

AIRSTREAM®

OWNER'S MANUAL

2027

RANGELINE®



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WARNING

Operating, servicing and maintaining a passenger vehicle or off-road 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

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Airstream Rangeline Owner's Manual

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Publication Date: June 2026

REV# 03

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NOTES

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Section 1 INTRODUCTION

The Owner's Manual for your new Airstream Touring Coach answers the most frequent inquiries regarding the operation, function, and care of the many systems that make modern motorhoming a joy.

The Ram ProMaster Van, upon which Airstream builds the Rangeline, is manufactured by Ram. The operation of the ProMaster van, its engine, power train, and other related components are in the Ram ProMaster Owner's Manual and other literature provided by Ram. Ram or their suppliers warranty those systems discussed in the ProMaster literature.

Airstream realizes our customers possess varying degrees of expertise in maintaining and repairing components of their touring coach. For this reason, the service and troubleshooting information found in this manual is for those with average mechanical skills. We also realize you may be more familiar with one area than another. Only you know your capabilities and limitations. We want you to use this manual and hope you will find the information helpful; however, if you ever feel help is needed, please get in touch with your dealer.

All information, illustrations, and specifications in this manual are based on the latest product information available at publication approval. Airstream reserves the right to make changes if and when new materials and production techniques are developed that can improve the quality of its product or when material substitutions are necessary due to availability.

We have provided many important safety messages in this manual. Always read and obey all safety messages.

Optional items may be available on all or particular models. Additionally, some optional items can only be included during the manufacturing phase and cannot be added aftermarket. The inclusion of optional items information in this manual does not imply or suggest the availability, application, suitability, or inclusion for any specific unit.

WARNING

Your Ram ProMaster Van Owner's Manual and Warranty contain important cautions, warnings, operational, and warranty information on the ProMaster and its components. All information in the ProMaster manual should be reviewed and followed for your safety. The Airstream Owner's Manual may provide additional information and tips on the use of the van as a touring coach; however, no information in the Airstream manual should be interpreted as advice or directions to disregard or void the warnings, cautions, or other information contained in the Ram ProMaster manual.

Airstream uses the  safety alert symbol and signal words **Danger**, **Warning**, and **Caution** to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death. The following are examples of each type of signal word, safety message, and information message found throughout this manual.

DANGER

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

WARNING

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

CAUTION

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

NOTICE

Indicates a potential situation which, if not avoided, may result in damage to your Airstream. Addresses practices not related to personal injury.

NOTE

Provides noteworthy information and tips about your Airstream.

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Section 2 SAFETY

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Safety Overview

Your safety and the safety of those around you depend on using good judgment. Carelessness with fire, smoking, flammable liquids, or other hazards greatly increases the risk of accidents. This section highlights the most critical safety considerations, along with additional tips found throughout the manual. Please review them carefully, along with the component and appliance manuals provided in your owner's packet, before operating your Airstream.

Fire and Carbon Monoxide Safety

Familiarize yourself and all other occupants with the alarms designed to alert you to dangerous situations. Alarms require periodic maintenance and batteries. Your safety depends on these devices functioning properly. Never ignore alarms. For more information, [see Smoke and Carbon Monoxide Alarms \(Detectors\) on page 2-6](#).

Familiarize yourself and all other occupants with the use of the provided fire extinguisher and emergency exits, discussed in this section.

Portable fuel burning equipment, including wood and charcoal grills and stoves, must never be used inside the vehicle. Keep flammable liquids and materials out of your Touring Coach.

Never run the vehicle's engine or any fuel burning appliances in an enclosed building or a partly enclosed area such as a garage, as this can lead to dangerous carbon monoxide buildup. For more information, [see Fire and Carbon Monoxide Hazards on page 2-4](#)

Electrical Appliance and Outlet Safety

Improper handling of electrical components can be fatal. Do not touch or use electrical components or appliances with bare feet, while hands or feet are wet, or while standing in water or on damp ground; [see Electrical System Overview on page 5-16](#)

Seat Belt Safety

Do not allow passengers to ride anywhere in the touring coach except in seats equipped with approved seat belts. For more information on seat belt safety, refer to your vehicle Owner/Operator Manual and [see Seat belts on page 8-4](#).

Loading and Weight Distribution Safety

Exceeding the Occupant and Cargo Carrying Capacity (OCCC) of your RV can lead to dangerous operating conditions. Overloading increases the risk of loss of control, tire failure, suspension damage, and reduced braking performance, which may result in serious injury or death.

Touring coaches have fresh water and wastewater holding tanks and multiple storage areas. It gives you great flexibility in loading. If you want to load down all the storage compartments, you may need to reduce the volume of fluids you carry.

Distribute your additional cargo as evenly as possible with the heaviest objects located as low as possible. For detailed information on capacity, loading, and weight distribution [see Specifications on page 4-4](#) and [see Loading on page 8-2](#).

Tire Safety

Properly maintained tires improve the steering, stopping, traction, and load-carrying capability of your vehicle. Be sure to read the Tire Safety information included in your vehicle Owner/Operator Manual. In addition, [see Tire Care on page 9-3](#).

Wheel Fastener Torque

Proper wheel fastener torque helps ensure wheels remain securely attached under load, reducing the risk of loosening or separation and minimizing abnormal wear on tires and related components.

Wheel fastener torque must be checked immediately after reinstalling a wheel and again after 30 miles. Torque all wheel fasteners evenly to specification using the proper sequence; [see Wheel Bolt/Lug Nut Tightening on page 7-8](#). For torque values, [see Specifications on page 4-4](#)

Mold Safety

Mold and mold spores are present in both indoor and outdoor environments. While it is not practical to eliminate all sources, indoor mold growth can be mitigated by controlling moisture and humidity. If left unchecked, mold can cause health problems such as allergic reactions, respiratory symptoms, asthma flare-ups, and, in some cases, infections or more severe reactions in people with asthma or weakened immune systems; [see What factors contribute to mold growth on page 3-9](#).

Fire Extinguisher



The fire extinguisher should be checked regularly to ensure it is fully charged and in good condition. Read and follow the instructions on the extinguisher carefully. Make sure all occupants know how to release the extinguisher from its storage bracket and how to properly operate it. If the fire extinguisher is used, it must be replaced to ensure it is ready in the event of an emergency.

Your local fire department may provide demonstrations, answer questions, and help confirm that your extinguisher is in proper working order.

⚠ WARNING

Fire extinguishers have a limited service life and may deteriorate over time. Check the manufacturer's expiration or manufacture date, and replace the extinguisher according to the manufacturer's recommendations. Inspect the extinguisher regularly — including the pressure gauge (if equipped) — and replace it immediately if it has been discharged (even partially) or shows visible damage.

Emergency Exits

Your touring coach has several exit points: the driver's door, passenger's door, sliding door, and rear doors. Everyone traveling in the coach should know how to operate all the doors and exit quickly, even in the dark. Plan and practice emergency exits at each campsite—a few minutes spent rehearsing can make a critical difference in an actual emergency.

Both the sliding side door and rear door allow quick escape from locked doors in an emergency.

PULL either door latch **TWICE** to open

Rear Screen Door - **PUSH** to open in an emergency. It is held in place at the edges by magnets.

⚠ DANGER

Do not block exits, inside or outside the coach. Keep the floor and exit paths clear of obstacles, and do not park near obstacles or hazards that could prevent a door from opening or impede an emergency exit.

⚠ WARNING

IN AN EMERGENCY, PULL THE LATCH TWICE TO UNLOCK THE DOOR.

⚠ AVERTISSEMENT

EN CAS D'URGENCE, TIREZ LE LOQUET DEUX FOIS POUR DÉVERROUILLER LA PORTE.

Fire and Carbon Monoxide Hazards

Portable fuel burning equipment, including wood and charcoal grills and stoves, must not be used inside the recreational vehicle.

⚠ DANGER

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.

⚠ DANGER

DO NOT use cooking appliances or portable gas heaters for comfort heating. Before operating provided equipment, open overhead vents or turn on exhaust fans and open a window.

⚠ DANGER

DO NOT store LP containers within the vehicle. LP containers are equipped with safety devices that vent gas should the pressure become excessive.

⚠ DANGER

Do not smoke inside the touring coach. Keep matches out of reach of small children. Do not bring flammable liquids inside the RV or clean with flammable materials. Keep flammable materials away from open flames. We have all heard these warnings many times, but they are still among the leading causes of fires.

Carbon monoxide (CO) is a highly poisonous gas produced when fuels burn. It is invisible, odorless, and undetectable by human senses. CO can become a serious hazard in tightly sealed vehicles with added insulation, sealed windows, and other weatherproofing that can trap gases inside.

⚠ DANGER

Carbon Monoxide is poisonous and can cause confusion, unconsciousness, and death. Follow all instructions, cautions, and warnings in this section.

Carbon monoxide can come from many fuel sources, including but not limited to: wood, coal, charcoal, oil, natural gas, gasoline, diesel fuel, kerosene, and propane. LP gas appliances and grills are common sources of carbon monoxide. The vehicle's engine and any onboard diesel or gasoline fuel-burning appliances will expel exhaust gases, including carbon monoxide, through external exhaust systems. If any of these are not properly maintained, ventilated, or are malfunctioning, CO levels can rise quickly.

Under normal conditions, the small amount of CO that may drift in from outside or from beneath the vehicle is not dangerous in a properly ventilated space, provided you take precautions when parking the coach; [see Vehicle Engine, Generator, and Fuel-Burning Appliance Exhaust on page 2-5](#).

⚠ WARNING

This RV is designed for use with non-vented batteries only. Installing batteries that require venting may release flammable or poisonous gases and can result in fire, explosion, serious injury, or death.

Symptoms of Carbon Monoxide Poisoning

- **Mild Exposure** - Slight headache, nausea, vomiting, fatigue (flu-like symptoms).
- **Medium Exposure** - Throbbing headache, drowsiness, confusion, fast heart rate.
- **Extreme Exposure** - Convulsions, unconsciousness, heart and lung failure. Exposure to CO can cause brain damage and/or death.

⚠ DANGER

Many causes of reported CARBON MONOXIDE POISONING indicate that while victims are aware that they are not well, they become so disoriented that they are unable to save themselves by either exiting the area or calling for assistance. Young children and pets may be the first to be affected.

