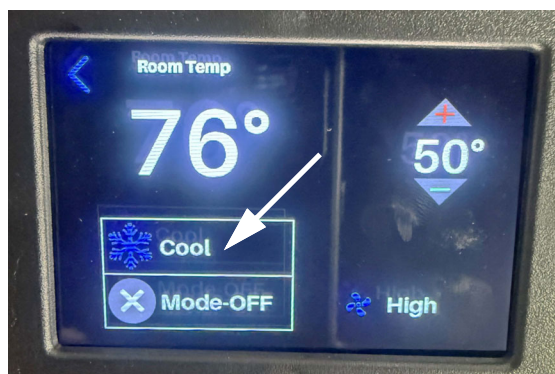
NOTE: Some models may be equipped with a Water Pump switch in the water service center on the outside of the motorhome or within the bathroom area for your convenience.

Environment

Select the “Environment” button on the main menu to access the Roof Air Conditioner.



Environment button on the main menu.
-Typical View



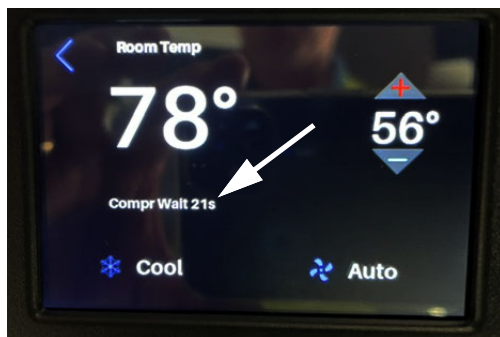
Select the mode button then select “Cool”.
-Typical View

SECTION 4 – APPLIANCES AND SYSTEMS



Then select Fan Icon to set fan speed.
-Typical View

NOTE: If the air conditioner was just shut off and turned back on there will be a “Compr Wait #s” displayed on the screen counting down from 2 minutes until the monitor panel will turn the air conditioner back on. This timer is to provide for any built up pressure in the air conditioner to subside and allow for improved operation of the air conditioner and power system.



Compr Wait with countdown timer.
(See NOTE above).
-Typical View

For further information on the roof air conditioner, refer to the manufacturer’s user guide provided in your InfoCase for complete operating instructions.

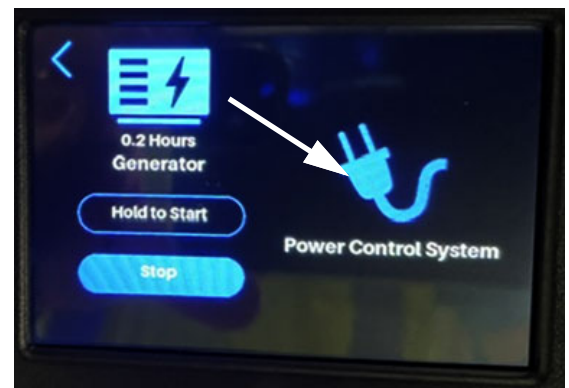
Power Control System

From the main screen select the Power icon. On the next screen select the power control system icon. The Power Control System screen will show what the current power source is, how many Amps the coach is using and the status of

the controlled appliances (powered or shed). By selecting the “Service” button, the applicable shore power service can be selected.



Power icon.
-Typical View

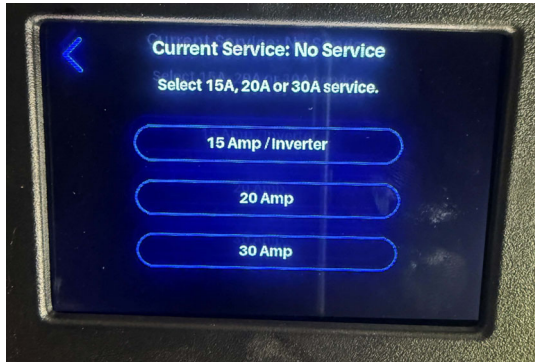


Select the Power Control System button.
-Typical View



Power Control System screen. Select the Service button to select the shore power service.
-Typical View

SECTION 4 – APPLIANCES AND SYSTEMS



Service selection screen.
-Typical View

Generator Start/Stop

See *Section 6 - Electrical* for generator start-up/shut-down and generator instructions.



Select the Power Icon on the main menu to access the Generator start/stop screen.
-Typical View

ROOF AIR CONDITIONING SYSTEM

All cooling functions controlling to setpoint have a short cycle protection time delay of three minutes. There will be no delay if the cycle OFF time exceeds three minutes.



Air conditioner vent located on the ceiling of the motorhome.
-Typical View

NOTE: The roof air conditioning system has ceiling registers that can be closed if necessary to force more cool air toward a specific area of the motorhome or to route cool air away from a specific area. If too many vents are closed, however, it can cause the air conditioner unit to shut down, particularly in high humidity conditions.



Climate control on the System Monitor Panel
-Typical View

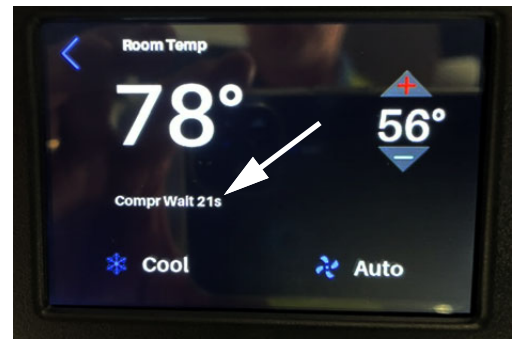


Select the mode button then select “Cool”.
-Typical View



Then select Fan Icon to set fan speed.
-Typical View

NOTE: If the air conditioner was just shut off and turned back on there will be a “Compr Wait #s” displayed on the screen counting down from 2 minutes until the monitor panel will turn the air conditioner back on. This timer is to provide for any built up pressure in the air conditioner to subside and allow for improved operation of the air conditioner and power system.



Compr Wait with countdown timer.
(See NOTE above).
-Typical View

Further Information

Refer to the manufacturer’s user guide provided in your InfoCase for complete operating instructions.

SECTION 6 – ELECTRICAL

Your motorhome is equipped with an electrical system consisting of two separate voltages:

- 120-volt AC system (household current)

The 12-volt system consists of two internal power sources, while the 120-volt system is operated from an outside power source or the optional 120-volt generator.

ELECTRICAL CAUTIONS

- Careless handling of electrical components can be fatal. Never touch or use electrical components or appliances while feet are bare, while hands are wet, or while standing in water or on wet ground.
- Improper grounding of the vehicle can cause personal injury. Do not plug the utility power cord into an outlet which is not grounded and do not adapt the plug to connect to a receptacle for which it is not designed.
- Do not attach an extension cord to the utility power cord.
- Be sure that all electrical appliances to be used contain 3-prong plugs for proper grounding.
- Avoid overloading electrical circuits. Replace fuses or circuit breakers with those of the same size and amperage rating only. Never use a higher rated fuse or breaker.
- Use caution when handling or working near electrical storage batteries. Always remove jewelry and wear protective clothing and eye covering. Avoid creating sparks.

ELECTRICAL SYSTEM – HOUSE 120-VOLT AC

The 120-volt system operates from the shoreline cord connected to an outside 120-volt utility service, such as those at campgrounds or from the 120-volt generator. In addition, the following equipment is entirely dependent on

120-volt current: air conditioner, microwave oven, and any 120-volt electrical equipment used at convenience outlets.

POWER CORD – EXTERNAL (DETACHABLE) (Shoreline)



WARNING

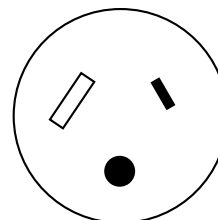
Do not use an extension cord. Improper sized cords, damaged cords, and poor connections can lead to fire, which can result in death or serious injury.



WARNING

Do not connect the external power cord to any receptacle until you have verified proper polarity and grounding. Be sure all prongs of the supply cord are properly plugged into the receptacle. Failure to observe can result in death or serious injury.

To connect to an external power source, plug the adapter end into the sidewall plug-in (located in the driver's side sidewall) and the receptacle end to a suitable power outlet box.



30 Amp Receptacle
(NEMA TT-30R)

SECTION 6 – ELECTRICAL



WARNING

This connection is for 110/125 Volt AC, 60 Hz 30 Ampere supply. Do not exceed circuit rating. Exceeding the circuit rating may cause a fire and result in death or serious injury.

The power cord is designed to ground the electrical system through the receptacle. It is also designed to carry the amperage output of most campground outlets. If the electrical receptacle to be used is designed to mate with the prongs of the power cord plug, the electrical connection can be expected to carry rated load.



Detachable Power Cord
-Typical View



WARNING

Service inlet access must be closed when utility connections are not in use.

Park Fuses or Breakers

Most campgrounds are equipped with a fuse or circuit breaker at the receptacle (which we recommend shutting off before engaging or disengaging the power cord.) This protects the park's wiring, as well as the power cord on your vehicle from electrical damage. If electrical power fails, contact the park attendants and have them check the fuse or breaker for your supply receptacle.

WINNEBAGO X ECOFLOW® POWER KIT PRO MONITOR PANEL

The EcoFlow® system Monitor Panel is used to conveniently control and monitor multiple electrical systems and power sources from one screen. This system contains a 5-in-1 power management controller (the power hub) which includes an inverter, a step-down converter, and multiple converters for battery, solar and alternator charging. The power hub is combined with a EcoFlow® battery system. The power hub charges this battery and also provides 12V DC and 120V AC power. The EcoFlow® monitor panel is located on the electrical panel to the left of the fridge cabinet.

There is an EcoFlow® app available for IOS and Android to manage the power system.



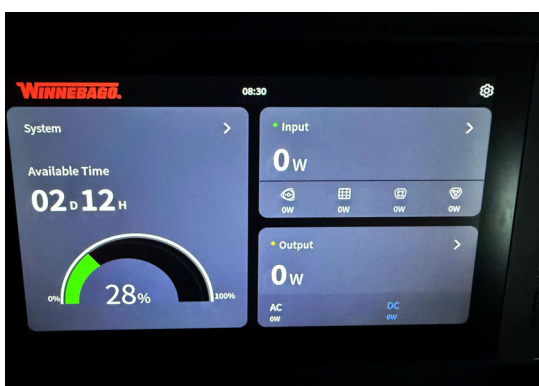
The breaker box is located above the fuse box on the inside wall.
-Typical View



Ensure the breakers are in the “ON” position as shown above.
-Typical View



The input screen shows total power in Watts, energy generated in watt-hours per day, and accesses controls of the OEM alternator, roof solar and AC shore power.
-Typical View



The EcoFlow® Main Screen
-Typical View

Features and Options



The output screen accesses controls to the 120V AC output and 12V DC output. (The 12V DC is On by default).
-Typical View



Selecting the System from the main screen will display available time, battery charging/discharging, battery state of charge (SOC) percentage, and temperature.
-Typical View

AC Shore Power Charging Settings

The Winnebago Power System has an adjustable incoming shore power charge rate. If the shore power breaker trips while charging, you need to lower the charge rate to accommodate rated incoming power, and reset the tripped breaker. Example: When plugged into a 15A power source, adjust the power charge rate to 12A.

The Winnebago Power System has the full ability to accept 30A shore power. The charge rate can be adjusted to reduce the cooling fan noise. Example: When plugged into a 30A power source, adjust the power charge rate to 15A to reduce the fan noise and heat generation, however, the charging rate will be reduced.

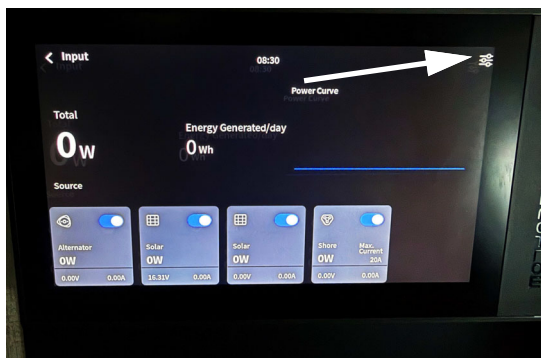
SECTION 6 – ELECTRICAL

NOTE: When using the generator to charge the battery, limit the AC input to 23A. The generator cannot support 30A draw and will cut off if you try to pull that much.



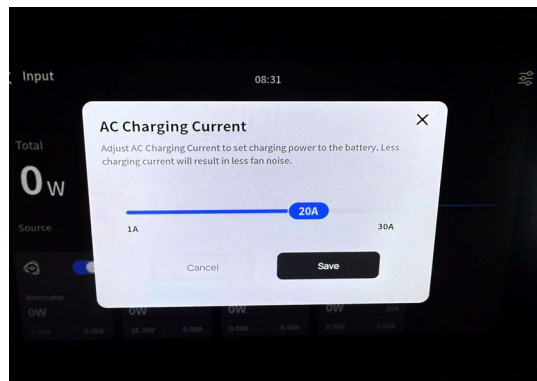
On the home screen, tap the screen inside the input box to open the input control panel.

-Typical View



While on the input control panel screen, tap the settings bar icon in the upper right hand corner to open the input setting screen.

-Typical View



On the input settings page, adjust the AC input total current to the appropriate shore power (amps) rating. For example 30 amp shore power or 15 amp shore power.

-Typical View

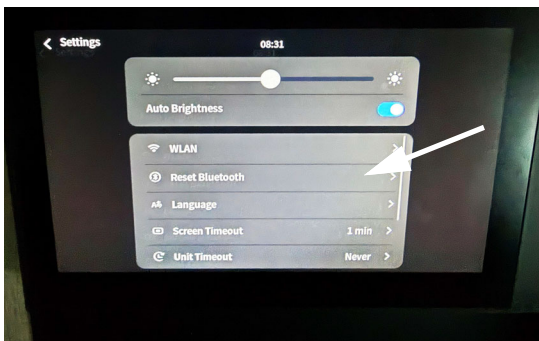
How to Unlink a phone

If you should ever need to unlink a phone to add a new one, Press the settings button, and select “Reset Bluetooth”. Then a new phone can be paired.



To unlink a phone, first select the settings button.

-Typical View



Select “Reset Bluetooth”, then a new phone can be paired.
-Typical View

CIRCUIT BREAKERS – HOUSE 120-VOLT AC

The breaker panel protects all 120-volt components in the motorhome from either an overload on the circuit or a short in the wiring or component itself. If an overload or short develops, the breaker will open preventing damage to the system.

Shut off the equipment (example: roof air conditioner) and allow a brief cooling period. Then reset the breaker by moving the switch to “Off” and back to “On”. If the breaker is continually tripped and no overload is evident, have the system checked for a short in the wiring or the appliances.



The breaker box on the inside wall.
-Typical View



120-Volt Circuit Breakers
-Typical View

NOTE: Typical view of breaker panel. Breaker arrangement may vary according to appliance and equipment options. Fuses and breakers are labeled on panel.

ELECTRICAL OUTLETS – HOUSE 120-VOLT AC

A number of standard household electrical outlets are provided throughout the motorhome for connecting small appliances such as televisions, radios, toasters, etc.

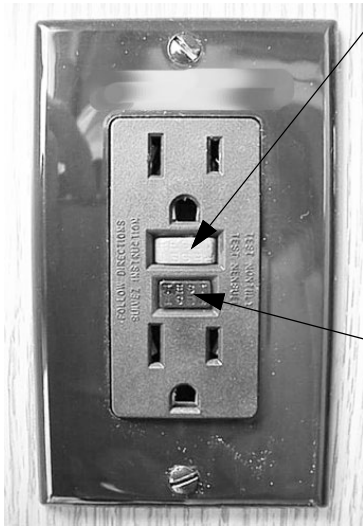
An exterior outlet is also located on the passenger side of the motorhome.

GROUND FAULT CIRCUIT INTERRUPTER

Bath, galley, and exterior outlets are connected to a GFCI (Ground Fault Circuit Interrupter), which is an extremely sensitive circuit breaker that will help to protect against severe electrical shock if a ground fault develops. If such a condition occurs, the GFCI will break the circuit by turning off the power to the protected outlets. Should this occur, unplug all the appliances on that circuit and press the reset button on the GFCI equipped outlet.