Conditions That Can Create Dangerous Carbon Monoxide Levels

1. Excessive spillage or reverse venting of fuel-burning engines, generators, and appliances can occur under certain outdoor conditions, such as:
 - Wind direction and/or velocity, including high gusts of wind.
 - Heavy air in the vent pipes (cold/humid air with extended periods between cycles).
 - Negative pressure differential resulting from use of exhaust fans.
 - Simultaneous operation of several fuel-burning appliances competing for limited internal air.
 - Exhaust connections vibrating loose.
 - Obstructions in or unconventional vent-pipe designs which can amplify the above situations.
2. Extended use of un-vented fuel burning devices.
3. Running the vehicle's engine or fuel-burning appliances in enclosed or confined spaces.
4. Temperature increase that can trap exhaust gases near the ground.

DANGER

NEVER ignore any alarm. Failure to respond can result in injury or death. Any alarm silence features are for your convenience only and will not correct a problem. Always check your touring coach for a potential problem after any alarm. Failure to do so can result in injury or death.

Vehicle Engine, Generator, and Fuel-Burning Appliance Exhaust

Internal combustion engines, such as the vehicle's engine, generator, and any onboard diesel or gasoline fuel-burning appliances, will produce exhaust gases, including carbon monoxide, when running. These gases are expelled through external exhaust systems. For additional information, refer to your vehicle owner's manual and, [see Appliances on page 5-30](#).

To reduce the risk of carbon monoxide exposure or other hazardous conditions:

1. DO NOT run the vehicle's engine, generator, or any fuel burning appliances in an enclosed building or a partly enclosed area such as a garage.
2. DO NOT operate the vehicle's engine, generator, or any fuel burning appliances when parked close to objects that could block the exhaust and force fumes inside; examples include thick vegetation, snow, buildings, and other vehicles.
3. DO NOT operate the vehicle's engine, generator, or any fuel burning appliances when parked in high grass or brush. The heat from exhaust system components could cause a fire in dry conditions.
4. DO NOT touch any part of an exhaust system when the vehicle's engine, generator, or any fuel burning appliances are running, or in the process of cooling. The heat coming off exhaust systems can cause severe burns. Allow the exhaust systems to cool before attempting maintenance or service.

DANGER

The vehicle's engine, generator, and any onboard fuel-burning appliances produce exhaust gases, including carbon monoxide. Prolonged exposure to exhaust gases may cause headaches, nausea, chest tightness, wheezing, cough, and irritation of the eyes, nose, and throat, and in high concentrations can be fatal.

WARNING

Touching hot exhaust system components can cause severe burns.

Smoke and Carbon Monoxide Alarms (Detectors)

Your Airstream is equipped with a smoke alarm and a carbon monoxide alarm. Depending on your Airstream model and date of manufacture, these may be separate devices or combined into a single unit that functions as both a smoke alarm and a carbon monoxide detector. For the purposes of this section, these items will be discussed as separate devices. All warnings and instructions in this section apply, regardless of the type of installation.

Refer to the instructions provided in your owner's packet for operation, testing, battery replacement, troubleshooting, and maintenance requirements for these safety devices.



If instructions were not included in your owner's packet, contact your Airstream dealership, Airstream Customer Relations by email at support@airstream.com or phone at (937) 596-6111, or scan the QR code above to visit <https://www.firstalert.com> and navigate to product support to obtain a copy.

⚠ WARNING

For the safety of all occupants, carefully read the manuals for the smoke and carbon monoxide alarms included in your owner's packet. These manuals provide critical safety information and troubleshooting guidance, as well as instructions for testing, maintenance, and replacement—including service life and end-of-life indications—that must be followed to ensure the alarms function properly and alert you to dangerous situations.

⚠ WARNING

If either alarm sounds, exit immediately and call the Fire Department. In the event of a carbon monoxide alarm, exit immediately and move everyone to a fresh-air location. Do not remove the batteries.

Expiration and Replacement

All alarms have a limited service life, after which they may no longer function reliably. The manufacturer specifies this lifespan in the device manual. However, Airstream recommends replacing alarms every five years due to the unique environment and conditions these devices are exposed to in an RV.

⚠ WARNING

Smoke and Carbon monoxide alarms have a limited life. Replace alarms immediately if they are not operating properly. You should always replace an alarm after 5 years from the date of purchase. Write the purchase date on the space provided on the back of the unit.

Testing

Smoke and carbon monoxide alarms should be tested at regular intervals: after the vehicle has been in storage, before each trip, and at least once per week during use. Refer to the manufacturer's instructions to properly perform these tests.

⚠ WARNING

Test alarms after the vehicle has been in storage, before each trip, and at least once a week while in use. If the alarm ever fails to test correctly, have it replaced immediately. If the alarm is not working properly, it cannot alert you to a problem. Failure to perform the test procedure can result in death or serious injury.

Battery Replacement

Batteries in both the smoke alarm and carbon monoxide alarm should be replaced once a year. Always use the exact brand and type of battery specified in the alarm manufacturer's instructions. Do not use rechargeable batteries.

Do not wait for the alarm to chirp before replacing the battery. If either alarm is chirping, replace its battery immediately.

The battery door will resist closing until batteries are installed. This warns you that the unit will not operate without batteries.

⚠ WARNING

Alarms are typically shipped with batteries in place and deactivated. Ask your dealer to activate the batteries, or, activate them immediately upon delivery. Failure to follow this warning will remove your protection.

Maintenance and Troubleshooting

Smoke and carbon monoxide alarms should periodically be cleaned to prevent the buildup of contaminants that can cause false alerts. Refer to the manufacturer's instructions for properly cleaning and caring for both smoke and carbon monoxide alarms. If an alarm becomes contaminated by excessive dust or debris, causing unwanted alarms, replace the unit immediately.

Each manufacturer's manual includes sections on troubleshooting LED light flashes (codes), alarm chirps, and recurring alarms. If you notice anything out of the ordinary, refer to the specific manual in your owner's packet to determine the type and meaning of indicators.

Smoke Alarm Basic Safety Information

- Smoke alarms only indicate the presence of smoke that reaches the sensor.
- Smoke alarms are not designed to sense gas, heat or flames.
- Smoke alarms cannot operate without working batteries. Removing the batteries for any reason, or failing to replace the batteries at the end of their service life, removes your protection.
- NEVER ignore any alarm. Failure to respond can result in injury or death.
- Any silence features are for your convenience only and will not correct a problem. Always check for a potential problem after any alarm. Failure to do so can result in injury or death.
- Test alarms once a week. If an alarm ever fails to test correctly, have it replaced immediately! If any alarm is not working properly, it cannot alert you to a problem.

Carbon Monoxide (CO) Alarm Basic Safety Information

- CO alarms are intended for use in ordinary indoor locations. It is not designed to measure CO levels in compliance with Occupational Safety and Health Administration (OSHA) commercial or industrial standards. Individuals with medical conditions that may make them more sensitive to carbon monoxide may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 ppm. For additional information on carbon monoxide and your medical condition contact your physician.

- CO Alarms are designed to detect carbon monoxide from ANY source of combustion. It is NOT designed to detect smoke, fire, or any other gas.
- CO Alarms will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas.
- CO alarms cannot operate without working batteries. Removing the batteries for any reason, or failing to replace the batteries at the end of their service life, removes your protection.
- NEVER ignore any alarm. Failure to respond can result in injury or death. CO may be present even if nothing is seen or smelled.
- Any silence features are for your convenience only and will not correct a problem. Always check for a potential problem after any alarm. Failure to do so can result in injury or death.
- Test alarms once a week. If an alarm ever fails to test correctly, have it replaced immediately! If any alarm is not working properly, it cannot alert you to a problem.
- Ensure that the alarm can be heard by all those who are intended to hear it.
- Do not expose to rain or moisture. Do not knock or drop the alarm. Do not open or tamper with the alarm as this could cause a malfunction.
- Seek medical help if it is suspected that someone is suffering from Carbon Monoxide poisoning.
- Carbon monoxide alarms are not a substitute for the proper servicing of fuel-burning appliances.
- Carbon monoxide alarms are not to be used on an intermittent basis, or as a portable alarm for spillage of combustion products from fuel-burning appliances.
- Room spaces should be well ventilated when household cleaning supplies are used as these may cause a false alarm.

Chemical Sensitivity and Ventilation

Chemical Sensitivity

Immediately after purchasing your new recreational vehicle, or after it has been unused for an extended period, you may notice strong odors and experience chemical sensitivity. This is not a defect. Like a new home, many products used in the construction of recreational vehicles, including carpet, linoleum, plywood, insulation, and upholstery, can emit odors as they adjust to their environment.

In addition, formaldehyde, a naturally occurring substance used in building materials and a by-product of combustion and other common processes, may also be present inside your touring coach, as it is present in numerous household products such as paints, coatings, and cosmetics.

In the enclosed space of a recreational vehicle, these emissions can sometimes accumulate through a process referred to as off-gassing. Off-gassing may cause irritation of the eyes, nose, and throat, as well as occasional headache, nausea, or asthma-like symptoms. Elderly persons, young children, and anyone with a history of asthma, allergies, or lung problems may be more susceptible.

Formaldehyde

Formaldehyde is widely used in building materials and household products. It is also a by-product of combustion and other natural processes and may be present inside the touring coach. Trace levels of formaldehyde are released from smoking, cooking, and using soaps, detergents (such as carpet shampoos), and many other household products. Some people are very sensitive to formaldehyde, while others may not react to the same levels.

Your Airstream touring coach uses low formaldehyde-emitting (LFE) wood products, which are standard in the recreational vehicle industry. Formaldehyde is an essential component of the adhesives that bind these wood products. The wood products in your coach are designed to emit formaldehyde at or below industry guidelines and should not cause symptoms in most individuals.

While LFE wood products typically do not emit formaldehyde at levels that would cause symptoms, it is possible, though unlikely, for symptoms to occur if the touring coach is improperly ventilated. Ventilation is essential for many reasons.

Ventilation

Proper ventilation is critical to reduce exposure to chemicals from off-gassing, including formaldehyde. Emissions naturally decrease over time, but you can further minimize exposure and aid in this natural process by opening windows, doors, and roof vents, and running vent fans or the air conditioner.

Ventilate frequently, especially after purchase or during periods of elevated temperature and humidity, as these conditions accelerate off-gassing. Sealing the vehicle reduces airflow and can increase indoor formaldehyde levels.

Airstream strongly recommends that you ventilate your touring coach regularly. If you have any questions about proper ventilation, please contact your dealer or Airstream.

Do Not Smoke

It is recommended you do not smoke inside your recreational vehicle. In addition to causing damage to your recreational vehicle, tobacco smoke releases formaldehyde and other toxic chemicals.

Medical Advice

Questions regarding the effects of formaldehyde on your health should be directed to your doctor or local health department.