If the GFCI keeps tripping, have the electrical system checked and repaired, if necessary, before using again.

SECTION 6 – ELECTRICAL



GFCI Outlet
(Ground Fault Protector)

•Push to Reset circuit after monthly testing or ground fault tripping.

•Push to Test at least monthly. Should break circuit. Press Reset button to reconnect.



WARNING

The GFCI will not completely eliminate the risk of electrical shock. Infants and small children may still be affected.

ELECTRICAL GENERATOR

–If Equipped



WARNING

Careless handling of the generator and electrical components can be fatal. Never touch electrical leads or appliances when your hands are wet, or when standing in water or on wet ground. Do not attempt to repair the generator yourself. Service should be performed by a qualified service center.

Automatic Power Transfer Switch

Whenever the Generator is started, an automatic power transfer system automatically switches the household electrical system to the

Generator approximately 30 seconds after the Generator is started. The 30 second delay allows the Generator to start easily without the burden of electrical loads.

Generator Basic Operation

NOTE: When starting the generator the appliances controlled by the Power Control System will be disabled or shed for 2 minutes to allow the generator to properly warm up. Please refer to the Power Control Section for more information.

NOTE: If the GenSet Start or Stop switch is momentarily pressed, the monitor panel will automatically try to start or stop the generator. Refer to the manufacturer's user guide provided in your InfoCase for additional information.

To Start the Generator

Press and Hold the GenSet Start button until you hear the Generator running smoothly, then release. (See image 1 and 2).

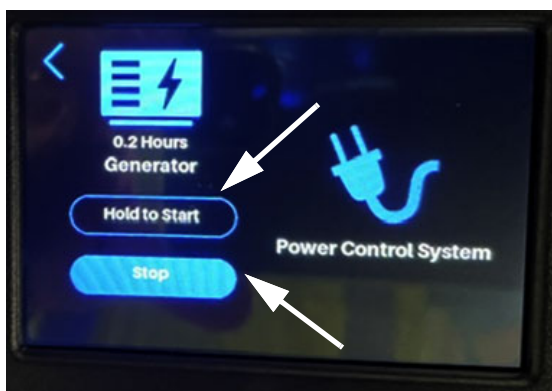
After starting the Electrical Generator, the Power Control System will automatically detect that the generator is running. When this occurs, the Power Control System will shed or turn off each of the appliances for 2 minutes before turning them back on one at a time. This is done to allow the generator time to warm up and to prevent large loads all turning on at the same time allowing the generator to better handle powering the appliances. This will occur even if the appliances are currently operating from inverter or shore power.

To Stop the Generator

Press and Hold the GenSet Stop button until you hear the Generator come to a full stop, then release. (See image 2).



1. Generator location on the main screen of the Systems Monitor Panel
-Typical View



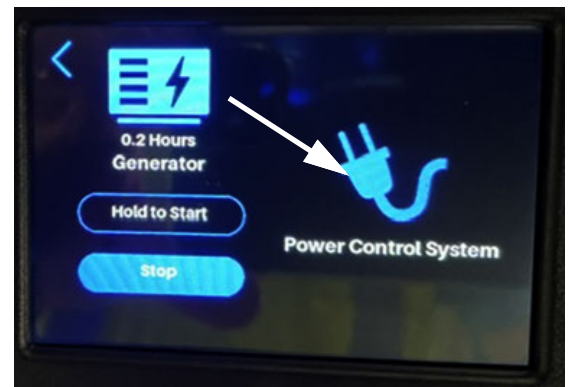
2. Generator Start/Stop Buttons
(Located on the systems monitor panel)
-Typical View

Power Control System

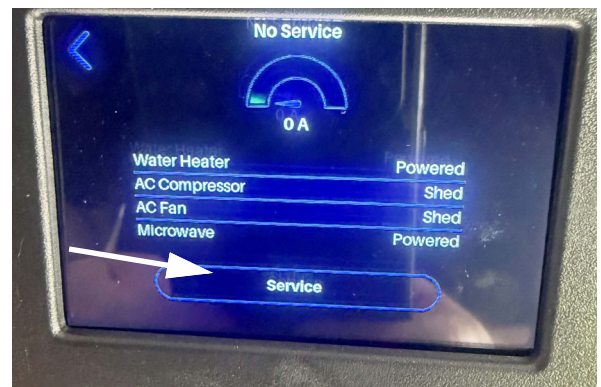
From the main screen select the Power icon. On the next screen select the power control system icon. The Power Control System screen will show what the current power source is, how many Amps the coach is using and the status of the controlled appliances (powered or shed). By selecting the “Service” button, the applicable shore power service can be selected.



Power icon.
-Typical View

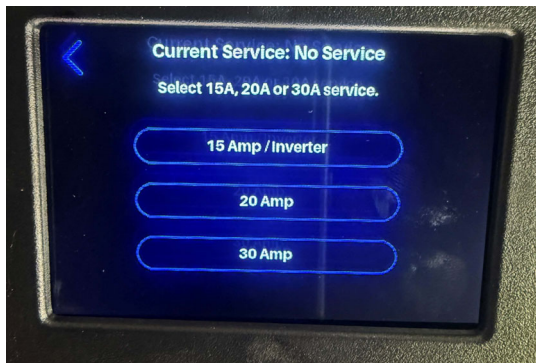


Select the Power Control System button.
-Typical View



Power Control System screen. Select the Service button to select the shore power service.
-Typical View

SECTION 6 – ELECTRICAL



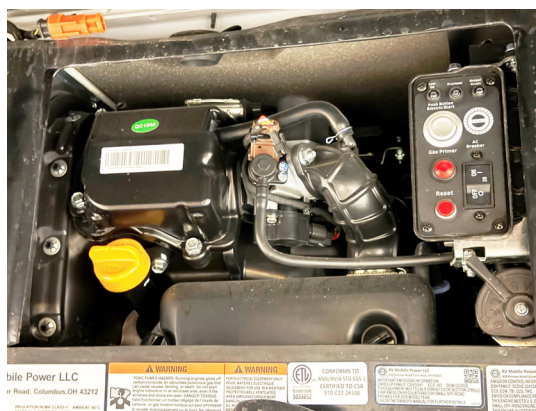
Service selection screen.
-Typical View



4. The generator is located underneath the rear end of the motorhome.
-Typical View



3. There is also a generator start/stop switch on the dash.
-Typical View



5. Removing the panel reveals push button electric start, gas primer, AC breaker, on/off switch and notification lights.
-Typical View



6. The pull start is located on the bottom of the generator.
-Typical View

Operation Warnings and Cautions



WARNING

The exhaust of all internal combustion engines contains carbon monoxide (CO). This poisonous gas is colorless, odorless, tasteless, and lighter than air. The exhaust systems of both your motorhome engine and your generator engine have been installed with your safety in mind. However, certain precautions must be taken when using them to protect yourself from conditions beyond the control of the manufacturer.

- Do not simultaneously operate the Generator and a power vent, which could draw exhaust gases into the vehicle.
- Do not open windows or vents on the end or side of the vehicle where exhaust pipe of the Generator is located.
- Park the vehicle so that the wind will carry the exhaust away from the vehicle. Also, note the position of other vehicles to be sure their exhaust will not enter your vehicle.
- Do not operate the Generator engine while parked if vegetation, snow, buildings, vehicles, or any other object can deflect the exhaust under or into the vehicle.

Check Generator oil level frequently during periods of use. Refer to the Generator manufacturer's user guide provided in your InfoCase for specific recommendations.

Further Information

Refer to the Generator manufacturer's user guide provided in your InfoCase for specific recommendations, operating instructions and cautions, troubleshooting, and maintenance.

BATTERY ACCESS

Accessing House Batteries



Battery

(Located to the right of the fridge, below the AC Breaker box and 12V DC fuse panel. Remove cover to access).

-Typical View



Battery

(Shown with cover removed).

-Typical View

NOTE: Chassis batteries are located under the driver seat.

NOTICE

Always refasten battery retainers when returning a battery to the compartment.

CIRCUIT BREAKERS AND FUSES – HOUSE 12-VOLT DC

All 12-volt circuits and equipment in the coach area of the motorhome are protected by either a fuse panel or breaker panel. When a circuit is overloaded or a short develops in any part of the system, a fuse or breaker will shut down that circuit. If this happens, turn off all affected lights or appliances and reset the breaker or replace the fuse with a new one of equal amperage rating.

House 12-Volt Fuses

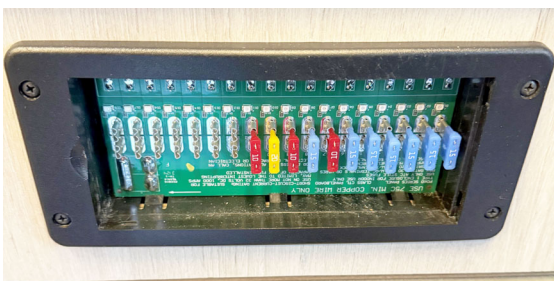
A label on the panel states the amperage rating and circuit protected for each fuse.

The fuse panel is located to the right of the refrigerator, below the 110V load center.



The fuse panel is located below the breaker box on the inside wall.

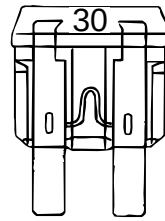
-Typical View



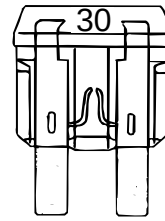
120-Volt Circuit Breakers

-Typical View

The fuse panel accepts only blade type plug-in fuses. Always replace fuses with those of the same amperage rating.



Functional



Non-Functional

Battery Charge Meter

See related item under “Systems Monitor Panel” in *Section 4 - Appliances*.

SECTION 7 – PLUMBING

FRESH WATER SYSTEM

The Fresh Water System provides water to the galley sink, shower, bathroom lavatory, toilet, and water heater. Water may be supplied by either of two sources:

- A fresh water tank and water pump located within the motorhome, or
- Any external fresh water source to which the motorhome may be connected, known as “city water”.

Use the City Fill to fill the fresh water tank on your motorhome.

Water Pressure Regulators

Because city water pressure varies from location to location, we recommend obtaining an in-line water pressure regulator to prevent damage to any components, connections, and seals in your fresh water system.

These devices simply connect in-line between the supply hose and the city water input on the motorhome. We recommend regulators that control water pressure to **50 psi. max.**

Water pressure regulators are commonly available at most RV dealerships and many large retail discount or home supply centers.

Method 1 - Filling the Fresh Water Tank Through City Fill Connection



WARNING

Potable water only.
Sanitize, flush, and drain water tank before using.
See owner's manual for instructions, care, and maintenance information.
Failure to maintain tank can result in death or serious injury.

Always fill the fresh water tank at an approved potable water filling facility or a known purified drinking water source.

The tank is filled through the City Water Connection (Fresh Water Inlet) located on the driver's sidewall of the motorhome.

The Fresh Water valve (located in the water service center on the passenger's side of the motorhome), routes the water from the city water hose to the fresh water tank for filling.

1. Attach hose to the Fresh Water Inlet.



Fresh (City) Water Connection
“Fresh Water Inlet”
(Located on the driver's side sidewall)
-Typical View

2. Turn the Fresh Water valve to the Tank Fill position.

SECTION 7 – PLUMBING



Fresh Water Valve
(Located in water service center)
-Typical View



Fresh Water Valve
(Located in water service center)
-Typical View

3. Turn city water supply ON.
4. Use the level display on the monitor panel to oversee filling of the tank, or when the tank is full, water will flow from tank vent tube beneath the motorhome.

NOTICE

Do not leave fresh water connection unattended when filling tank. Failure to comply may result in tank expansion and property damage.

5. Turn OFF city water supply and disconnect hose from the Fresh Water Inlet.
6. Turn the Fresh Water valve to Normal position to use the water pump. *The Tank Fill position is only for pressure filling the water tank from the city water hose connection.*

Using City Water

When connected to an outside source of water, the water bypasses the water pump and storage tank and supplies pressure directly to individual faucets and toilet. A check valve built into the pump prevents water from entering the pump and filling the storage tank.

- Connect hose to Fresh Water Inlet as described in previous steps.
- With the Fresh Water valve in the Normal position, turn the Water Pump switch(es) OFF.

NOTE: Always keep the Fresh Water valve in Normal position unless you are filling the tank. If this valve is left in the Tank Fill position while using the city water, water will keep flowing into the tank and out the tank vent tube onto the ground and the water pump will run without delivering water to the faucets.

Disconnecting from City Water

- Turn the city water supply OFF.
- Open a faucet on the motorhome (such as the exterior wash station, if equipped) to relieve line pressure.
- Disconnect hose from the motorhome and replace cap on the Fresh Water Inlet.

NOTE: Ensure the Fresh Water valve is in NORMAL position to use the water pump. If the valve is in Tank Fill position, the pump will run continuously without delivering water.

ECO-HOT SYSTEM

When placed in the “Pre-heat” setting the Eco-hot System cycles water as it gets hot, to avoid wasting water into the gray tank. To operate, turn the water pump on, then turn the Eco-hot valve to the “Pre-heat” position. After approximately 20 seconds, the water should be hot. Then place the Eco-hot valve to the “Normal” position.



Eco-hot valve
(Located passenger side on the sink.)
-Typical View

WATER PUMP

When your motorhome is not connected to a city water supply, water is supplied from the fresh water tank by a water system demand pump. A demand pump is designed to run only when you are using water. When you open a faucet, the waterline pressure drops and the pump begins to run, and it will continue to run as long as the faucet is open. When you close the faucet, the line pressure backs up to the pump, and it shuts itself off.

The pump is self-priming and will run briefly to build up line pressure when the Water Pump switch is first turned on. See “Initial Waterline Priming” for instructions on using the water system for the first time.

Water Pump Strainer

The pump is equipped with a cleanable strainer to capture any possible tank-borne particles that could damage pump components.

NOTE: We recommend that you check and clean the strainer after each tankful of water during the first few uses of the Water Pump system. Thereafter, remember to check it at least yearly, and be sure to empty water from it if using the blowout winterization procedure.



Water Pump Strainer
-Typical View

To Clean Pump Strainer

- Ensure all Water Pump switches are OFF.
- Twist the inlet cap (bowl) “counter-clockwise” to unscrew from the strainer assembly.
- Remove the bowl and pull the strainer screen out of the bowl to tap out any particles and rinse clean.
- Insert the strainer screen back into the bowl, then screw the bowl back onto the strainer assembly.

Water Pump Switch

The Water Pump switch is located on the monitor panel (some models may have an additional switch in the water service center, near the exterior shower, or within the bathroom area for your convenience).

SECTION 7 – PLUMBING

While the switch is “ON”, the pump will automatically supply water as it is needed.

Do not leave the pump on while away from your motorhome or while driving. In time, a slow leak in a faucet could drain the water tank, fill the holding tank, and discharge the house batteries.

Initial Waterline Priming

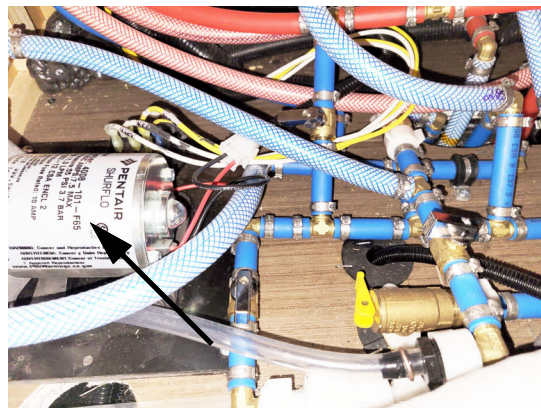
1. Ensure that all water drain valves are closed, including water heater valve.
2. Turn Water Pump switch to “OFF” position.
3. Fill water tank.
4. Open all faucets, hot and cold.
5. Turn ON the Water Pump switch.
6. Close each faucet as it begins to deliver a steady stream of water (close cold water first). Leave hot water faucets on until they also deliver a steady stream of water. This will ensure that the water heater is filled with water.
7. Check to ensure the Water Pump stops soon after all faucets have been closed.
8. The Water Pump is now ready for automatic operation. The pump will start when a faucet is opened and stop when the faucet is closed.

Further Information

Refer to the Water Pump manufacturer’s operation, care, and maintenance information provided in your InfoCase.



Water Pump Access Panel
(Located under the galley. To access remove bottom drawer.)
-Typical View



Water Pump
(Located under galley)
-Typical View

DISINFECTING YOUR FRESH WATER SYSTEM

(As required by NFPA®1192 Standard on Recreational Vehicles)

To ensure complete disinfection of the potable water system, it is recommended that the following procedure be followed on a new system, one that has not been used for a period of time, or one that could have become contaminated.

This procedure is also recommended before long periods of storage, such as over winter.

Disinfecting with City Water Fill

When disinfecting through the city water fill, an external cartridge-type water filter assembly must be connected in-line between the city water hose and the city water fill to add disinfecting solution to the tank. These filters are commonly available at most RV supply stores.

NOTE: If you do not have an in-line cartridge filter, see City Water Hose/Tank Disinfection following this procedure for an alternate method of adding bleach solution to your tank.

1. Remove the filter cartridge and pour 1/4 cup of household chlorine bleach (sodium hypochlorite solution) for each 15 gallons of tank capacity into the empty filter canister, then screw the canister back onto the filter base.



WARNING

Chlorine is poisonous. Do not misuse. Recap bottle and clean all utensils after use.

This solution will result in a residual chlorine concentration of approximately 50 ppm in the water system. *(If a 100 ppm concentration is desired, use 1/2 cup of household bleach for each 15 gallons of tank capacity).*

The bleach will be drawn into the tank when the city water is turned on and the Fresh Water valve is turned to Tank Fill position.



Fresh Water Valve
(Located in water service center)
-Typical View

2. Fill the tank completely, then open each faucet in the motorhome and run the water until a distinct odor of chlorine can be detected in the water discharged. Do not forget the hot water faucets.
3. Let the system stand at least 4 hours when disinfecting with 50 ppm residual chlorine. *(If a shorter time period is desired, then 100 ppm chlorine concentration should be allowed to stand in the system for at least 1 hour).*
4. Drain the fresh water tank.
5. Install the filter cartridge into the filter canister, then refill the tank with fresh water.
6. Open each faucet again and run fresh water to flush chlorinated water from the lines. Run the water until there is no odor of chlorine detected in the water discharged. Do not forget the hot water faucets. *(You may need to leave a hot water faucet open for some time to flush the water heater with clean water. You may also want to turn the water heater off until this is done to avoid wasting energy trying to heat "unused" water).*
7. Water system is now disinfected.

City Water Hose/Tank Disinfection

As an alternative way to disinfect your tank, connect a city water hose to your motorhome and pour the bleach into the other end of the hose

SECTION 7 – PLUMBING

using a funnel. Hold the hose upright to avoid draining the bleach.

Connect the hose to a city water hydrant to force the bleach into the tank and fill the tank with water.

This method has the additional benefit of disinfecting the city water hose at the same time.

Continuous Tank Disinfection (Superchlorination)

Some RVers like to ensure continuous sanitation of their fresh water tank by “superchlorination”– maintaining an effective low level of chlorine in the tank at all times.

- Add 1 teaspoon of household chlorine bleach (sodium hypochlorite) to your tank for each 10 gallons of tank capacity. When you fill the tank, this will result in a 6.7 ppm level of chlorine, which should kill harmful bacteria and slime-forming organisms.
- Superchlorination does not affect city water usage, only the fresh water tank.

SHOWER HOSE VACUUM BREAKER

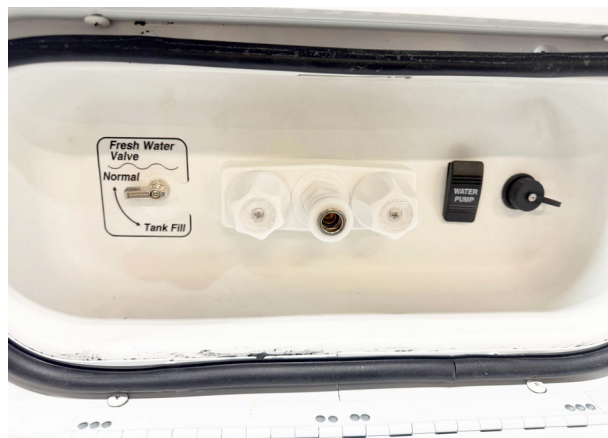
After using the shower, you may notice water dripping from the shower faucet assembly. The dripping results when vacuum in the shower hose (after closing the shower faucet) slowly releases and allows water remaining in the hose to drain down. This is a normal function of the shower valve assembly and is not a leak or defect.

If items are placed into the shower tub before shower valve vacuum release is complete, they may become wet.

EXTERIOR SHOWER/WASH STATION

–If Equipped

The Exterior Shower/Wash Station feature allows you to do things such as rinse off sand or salt after a swim, rinse off muddy boots, or bathe your pet outside the motorhome. Some models may have a Water Pump switch located near the shower faucet for convenience.



Exterior Shower/Wash Station
(Located on passenger side)
-Typical View

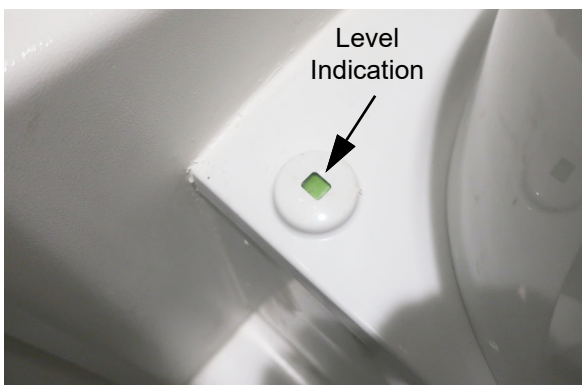
TOILET

NOTE: See the toilet manufacturer's user guide provided in your InfoCase for complete operating instructions, care and cleaning instructions, and safety precautions.

The toilet in your motorhome has a waste holding tank, which you need to empty when full. The waste holding tank is located in the left sidewall compartment.

See “Before Use” in the toilet manufacturer's user guide provided in your InfoCase for complete instructions before using the toilet.

When the Level Indication slide turns from green to red, the waste holding tank is full.



-Typical View

To open the waste holding tank compartment, use the key (located on key ring) to unlock the compartment door then push both buttons in at the same time while pulling the door open.



2. Push both buttons in at same time to open

Waste Holding Tank Compartment
(Located on left sidewall)
- Typical View

See the toilet manufacturer's user guide provided in your InfoCase for complete instructions on emptying the waste holding tank.

Important “Don’ts”

- Don't use facial tissue or regular toilet tissue in the RV toilet. These will not disintegrate sufficiently and will often cling to the sides of the holding tank. Toilet tissue made specifically for use in RV toilets and holding tanks is available at most RV supply centers.

- Don't dispose of sanitary napkins or other non-dissolving items in the toilet.
- Don't put automotive antifreeze or caustic chemicals, such as laundry bleach or heavy detergents into the toilet or holding tank. These products may damage plastic or rubber parts in the system.

See winterizing instructions at the end of this section to prepare the toilet for storage in freezing conditions.

Further Information

See the toilet manufacturer's operation information in your InfoCase for complete operating, care, and maintenance information.

DRAINAGE SYSTEM (P-TRAPS)

Ensure there is an adequate amount of water in the drainage system p-traps to avoid sewer odor from entering your motorhome.

If you should experience a bad odor, pour approximately 1 cup of water down each sink and shower drain in the motorhome.

WASTE WATER SYSTEM

(Holding Tank)

The drainage system is self-contained and uses a holding tank to contain the waste water until it can be dumped at an appropriate waste water disposal site. This means you can use the toilet, sinks and shower even in areas where utility hookups are not available.

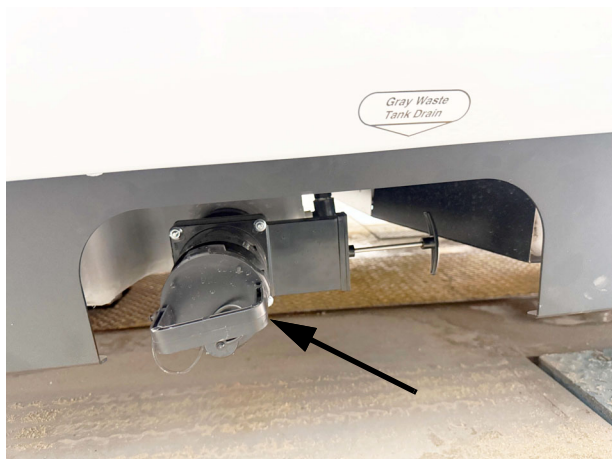
The gray water holding tank contains the waste water from the galley sink and shower, and may include bathroom lavatory.

See “Specifications” in *Section 1–Introduction* for tank capacities for your model.

Dumping Holding Tanks

1. Remove dust cap from drain and connect sewer hose. Be sure it is firmly attached.

SECTION 7 – PLUMBING

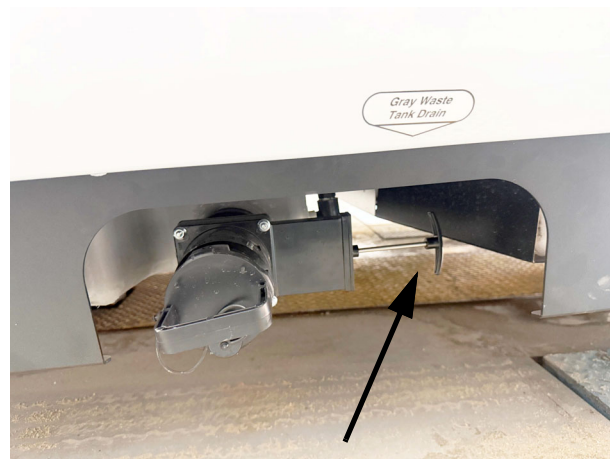


Sewage Drain Outlet
(Located on driver's side)
-Typical View



The sewer hose is stored on the
driver's sidewall in this
compartment.
-Typical View

2. Place the outlet end of sewer hose into disposal opening.



- Drain valve to drain Gray Water tank – then close.

Holding Tank Dump Valves
(Located on driver's side)
-Typical View

3. Open the Gray Waste Tank Drain valve with a quick pull and make sure there are no sags in the hose to ensure complete drainage. Close Gray Waste Tank Drain valve as soon as tank is empty.
4. Add an odor control chemical to the sewage holding tank through the toilet. These chemicals are available at most RV stores.
5. Rinse sewage drain hose thoroughly with water and stow.

NOTE: We recommend that you dump all holding tanks before traveling to avoid carrying unnecessary weight.

Using On-Site Sewer Hook-Ups

The sewage drain hose may remain attached to the sewage drain outlet while the motorhome is parked and connected to an on-site sewage hook-up.



WARNING

Service inlet access must be closed when utility connections are not in use.

When using a sewer hook-up, keep the dump valves closed until a tank becomes full or when preparing to leave the site. This keeps the solids in suspension, allowing them to be carried out with the liquids when the dump valve is opened. If the valve is left open, the liquids will drain off, leaving solids in the tank. Should this accidentally happen, disconnect the hose, fill the tank about half full with water, and drive a few miles to dislodge the solids. A few starts and stops will aid in the process. Then reconnect the hose and drain in the normal manner.

NOTE: Always keep sewage drain outlet capped while sewage connection is not in use.

Holding Tank Level Indicators

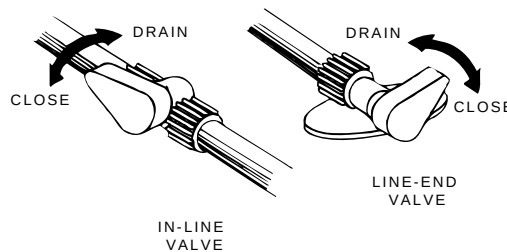
See System monitor panel for Water and Holding Tank Levels, Water Pump and Water Heater Control” in *Section 4–Appliances* for further information on the monitor panel and checking tank levels.

See “Specifications” in *Section 1–Introduction* for tank capacities for your model.

WATERLINE, WATER TANK DRAIN VALVES & WATER HEATER BYPASS AND ANTIFREEZE SIPHON VALVES

The Waterline and Water Tank Drain valves are used to drain water from the water tank and the water supply lines when preparing the motorhome for storage or when sanitizing the water system.

See the “Water System Drain Valve Locations” chart at the end of this section for locations on your model.



(Typical)

Your motorhome may be equipped with a Water Heater Bypass valve and an Antifreeze Siphon (Winterization) valve for winterizing waterlines using RV antifreeze.

Turn the handle as shown to either bypass or flow mode.

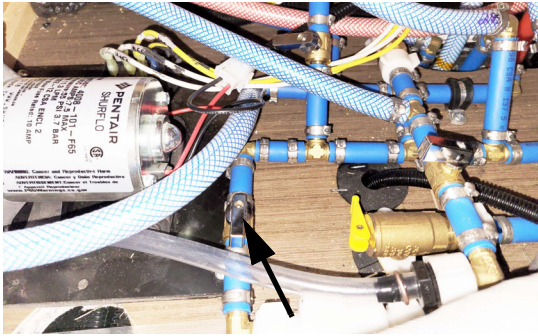
Refer to the “Water System Drain Valve Locations” chart at the end of this section for locations on your model.



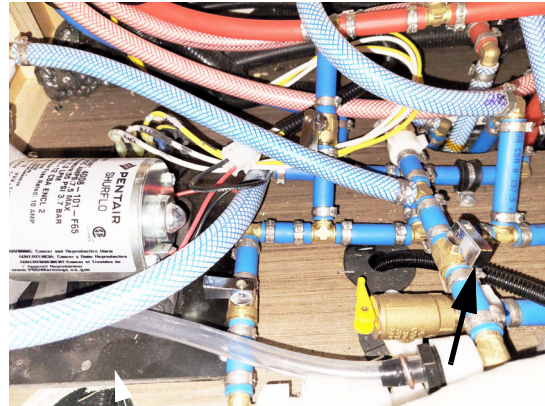
CAUTION

Leave bypass valve handle in NORMAL FLOW position if draining water and blowing out waterlines. Place in BYPASS position ONLY when using antifreeze solution in waterlines.