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Section 3 GENERAL INFORMATION

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General Information

2-Year Airstream Limited Warranty

AIRSTREAM®

1001 West Pike St., Jackson Center, OH 45334-0629

2027 RANGELINE

2-YEAR AIRSTREAM

LIMITED WARRANTY

Delivery Date: _____

Airstream Serial Number: _____

Chassis Serial Number: _____

PURCHASED BY: _____

PURCHASED FROM: _____

Name: _____

Dealer Name: _____

Address: _____

Address: _____

City/State: _____ Zip: _____

City/State: _____ Zip: _____

THIS LIMITED WARRANTY COVERS: (i) The first retail owner and any subsequent owners for a period of 2 years; (ii) ONLY those portions of a NEW motorhome not excluded under the section "What is Not Covered," when sold by an authorized dealership and used for its intended purpose of recreational travel and camping; and, (iii) ONLY defects in workmanship performed and/or materials used to assemble those portions of your motorhome not excluded under the section "What is Not Covered." "Defect" means the failure of the workmanship performed and/or materials used to conform with the design and manufacturing specification and tolerances of Airstream. This Limited Warranty is transferable, and the subsequent owner's warranty coverage period shall be the unexpired balance of the original warranty coverage period. A completed copy of the Warranty Transfer Form must be submitted to Airstream at the time of resale.

When you request and accept the performance of warranty repairs under the terms of this Limited Warranty, you are accepting all terms of this Limited Warranty, including by way of example, warranty limitations and disclaimers, the forum selection clause and the clause reducing the time period when suit must be filed for breach.

If any term or condition in this Limited Warranty conflicts with your state's Uniform Commercial Code ("UCC") as interpreted by courts within your state, the provisions of your state's UCC are varied as allowed for by USS 1-302.

COVERAGE ENDS: 24 months after the first retail owner first takes delivery of the motorhome from an authorized dealership. Delivery occurs when the retail owner takes physical possession of the motorhome or has alterations done to it, whichever occurs first. ANY ACTION FOR BREACH OF THIS WARRANTY OR ANY IMPLIED WARRANTIES MUST BE COMMENCED NOT MORE THAN 25 MONTHS AFTER DATE OF DELIVERY. Some states do not allow the reduction of the time when a breach of warranty claim must be commenced, so the reduction in time when a breach of warranty claim must be commenced may not apply to you.

LIMITATION OF IMPLIED WARRANTIES: IMPLIED WARRANTIES ARISING UNDER APPLICABLE LAW, IF ANY, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY LIMITED IN DURATION TO THE TERM OF THIS WARRANTY AND ARE LIMITED IN SCOPE OF COVERAGE TO THOSE PORTIONS OF THE MOTORHOME COVERED BY THIS WARRANTY. THERE ARE NO EXPRESS WARRANTIES OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY ON THOSE PORTIONS OF THE MOTORHOME EXCLUDED FROM COVERAGE. There is no warranty of any nature made by Airstream beyond that contained in this Limited Warranty. No person has authority to enlarge, amend, or modify this Limited Warranty. The dealer is NOT Airstream's agent. Airstream is not responsible for any undertaking, representation, or warranty made by any dealer or others beyond those expressly set forth within this Limited Warranty. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

DISCLAIMER OF INCIDENTAL AND CONSEQUENTIAL DAMAGES: Airstream disclaims any and all incidental and consequential damages, including but not limited to expenses such as transportation to and from dealerships and Airstream repair facilities, loss of time, loss of pay, loss of use, inconvenience, commercial loss (including but not limited to lost profits), towing charges, bus fares, vehicle rental, service call charges, gasoline expenses, incidental charges such as telephone calls and facsimile transmissions, and expenses for lodging and moisture damage such as mold and mildew as well as rust and corrosion. This disclaimer is independent of any failure of the essential purpose of any warranties provided with the motorhome and shall survive any determination that a warranty failed of its essential purpose. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

REPAIR REMEDY: Airstream's sole and exclusive obligation is to repair any covered defects discovered within the warranty coverage period if: (1) within 10 days of your discovery of a defect, you notify Airstream OR an authorized dealership of the defect; AND (2) you deliver your motorhome to Airstream OR an authorized dealership at your cost and expense.

BACK-UP REMEDY: If the primary repair remedy fails to successfully cure any defect after a reasonable number of repair attempts, your sole and exclusive remedy shall be to have Airstream pay an independent service shop of your choice to perform repairs to the defect, which requires the exercise of good faith. If you select an independent service shop, you must notify Airstream to allow it to work directly with the service shop to have repairs performed. The repair remedy and the back-up remedy MUST both be exhausted AND these remedies must fail to fulfill their essential purpose before you can seek other legal or equitable remedies for breach of this express warranty or for breach of any implied warranty. THIS LIMITED WARRANTY IS NOT A WARRANTY THAT PROMISES OR EXTENDS TO FUTURE PERFORMANCE BECAUSE THE WARRANTY DOES NOT MAKE A REPRESENTATION ON HOW YOUR MOTORHOME WILL PERFORM IN THE FUTURE BUT INSTEAD REPRESENTS ONLY WHAT THE REMEDY WILL BE IF A DEFECT EXISTS.

Unless prohibited by state law, repairs will not extend the time when you must commence a breach of warranty claim and shall not extend the warranty coverage period. Any performance of repairs after the warranty coverage ends OR any performance of repairs to those portions of your motorhome excluded from coverage shall be considered "good will" repairs. Warranty repairs should be expected. Airstream may use new and/or remanufactured parts and/or components of substantially equal quality to complete a repair. Damage to interior or exterior surfaces, trim, upholstery, and other appearance items may occur at the factory during assembly, during delivery of the motorhome to your selling dealer or on the selling dealer's lot. Normally, any damage is detected and corrected at the factory or by the selling dealer during the inspection process. If you discover any damage when you take delivery of your motorhome, you MUST notify your dealer OR Airstream within 10 days of the date of purchase to have damage repaired at no cost to you. Minor adjustments, such as adjustments to the interior or exterior doors, drawers, and latches will be performed at no cost to you by your selling dealer during the first 90 days of warranty coverage; thereafter, such adjustments are your exclusive responsibility as normal maintenance.

WHAT IS NOT COVERED

1. The Stellantis chassis and power train, including, by way of example, the engine, drive-train, steering, ride and handling, braking, wheel balance, muffler, tire wear or failure, tubes, batteries and gauges, suspension, exterior shell, exterior doors, etc.
2. Accessories and equipment that are working as designed, but which you are unhappy because of the design;
3. Normal deterioration due to wear or exposure, including but not limited to floor coverings, rust, corrosion, oxidation, and cosmetic blemishes. In addition, this Limited Warranty does not apply to consumable parts that are designed to diminish over time, unless failure has occurred due to a defect in materials or workmanship;
4. Normal maintenance and service items, including but not limited to batteries, tires, glass breakage, fuses, bulbs, lubricants, sealants and seals, door adjustments, and awning tension. In addition, this Limited Warranty does not apply to consumable parts that are designed to diminish over time, unless failure has occurred due to a defect in materials or workmanship;
5. After-market equipment or accessories installed on the motorhome after completion of manufacture by Airstream, or any defects or damage caused by such items;
6. Motorhomes not purchased through an authorized dealer of Airstream and motorhome's purchased directly or indirectly through auction, salvage, repossession, or other non-customary sale means.
7. Any motorhome used other than for temporary recreation purposes, including, but not limited to, use of the motorhome for residential, rental, business and commercial purposes, or any motorhome purchased by, registered by, or titled in the name of a business association (such as any LLC, corporation, or partnership). If the motorhome owner or user files a tax form claiming a business or commercial tax benefit or income related to the motorhome, it shall be irrefutable that the motorhome has been used for rental, commercial or business purposes.
8. Defects or damage caused by, in whole or in part, or in any way related to: Accidents, misuse (including off-road use), or negligence; Failure to comply with the instructions set forth in any owner's manual provided with the motorhome; Alteration or modification of the motorhome except such alterations or modifications approved in writing by Airstream; Acts of God or other environmental conditions, such as lightning, hail, salt causing rust, or other chemicals in the atmosphere; De-icing agents or other chemicals applied to the motorhome; Failure to properly maintain or service the motorhome, including but not limited to the maintenance of lubricants, sealants, and seals; Condensation and the results of condensation including water damage and the growth of mold or mildew (mold and mildew are natural growths given certain environmental conditions and are not covered by the terms of this Limited Warranty); The addition of weight to the motorhome that causes the total weight to exceed applicable vehicle weight ratings, or addition of weight causing improper distribution of the weight of the motorhome; Failure to seek and obtain repairs in a timely manner; Failure to use reasonable efforts to mitigate damage caused by defects; Failure to properly ventilate the motorhome; Improper electric power supply or improper motorhome hookup to other facilities; Acts or omissions of any person or entity other than Airstream.
9. Hardware or software of a third-party device that is connected to the motorhome or its components, even if integrated or delivered with the motorhome. Airstream is not responsible for the quality or accuracy of any information or service accessed through or from any third-party device or platform. Software distributed by Airstream inside or outside the motorhome (including, but not limited to, system software and/or applications) is not covered by this Limited Warranty. Airstream does not warrant that connections to, from or through the motorhome will be uninterrupted or error-free. Also, the user should back-up their data and information frequently. Airstream is not responsible for any loss or damage to data or information made available in connection with the use of the motorhome. In addition, this Limited Warranty does not apply to: (a) to damage caused by use with another product or service; (b) to damage caused by a third party device or service (including upgrades and expansions), or (c) to obsolescence or lack of utility due to incompatibility with future versions of external hardware or software, including, but not limited to mobile devices.

OBTAINING WARRANTY SERVICE: In order to obtain warranty service under this Limited Warranty, the owner must do all of the following:

1. Owner and dealer representative must complete, sign, and return the Customer Performance Checkout within 10 days from delivery of the motorhome;
2. Notify Airstream or one of its authorized, independent dealers, of any claimed defect within the warranty period or 10 days thereafter;
3. Provide notification of a defect within 10 days of discovery of that defect; and
4. Promptly return the motorhome to an authorized Airstream dealer or Airstream for repairs.

If you believe a defect covered by this Limited Warranty still exists after an attempted repair by an authorized Airstream dealer, you must contact Airstream in one of the following manners, and specify:

1. The complete serial number of the motorhome;
2. The date of original purchase and the date of original delivery;
3. The name of the selling dealer; and servicing dealer, if they are not the same.
4. The nature of the problem and the steps or service which have been performed.

Email: support@airstream.com • Phone: (937) 596-6111

Mail: AIRSTREAM, INC., 428 West Pike Street, P.O. Box 629, Jackson Center, Ohio 45334-0629, Attention: Owner Relations Department

General Information

Airstream may direct you to an authorized Airstream dealer or may request that you bring your motorhome to the Airstream factory in Jackson Center, Ohio for repairs. Airstream does not control the scheduling of repairs at its authorized Airstream dealers, and repairs at the Airstream factory may not be immediately available. Therefore, you may encounter delays in scheduling repairs and/or completion of repairs. All costs associated with transporting the motorhome for any warranty service shall be the sole responsibility of the owner.