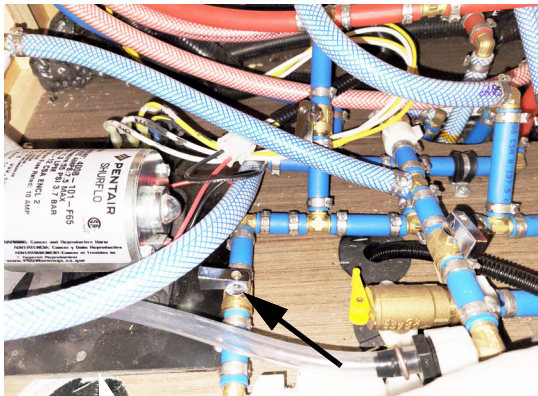
SECTION 7 – PLUMBING



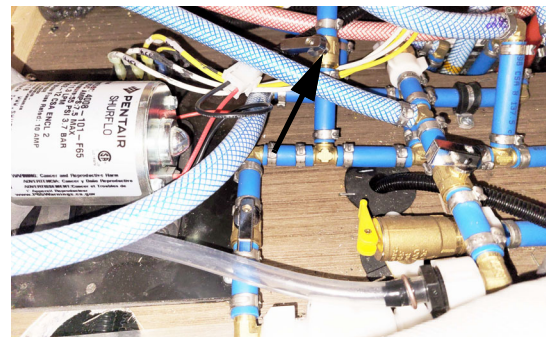
Winterization Valve #1
(Shown in Normal position).
-Typical View



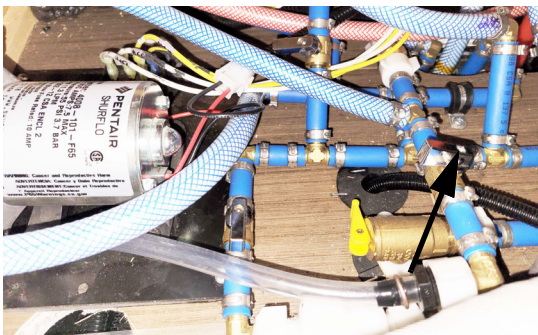
Winterization Valve #2
(Shown in winterize position).
-Typical View



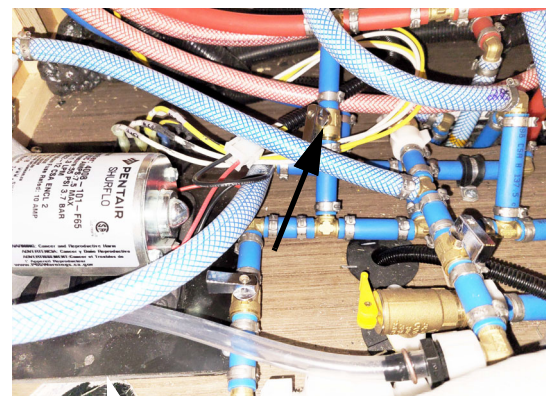
Winterization Valve #1
(Shown in winterize position).
-Typical View



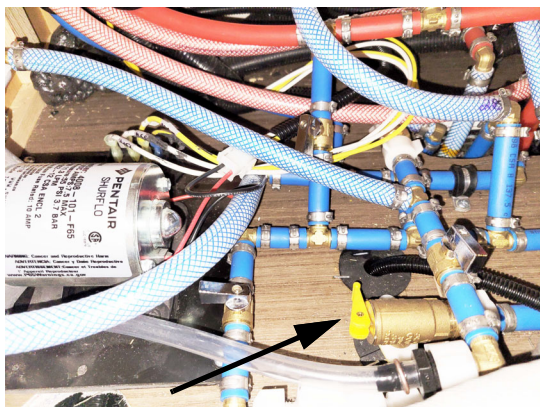
Winterization Valve #3
(Shown in Normal position).
-Typical View



Winterization Valve #2
(Shown in normal position).
-Typical View



Winterization Valve #3
(Shown in winterize position).
-Typical View



Water Heater drain valve
(Shown in closed position).
-Typical View



Fresh Water
Drain Valves

Fresh Tank
Drain Valve

Fresh Water and Fresh Tank Drain Valves.
-Typical View

WINTERIZING PROCEDURES

Certain areas of your water system require additional attention and disconnecting or blowing out these lines may be required. Be sure all water is drained from the system.

You can winterize the water and plumbing system of your motorhome using one of the following two methods – 1) Blow out waterlines using compressed air or – 2) Fill waterlines with RV water system antifreeze.

Further Information

Refer to the Water Heater manufacturer's user guide provided in your InfoCase for complete winterizing procedures.

Method 1 – Blow Out Procedure (Drain and purge waterlines using compressed air)

1. **Level the Motorhome.** If the motorhome is not level, there may be “low points” in waterlines that can trap water in the lines and prevent it from draining properly.
2. **Drain Fresh Water Tank and Waterlines.** Open all waterline drain valves and drain fresh water tank. (See “Water System Drain

SECTION 7 – PLUMBING

Valve Locations” chart at the end of this section for locations of drain valves on your model).

3. **Drain Exterior Shower/Wash Station.**

Open exterior shower knobs and lay shower head on ground as shown to drain any water left in the shower line.

Also, place the tip of your finger into the city water inlet and gently press the backflow valve “button” in the center of the inlet to drain any water trapped in the inlet line.

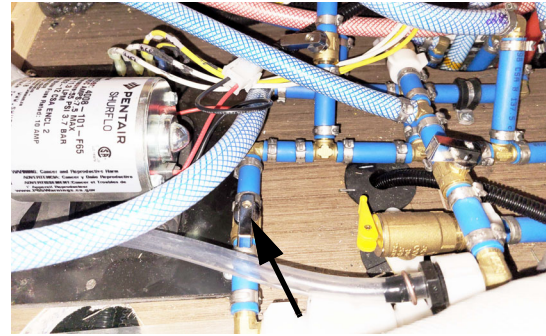


Drain Exterior Shower/Wash station
-Typical View

4. **Open the Water Heater Drain (Yellow) Valve, and all waterline drain valves.** (See “Water System Drain Valve Locations” chart at the end of this section for location of drain valves on your model.

NOTE: To make sure that all water drains properly from the water container, place a big enough vessel underneath the drainage socket of the drain valve. (>2.64 gallons (10 liters).

5. **Turn Winterization Valve 1** (Water Heater Bypass) to normal position.



Winterization Valve #1
(Shown in Normal position).
-Typical View

6. **Open Faucets.** Turn on the water pump and open all sink faucets and shower head knobs. Leave open after water stops flowing.
7. **Close Faucets.**
8. **Drain Toilet.** Press the toilet flush button and hold until water stops flowing in the toilet. Then turn water pump switch off.
9. **Clean the Water Pump Strainer.** (Shown below)



Water Pump Strainer
-Typical View

To Clean Pump Strainer

- Ensure all Water Pump switches are OFF.
- Twist the inlet cap (bowl) “counter-clockwise” to unscrew from the strainer assembly.

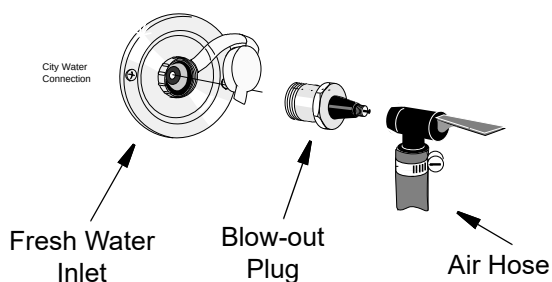
- Remove the bowl and pull the strainer screen out of the bowl to tap out any particles and rinse clean.
- Insert the strainer screen back into the bowl, then screw the bowl back onto the strainer assembly.

10. Turn the Eco-Hot valve to the “Normal” position.



Eco-hot valve in Normal Position
(Located passenger side on the sink.)
-Typical View

11. **Connect Air Pressure.** After water has stopped draining at all faucets and drain valves, leave faucets open and connect a “blow-out” plug to the city water connection on the motorhome. Then use a compressed air hose regulated to 30 psi or less to force air through the system. A “blow-out” plug can be purchased at any Winnebago Industries® dealer.



NOTICE

Limit air pressure to 30 psi to avoid damage to equipment.

NOTE: DO NOT burst air into the system. This can damage the water pump. It is better to let air in slowly.

12. **Close all drains and faucets.**
13. **Let air flow for five minutes** until water is completely drained out of faucets and drain valves. Open faucets one at a time.
14. **Drain Toilet.** Press the toilet flush button and hold until water stops flowing in the toilet. Then turn water pump switch off.
15. **Open all drains** to clear lines and let air flow for 5 minutes.
16. **Turn air pressure off.** Disconnect water purge adapters. Recap the city water inlet to avoid contamination by dirt or insects.

After Disconnecting Air Pressure

17. Close all waterline drains, tank drain valves, and all faucets to avoid contamination by dirt, insects, or rodents.
18. Pour about one cup of RV antifreeze down each drain for the galley sink, lavatory sink, and shower/tub. This fills the drain trap pipes to prevent holding tank odors from entering the motorhome during storage.

NOTE: It is not necessary to add antifreeze to the toilet since the flush valve will be closed.

Do not add automotive antifreeze or caustic chemicals such as bleach or laundry detergents into the toilet bowl or holding tanks. Although these products may have a deodorizing effect, they may damage plastic and rubber parts in the system.

19. Empty the water pump strainer filter bowl to avoid water freezing and cracking the filter bowl. See “Water Pump” previously in this section.

SECTION 7 – PLUMBING

Dump and Clean Holding Tank

20. Completely drain the waste water holding tank at an approved waste disposal site.
21. Close dump valves and refit the dust cap onto the drain outlet. This will inhibit rust formation on valve shafts and prevent entry and contamination by airborne debris, insects, and rodents.

Your drainage and fresh water systems are now winterized.

See instructions for removal from storage in Section 11 - Maintenance and Storage.

Method 2 – Antifreeze Fill Procedure

(Fill plumbing lines with RV water system antifreeze)

NOTE: As an alternative to totally draining the waterlines, you may winterize tanks and lines by filling them with non-toxic RV water system antifreeze through the plumbing system.

This product is available from your dealer and from most RV supply stores and national retail outlets.

Follow directions on the container to determine the correct amount to use for your motorhome.

Your motorhome is equipped with a manually operated waterline winterization system for your convenience in winterizing fresh waterlines.

The system features a Winterization (diverter) valve with an antifreeze siphon tube to draw non-toxic RV water system antifreeze into the waterlines.



WARNING

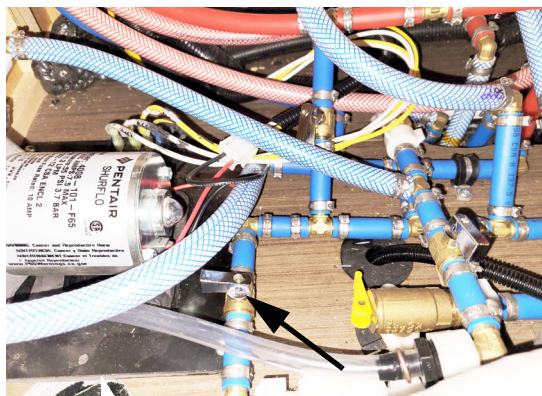
NEVER use automotive antifreeze/coolant in your RV water system. Automotive coolant/antifreeze contains ethylene glycol which, if ingested, can cause blindness and can be fatal.

1. **Level the Motorhome.** If the motorhome is not level, there may be “low points” in waterlines that can trap water in the lines and prevent it from draining properly.
2. **Drain Fresh Water Tank and Waterlines.** Open all waterline drain valves and drain fresh water tank. (See “Water System Drain Valve Locations” chart at the end of this section for locations of drain valves on your model).
3. **Drain water heater.**
4. **Drain Exterior Shower/Wash Station.** Open exterior shower knobs and lay shower head on ground to drain any water left in the shower line.
Also, place the tip of your finger into the city water inlet and gently press the backflow valve “button” in the center of the inlet to drain any water trapped in the inlet line.

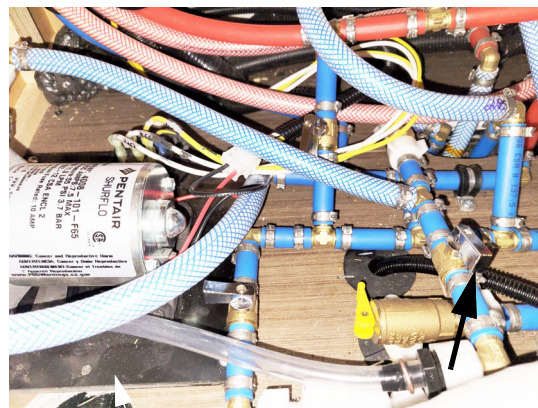
Set Up Winterization Valves

See “Water System Drain Valve Locations” chart at the end of this section for location of bypass valve on your model.

5. Verify **Winterization Valve 1** is in Winterize position.

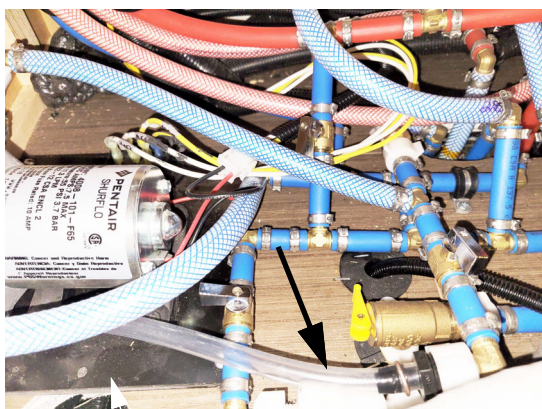


Winterization Valve #1
(Shown in winterize position).
-Typical View



Winterization Valve #2
(Shown in winterize position).
-Typical View

6. Remove and save the protective cap from the end of the antifreeze siphon tube (save cap to cover tube after use.)



Siphon Tube.
-Typical View

7. Insert the end of the siphon tube into a pail or container with 2 to 3 gallons of non-toxic RV antifreeze solution.
8. Turn **Winterization Valve 2** so that it points to Winterize (Siphon).

NOTE: Ensure that all drain valves are CLOSED before pumping RV antifreeze into the water system.

Refer to the “Water System Drain Valve Locations” chart at the end of this section for valve locations on your model.

Fill Lines

9. Turn the Water Pump switch ON.
10. Open each hot and cold water faucet handle/knob in the motorhome – one at a time each in turn until antifreeze solution just begins to flow from the faucet, then close. Do not forget exterior shower/wash station knobs (if equipped).
11. Press the toilet flush pedal and hold until antifreeze begins flowing into the toilet. Leave a small amount of antifreeze that remains in the bowl.
12. Turn Water Pump switch OFF.

When Done Adding RV Antifreeze

13. Turn **Winterization Valve 2** so it points toward Normal. This will stop the flow from the antifreeze siphon tube and revert the tank line flow to the water pump.
14. Replace the protective cap onto the end of the antifreeze siphon tube to keep out insects or debris when not in use.

SECTION 7 – PLUMBING

Fill Drainage System P-Traps

15. Pour about one cup of RV antifreeze down each drain for the galley sink, lavatory sink, and shower/tub. This fills the drain trap pipes to prevent holding tank odors from entering the motorhome during storage.

Dump and Clean Holding Tank

16. Completely drain the waste water holding tank at an approved waste disposal site.
17. Close dump valve and refit the dust cap onto the drain outlet.
This will inhibit rust formation on valve shafts and prevent entry and contamination by airborne debris, insects, and rodents.

Your drainage and fresh water systems are now winterized.

See instructions for removal from storage in Section 11 - Maintenance and Storage.

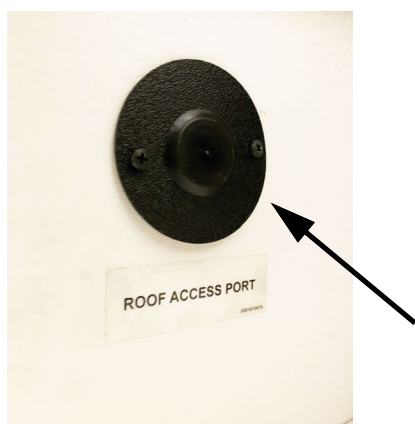
WATER SYSTEM DRAIN VALVE LOCATIONS		
Model	System	Drain Valve Locations
H19 KC/ DC	Waterlines	Three (3) valves located in water service center.
	Water Tank	One (1) valve located in water service center.
	Water Heater	One (1) yellow drain valve on the passenger's side located under galley.
	Winerization Valve 1	Water Heater Bypass Valve - Located under galley.
	Winterization Valve 2	Winterization (Antifreeze) Valve - Located under galley.
	Winterization Valve 3	Winterization bypass hot lines- located under galley.

SECTION 8 – ENTERTAINMENT

ACCESS PORT (ROOF)

Your motorhome is equipped with a roof access port that provides a wiring path from an overhead cabinet to a sealed box on the roof for installing electronic devices such as Wifi and cell boosters, TV antennas, and satellites.

The roof access port is located in the cabinet above the fridge. Remove plug to access.