CONSUMER ARBITRATION PROGRAM: For recreation vehicles purchased in the State of California, Airstream, Inc. participates in the Consumer Arbitration Program for Recreation Vehicles (CAP-RV). This third-party dispute resolution program is available, at no charge to you, to settle unresolved warranty disputes for recreation vehicles. This dispute resolution program reviews eligible product and service related complaints involving warranty covered components. To find out more about this program, or to request an application/brochure, please call the Arbitration Administration office toll-free 800.279.5343. The CAP-RV program operates as a certified mechanism under the review of the California Arbitration Certification Program. Members of the armed forces who purchased the vehicle in California, or who were stationed in or a resident of California at the time of purchase (regardless of state of purchase) or who are stationed in California at the time of application to this program may utilize the CAP-RV program.

EVENTS THAT DISCHARGE AIRSTREAM'S OBLIGATIONS UNDER THIS LIMITED WARRANTY: Damage caused by collision, fire, theft, vandalism, explosions, overloading in excess of rated capacities, odometer tampering, and use of the motorhome for commercial, business, or rental purposes shall discharge Airstream from any express or implied warranty obligation.

LEGAL REMEDIES: EXCLUSIVE JURISDICTION FOR DECIDING LEGAL DISPUTES RELATING TO THE ALLEGED BREACH OF EXPRESS WARRANTY AND BREACH OF IMPLIED WARRANTIES ARISING BY OPERATION OF LAW AS WELL AS THOSE RELATING TO REPRESENTATIONS OF ANY NATURE RESTS IN THE COURTS WITHIN THE STATE OF MANUFACTURE, WHICH IS OHIO. ALSO, THIS WARRANTY SHALL BE INTERPRETED AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF OHIO. ANY AND ALL CLAIMS, CONTROVERSIES, AND CAUSES OF ACTION ARISING OUT OF OR RELATING TO THIS WARRANTY, WHETHER SOUNDING CONTRACT, TORT OR STATUTE, SHALL BE GOVERNED BY THE LAWS OF THE STATE OF OHIO, INCLUDING ITS STATUTE OF LIMITATIONS, WITHOUT GIVING EFFECT TO ANY CONFLICT OF LAW RULE THAT WOULD RESULT IN THE APPLICATION OF THE LAWS OF A DIFFERENT JURISDICTION. IF STATE LAW GIVES YOU ADDITIONAL RIGHTS THAT CONFLICT WITH ANY TERM OF THIS WARRANTY, YOUR STATE LAW APPLIES OVER INCONSISTENT WARRANTY TERMS. For example, if you took delivery of your RV in California, the Song Beverly Warranty Act and Consumers Legal Remedies Act apply because they cannot be waived.

I AGREE THAT ANY AND ALL ACTIONS OF ANY KIND RELATED TO MY MOTORHOME SHALL BE DECIDED BY A JUDGE RATHER THAN BY A JURY. THIS JURY WAIVER MAY NOT APPLY TO YOU IF APPLICABLE OR PROVINCIAL LAW PROHIBITS A WAIVER OF A JURY TRIAL. For example, if you took delivery in California, your right to a jury cannot be waived.

CALIFORNIA CONSUMERS: To comply with California's Song Beverly Consumer Warranty Act pre-litigation notice requirements (described at California Code of Civil Procedure Section 871.24), written notice can be sent to Airstream, Inc., either by email sent to the following email address: support@airstream.com, or by certified or registered mail, return receipt requested, sent to the following address: Airstream, Inc., 428 West Pike Street, P.O. Box 629, Jackson Center, Ohio 45334-0629, Attention: Owner Relations Department.

CONSUMIDORES DE CALIFORNIA: Para cumplir con los requisitos de notificación previa al litigio de la Ley de Garantía del Consumidor Song Beverly de California (descritos en la Sección 871.24 del Código de Procedimiento Civil de California), se puede enviar una notificación por escrito a Airstream, Inc., ya sea por correo electrónico a la siguiente dirección de correo electrónico: support@airstream.com, o por correo certificado o registrado, con acuse de recibo, enviado a la siguiente dirección: Airstream, Inc., 428 West Pike Street, P.O. Box 629, Jackson Center, Ohio 45334-0629, Attention: Owner Relations Department.

Before I purchased my motorhome, I received, read, and agreed to the terms and conditions of this Limited Warranty. I understand and agree that the selling dealership is not an agent for Airstream but is an independent entity. I understand and acknowledge items of the WHAT IS NOT COVERED section of this Limited Warranty. I acknowledge and agree that, before purchasing my motorhome, I inspected or was given an opportunity to inspect my motorhome and disclosed in writing to the selling dealership all defects and damage that I discovered during my test drive. For example, I inspected the underside of the RV for rust and did not discover any unless disclosed in writing to the selling dealership.

Purchaser Signature

Date

Purchaser Signature

Date

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.
AIRSTREAM, INC • 1001 West Pike Street • Jackson Center, Ohio 45334-0629 • Phone: 937-596-6111 • FAX: 937-596-6539

ProMaster Van Information

Airstream, Inc., does not accept any responsibility in connection with any of its touring coach's for the ProMaster Van or its components. The ProMaster Van and its components are covered by Ram Warranties as explained by ProMaster literature provided. Your ProMaster Van and its components are pre-checked by its manufacturer before delivery to Airstream. All service to the ProMaster Van and its components must be performed by Ram ProMaster designated service points according to the manufacturer's warranty and service policies. The literature provided with each touring coach gives important information concerning its warranty coverage, maintenance, and operation.

The Airstream Rangeline Owner's Manual may provide additional information and tips on the use of the van as a touring coach, however, no information, in whole or in part, in any Airstream manual should be interpreted as advice or directions to disregard or void the Warnings, Cautions, Notices, or other information contained in the ProMaster's manuals.

⚠ WARNING

Your Ram ProMaster Van Owner's and Warranty Manuals contain important cautions, warnings, operational, and warranty information on the ProMaster and its components. All information in the ProMaster manual should be reviewed and followed for your safety.

Service

Coach-Net® Roadside Assistance



Every new Airstream comes with a one-year, transferable subscription to Coach-Net which includes a long list of premium services to help quickly solve issues or learn about your Airstream.

To learn more, scan the QR code above, navigate to <https://www.airstream.com/owners/coach-net/>, or call Coach-Net at 855-817-1885. On-call technicians are always ready to answer questions.

Service Centers

Before leaving the factory, every vital part of the touring coach is tested for performance. Each test is signed and certified by an inspector. After the touring coach arrives on your dealer's lot, all vital parts and systems are again tested. When you take delivery of your new touring coach, you will receive a complete check out.

At that time, a specified list of performance checks on your touring coach equipment will be conducted, and any deficiencies you have experienced since taking delivery will be corrected.

Please contact your dealer if your touring coach needs service. Major service under your Airstream Limited Warranty is available through our nationwide network of Airstream Dealer Service Centers. To find a dealer, please visit, <https://www.airstream.com> to use our dealer locator.

Occasionally, dealerships change, or new dealers are added that may not appear on the website immediately. Please note that all centers operate on an appointment basis for the utmost efficiency.

When you require service for your touring coach from the Airstream Factory Service Center or a Certified Dealer Service Center, please contact the service manager for an appointment, and inform them if you are unable to keep the appointment date or wish to change it. Service may be arranged at the Factory Service Center by contacting the Service Coordinator at:

Airstream Factory Service Center

428 West Pike Street

P.O. Box 629

Jackson Center, Ohio 45334-0629

Phone: (937) 596-6111 or (877) 596-6111

NOTE

Connected RV features and systems may be turned off while in a service facility for the safety of our technicians. You might have to re-pair your personal device after service appointment.

General Information

Reporting Safety Defects

If you believe 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 Airstream, 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 Airstream Inc.

To contact NHTSA, you may either call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153), go to <https://www.nhtsa.gov>, or write to:

Administrator

NHTSA

1200 New Jersey Avenue, S.E.

Washington, DC 20590

You can also obtain other information about motor vehicle safety from <https://www.nhtsa.gov>.

Camping

Suggested Pre-Travel Check List

Exterior

1. Verify power cord is stored.
2. Verify water and sewer hoses are stored.
3. Double check all hitch connections (if towing).
4. Look under, over, and around the vehicle for any overlooked items.
5. Check exterior lighting.
6. Check torque of wheel bolts or lug nuts.
7. Check tires for correct pressure.

Interior

1. Turn off water pump, heating/hot water system.
2. Close windows and vents.
3. Close all interior cabinet doors.
4. Latch refrigerator door. (Seal containers first.)
5. Latch microwave.
6. Secure, stow, and latch for travel anything that will move, fall, fly, or open.
7. Drain toilet bowl.
8. Turn off 12-volt lights.

Touring Coach Equipment and Accessories

1. Water hose, 5/8-in. high-pressure, tasteless, odorless, non-toxic (two 25-ft. sections).
2. Y connection - water hose.
3. Holding tank cleaner and deodorizer.
4. Power cord adapter, 15 amp - 30 amp.
5. Electric cord, 30-amp capacity.
6. Wheel chocks.
7. Torque wrench.
8. Quality tire gauge.

Motoring Essentials

1. Touring coach registration.
2. Carry driver's license.
3. In Canada, bring along a non-residence liability insurance card and your passport.
4. In Mexico, you must have special auto insurance.
5. Carry an extra set of the ignition keys in a separate pocket or in your wallet.
6. Keep an operating flashlight with fresh batteries in the glove compartment.
7. Carry your pet's dish, food, leash, and health and registration papers.

Overnight Stop

In time you will develop a knack for spotting wonderful little roadside locations by turning off the main highway and exploring. There are many modern recreational vehicle parks, including State, County, and Federal parks with good facilities, where you may obtain electrical, water, and sewer hookups and connections. Directories are published which describe in detail these parks and tell what is available in the way of services and hookups.

All you need to do to enjoy the self-contained luxury while boondocking is to:

1. Turn on the 12-volt battery disconnect switch to provide power to your components.
2. If you need to cook or run the air conditioner:
 - Start the generator.
 - Turn the inverter on to power the microwave and outlets on the inverter circuit (identified by the affixed "Inverter Circuit" label). To conserve battery power, turn off the inverter when not in use.
3. Turn on the water pump and open faucets until air is expelled from the system.

Before moving on, turn off appliances, water pump, and battery disconnect. Check your campsite, both for cleanliness and to be sure you have not left anything behind. Make sure everything is properly stowed.