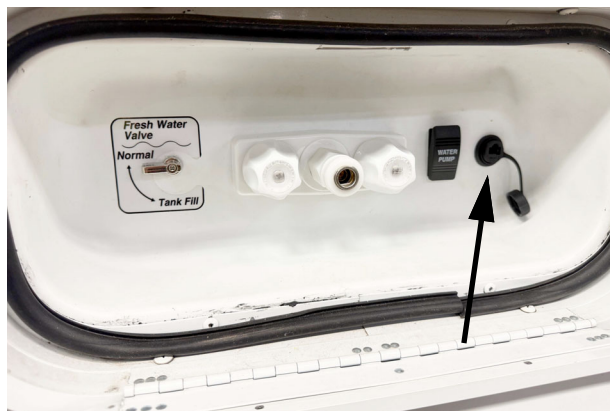


Roof Access Port
(Located inside the cabinet above the fridge).
-Typical View

SATELLITE INTERNET SYSTEM

The motorhome has been prepared to allow satellite Internet to be installed with these key features:

- Allowing for the use of roof mounted or portable antenna.
- Weather and watertight exterior ethernet outlet located inside the right rear external compartment for connection of a portable antenna from the ground.
- A location to set and secure WI-FI router from damage while stationary or in transit.
- Power outlets available for multiple equipment.



Satellite port
(Located inside compartment on passenger's side).
-Typical View



Ethernet hook up for satellite located inside the coach in the overhead cabinet above the refrigerator.
-Typical View

SECTION 9 – FURNITURE AND SOFTGOODS

DINETTE TABLE (PORTABLE)

Your motorhome is equipped with a portable dinette table. The DC model is equipped with 2 tables and support legs, and the KC is equipped with 1 table and support leg.

DC Dinette Table



1. Grab a table- these are stored under the rear seats.
-Typical View



2. The metal receivers are located on the floor.
-Typical View



3. Place the support leg in the metal receiver.
-Typical View



4. The support leg fits in the receiver on the bottom of the table.
-Typical View

SECTION 9 – FURNITURE AND SOFTGOODS



5. Place the table on top of support leg.
-Typical View



1. First, remove the tables from the support poles and store the support poles and the tables.

SLEEPING FACILITIES



WARNING

Sleeping facilities are not intended for use while vehicle is in motion. For safety, passengers must use safety belted seating positions while vehicle is in motion.

SOFA/SLEEPER QUEEN BED

-DC Model

This section explains how to convert the rear seat area into a queen sized bed on the DC Model. Reverse the steps to convert back.



2. Locate the pull strap on one of the couch cushions and pull out and up.
-Typical View

SECTION 9 – FURNITURE AND SOFTGOODS



3. Each seat back also has an assist strap to help move couch into position.
-Typical View



4. Both seats will fold out and down as shown.
-Typical View



5. With both seats down it forms the bed.
-Typical View



6. As optional storage, both seats in bed configuration can be lifted and held in place with included straps as additional rear storage.
-Typical View

SECTION 9 – FURNITURE AND SOFTGOODS

BED STEP

Your motorhome is equipped with a step to help access the bed and the power loft bed.



1. Bed step in stored position.
-Typical View



2. Pull out and down to lower the bed step
for use.
-Typical View

FRONT CAP STORAGE

A lowering storage area is included over the cab of the motorhome to allow increased access to and from the chassis.

When raising the panel, raise the panel with one hand, and then tighten the straps by pulling on them. The straps can then be attached by the hook and loop fastener to the underside of the panel. To lower, first raise the panel by hand to remove tension from the straps and loosen the straps to lower. The panel will rest on the cab cutout.



Front Cap storage compartment shown in
the raised position to allow increased access
to and from the chassis front seats.
-Typical View



2. Front Cap storage shown in open
position. The panel will rest on the cab
cutout.
-Typical View

POWER LOFT DOUBLE BED

–DC Model is used in the following images, but the steps are the same.

NOTE: The Power Loft Bed is not intended for storage.

The Loft Bed is stowed near the rear ceiling and is double sized. Reverse the steps to place back in storage.

NOTICE

Unroll and lower window covers before operating loft bed to avoid damaging the window covers.

NOTICE

If the bed does not smoothly operate as intended for the full range of motion up and down the mechanism may be damaged and is not safe to sleep on.

To lower the Loft Bed for use



1. Unfasten and lower all window covers.
-Typical View



2. Unfasten the safety belt
-Typical View



3. Turn the key (located near the monitor panel) to the “ON” position.
-Typical View



4. Push the DOWN arrow to lower the Loft Bed.
-Typical View

SECTION 9 – FURNITURE AND SOFTGOODS



WARNING

Keep people away from operating mechanism and pinch hazard areas during use. Failure to do so could cause injury.



CAUTION

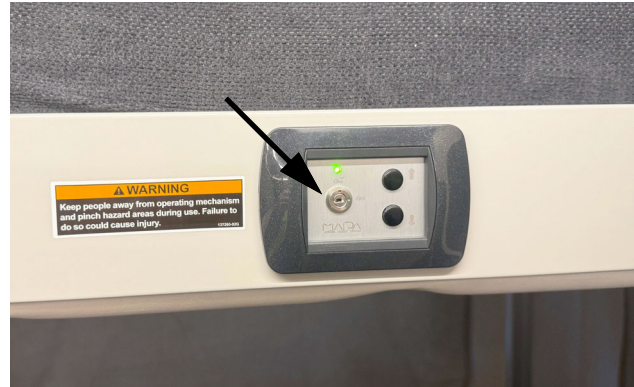
Release the Lower Button immediately if the bed stops moving downward. If button is held mechanism can become damaged.

- While the bed is being lowered, if the bed stops lowering and button continues to be pressed, damage may happen to the cables and mechanism. Lowering button must be released immediately if downward motion stops.
- Maximum Capacity: 400 lbs.
- To avoid injury to young children, do not leave them unattended on the bunk.

NOTE: This low bunk design may be accessed without the use of a ladder. If needed, a multi-purpose step stool may be used.

To store the Loft Bed

1. Push the UP arrow until the Loft Bed reaches the ceiling.
2. Turn the key (located near the loft bed or monitor panel, depending on model) to the “OFF” position.



3. Fasten the safety belt whenever the bed is in the stored position.



Manual Retraction of Loft Bed

If the Power Loft Bed is malfunctioning you may need to manually retract the loft bed.

1. Remove screws from bottom bunk panel. Remove panel and set aside.
2. Remove Loft Bed manual retractor from InfoCase.



3. Insert manual retractor into loft bed motor (as shown) and turn clockwise to raise the loft bed into stored position.



SECTION 10 – MAINTENANCE AND STORAGE

SEALANTS – INSPECTION AND GENERAL INFORMATION

Water is a recreational vehicle's worst enemy when it is allowed to enter where it is not intended. Sealants perform a very important function and should be inspected closely and maintained regularly. Winnebago Industries® utilizes many different types of sealants. Refer to the "Sealants Call-Out Sheet" provided in your InfoCase for further information.

Sealants, in general, do not have "set" lifetimes. Varying environmental factors affect the pliability and adhesiveness of sealants. You or your dealer must:

- Inspect all sealants, a minimum of every six months.
- Inspect the moldings, windows, clearance lights, exterior compartment doors, and all their attachments.
- Also, inspect weather seals around entrance door, etc., and if necessary, have a dealer replace them immediately.
- Check for cracks, voids, gaps, breaks, adhesion, and any sign of physical deterioration.

NOTE: Proper sealant inspection includes not just visual observation but running a finger along sealant seams to verify proper adhesion to the surface. Any loosened areas must be replaced.

- Have the sealant replaced if you notice any of the above. Your local Winnebago Industries dealer has the correct and necessary parts and experience to help you maintain your sealants.
- Always use the same type sealant that was removed.
- Immediately have dealership check moldings, windows, and exterior attachments for leak source if you notice water inside of unit.

NOTICE

Sealants must be inspected every 6 months and replaced if necessary.

ROOF



WARNING

STAY OFF ROOF. Surface may be slippery. Falling could result in death or serious injury.

The roof is made of Thermo-Panel materials like the walls and floor. It will support the weight of an average adult for periodic maintenance or repair of the roof or roof mounted components.

Walking or working on the roof should be left to qualified service personnel using proper safety equipment in a safe environment. You should only walk or work on the roof if you are qualified and have created a safe environment.

For your safety, it is not recommended that you store or carry items on the roof.

Always have damage to the roof area repaired immediately. Damaged or detached sealant around the vents, air conditioner, body-to-roof seams, etc., should also receive immediate attention. Delaying these repairs may allow water leakage and result in damage to interior ceiling and body panels, upholstery, etc., which is not covered by the limited warranty (see "New Vehicle Limited Warranty" provided at the beginning of this manual).

SECTION 10 – MAINTENANCE AND STORAGE

UNDERCARRIAGE

Buildup of mud and dirt under the body of the vehicle can cause damaging rust or corrosion on steel or aluminum parts and can add needless weight to the vehicle. This, in effect, reduces the amount of cargo you can carry and remain within GVWR and GAWR limits.

Corrosive materials, such as those used for ice and snow removal and dust control, can also accumulate on the underside of a vehicle. These materials should be removed by flushing the undercarriage regularly with water, especially horizontal surfaces, cavities, and other areas where mud and other deposits may collect.

EXTERIOR AUTOMOTIVE PAINT FINISH

The exterior finish of your motorhome is fully or partially finished with the highest quality automotive paint and clearcoat.

Follow these precautions to keep the finish looking its best and preserve maximum gloss and durability.

Parking

- **Avoid parking under trees** – When this happens you should rinse the bird droppings and tree sap off as soon as possible. Tree sap is a form of sugar and will dissolve after a couple of rinses. Bird droppings can eat into a painted surface if left unattended and need removed as soon as possible. Lukewarm soapy water can help speed up the cleaning process.
- **Avoid parking near salt spray** – When this happens you need to rinse off the salt mineral residue to minimize the corrosiveness of the salt.
- **Avoid parking near factories with heavy smoke or industrial fallout** – Industrial fallout can eat into your exterior finish when dew or rain mixes with it to create nitric or sulfuric acid that gets magnified by the intensity of the sun. As the water evaporates, the acid becomes more powerful and attacks

the painted surface.

Rinsing and washing the surface helps remove the fallout and neutralize the acid. After the initial 60-day cure stage, a coat of wax or polish can help protect the surface from these types of contaminants.

- **Do not scrape ice or snow from the painted surface.** Brush off gently with a soft-bristled snow brush – avoid being forceful with the brush.
If brush scratches show after the motorhome thaws out, it may be possible to remove them by hand waxing with a silicone-free liquid wax.
- **Avoid covering painted surface.** When paint is covered (especially in outdoor conditions), water may appear between the cover and the motorhome due to rapid temperature fluctuations. The water may vaporize under certain conditions and migrate into the painted surface, possibly resulting in blisters and/or bubbles in the paint. These blisters/bubbles are not covered under warranty.
Covering your motorhome is at owner's risk.

Driving

- Rinse off bugs and bird droppings with water daily.
- Antifreeze, fuel, or windshield/window solution spilled on the painted surface should be rinsed off immediately with water and allowed to air dry. Wiping dry with a towel may create fine scratches due to the solvent nature of these types of fluids.
- Fuel cannot be diluted and dissipated with water. It must be removed with a mineral spirit type cleaner (such as *SEAFOAM Bugs-B-Gone*, or equivalent) or a silicone-free spray wax and microfiber cloth to remove the stain left by fuels.
- Ensure that all motorhome fluids (such as gas, oil, grease, antifreeze, transmission fluid, brake fluid, etc.) are completely wiped off of painted surfaces. Failure to comply may cause the paint to blister and/or peel.

NOTE: When driving in wintry conditions, the road surface may be covered with heavy salts or small rocks to improve traction. These types of road conditions may cause surface damage to your motorhome. If possible, it is best to avoid these types of exposures. However, if you do use your motorhome under these types of conditions, you may want to consider, among other things, washing both the undercarriage and the body of your motorhome after exposure to these types of conditions.

Washing

- Commercial vehicle wash facilities should be strictly avoided! They will scratch your motorhome!

Truck-style wash centers have high-pressure wands that emit higher than necessary water pressures and the brushes are very aggressive. Most truck wash brushes are made from a heavy plastic for durability and are under heavy pressure. They are designed to clean heavy road films on semi trailers and are often dirty. They are not designed for custom painted motorhome's and they will scratch the clearcoat finish. Many times these scratches can penetrate the clearcoat finish, possibly causing delamination and/or other paint related issues that are not covered under warranty.

- Wash your motorhome with cool or lukewarm water using a quality automotive detergent that does not contain bleach solution. Most auto stores offer car wash detailing soaps that are similar and do not have bleach in the formulation (such as Meguiars #62).
- Never use a bristled brush or broom to wash the painted surface. This will cause scratches in the finish. Using a microfiber cloth, mitt, or mop is strongly recommended.
- Be sure your cloth or applicator is clean. A dirty applicator can scratch your motorhome.

Washing Procedure

- Rinse area to be washed with cold water to remove surface residue. Ensure you are not in direct sunlight.
- With area to be washed still wet from the rinse, use the recommended soapy mixture to clean the area. To avoid scratching painted surfaces, a microfiber cloth, mitt, or mop is strongly recommended to apply soapy water.
- Rinse washed area before soap evaporates.
- Dry the rinsed area before the water evaporates.

NOTE: Avoid aiming water flow from a hose or spray from high-pressure washing equipment into any appliance intake, as damage or difficulty in operating appliances may occur.

- After washing the motorhome, carefully inspect sealant around window frames, vents, and any other joints that may have loosened or separated. See “Sealants - Inspection and General Information” at the beginning of this section for details.

Bug Removal

- Rinse any loose debris off with water and allow the remaining residues to soak and soften. Use soap and water to wash the residue, then rinse.

NOTE: You may wish to repeat and leave soap on longer than normal to help with softening hardened residue.

- For more stubborn areas, use an ammonia-based glass cleaner followed by washing with warm soapy water, then rinse.
- Remember to use microfiber towels during this process to help avoid scratches.
- If this does not work, as a last resort, use a bug removal product (like SEAFOAM Bugs-B-Gone, or equivalent) in a shady area and follow the directions on label. Ensure cleaner is completely wiped off of painted surfaces. Failure to comply may cause the paint to blister and/or peel.

SECTION 10 – MAINTENANCE AND STORAGE

Polishing and/or Waxing

NOTE: When your motorhome is new or has been repainted for any reason, no polish or wax should be applied to the finish until after a 60-day cure cycle at temperatures higher than 60 degrees for 60 days. Failure to observe this precaution could void your paint warranty.

- We recommend a silicone-free polish with an orbital machine and terry cloth applicator.
- Liquid waxes are easier to apply and bring to a gloss with fewer residues.
- Avoid paste waxes. They sometimes have fillers and additives that give a very short term result. Stay away from silicones in polishes and soaps.
- Buffing compounds remove some of the mil film of the clearcoat, so we recommend that only professionals or very experienced users apply this type of product.

Inspection

A motorhome exterior is subjected to many physical forces and environmental conditions. While the motorhome is parked, it is exposed to climate and weather extremes and other environmental conditions. While in operation, it is subjected to various twisting and flexing forces caused by routine cornering and turning, and by uneven road surfaces, such as bumps, potholes, railroad tracks, and parking lot entrances.

Inspect the exterior fiberglass shell periodically for cracks which may represent a threat to the integrity of the fiberglass.

Minute cracks in the surface (commonly referred to as "spider cracks" or "hairline cracks") caused by normal flexing of the fiberglass exterior are normal and typically pose no threat to the integrity of the motorhome other than appearance.

However, if a crack has opened up and the weave of the cloth is visible, this does represent a threat to the integrity of the fiberglass and must

be repaired or covered as quickly as possible to avoid penetration by moisture, especially in freezing climates.

If the fiberglass has been damaged and contains cracks, tears, or holes, use plastic sheeting and duct tape, if necessary, to prevent moisture from damaging the sidewall material or the interior of the motorhome.

Protective Film

–If Equipped

Your motorhome may be equipped with a protective film to defend against everyday road hazards. This film creates a barrier against bugs, road grime, bird droppings, and other harmful elements.

Further Information

See the manufacturer's information provided in your InfoCase for complete care and maintenance instructions.

EXTERIOR GRAPHIC CARE

The pressure-sensitive graphics on your vehicle require very little maintenance. In order to allow the graphics to have the longest life possible, the following steps should be taken.

- Wash graphics with plain soap and water or any car wash detergent. Rinse thoroughly.
- High pressure water spray may loosen or damage graphics. Keep spray nozzle at least 1 1/2 feet from the edge of the graphics.
- Test any cleaning solution on a small section of graphic before using.
- Never use aromatic solvents such as acetone, M.E.K., toluene, paint thinner or lacquer thinner on graphics. Solvents may soften the vinyl and smear colors.
- Gasoline or other fuels spilled on graphics should be rinsed off immediately with water.
- Do not apply paint or clearcoat over the graphics.
- Do not apply wax over the graphics, especially wax containing petroleum distillates. Wax that has dried along the edge

of a graphic can be removed with cotton swabs after softening it with isopropyl alcohol. Rinse area thoroughly after cleaning.

PLASTIC PARTS – CLEANING

Many parts in your vehicle, such as the dash, exterior light lenses, and certain exterior body panels are made of high-impact plastic materials that can be damaged by wiping with solvents or improper cleaning products.

Always try cleaning plastic parts with the mildest cleaners first and work your way up to stronger cleaning products. Use the following cautionary lists as a guide when selecting cleaning products to use on plastic parts.

NOTICE

Do not use citrus-based cleaners on polycarbonate finishes. Citric compounds will damage the high-gloss surface, causing it to appear dull or “flat”. Always test a cleaning product on a hidden area to be sure it will not cause damage to the appearance of the part.

Here is a list of mild cleaners that **may be used safely**:

- Car washing soap and water
- Glass cleaners *without ammonia*
- Mineral oil
- Multipurpose cleaners (such as Fantastik®, Formula 409®, etc.)

The following products, compounds, or solvents must be **wiped off immediately** to avoid damage:

- Ammonia
- Brake fluid
- Bathroom basin, tub, and tile cleaners
- Chlorine
- Ethyl alcohol
- Isopropyl (rubbing) alcohol
- Kerosene or gasoline

- Naphthalene
- Pine-type household cleaners

Do not use cleaners containing the following products, compounds, or solvents. These products **will damage** the finish.

- Acetic acid
- Acetone (nail polish remover)
- Aromatic solvents (lacquer thinners)
- Benzene
- Butyl alcohol

EXTERIOR LIGHTS

Most Winnebago Industries® vehicles have polycarbonate lenses on exterior lamps, which are very sensitive to a variety of chemical solvents and cleaners.

Use only soap and water to clean exterior lamp lenses, especially headlights.

- Contact with certain chemicals can cause etching, “crazing” or cracking of the lens, which can significantly reduce the lens clarity and effectiveness of the lamp and may require replacement of the complete lamp housing.
- Some popular citric acid cleaners may cause polycarbonate lenses to become “hazy” or “foggy”.
- Do not use a pressure washer to clean headlights.
- Inspect and operate the lights regularly to confirm proper operation and mounting condition.

INTERIOR SOFT GOODS

We recommend a weekly routine of vacuuming all fabrics and carpet throughout the motorhome to prevent an accumulation of dirt, which can detract from the appearance and shorten the life of carpet and fabrics.

Fabric Upholstery

Some fabrics used in this motorhome may contain fire retardant and lightfastness additives, which can be damaged by use of improper cleaning products. Some water-based household

SECTION 10 – MAINTENANCE AND STORAGE

cleaning products are not formulated for use on fabrics and may cause excessive shrinkage or fading. Always test any cleaning product on a hidden area of fabric before using on visible areas. For best results, fabric cleaning should be referred to a professional carpet and upholstery cleaner.

NOTE: To minimize fading of upholstery, carpets and other interior fabrics caused by excessive sunlight, the drapes, blinds, or shades should be closed when the motorhome is parked for an extended period of time.



WARNING

When cleaning upholstery and fabric, do not use lacquer thinner, nail polish remover, laundry soaps, or bleach. Never use carbon tetrachloride, gasoline, or naphthalene for any cleaning purpose. These materials may cause damage to the material being cleaned and most are highly flammable, posing risk of injury due to fire.

Leatherette –If Equipped

Leatherette materials are easy to care for and require no recommended maintenance other than regular cleaning. To clean, only use:

- Mild soap and water
- For stubborn spots, use alcohol-based solutions such as Fantastik® or Formula 409®
- To disinfect, use a 5:1 bleach/water solution
- Always rinse with clean water
- Allow to air dry

Vinyl Fabrics (including ceiling) –If Equipped

Vinyl should be cleaned with a soft, damp cloth, and a mild detergent only. Do not use solvents. Solvents may damage the surface of the vinyl.

Draperies, Curtains, and Bedspreads

These items may be woven from a variety of fabrics. We recommend that these be professionally dry cleaned only. A five percent shrinkage may occur when you have these items dry cleaned.

General Stains

As with any stain or contamination, the quick response is the best, especially when done in conjunction with the proper cleaner for the type of stain.

CABINETRY – CLEANING

Wooden items may be cleaned with a soft cloth and a good quality wood finish cleaning product.

Vinyl simulated wood panels may be cleaned with a mild, water-based cleaner and a soft cloth. Do not use solvents on vinyl wood panels.

NOTE: Many cabinetry and furniture items throughout this motorhome are constructed either partially or completely of real hardwoods. Because of natural variations in woodgrain density, slight differences in stain hue may exist between one item and another. This is the distinctive character and beauty of real wood.

DECORATIVE VINYL WALL PANELING – CLEANING

Decorative Vinyl Wall Paneling may be cleaned with mild detergent and warm water. The soap product should contain no abrasives, and the use of a soft cloth or sponge with the cleaning liquid should help preserve the finish of the vinyl.

Do not use bleach, cleaning agents with solvents or harsh chemicals, oil based spray cleaners, or other multipurpose cleaners such as Fantastik® or Formula 409® as they could damage the vinyl surface.

TABLES AND COUNTERTOPS

Work surfaces are covered with a plastic or thermo-formed laminate that resists solvents, stains, and abrasions. A coat of furniture wax applied to these surfaces on the counters and table will help preserve their beauty and make cleaning easier. Always clean the surface before applying wax.

SINK – STAINLESS STEEL

Care and Cleaning Instructions

The stainless steel sink can usually be cleaned with water and soap or detergent using a soft cloth or sponge.

- **Rinse thoroughly** with warm water and wipe dry quickly to avoid spots and streaks.
- **For stubborn stains**, use a mild abrasive cleanser like Soft Scrub[®], Comet[®], etc. Work in the direction of the “grain” of the brushed finish lines.
- **Never use steel wool.** Particles of steel from the wool pad can embed into the sink surface, then become rusty and unsightly.
- **Avoid contact with full-strength** bleaches, household chemicals, and acid-based cleaners. If this happens, rinse and wipe dry quickly.
- **Salt, mustard, and mayonnaise** can cause pitting if left on the steel sink surface. If spilled, clean and rinse immediately.
- **A high iron content** in the water (hard water) may result in a brown or rust-colored stained appearance. If noticed, dry towel sink after each use.
- **Do not use rubber mats** in the sink bowl. Material trapped under mats can complicate cleaning.

NOTE: Improper use may damage this product and void the warranty.

RANGE AND REFRIGERATOR

For care and appearance maintenance of the range and refrigerator, refer to the appliance manufacturer’s operation and maintenance manuals included in your InfoCase.

VINYL FLOORING

Care and Maintenance

You can easily maintain the beauty of your vinyl flooring with little effort, by following these recommendations:

- Sweep or vacuum floor daily (use a vacuum without a beater bar head.) Remove loose dirt with a soft brush or Swiffer[®] type product.
- For more intense cleaning, use a non-abrasive cleanser, such as Mr. Clean[®]. Rinse with clean water.

NOTE: Floor cleaners containing waxes, brighteners, or gloss agents are not recommended.

- Regular cleaning with solvent-based chemicals may adversely affect the topcoat performance.
- Do not use undiluted bleach or leave a dilution of bleach on the floor for longer than one hour.
- Vinyl flooring is extremely durable and long lasting. It is normal for the floor to show some denting and dimpling where furniture sets due to the soft nature of the material. The dents are not permanent and will come out over time.

Spill Removal for Water Based Spills

- Remove the solid material from the spill before cleaning.
- Mix 1/4 to 1/2 teaspoon of clear hand dish-washing detergent with 1 cup of water. Use this to dampen a sponge or towel and wipe until the spill is gone.
- Use clean water to wet a towel and rinse the soap from the spill area until all of the soap and spill is gone.

SECTION 10 – MAINTENANCE AND STORAGE

- Inspect to ensure that there is no remnants of the spill left behind in the weave, including the cracks, as this can create further issues.

Spill Removal for Oil Based or Greasy Spills

- Select a grease removing household detergent that is non-bleaching that contains no grit in it to clean the spill area.
- Follow the detergent container's directions located on the bottle to clean the spill area.
- After the entire spill is removed return to the steps listed before on "Spill Removal for Water Based Spills" and follow the directions completely.

Maintenance Tips

- Install protection (such as pads or casters) on furniture with legs or sharp edges. This protection should not contain bitumen, which may cause brown stains.

NOTE: Faulty pads and casters should be removed and replaced.

- Burning cigarettes and matches can cause damage to the flooring.
- Use doormats (that do not contain bitumen) to keep out most of the dirt and dust.
- Remove spills immediately with a damp cloth, followed by rinsing with clean water.
- The use of stiletto heels is not recommended, as they may cause permanent damage to the flooring.
- Protect flooring from prolonged direct sunlight exposure.

Treatment of Stains

Acids, alkali, alcoholic beverages, coffee, soft drinks, ketchup, fruit, fruit juices, food, vegetables, mustard, ink, and iodine:

- Remove the stain with lukewarm water and a cloth or sponge. If necessary, clean with a soft nylon pad and non-abrasive mild detergent or resilient floor cleaner.

Heel marks:

- Clean as soon as possible with a soft nylon pad and non-abrasive mild detergent or resilient floor cleaner.

Asphalt, candle grease, chewing gum, fat, oil, tar, and shoe polish:

- Gently remove with a blunt instrument and treat with a soft nylon pad and non-abrasive floor cleaner.

Lacquer and nail polish:

- Remove as soon as possible. Do not allow to dry. If necessary, apply nail polish thinner (sparingly) to remove any residue.

Corrosion, paint, and grass stains:

- Treat as soon as possible with a soft nylon pad and non-abrasive mild detergent or resilient floor cleaner.

Varnish, oil paint, and solvents:

- Blot up as soon as possible. Do not rub, as this will only spread material further across the surface. Carefully treat with a mild cleanser. When dry, carefully peel the stain off. MEK may be used sparingly, if necessary. Rinse immediately with clean water.

Pet stains:

- Treat with lukewarm water. If stain remains visible, clean with a soft nylon pad and non-abrasive resilient floor cleaner.

Further Information

Refer to the quick reference guide located in your InfoCase for further information.

BATHROOM

Toilet

For instructions on the care of your toilet, refer to the information in your InfoCase.

Tub and Shower Walls

The tub and shower walls in the bathroom should be cleaned with mild soap and warm water. Do not use an abrasive cleaner on the

shower walls and tub, as scratching and discoloration may occur. Stubborn stains may be removed with an automotive-type cleanser.

Lavatory Sink

Care and Cleaning Instructions:

The stainless steel sink can usually be cleaned with water and soap or detergent using a soft cloth or sponge.

- Rinse thoroughly with warm water and wipe dry quickly to avoid spots and streaks.
- For stubborn stains, use a mild abrasive cleanser like Soft Scrub®, Comet®, etc. Work in the direction of the “grain” of the brushed finish lines.
- Never use steel wool. Particles of steel from the wool pad can embed into the sink surface, then become rusty and unsightly.
- Avoid contact with full-strength bleaches, household chemicals, and acid-based cleaners. If this happens, rinse and wipe dry quickly.
- Salt, mustard, and mayonnaise can cause pitting if left on the steel sink surface. If spilled, clean and rinse immediately.
- A high iron content in the water (hard water) may result in a brown or rust-colored stained appearance. If noticed, dry towel sink after each use.
- Do not use rubber mats in the sink bowl. Material trapped under mats can complicate cleaning.

NOTE: Improper use may damage this product and void the warranty

Marks or Discoloration

A color-matched automotive scratch remover compound may be used to remove stubborn marks or discoloration. Always follow label directions.

NOTE: Do not use steel wool or metal scouring pads.

WINDOWS

Windows may be periodically cleaned with a good quality glass cleaner or mild soap solution using a soft cloth.

Use care when removing ice or frost from the windows. Always use a plastic ice scraper, never one made of metal. Use care when removing ice from the mirrors to protect the reflective surfaces.

DOORS AND MIRRORS

Entry door latches

- Inspect the entry door latches regularly for signs of wear and tear.
- Ensure the latches are functioning smoothly and securely.
- Door locks and hinges should be lubed periodically with dry lubricant to ensure trouble-free operation and to protect against freeze-up.
- Replace any damaged or faulty latches immediately to ensure safety.

Cargo Door Compartments

- Check the cargo door compartments for any signs of damage or malfunction.
- Verify the compartments close securely and latch properly.
- Clean and lubricate the hinges and latches with dry lubricant to prevent rust and ensure smooth operation.
- Inspect the seals around the compartments to prevent water leaks and maintain the integrity of the storage areas.

Mirrors

Use care when removing ice from the mirrors to protect the reflective surfaces.

SECTION 10 – MAINTENANCE AND STORAGE

VEHICLE USAGE IN COLD WEATHER

This is a 3 season motorhome. At any temperatures below freezing, the fresh water and gray tanks are at risk of damage as they are external and are not heated.

In all weather conditions, you are responsible for your safety. Make sure you have back up sources for warmth and whenever you are exploring remote locations use careful trip planning - just like you would on a remote backpacking trip.

VEHICLE STORAGE – PREPARATION

Properly preparing your vehicle for storage will lessen the possibility of damage to your vehicle. Prepare the motorhome for vacancy just as you would if you were leaving your house for an extended period.

Clean and Prep Motorhome for Storage

11. Turn the Electronic Thermostat switch OFF.
12. **Remove all foods and items that may cause odors from cabinets and refrigerator.**
13. Clean and defrost the refrigerator. Prop the door open slightly to allow any odors to dissipate. Place an open box of baking soda inside the refrigerator to help absorb odors.
14. **Fully charge the battery. The battery must have at least 80% charge to survive freezing temperatures and long period of non-use.** We recommend that you connect a battery charger or plug in the shoreline once a month during long-term storage periods to maintain battery charge and to avoid sulfating. If connecting a charger directly to batteries, turn the House/Coach Battery Disconnect switch off to avoid electrical arcing when attaching and detaching charge clamps.

NOTE: We do not recommend leaving the shoreline plugged in continuously during storage.

15. After charging the battery, turn off button on the EcoFlow to disconnect the batteries and avoid parasitic* drain.

** Parasitic battery drain is the gradual drain by items connected directly to battery power such as clocks, radio memory, and the engine computer.*

16. Have the vehicle chassis completely serviced and lubricated. Be sure radiator antifreeze protection level is sufficient for the lowest anticipated temperatures.
17. Wash and wax the motorhome.
18. Inspect all seams and seals around doors, windows, vents, and any other joints. Replace or repair any that are damaged. Sealing materials and compounds can be purchased from your dealer. Badly damaged weather seals may need to be replaced by your dealer.
19. Close all windows and roof vents. Protect all appliance vent openings from contamination by animals or insects (e.g. bird nest, wasp nests, etc.)
20. Lubricate all door hinges and locks.
21. Clean the interior of the motorhome. Dirt and stains are more easily removed when fresh.