Overnight or Weekend Trips

On overnight or weekend trips, chances are you will not use up the capacity of the holding tanks or deplete the water supply if using the system moderately or conservatively. You will need to maintain the level of your house battery during this time by plugging into shore power or by starting your generator.

Longer Trips

On a longer trip, when you have stayed where sewer connections and utility hookups were not available, it will be necessary for you to stop from time to time to dispose of the waste in the holding tank and replenish the water supply. Many truck stops and gas stations, chain and individually owned, have installed sanitary dumping stations for just this purpose. Booklets are available that list these facilities.

When you stop for the night, your Airstream Touring Coach is built to be safely parked in any spot that is relatively level and where the ground is firm.

Extended Stay

MMaking a long trip is not very different from making a weekend excursion. Since everything you need is right at hand, you are at home wherever you go. When packing for an extended trip, take everything you need, but only what you need.

Hook up to water by attaching a ½ -inch minimum high-pressure water hose to the city water service.

Connect to external power when available; [see Shoreline Power Inlet and Cordset on page 6-8.](#)

Connect to any external service provider for entertainment, [see Entertainment Systems on page 5-29.](#)

When you stay for extended periods where electric or water hookups are not available, you must make regular checks on State-of-Charge of your battery and the contents of your water tank. Carry drinking water in a clean bucket to refill your tank. When your waste tank nears capacity, move your touring coach to a dumping location.

Leveling

When you plan to stay in the same place for several days, weeks, or months, you will want your touring coach to be as level as possible. Check the attitude with a small spirit level set on the inside work counter. If a correction is necessary, then you must first level from side to side. This can be done most easily by driving up a small ramp consisting of 2 in. x 6 in. boards tapered at both ends. Airstream does not recommend placing tires in a hole for leveling.

Effects of Prolonged Occupancy

Your touring coach was designed primarily for recreational use and short-term occupancy. If you expect to occupy the touring coach for an extended period, be prepared to deal with condensation and the humid conditions that may be encountered. The relatively small volume and tight compact construction of modern recreation vehicles mean that the normal living activities of even a few occupants will lead to rapid moisture saturation of the air contained in the touring coach and the appearance of visible moisture, especially in cold weather.

Just as moisture collects on the outside of a glass of cold water during humid weather, moisture can condense on the inside surfaces of the touring coach during cold weather when relative humidity of the interior air is high. This condition is increased because the insulated walls of a recreation vehicle are much thinner than house walls. Estimates indicate that two adults can vaporize up to one-and-a-half gallons of water daily through breathing, cooking, bathing, and washing. Unless the water vapor is carried outside by ventilation or condensed by a dehumidifier, it will condense on the inside of the windows and walls as moisture, or in cold weather as frost or ice. It may also condense out of sight within the walls or the ceiling where it will manifest itself as warped or stained panels. Appearance of these conditions may indicate a serious condensation problem. When you recognize the signs of excessive moisture and condensation in the touring coach, action should be taken to minimize their effects.

NOTICE

Your touring coach is not designed, nor intended, for permanent housing. Use of this product for long term or permanent occupancy may lead to premature deterioration of structure, interior finishes, fabrics, carpeting, and drapes. Damage or deterioration due to long-term occupancy may not be considered normal, and may under the terms of the warranty constitute misuse, abuse, or neglect, and may therefore reduce the warranty protection.

To avoid condensation problems, try to follow these tips to help alleviate excess moisture:

- Allow excess moisture to escape to the outside when bathing, washing dishes, hair drying, laundering, and using appliances. Always use an exhaust fan when cooking.
- Keep the bathroom door closed and the vent or window open when bathing and for a period of time after you have finished.
- If you are experiencing condensation, you may want to reconsider hanging wet clothes in the touring coach to dry.
- In hot weather, start the AC early as it removes excess humidity from the air while lowering the temperature.
- Keep the temperature as reasonably cool during cold weather as possible. The warmer the vehicle, the more cold exterior temperatures and warm interior temperatures will collide on wall surfaces, thus creating condensation.
- Use the ceiling vent to keep air circulating inside the vehicle so condensation and mildew cannot form in dead air spaces. Allow air to circulate inside closets and cabinets (leave doors partially open). Please keep in mind that a closed cabinet full of stored goods prevents circulation and allows the exterior temperature to cause condensation.
- The natural tendency would be to close the vehicle tightly during cold weather. This will actually compound the problem. Simply put, you need to remove some of the warm air and allow some cool outside air to get inside the vehicle so the furnace will not recycle the humid interior air.
- Minimize the use of incandescent lights, which produce heat and contribute to condensation.

About Molds

What are molds

Molds are microscopic organisms that naturally occur in virtually every environment, indoors and out. Outdoors, mold growth is important in the decomposition of plants. Indoors, mold growth is unfavorable. Left unchecked, molds break down natural materials, such as wood products and fabrics. Knowing the potential risks is important for any type of homeowner to protect their investment.

What factors contribute to mold growth

For mold growth to occur, temperatures, indoor or outdoors, must be between 40°F and 100°F and also, there must be a source of moisture, such as humidity, standing water, damp materials, etc. Indoors, the most rapid growth occurs with warm and humid conditions.

How can mold growth be inhibited

By controlling relative humidity, the growth of mold and mildew can be inhibited. In warm climates, use of the air conditioner will reduce the relative humidity. Vents are located in the bathing and cooking areas and constant use is advised during food preparation and bathing, even during colder weather. Additionally, opening a window during these activities will assist in ventilation. In extremely humid conditions, the use of a dehumidifier can be helpful. If using a dehumidifier, please read and follow all manufacturer instructions and recommendations to the use and cleaning of the dehumidifier.

Frequent use of your touring coach or cleaning regularly is an important preventive measure. Further, any spills should be wiped up quickly and dried as soon as possible. Avoid leaving damp items lying about. On safe surfaces, use mold or mildew killing cleaning products. Check sealants regularly, and reseal when necessary to avoid water leaks. Proper preventive maintenance to the touring coach and its accessories, as described both in this manual and in accompanying literature, will provide the best protection to the touring coach.

Wastewater System

The main parts of the wastewater system are the toilet, holding tanks, and tank dump valves; [see Drain and Waste System on page 9-6](#). The system is designed to provide complete self-contained toilet facilities, while on the road or parked, without being connected to a sewage line. It may also be used when parked while connected to a sewage hose.

Keep the dump valves closed with either method and empty the tanks when they are nearly full. The idea is to send a large volume of water through the tanks and hose at the same time to float solids away.

After the waste tank has been emptied, close the dump valves and charge the tank by putting a few gallons of water in the holding tank using the flush inlet. This will spray the interior of the tank with water and help prevent solids from building up in the sewage holding tank. The addition of a deodorizing agent like Aqua-Kem will help prevent odors.

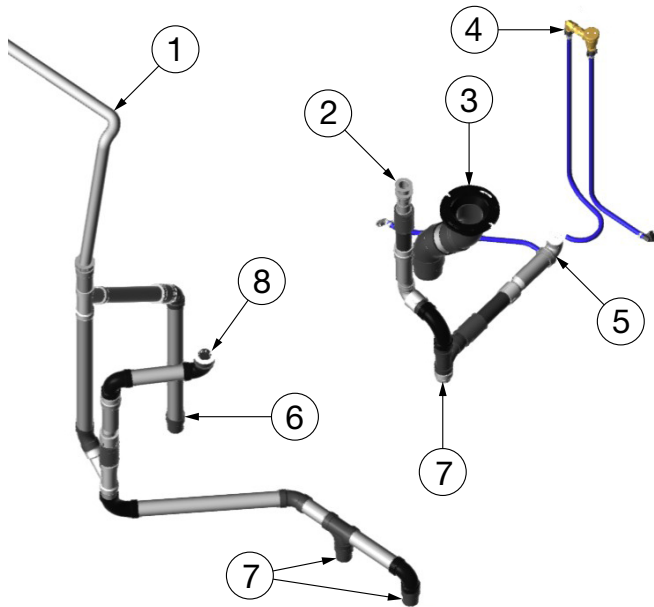
Should you ever have a buildup of solids, close the valves, fill the tanks about 3/4 full with fresh water, drive a distance to agitate the solids, and drain the tanks.

Things Not to Put into Toilet or Drains

- Facial tissues and feminine hygiene products (they do not dissolve like toilet paper).
- Automotive antifreeze, ammonia, alcohols, or acetone.
- Table scraps or other solids that may clog the drains.

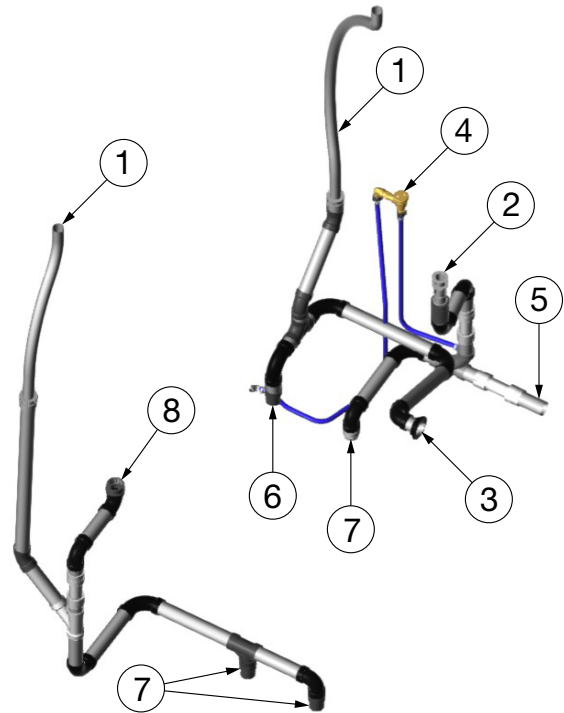
General Information

Drain System, Rangeline 21PS Model



1. Vent
2. Lavy Drain
3. Toilet Drain
4. Waste Tank Flush
5. Shower Drain
6. Waste tank Connections
7. Gray Tank Connections
8. Galley Sink Drain

Drain System, Rangeline 21PL Model



1. Vent
2. Lavy Drain
3. Toilet Drain
4. Waste Tank Flush
5. Shower Drain
6. Waste tank Connections
7. Gray Tank Connections
8. Galley Sink Drain

Winter Traveling

Traveling in sub-freezing temperatures will require certain precautions to protect the plumbing system and your personal belongings from being damaged by freezing. Consider how cold it will get, how long it will be before you turn the heat back on, and if the temperature is falling or rising. Remember, when traveling, the wind chill factor will cause the interior of the touring coach to cool much faster than when it is parked

1. You must have at least 1/4 tank of fuel to run the hydronic heating/hot water system as the heat from the furnace warms the touring coach and keeps the fresh water lines and waste water holding tank from freezing. If your fuel tank drops below 1/4 tank, the hydronic system will automatically shut off. This 1/4 tank reserve is so you can travel to refuel.
2. If your stay is longer than overnight, you should endeavor to have a shoreline hookup.
3. Minimize use of electricity if 120-volt power source is not available.
4. Leave cabinet doors, wet bath doors, and wardrobe doors slightly open at night to allow circulation of air in and around all components.
5. Save power by using non-toxic RV- approved antifreeze in the gray water and waste water holding tanks instead of the heating pad to prevent freezing. Quantity of antifreeze needed will vary with ambient temperature and the amount of liquids in tank.
6. For extended stays in cold weather, insulate all water lines outside the touring coach. You should remember that low temperatures in combination with high winds cause an equivalent chill temperature much below what your thermometer is reading. For instance, with an outside temperature of zero degrees, and the wind velocity of 10 miles per hour, the equivalent chill temperature is -20°F.