If you are storing your vehicle through the winter, or in cold climates, extra preparations must be made to protect equipment and systems that can be damaged by freezing temperatures. See “Winterizing Procedures” in *Section 7 - Plumbing*.

VEHICLE STORAGE – REMOVAL

1. Completely air out the motorhome.
2. Check window operation.
3. Check cabinet and door hinges. Lubricate with penetrating oil, if necessary.
4. Close all faucets and drain valves that are open.
5. Add a few gallons of water to the fresh water tank and turn on the water pump to check for leaks, especially at fittings.

6. Open all faucets in turn to release trapped air and check to be sure faucet washers have not hardened during storage.
7. Sanitize the water system as outlined under *Disinfecting the Fresh Water System* in the Plumbing section, then flush the waterlines thoroughly with fresh water.
8. Check the toilet for proper operation.
9. Add water to the holding tank using the toilet flush pedal and galley sink faucet. Check to be sure dump valves seal tightly.
10. Check around all appliances for obstructions and ensure that all vent openings are clear.
11. Start refrigerator and check for proper cooling.
12. Clean wall and counter surfaces.
13. Replace batteries, if necessary, and check out electrical system to make sure all lights and electrical components operate.
14. Check tires for proper cold inflation pressure. See “Vehicle Certification Label” in *Section I - Introduction*.
15. After washing accumulated winter grime from the vehicle, it is important to carefully inspect the seams and sealants for separation or cracks that may have appeared around the window frames, vents, and any other joints. See *Sealants – Inspection and General Information* at the beginning of this section. Resealing is quite simple and the material is quickly and easily applied. Appropriate compounds are available from your dealer. See the *Sealants – Recommended Application* page in the Supplement Manual provided in your InfoCase.
Also inspect weather seals around doors, etc., and if necessary, have a dealer replace immediately.

CHASSIS SERVICE AND MAINTENANCE

Consult the appropriate sections in the chassis manual for specific information regarding operating safety, service recommendations, and maintenance schedules for the chassis section of your vehicle.

SECTION 10 – MAINTENANCE AND STORAGE

MOTORHOME MAINTENANCE CHART

These recommendations apply for normal recreational use. Heavy duty or full-time use may require more frequent maintenance intervals.

Always use specified sections or manufacturer's guide for further information and instructions.	Before Each Use	Weekly	Monthly	Every 3 Months	Every 6 Months	Every Year	As Necessary
Electrical System							
Check Battery Condition Meter	◆						
Check 12V fuses and 120V breakers							◆
Check GFCI receptacles (Located above counter-top and rear face of counter-top cabinet-see appliance section).			◆				
Generator							
Visually inspect generator and compartment	◆						
See generator manufacturer's maintenance guide							◆
Plumbing System							
Sanitize plumbing system							◆
Winterize plumbing system							◆
Clean water pump strainer filter						◆	◆
Exterior							
Clean roof				◆			◆
Clean sidewalls			◆				◆
Clean windows							◆
Flush underside of vehicle				◆			◆

MOTORHOME MAINTENANCE CHART

These recommendations apply for normal recreational use. Heavy duty or full-time use may require more frequent maintenance intervals.

Always use specified sections or manufacturer's guide for further information and instructions.	Before Each Use	Weekly	Monthly	Every 3 Months	Every 6 Months	Every Year	As Necessary
Safety Equipment							
Check operation of the following items:							
Headlights, Taillights, and Marker Lights	◆		◆				
Turn Signals	◆		◆				
Horn	◆		◆				
Hazard Warning Flashers	◆		◆				
Windshield Wipers and Washers	◆		◆				
Headlight Alignment							◆
Fire Extinguisher - check charge indicator	◆		◆				
Smoke Alarm - test operation *	◆		◆				
Carbon Monoxide Alarm - test operation *	◆		◆				
(*replace battery if needed)							
Appliances							
Water Heater							
See water heater manufacturer's maintenance guide							◆
Inspect and clean exterior vent	◆						◆
Refrigerator							
See refrigerator manufacturer's maintenance guide							◆
Furnace							
See furnace manufacturer's maintenance guide							◆
Inspect and clean exterior vent	◆						◆
Air Conditioner							
See A/C manufacturer's maintenance guide							◆
Inspect for exterior damage				◆			◆
Check/replace filter			◆				
Range Top							
See range manufacturer's maintenance guide							◆

SECTION 10 – MAINTENANCE AND STORAGE

MOTORHOME MAINTENANCE CHART

These recommendations apply for normal recreational use. Heavy duty or full-time use may require more frequent maintenance intervals.

Always use specified sections or manufacturer's guide for further information and instructions.	Before Each Use	Weekly	Monthly	Every 3 Months	Every 6 Months	Every Year	As Necessary
Sealants							
Inspect (see "Sealants - Inspection and General Information" at the beginning of this section for proper inspection technique)					◆		◆
Replace (see "Sealant Call-out Sheet" in the supplement manual provided in your InfoCase)							◆
Frame & Chassis							
Follow chassis manufacturer's maintenance guide (refer to chassis manual)							◆
Inspect hitch receiver (if towing)	◆						
Tires							
Check and adjust air pressure	◆						◆
Check tread wear	◆						◆
Check front end alignment and adjust if needed							◆
Miscellaneous							
Lubricate locks, hinges, and latches			◆				◆
Inspect entry door, cargo door latches and seals			◆				
Ensure all doors are fully latched before use	◆						
Ensure awning is fully retracted	◆						
Ensure coach windows are closed and latched.	◆						

SECTION 11 – MISCELLANEOUS

LOADING THE VEHICLE

NOTE: Your motorhome's load capacity is designated by weight, not by volume, so you cannot necessarily use all available space when loading your motorhome.

- Store or secure all loose items inside the motorhome before traveling. Possible overlooked items such as canned goods or small appliances on the countertop, cooking pans on the range, or free-standing furniture items can become dangerous projectiles during a sudden stop or evasive maneuver.
- Be aware of GVWR, GAWR, and individual load limit on each tire or set of duals.

When loading the vehicle, distribute the cargo load equally so that you do not exceed either the Front or Rear Gross Axle Weight Rating (GAWR) or the Gross Vehicle Weight Rating (GVWR). The Gross Axle Weight Rating (GAWR) means the weight value specified by the chassis manufacturer as the load carrying capacity of a single axle system as measured at the tire-to-ground interfaces. This is the total weight a given axle is capable of carrying. Each axle has its own rating.

Have your vehicle weighed to determine the proper load distribution for your vehicle. Also distribute cargo side-to-side so the weight on each tire or dual set does not exceed one half of the GAWR for either axle.

For example, if the Front GAWR is 6,000 lbs., there should be no more than 3,000 lbs. on each tire. (If the left side weighs 3,100 lbs. and the right side weighs 2,700 lbs., at least 100 lbs. of the load must be shifted from the left side to the right side.) The GVWR is listed on the Vehicle Certification Label. (See sample in *Section 1 - Introduction*).

The GCWR (Gross Combination Weight Rating) means the maximum allowable loaded weight of this motorhome and any towed trailer or towed vehicle.

NOTE: We recommend that you dump all holding tanks before traveling to avoid carrying unnecessary weight.



WARNING

The weight of the loaded vehicle (including options, attachments, passengers, water, fuel, luggage, and all other cargo) must not exceed the GVWR or GAWR of either axle.

WEIGHING YOUR LOADED VEHICLE

To check the weight of your fully loaded motorhome, locate a commercial weighing scale that is capable of weighing large trucks.

NOTE: Sales literature may give approximate or standard weights. Your actual motorhome weight may differ based on added factory and/or dealer options.

Loading

Load your vehicle completely as if you were going on a long trip with everything you would carry, including food, clothing, bedding, lawn chairs, etc., a full fuel tank, full propane tank, and a partial tank of fresh water, but empty holding tanks. Remember, tongue weight must be included in the GVWR.

Finding a Scale

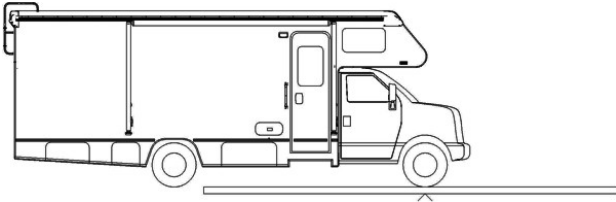
In urban areas, the most common places to find a public access scale are commercial truck stops. In rural areas, most grain storage elevators have scales available. Most scales charge a nominal fee for weighing a vehicle.

Weighing

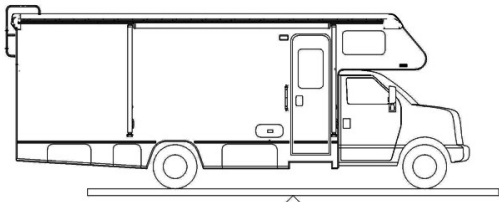
There is typically a scale operator to direct you, but the basic routine is to take three separate weights - front axle, whole vehicle, and rear axle.

SECTION 11 – MISCELLANEOUS

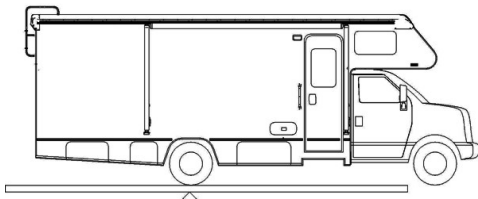
You will first drive only your front wheels onto the scale pad, then drive ahead so that the whole vehicle is on the scale, then finally pull off until just the rear wheels are on the pad.



Front GAWR (Front Axle Only)



GVWR - Whole Vehicle (All Axles)



Rear GAWR (Rear Axle Only)

You will receive a weight “ticket” that states your current Front Gross Axle Weight, Rear Gross Axle Weight, and Gross Vehicle Weight. You can compare these weights to the weight ratings listed on your Vehicle Certification Label to use as a guideline for future loading limits and weight distribution.

The gross weight of the vehicle must not exceed the Gross Vehicle Weight Rating (GVWR) specified on the Vehicle Certification Label. The front and rear axle weight also should not exceed the corresponding Axle Weight Rating specified on the Vehicle Certification Label.

Corner Weighing (Side-to-Side)

The most accurate method of weighing a motorhome is to weigh each “corner” of the motorhome separately (single L/R front wheels or L/R rear dual sets.) This method will help you determine how to distribute your cargo to avoid overloading, especially on tires.

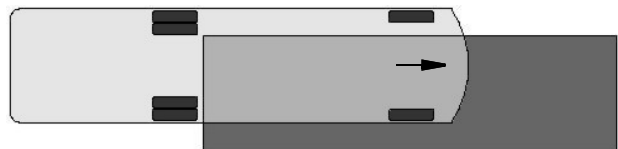
To determine the weight distribution on each tire or dual set, you will need to find a scale capable weighing side-to-side, or all four “corners” of the vehicle separately.

A truck scale may be used if the ground is level with the scale surface and the scale has clearance to drive one side of the motorhome onto the scale as shown.

Drive the motorhome on the level area next to the scale and straddle the scale so that only one side of the motorhome will be on the scale pad.

NOTE: Wind and precipitation can also cause weight inaccuracies.

Pull only the right front wheel onto the scale pad as shown.



Weighing Right Front Corner

When the front wheel has been weighed, pull the motorhome straight ahead until only the right rear wheel/dual set is on the scale pad as shown.



Weighing Right Rear Corner

Now, turn the motorhome around and repeat the process for the other side.

The load on each wheel or dual-wheel set should not exceed one-half of the corresponding GAWR. For example, if the GAWR for the rear

axle is 12,000 lbs., then the load on each rear dual set (left rear duals or right rear duals) should not exceed 6,000 lbs.

Tires must be filled to the recommended air pressure for the highest loaded tire set on that axle. For example, on the rear axle, if the left side weighs more than the right, fill the left tires to the pressure required for that weight, then fill the right tires to the same pressure as the left ones.

If your actual weight is considerably less than GAWR, you may be able to lower your tire pressure. See a tire dealer for a load/pressure chart.

NOTE: The Hitch Load from a Towed Vehicle or carrier box must also be counted on the Rear GAWR and subtracted from the rear axle cargo capacity.

Be aware that hitch load can affect handling characteristics. The more weight on the hitch, the lighter the front end will feel at the steering wheel.

CAR OR TRAILER TOWING

–If Equipped

Hitch Capacity*

2,500 lbs. max.

Tongue Weight*

250 lbs. max.

The factory installed towing hitch on this motorhome is capable of pulling 5,000 lbs. load (max.), however, the vertical (tongue) weight may vary according to chassis and model combinations

(*see label on hitch). Towing capacity may be less than hitch rating.

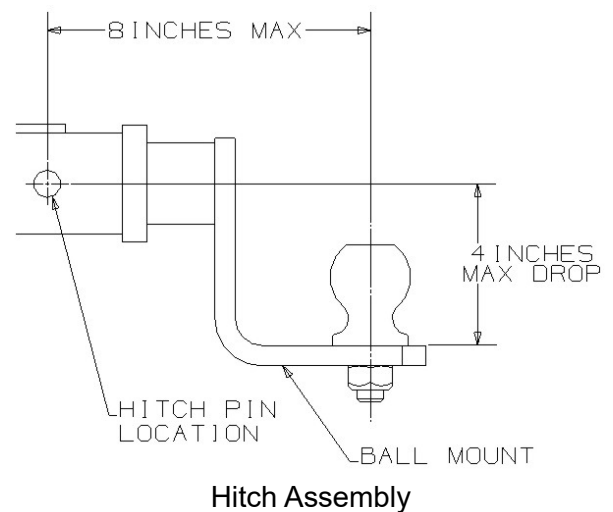
When towing a trailer or vehicle, do not exceed either the GVWR, the rear axle GAWR, or the chassis GCWR (the combined loaded weight of the motorhome and the towed vehicle). See preceding items “Loading the Vehicle” and “Weighing Your Loaded Vehicle” for explanation of weight ratings.

Because of individual vehicle use and loading habits, we recommend weighing the vehicle while fully loaded to avoid exceeding any of the listed Gross Weight Ratings. See “Vehicle Certification Label” in the Introduction section for information on gross weight ratings.

Towing will affect vehicle handling, durability, and fuel economy. Exceeding any of the listed Gross Weight Ratings will result in unacceptable overall vehicle performance. Maximum safety and satisfaction when towing depends on proper use of correct equipment.

When towing a vehicle behind your motorhome, the tow bar should be level or pointing slightly upward towards the tow vehicle.

When coupling the vehicle tow bar to the Factory Receiver Hitch using a “drop receiver” or a conventional “ball mount” (commonly referred to as a “stinger” or a “draw bar”), do not exceed a 4” drop, nor one that the centerline of the hitch pin to the centerline of the ball exceeds 8”. See the following Hitch Assembly illustration.



If a towing “brake system” is required, we recommend that a “modulated” towed vehicle braking device be installed. This means that when the motorhome brakes are applied, whether hard or soft, a mirror effect occurs in the braking of the towed vehicle. In other words, the more

SECTION 11 – MISCELLANEOUS

force applied to the motorhome brakes, the more force will be applied to the rear vehicle's braking system.

We do not recommend the usage of a “surge-style” braking device. The usage of a surge brake (especially when coupled with a hitch ball located outside our recommended limits) places excessive stress on the hitch. This abuse of the ball mount and the hitch may cause premature hitch assembly failure.

Finally, do not forget to consider the actual tongue weight. This should not exceed the stated hitch vertical load for your vehicle. This weight is typically defined as the tongue weight of a towed vehicle hitch, boat trailer tongue weight, or a receiver-mounted carrier rack.

Check state regulations on trailer weight and trailer brake requirements to be sure you select the right equipment before towing.

Before descending a steep or long grade when towing a trailer, reduce speed and shift into a lower gear to control vehicle speed. Avoid prolonged or frequent application of brakes, which could cause overheating and brake failure.



WARNING

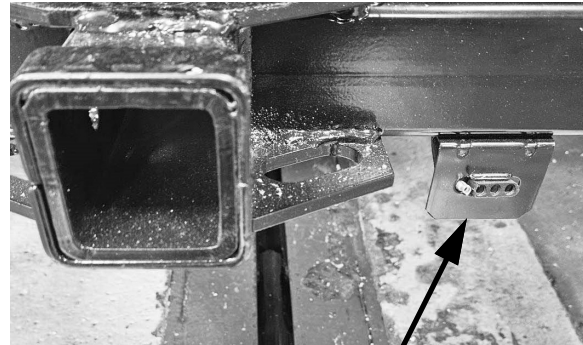
For safe towing and vehicle handling, maintain proper trailer weight distribution. The total weight of the motorhome and the vehicle towed must not exceed the Gross Combined Vehicle Weight rating. See the Body and Chassis Specification chart in the Introduction section.

NOTICE

Exceeding any of the recommended gross vehicle weight ratings may result in vehicle damage. Do not install a frame equalizing-type hitch on your vehicle.

TRAILER WIRING CONNECTOR

Your motorhome is pre-wired for trailer or car towing lights with a 4-pin wiring connector. (Typical View shown).



•4-pin socket

Further Information

Refer to the chassis manufacturer's user guide provided in your InfoCase for further instructions.

TOWING GUIDELINES

Gross Vehicle Weight Rating (GVWR)

This is the maximum allowable weight of the fully loaded vehicle. Included are fuel, water, LP, passengers, cargo, tools, and optional equipment installed by the motorhome manufacturer, dealer, or owner. This value is found on the VIN label, typically placed near the driver position.

Gross Axle Weight Rating (GAWR)

This is the total weight a given axle is capable of carrying, measured at the ground. Each axle has its own rating. These values are also found on the Vehicle Certification Label: front and rear.

Gross Combination Weight Rating (GCWR)

This is the maximum allowable weight of the motorhome and loaded trailer, including the items noted in GVWR above. For purposes of this definition, the “trailer” can be a trailer, a

vehicle towed on a dolly, or a vehicle towed by means of a tow bar. GCWR is typically specified based on durability and performance of the tow vehicle drive train: engine and cooling systems, transmission, drive line, drive axle, and others. The tow vehicle brakes may be rated for operation at GVWR, not GCWR.

*NOTE: State or provincial laws/regulations may require the “trailer” to be equipped with brakes that are activated when the motorhome brakes are applied. **The user is responsible to know and understand the laws of the state or province being traveled.** The Department of Transportation in a given state or province should be able to provide specific information.*

Hitch Ratings

SAE Standard J684 defines:

- Class 1 trailers as “GVWR not to exceed 2,000 lbs”.
- Class 2 trailers as “GVWR over 2,000 lbs. and not to exceed 3,500 lbs. GVWR”.
- Class 3 trailers as “GVWR over 3,500 lbs. and not to exceed 5,000 lbs. GVWR”.
- Class 4 trailers as “GVWR over 5,000 lbs. and not to exceed 10,000 lbs. GVWR”.

Hitches are to be permanently marked with “Maximum trailer GVWR to be drawn” and “Maximum vertical tongue weight to be imposed.” The SAE standard does not specify a vertical load rating.

Traditionally, hitches are labeled 3,500/350 as Class 2, 5,000/500 as Class 3, and 10,000/1,000 as Class 4. The vertical tongue load value of 10 percent of drawn rating comes from the collective experience that 10 percent is the minimum value that provides stable towing of a trailer.

Ford’s towing guide suggests 10 to 15 percent for trailers over 2,000 lbs. Within GCWR, a Class 3 hitch allows “dingy” towing a large car or mid-size SUV; a Class 4 hitch allows “dingy” towing a large SUV or pickup. (Hitch ratings are independent of towing vehicle ratings.)

NOTE: Some Winnebago Industries® models equipped with a Class 3 hitch may have a label limiting vertical tongue load to 350 lbs. Some Winnebago Industries models equipped with a Class IV hitch have a label limiting vertical tongue load to 500 lbs. On a 228" wheelbase, a 500-lb. load on a hitch 11' from the rear axle will apply about 800 lbs. at the axle.

The user must verify that the hitch equipment being used is adequate for the application.

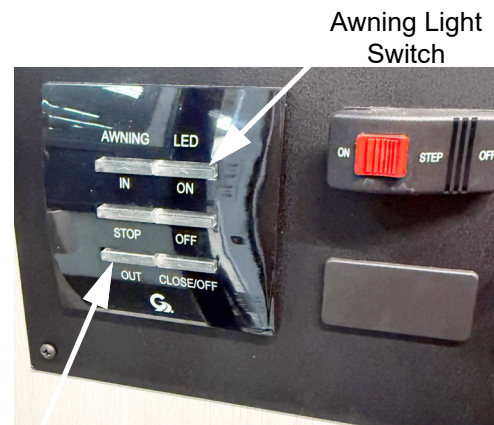
POWER AWNING

–If Equipped

The Power Awning control switches and Awning Light switch is located near the sliding entrance door.

NOTE: Adjustments made to the factory settings may affect performance.

NOTE: Make sure the awning is fully retracted before driving the vehicle.



- Press OUT to Extend.
- Press IN to Retract.

Power Awning and Awning Light Switches
(Located near entrance door.)
–Typical View

SECTION 11 – MISCELLANEOUS



CAUTION

Pinch Hazard. Ensure there are no people who could be harmed or objects that can be damaged. Failure to heed this warning could result in severe injury and/or property damage.

Operating the Awning

- Press the Patio Awning switch OUT (to extend) or IN (to retract).
- The Awning Light Switch will illuminate the area around the awning.

Ignition Lockout System

The Ignition Lockout System will disable the extend function while the vehicle ignition key is in the On position. With this feature, the Awning will only extend when the vehicle ignition key is in the Off position. The Awning can retract anytime regardless of the ignition key position.

Awning Motion Sensor

The awning has a wind motion sensor that is powered by batteries. When the batteries die, there will be a beeping sound inside the coach indicating the need to replace them. The batteries are located in the lead rail on the motor side of the awning.

Further Information

For complete operating instructions, features, safety precautions, and maintenance care, refer to the Awning manufacturer's user guide provided in your InfoCase.

STORAGE COMPARTMENT DOORS

The high-density gaskets used on the exterior storage compartments are designed to provide a more positive seal against dust and weather.

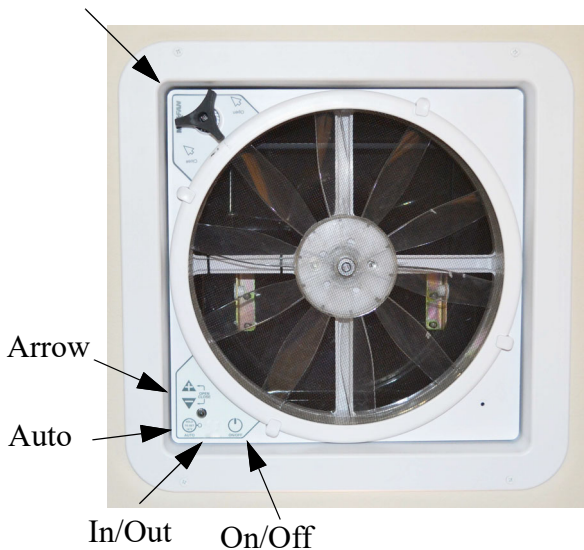
To ensure that exterior storage compartment doors have latched properly, press firmly on the bottom edges of the doors with the palms of your hands while twisting latches.

POWER ROOF VENTILATOR

The Power Roof Ventilator features a rain cover, electric lift, and thermostat operation with exhaust airflow.

NOTE: In event of power failure, the ventilator dome may be opened or closed manually using the Dome Crank knob.

Dome Crank



Power Roof Ventilator

- **ON/OFF** – Press to turn the fan on or off. The vent lid will open automatically when the fan is turned on and close when the fan is turned off.
- **IN/OUT** – Press to reverse the direction of the fan. The fan will slow down and pause for two (2) seconds before resuming operation in the opposite direction.
- **AUTO** – Press to enter Auto Mode. You will hear three (3) quick beeps to confirm the fan is in Auto Mode. To exit Auto Mode, press the On/Off button.

- **ARROW** – In Auto Mode press the +/- arrow buttons to adjust thermostat temperature up or down. Press the +/- arrow buttons at the same time to open or close the vent lid.

NOTE: For best results, close all other roof vents, windows, and doors, then open one (1) window the farthest distance from the roof ventilator. The fan speed selector allows you to control the amount of circulation you need at any time.

Further Information

See the power ventilator manufacturer's operating instructions supplied in your InfoCase for further instructions, care, and cleaning information.

POWER ROOF VENTILATOR (BATH)

Fan Lift Bar



Fan Power Switch

Power Roof Ventilator

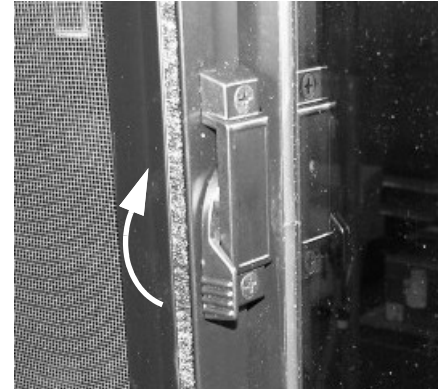
To Operate Ceiling Ventilator

1. To open the ventilator dome, push upwards on the Fan Lift Bar.
2. Press the Fan Power Switch to operate.
3. When finished using the roof ventilator, press the Fan Power Switch to stop operation.
4. Pull the Fan Lift Bar down to close dome.

WINDOWS

Horizontal Slider Windows

Swing the latch handle straight out or up (depending on the style of window). Grasp the sliding window edge frame and slide the window to the side. Ensure the latch is open before trying to slide the window closed.



-Typical View

EFFECTS OF PROLONGED OCCUPANCY

Your motorhome was designed primarily for recreational use and short-term occupancy. If you expect to occupy your motorhome for an extended period, be prepared to deal with condensation and humid conditions that may be encountered.

Humidity and Condensation

Moisture condensing on the inside of windows is a visible indication that there is too much humidity inside the motorhome. Excessive moisture can cause water stains or mildew, which can damage interior items such as upholstery and cabinets.

When you recognize the signs of excessive moisture and condensation in your motorhome, you should take immediate action to minimize their effects.

You can help reduce excessive moisture inside the motorhome by taking the following steps:

SECTION 11 – MISCELLANEOUS

Ventilate with outside air

Partially open one or more windows and a roof vent to circulate outside air through the motorhome. In cold weather, this ventilation may increase use of the furnace, but it will greatly reduce the condensation inside the motorhome.

Minimize moisture released inside the motorhome

Run the range hood fan while cooking and open a bath vent while bathing or showering to carry water vapor out of the motorhome. Avoid making steam from boiling water excessively or letting hot water run. Avoid bringing extra moisture into the motorhome by way of soaked clothing or snow on shoes. Do not hang-dry wet overcoats or clothing inside the motorhome.

TIE-DOWN RINGS

–If Equipped

Your coach may be equipped with four (4) tie-down brackets (located in the rear of the coach) to give you the ability to restrain cargo while traveling.

To Install Tie-Down Ring into Floor Bracket

1. Push down on center of ring as shown in the following photo.



2. Slide tie-down ring into the floor bracket, then release the top of the tie down ring to secure into the floor bracket.



- Tie-down ring is now ready to restrain cargo. Repeat steps 1 and 2 for the remaining floor brackets needed to restrain your cargo.



- Reverse steps to remove tie-down ring from floor bracket.

The maximum weight capacity for the total of all cargo items to be secured by the floor tie-downs is 100 lbs.

It is the operator's responsibility to ensure that the cargo items are safely restrained using the available floor tie-downs before traveling.

INDEX

About this Manual	1-1
Access Port (Roof)	8-1
Air Conditioner/Heater – Automotive (Dash)	3-3
Bathroom	10-8
Battery Access	6-9
Bed Step	9-4
Before Driving	1-2
Cabinetry – Cleaning	10-6
Car or Trailer Towing	11-3
Carbon Monoxide Alarm	2-2
Carbon Monoxide Warning	2-3
Chassis Service and Maintenance	10-11
Child Restraints	3-2
Circuit Breakers – House 120-Volt AC	6-5
Circuit Breakers and Fuses – House 12-Volt DC	6-10
Decorative Vinyl Wall Paneling – Cleaning	10-6
Dinette Table (Portable)	9-1
Disinfecting Your Fresh Water System	7-5
Doors and Mirrors	10-9
Drainage System (P-Traps)	7-7
Driving Safety	2-2
Eco-hot system	7-3
Effects of Prolonged Occupancy	11-7
Electrical	2-4
Electrical Cautions	6-1
Electrical Generator	6-6
Electrical Outlets – House 120-Volt AC	6-5
Electrical System – House 120-Volt AC	6-1
Emergency Exits	2-5
Engine Cooling System	3-3
Engine Overheat	2-8
Exterior Automotive Paint Finish	10-2
Exterior Graphic Care	10-4
Exterior Lights	10-5
Exterior Shower/Wash Station	7-6
Fire Extinguisher	2-4
Formaldehyde Information	2-6
Fresh Water System	7-1
Front Axle Tire Alignment	1-2
Front Cap Storage	9-4
Fuel	2-2
General Warnings	2-1

Index

Ground Fault Circuit Interrupter	6-5
Hazard Warning Flashers	3-3
Headlight Alignment	1-2
Interior Soft Goods	10-5
Jump Starting	2-8
Keys	3-3
Lights	3-4
Loading	2-5
Loading the Vehicle	11-1
Maintenance	2-5
Microwave Oven	4-2
Mirrors – Power Exterior	3-3
Mold, Moisture, and Your Motorhome	2-6
Motorhome Maintenance Chart	10-12
Occupant and Cargo Carrying Capacity Label	1-3
Owner and Vehicle Information	1-6
Plastic Parts – Cleaning	10-5
Power Awning	11-5
Power Cord – External (Detachable)	6-1
Power Loft Double Bed	9-5
Power Roof Ventilator	11-6
Power Roof Ventilator (Bath)	11-7
Pre-Delivery Inspection	1-2
Radio – In-Dash	3-3
Range and Refrigerator	10-7
Range Top (Electric)	4-2
Rearview Mirror with Monitor System	3-3
Refrigerator	4-1
Reporting Safety Defects	1-3
Roadside Emergency	2-7
Roof	10-1
Roof	2-7
Roof Air Conditioning System	4-8
Safety Messages Used in this Manual	1-1
Satellite Internet System	8-1
Sealants – Inspection and General Information	10-1
Seat Belts	3-1
Seats – Driver/Co-Pilot	3-1
Service and Assistance	1-2
Shower Hose Vacuum Breaker	7-6
Sink – Stainless Steel	10-7
Sleeping Facilities	9-2
Smoke Alarm	2-4
Sofa/Sleeper Queen Bed	9-2
Solar Charge Panel	4-3

Specifications and Capacities	1-5
Storage Compartment Doors	11-6
Suspension Alignment and Tire Balance	3-4
Systems Monitor Panel	4-5
Tables and Countertops	10-7
Tie-Down Rings	11-8
Tires	3-4
Toilet	7-6
Towing Guidelines	11-4
Trailer Wiring Connector	11-4
Undercarriage	10-2
Vehicle Certification Label	1-4
Vehicle Storage – Preparation	10-10
Vehicle Storage – Removal	10-10
Vehicle Usage In Cold Weather	10-10
Vinyl Flooring	10-7
Waste Water System	7-7
Water Heater – Truma Combi G	4-4
Water Pump	7-3
Water System Drain Valve Locations	7-17
Waterline, Water Tank Drain Valves & Water Heater Bypass and Antifreeze Siphon Valves	7-9
Weighing Your Loaded Vehicle	11-1
Windows	10-9
Windows	11-7
Winnebago x ECOFLOW® Power Kit Pro Monitor Panel	6-2
Winterizing Procedures	7-11