Heated Tanks

Your touring coach has 12-volt heat pads on the waste water tank, gray water tank, and on the pipe elbows of the dump valve to help prevent freezing. The tank heaters are controlled using the Multiplex system; [see Multiplex System on page 5-28](#). When the outside temperature is near freezing, simply switch ON the tank heaters. Built-in sensors will activate the heat pads when the contents drop to 44°F. Once the liquid is heated and rises to 64°F the heat pads will automatically deactivate. Turn the power OFF when the outside temperature remains above freezing or if the tanks are empty. The tank heaters will quickly deplete the house battery unless the unit is plugged into an external AC power source or the generator is used to operate the inverter/charger. To conserve battery power, RV antifreeze may be used to protect the gray water and waste water tanks.

NOTE

The fresh water tank is installed above the floor where heat from the furnace will help keep it from freezing.

NOTICE

Drain and winterize the water system when not being used during winter travel; [see Winterizing and Storage on page 9-8](#).

NOTES

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Section 4 FLOOR PLANS AND SPECIFICATIONS

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Floor Plans And Specifications

Floor Plans

Rangeline PS (Premier Suite)



Rangeline PL (Premier Loft)



Floor Plans And Specifications

Specifications

Rangeline Specifications	
Chassis	Ram® ProMaster 3500 High Roof Extended, FWD
Engine	3.6L Pentastar® V6 24V VVT
Emissions	50 State Emissions
Horsepower/Torque	276HP @ 6,400RPM/250 lbs Torque @ 4,400RPM
Transmission	9-Speed Automatic 948TE
Wheelbase	159"
MPG ^[1]	18-20 Estimated Highway
Exterior Overall Length	20' 11"
Exterior Overall Height with A/C	9' 5"
Exterior Overall Width w/Mirrors	8' 2.25"
Interior Height	6' 2.25"
Interior Width	5' 11"
GVWR ^[2]	9,350 lbs
GCWR ^[2]	12,000 lbs
UVW/UBW ^[2]	Weights are listed on the OCCC Label and Tire and Loading Placard; for more information, see Specifications Labels on page 4-5
OCCC ^[2]	
Tow Capacity ^[3]	Up To 3,500 lbs (See ProMaster Guidelines)
Hitch Tongue Weight	350 lbs
Fuel Tank	24 gallon
Fresh Water Tank	28 gallon
Gray Water Tank	19 gallon
Waste Water Tank	12 gallon
Hydronic Heating/Hot Water System	Gasoline Fueled with 120V Element Support
Air conditioner	13,500 BTU w/Soft Start
12V Refrigerator, Rangeline PS Model	3.2 cubic feet with marker board front
12V Refrigerator, Rangeline PL Model	Refrigerator 4.3 cubic feet / Freezer .33 cubic feet
Microwave	.7 cubic feet
Cooktop	1,000 Watt, Single Burner, Induction
Battery (House)	12 Volt 270 Ah Deep Cycle Lithium Battery (LiFePO4)
Converter / Inverter	130 Amp Charger / 3,000 Watt Pure Sine Inverter
Generator	2.8 Kw Ultra Quiet w/ Auto Start (Gasoline Fueled)
Shore Power	30-Amp/120-Volt Service w/Smart Plug
Solar Power	200 Watts (without Pop-Top) / 195 Watts (with Pop-Top)
Bed Sizes, Rangeline PS Model	2 PC Folding Bed System: 74" x 52.5" / Pop-Top Bed: 78" x 50.5"
Bed Sizes, Rangeline PL Model	Motorized Lift Bed: 74" x 53" / Smartbench Bed: 74" x 53"
Wheel Fastener Torque Value ^[4]	145 ft-lbs
Tire Size / Max Cold Inflation Pressure ^{[2][5]}	Tire size and max cold inflation pressure are listed on the Tire and Loading Placard on the B-pillar (driver's door jamb); For more information, see Tire and Loading Placard on page 4-5
Airstream Limited Warranty	2 Years
Ram® Basic Limited Warranty	3 Years/36,000 Miles
Ram® Fleet Powertrain Care Warranty	5 Years/100,000 Miles

1. Actual mileage will vary based on load carrying, driving style, and road conditions.

2. For more information, [see Specifications Definitions on page 4-5](#) and [see Specifications Labels on page 4-5](#).

3. Tow capacity will vary with build spec and intended vehicle loading with people, cargo, and fluids.

4. For safety reasons, wheel fastener torque must be checked immediately after reinstalling wheels and again after 25 miles.

5. In this context, cold refers to how long a tire has sat idle. *Max cold inflation pressure* should be checked in the morning (after sitting idle for at least three hours) before driving more than one mile or before rising ambient temperatures and the sun's radiant heat can affect tire pressure.

Specifications Definitions

Unloaded Vehicle Weight (UVW) or Unit Base Weight (UBW) is the factory manufactured/empty weight of the touring coach. UVW includes fuel, engine and generator operating fluids, and all batteries; *UVW is listed as "factory manufactured weight" on the Tire and Loading Placard.*

Gross Combined Vehicle Weight Rating (GCWR) is the maximum weight rating of the vehicle with a trailer attached; *GCWR is listed on the previous page.*

Gross Axle Weight Rating (GAWR) is the value specified as the load carrying capacity of a single axle system, as measured at the tire-ground interfaces. This is the maximum amount of weight that can be placed on each axle; *GAWR is listed on the Manufacturer's Certification Label.*

Gross Vehicular Weight Rating (GVWR) is the maximum permissible weight of the Touring Coach when fully loaded; *GVWR is listed on the Tire and Loading Placard and Manufacturer's Certification Label. It is also listed on the previous page.*

Occupant and Cargo Carrying Capacity (OCCC) is the maximum total weight of all occupants, cargo, fresh water, and any tongue weight of a towed trailer; *OCCC is listed on the OCCC label and Tire and Loading Placard.*

GVWR - UVW = OCCC

⚠ WARNING

The combined weight of occupants and cargo should never exceed the limit on OCCC label.

⚠ WARNING

Wheel fastener torque must be checked immediately after reinstalling a wheel and again after 30 miles. Torque all wheel fasteners evenly to specification using the proper sequence; [see Wheel Bolt/Lug Nut Tightening on page 7-8](#). For torque values, [see Specifications on page 4-4](#).

NOTE

All product information and specifications listed are as accurate as possible at the time of printing. Since we continually strive to improve our products, all specifications are subject to change without notice.

NOTE

Specifications labels shown are examples only.

Specifications Labels

Occupant and Cargo Carrying Capacity Label

MOTOR HOME OCCUPANT CARGO CARRYING CAPACITY
VIN: XXXXXXXXXXXXXXXX
THE COMBINED WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED
XXX kg OR XXX LBS
 Safety belts equipped seating capacity: X
CAUTION:
 A full load of water equals XX kg or XXX lbs of cargo @ 1kg/L (8.3lb/gal) and the tongue weight of a towed trailer counts as cargo.
 Motor Home overall length XXX (XXX cm) as manufactured

The Occupant and Cargo Carrying Capacity Label on the edge of the passenger door lists the VIN, OCCC, safety belt equipped seating capacity, the weight of a full load of water, and the motorhome's overall length.

Tire and Loading Placard



TIRE AND LOADING INFORMATION
RENSEIGNEMENTS SUR LES PNEUS ET LE CHARGEMENT

The combined weight of occupants and cargo should never exceed XXX kg or XXXX lbs.

SEATING CAPACITY TOTAL X FRONT X REAR X

TIRE PNEU	SIZE DIMENSIONS	COLD TIRE PRESSURE PRESSION DES PNEUS A FROID
FRONT AVANT	XXXXXXXXXX	XXX kpa (XX Psi)
REAR ARRIERE	XXXXXXXXXX	XXX kpa (XX Psi)
SPARE DE SECOURS	XXXXXXXXXX	XXX kpa (XX Psi)

SEE OWNERS MANUAL FOR ADDITIONAL INFORMATION
 VOIR LE MANUEL DE L'USAGER POUR PLUS DE RENSEIGNEMENTS

XXXXX

The factory manufactured weight of this motor home is XXXX kgs XXXX (lbs).
 The GVWR of this motor home is XXXX kgs XXXX (lbs).

The Tire and Loading Placard on the B-pillar (driver's door jamb) lists OCCC, UVW, GVWR, seating capacity, tire size, tire cold inflation pressure, and the last six digits of the serial number.

Manufacturer's Certification Label

MANUFACTURED BY : AIRSTREAM, INC

GVWR:	XXXX kg/	XXXX lb	DATE: XXXXXXXX	XXX
GAWR	TIRES	RIMS	COLD INFL.PRESS.	
FRONT	XXXXXXXXXX	XXXX	XXX KPA	SINGLE ☒
XXXX KG/ XXX LB			XX PSI	DUAL ☐
INTERM				SINGLE ☐
			PSI	DUAL ☐
REAR	XXXXXXXXXX	XXXX	XXX KPA	SINGLE ☒
XXXX KG/ XXX LB			XX PSI	DUAL ☐

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

V.I.N./N.I.V.:XXXXXXXXXXXXXXXXX TYPE/TYPE: XXXXXXXX MODEL: XXXXXX
 XXXXXXXXXXXXXXXXXXXX XX XXX Serial: XXXXXXXXXXXXXXXXX

The Manufacturer's Certification Label on the driver's side inner door panel lists the GVWR, GAWR, date of manufacture, tire size, rim size, tire cold inflation pressure, VIN/NIV number, vehicle type, model, and the full serial number.

NOTES

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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Section 5 INTERIOR

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General Information and Cleaning

The interior of every Airstream is crafted with features that offer comfort, convenience, functionality, durability, and design appeal. Our goal in this section is to deliver the best experience possible by providing you with the knowledge you need to enjoy these features and care for them to ensure their longevity.

 Airstream Supply Company is your trusted source to obtain care products and supplies to help maintain and enjoy your Airstream. Scan this QR code to visit and explore our recommended assortment of RV care products and much more at [airstreamsupplycompany.com](https://www.airstreamsupplycompany.com).

Many of the appliances and components installed in your Airstream come with manuals from the manufacturers that produced them. These manuals provide detailed instructions and critical safety alerts that should be read and followed before operating them. If any manual(s) have not been provided in your owner's packet, contact your dealer, appliance or component manufacturer, or Airstream Customer Service at 937-596-6111 or email: support@airstream.com

⚠ WARNING

Keep your furniture and family safe from fires caused by careless smoking. Do not smoke when drowsy. Remove immediately any flowing ash or a lighted cigarette which falls on furniture. Smoldering or smoking material can cause upholstered furniture fires.

Upholstery Care

Regular cleaning and vacuuming are the best ways prevent excess dirt from accumulating. To help extend the life of the fabric, wipe up spills as soon as they occur. Clean soiled areas with mild soap and water, rinse with fresh water and wipe dry with a clean cloth.

For food and other common mild stains, wipe the affected area with a soft cloth or soft bristle brush using a non-abrasive household spray cleaner. Rinse with fresh water and wipe dry. For tougher stains, clean the soiled area with a 50% solution of Isopropyl Alcohol and water. It is important to rinse the cleaned area with fresh water after applying the alcohol solution.

To disinfect, apply a 20% solution of household bleach and water or a 70% solution of Isopropyl Alcohol and water. After the appropriate contact time, gently wipe or rinse with fresh water and dry the surface.

For an extensive guide to cleaning and removing tough stains, visit <https://www.nassimi.com> to locate their Resilience Vinyl Cleaning and Disinfecting Guide.

NOTICE

Do not use orange cleaner, abrasive cleaners or abrasive sponges/pads as these may damage the upholstery.

Cabinets, Overhead Lockers, and Countertops

Clean the high-pressure laminate surfaces with a clean, damp, non-abrasive cotton cloth and a mild liquid detergent or household cleaner. Rinse with clean water and dry the surface with a soft, clean, non-abrasive cotton cloth. Avoid flooding the laminated areas, especially near seams, since water can penetrate and cause the substrate to swell.

NOTICE

Do not use abrasive cleaners or abrasive sponges/pads. Never use cleaners containing acid or alkali. These cleaners will damage laminate surfaces.

Aluminum Interior Skin

The metal interior skin on the ceiling has a baked-on acrylic coating. Use soft rags or wash mitts, always moving lengthwise with the aluminum grain. NEVER rub hard on the coating. Remove oil, grease, dust, and dirt by washing with a 5 percent solution of commonly used commercial and industrial multi-purpose detergent in water. A thorough clean water rinse should follow cleaning. Drying the metal with a chamois or a soft cloth may prevent spots and streaks. When washing or waxing the metal, always wipe "with" the metal's grain. A good grade of nonabrasive automotive paste or liquid wax once a year will increase the life of the finish.

NOTICE

Abrasive polishes or cleaning solvents such as automatic dishwasher or acid etch cleaners are too strong and should never be used. Rinse all grit from surface prior to washing. Use soft rags always moving lengthwise with the grain. NEVER rub with excessive pressure on the coating. Even the softest rag will damage the coating if excessive pressure is applied.

Luxury Woven Vinyl Floor

General Cleaning

One of the best ways to keep the floor looking good is to vacuum regularly. This action helps prevent dirt from becoming embedded in the flooring and eliminates the need for more vigorous cleaning. Use a vacuum cleaner with strong suction and soft brushes that loosen the dirt while removing it simultaneously.

For general or light cleaning, sweep or vacuum off loose dirt and wipe down the floor. Prepare a solution of water and mild soap using mild liquid dish soap or a mild household cleaner. Using a soft bristle brush to clean, apply a small amount of the mixture. Rinse thoroughly to remove all soap residue. Allow the floor to air dry.

Remove stains as soon as possible to avoid staining. For spot removal, the largest portion of the spill should be removed by blotting or wiping up. During this step, avoid applying so much pressure that the stain spreads. Blot watery spills with a clean cloth or paper towels to remove them. Solid spills should be scraped using a blunt scraper, brushed with a medium-bristle brush to loosen the embedded material, and vacuumed to remove the solid particles. Semi-solids (soft foods, mud, etc.) should be allowed to dry, then brushed with a medium bristle brush and vacuumed away.

After removing the spill, treat the rest with a general spot cleaner. It can be sprayed directly on the spill, worked in with a brush for 1 to 2 minutes, and blotted away. When the stain is fully removed, spray a small amount of water on the area and blot to remove the water with a paper towel.

Depending on the level of traffic, the flooring may require a deeper cleaning. Hot water extraction is recommended to clean the floor effectively if this occurs. For an extensive guide to cleaning and removing tough stains, visit <https://infinitylww.com> to locate their care and cleaning resources.

Interior Doormat and Rug Selection

To avoid staining or discoloration of vinyl flooring, only use doormats or rugs made of natural fibers.

NOTICE

Rubber or latex-backed mats or furniture with rubber feet may stain or discolor vinyl flooring.

NOTICE

Remember to protect the area around your flooring if using a bleach solution. Other fabrics may have an adverse reaction to certain cleaners.

NOTICE

The use of certain cleaning agents, including but not limited to powdered abrasives, solvents, and industrial strength cleaners is not recommended. Always follow the manufacturer's instructions. Check that the cleaner is suitable for use with cushioned vinyl floor coverings.

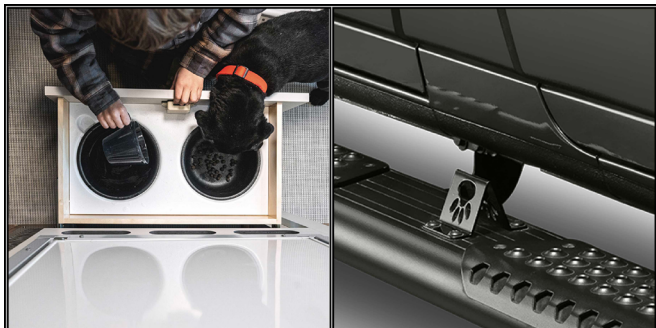
Window Coverings

Pull anywhere along the edge of the covering to remove. The coverings can be rolled up and held in place by the straps at the top, or they can be removed and stowed.

To clean window coverings, prepare a mixture of lukewarm water (approx. 30° C / 86° F) and a mild detergent (e.g., dishwashing detergent). Do not use rough, abrasive sponges/pads or any cloth that could leave marks, lint, or other residues on the fabric, such as paper towels.

Make sure your hands are clean before touching or handling the fabric. With one hand, gently push the fabric from the back against the spot you want to clean. Gently rub the area with a sponge until the spot has disappeared. Use a clean, wet cloth to remove detergent residues; wipe dry with a soft cloth if necessary. Leave coverings hanging in the down position to ensure it is completely dry before rolling it up again.

Pet Features



On **Rangeline 21PS** models, you will find a pet drawer under the refrigerator with no-spill bowls for food and water, with storage underneath for towels and other pet supplies. The area under the bed is designed for placement of a pet bed.

On all models, a paw-shaped leash holder/tie-out is mounted outside to the running board.

Wet Bath

For cleaning, wet the bath surface and clean it using a non-abrasive sponge or soft cloth and a non-abrasive liquid detergent cleaner safe for acrylic, gel coat, and fiberglass bath surfaces. Avoid using acidic or harsh commercial bath cleaners. Rinse and dry with a soft towel.

A wax or sealer suitable for these surfaces can be applied to the stall to restore gloss to dull areas when necessary, but should not be used on the shower floor as this could create an unsafe, slippery surface.

⚠ WARNING

Applying wax to the shower floor is not recommended and could create an unsafe, slippery surface.

Lavy Fold-Down Sink



Fold-down Sink: To open the lavatory sink, pull the top outward until the bowl releases from the holding pegs, then lower it into position. Water drains out of the back of the bowl into a drain line within the wall. Dry the bowl before folding it back up to keep the surface clean and prevent residue buildup.

Rangeline 21PS Model, Faucet (shown left): To use the faucet, fold it out from its stowed position above the sink.

Rangeline 21PL Model, Dual-Purpose Showerhead/ Faucet (shown right): To use as a faucet, rotate to a position over the sink. It can also be extended and placed on the wall-mounted holder for use as a showerhead.

NOTE

To conserve water while showering with fresh tank water, turn the water off between lathering and rinsing.

Sink and Faucet Care

To clean sinks and faucets, dampen a soft cloth with warm water and a small amount of mild liquid soap or detergent. Gently wipe down all surfaces, then rinse with clean water and dry with a soft cloth. Avoid abrasive scrubbing sponges, steel wool, scouring powders, and harsh chemical cleaners, as these can damage or dull the protective finishes on sinks and faucets. Using gentle cleaning methods helps preserve the appearance and integrity of the materials. For best results, wipe down sinks and faucets after each use to prevent water spots, soap residue, and grime from accumulating.

Avoid leaving cookware in the sink, especially metal like cast iron, as it can cause stains and scratches. Depending on the sink and faucet manufacturer, additional care instructions may be included in your owner's packet.

Toilet

⚠ CAUTION

To avoid potential unsanitary wastewater overflow, you must monitor holding tank levels shown on the multiplex panel.

NOTICE

Empty the bowl before travel to reduce the risk of water splashing from the bowl while the motorhome is in motion.

NOTICE

Only water, sewage, and rapid-dissolving toilet tissue should be flushed. Other materials can cause clogging, and on the Rangeline PL model, may damage the macerator which may void the toilet warranty.

NOTICE

When you dump the bowl of the toilet, make sure all paper and solids have cleared the slide mechanism before you allow it to close. Failure to do so can cause the groove for the slide to become jammed and the slide will no longer close completely.

Deodorizers and Biological Chemicals

There are many deodorizers and processing chemicals on the market in tablet, liquid, and powder form. These not only combat odor, but also stimulate the bacteria that works to dissolve the solids and tissues in your waste tank. These chemicals should be introduced through the toilet prior to use per the manufacturers directions. It's also important to always add a few gallons of water by filling the toilet bowl a few times and depressing the foot pedal.

Cleaning

For routine cleaning, Dometic recommends using SeaLand toilet bowl cleaner. If this cleaner is unavailable, use a non-abrasive bathroom and toilet bowl cleaner. Follow label instructions. For stubborn stains, use rubbing alcohol (sparingly).

NOTICE

Do not use highly concentrated or high acid content household cleaners. They may damage the rubber seals.

Toilet Operation, Rangeline 21PS Model



Refer the manufacturer's guide in your owner's packet for warranty, maintenance, cleaning, and troubleshooting information. You can also visit Dometic's website at <https://www.dometic.com> to obtain a copy. Should your RV be equipped with an alternative to Dometic, refer to that manufacturer's website.

To flush, press the foot pedal, holding the pedal down until all solids have cleared. To add water into the bowl, press the pedal down halfway.

Toilet Operation, Rangeline 21PL Model



Before using the macerator toilet, read the manufacturer's instructions included in your owner's packet. The manual provides detailed information on operating the control panel, including understanding LED notifications and audible alerts, as well as performing troubleshooting, cleaning, and maintenance. If the manual was not provided, scan the QR code above or visit <https://www.sanimarin.com> to download a copy.

A macerator toilet uses a motor and cutting blades to grind solid waste and toilet paper during flushing. The following is a basic overview of how to prepare and operate the toilet using the bathroom wall-mounted control panel. To begin using the toilet, ensure its water valve is open to supply fresh water and press the NORMAL button. Perform several flush cycles with fresh water to prepare the bowl for use.

The control panel has three buttons used to activate and empty the bowl:

NORMAL - Flushes solids and toilet paper.

ECO - Flushes liquids and small amounts of toilet paper.

EMPTY - Removes water from the bowl. Press until empty (a small amount of water will remain; this is normal).

Storage

⚠ WARNING

Always secure all loose items before travel. Unsecured cargo can cause injury, contribute to a vehicle accident, be lethal in a crash, or damage the vehicle interior. Ensure all items, including countertop objects, are stowed or fastened before driving.

Storing Countertop Items and Table for Travel

All countertop items, including cutting boards, the cooktop, and other loose objects, along with the removable table, must be stowed securely prior to travel.

Cabinets, Roof Lockers, and Cubbies

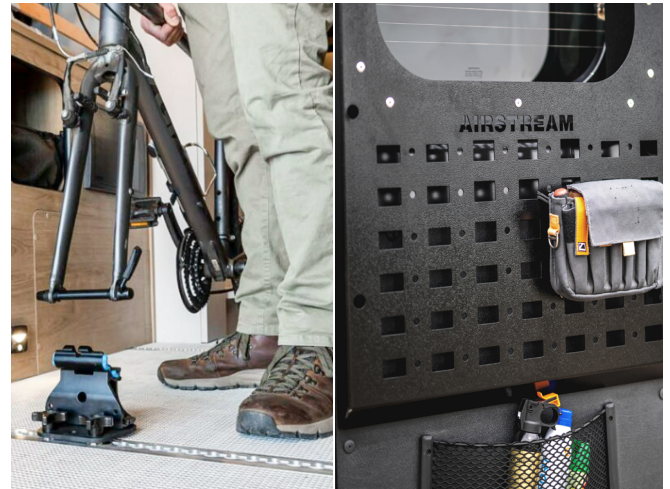
Latching hardware keeps doors and drawers secure while traveling. To open doors and drawers equipped with secure latching hardware, press the spring-loaded knob inward until it pops out to use as a pull. When closing, push the knob back into the recess until the mechanism latches.

Exercise caution when storing items in cubby spaces and other open storage areas as they could dislodge during travel. Heavy items could cause damage and even be dangerous should they dislodge while making sudden stops. Always secure cargo before travel. It is recommended to store heavier items in lower storage areas and lighter items overhead.

⚠ WARNING

Keep flammable material away from appliances with burners and do not block vents.

L-Track Cargo Rails and Molle Panel Storage



Your coach features L-track rails (airline-style cargo track). This high-grade aluminum track is durable and lightweight and creates strong and secure tie-down anchor points when equipped with L-track fittings.

On the **Rangeline 21PL** model, in addition to use as an anchor point, this track facilitates use of the Smartbench. For more information, [see Smartbench on page 5-12](#).

On the rear doors, you will find Molle panels. Popular with outdoor enthusiasts, Molle panels provide a customizable mounting surface to hold travel gear.



Visit <https://airstreamsupplycompany.com> by scanning this QR code and enter L-track in the search field to find attachments like the L-track quick-release latch or the L-track bike mounting system (shown above left).

NOTICE

Each Molle panel has a 30 lb. MAX weight limit.

Dinette Table

To install and adjust the table on the slide rail:

1. Remove the table from its storage location behind the driver seat (Rangeline PL only) and attach the table leg.
2. Hold the table so the mounting clips are aligned above the slide rail.
3. Tilt the table slightly and hook the mounting clips onto the slide rail. On the Rangeline PL model only, the table can be installed in either of two locations: in front of the Smartbench (as shown in the photo) or along the galley near the sliding door.
4. Lower the table until the clips fully engage the rail and the leg rests on the floor.
5. Slightly lift the free end of the table and slide it along the rail to the desired position.
6. Pull the knob on the underside of the table to release the table extension and position it as desired.

NOTE

The tab on the underside and the button on top of the clip(s) are not functional and do not require adjustment.



Rangeline 21PL Model Table - An additional table mounting location (not shown) can be found on the side of the galley to accommodate seating with the passenger seat rotated. When not in use, the table is stowed behind the driver's seat.



Rangeline 21PS Model Table (Shown Above)

Exterior Fold-Down Table, Rangeline 21PL Model

The exterior fold-down table is accessible with the door open. It provides a convenient surface for beverages and light cooking items and is designed to support minimal weight only.

Driver and Passenger Seats

⚠ WARNING

Do not operate the vehicle unless the seats are locked in the forward-facing position.

The driver and passenger seats are a component of the Ram Promaster van.

Several adjustments are available around the base and sides of both seats. Adjust the driver's seat to suit your comfort level and to a position where you can easily reach and operate the controls when driving. Adjustments include lumbar, recline, forward/rearward, swivel (if equipped), and height. To learn how to use them, refer to the Ram Promaster Owner's manual seat section.

⚠ WARNING

Adjust the driver's seat so that you can easily reach and operate all controls. Make sure the seat is locked in position. Do not make adjustments to the driver's seat while vehicle is moving. The seat could move unexpectedly causing loss of control.



If equipped, the swivel seat lever is on the lower front inboard side of both seats. Pull the lever outward to unlock the swivel and turn the seat to face the opposite direction. The seat will lock in both the forward and rearward-facing positions. Before operating the vehicle, check that the seats are locked in the forward-facing position by attempting to rotate them on their swivel.

NOTICE

Seat backs in cab must be returned to full upright position and seat moved forward before the seat is swiveled. Failure to do so could result in damage to the seats upholstery, wall panels, seat base trim, and seat controls.

NOTE

Some models will not shift out of park unless the seats are facing forward and locked into position. The instrument cluster may also provide audible and visual warnings. Refer to your Ram Promaster Owner's manual for information about these and other notifications in the swivel seat section.

Living Area, Rangeline 21PS Model

Bench Seat



Second-row seating allows two additional passengers to be onboard when traveling. The bench seat has integrated child seat anchors and tethers as part of the LATCH system. For more information on how to use the LATCH system, [see How to Install a LATCH Equipped Seat on page 8-5](#).

Folding Bed and Access Step



⚠ WARNING

To avoid injury and damage to the folding bed, do not exceed the maximum weight limit of 600 lbs.

Folding Bed Operation

To unfold the hinged metal bed frame and mattress:

1. The folded bed is held in place by brackets with velcro straps. Lift the edge of the mattress to locate the velcro securing straps at both ends of the bed frame and undo them.
2. Lift the frame out of the holding brackets and unfold it until it lays flat.
3. Lower the frame into position by aligning the catches on the roadside frame with the holes on the curbside frame.

To fold the bed up, repeat the process in reverse and ensure the securing straps are velcroed back in place before traveling.

Bed Access Step

Use the integrated roll-out step next to the lavatory to access the raised bed. The step has an L-shaped drawer stop on the side that engages when the step is pulled out. Lift up on the drawer stop to disengage.

⚠ WARNING

Fold and secure the bed with the Velcro straps before travel. Do not leave it open, use it for seating, or store items while travelling.

Pop-Top Option

The pop-top offers additional sleeping capacity for two. Follow the instructions below for opening, closing, use, and care.



⚠ WARNING

Failure to follow these precautions when setting up and using the Pop-top can result in death or serious injury. Always observe the following:

- Do NOT use the pop-top in wind speeds above 25 MPH. To avoid injury to occupants or damage to the coach, do NOT use the pop-top if stormy weather is forecasted.
- Do not exceed the following weight limits: pop-top interior MAX 550 lbs. / ladder MAX 250 lbs.
- Do not drive with the pop-top open. Never drive with occupants in the pop-top.
- Do not exceed the pop-top's 80 MPH MAXIMUM SPEED LIMIT.

Opening the Pop-Top

1. Unfasten the travel safety straps found at the front of the roof access.
2. Locate and unfold the ladder (stored in the overhead above the driver and passenger seats). Attach the ladder to the hooks at the entrance to the pop-top. Ensure the ladder's feet are in contact with the floor.

3. Climb the ladder to reach the release button and unlock it with the provided key.
4. Press the release button while pushing upward on one of the grab-handles to unlatch the top, then hold onto both handles and push upward to raise the top.

Closing the Pop-Top

1. Turn off and close the ceiling vent.
2. To avoid damaging the top, close all windows, turn off all lights, remove all personal items including bedding and pillows, disconnect and remove all USB powered devices, and ensure the canvas is completely dry prior to closure.



3. Locate the two front straps on either side of the front window (interior). Connect the two straps, and pull taut to 45 7/8" across the canvas width, as shown above.

⚠ CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

NOTICE

A loose front strap can result in damage to the canvas when the pop-top is closed. Keep the front strap taut when closing the pop up.

4. Pull downward on both grab-handles evenly until the top is lowered but do NOT completely close the pop up at this point. Observe the canvas as you lower the top. Make sure it folds inward to avoid getting it caught in the pop-top's mechanism or latch.
5. Walk around the vehicle and visually inspect the roof for any canvas material sticking out of the frame. If necessary, carefully tuck in any protruding material.

6. Fully close the top. Pull down on the handles until the latch engages. A clicking sound should be heard, signifying the locking system has engaged. Lock the mechanism and remove the key.

Perform the following to ensure the pop-top's locking system is engaged: grab the handles with both hands and push upwards. If the upward pressure does not change the tops position significantly on both sides, then the locking system is properly engaged.

7. Fasten the travel safety straps.
8. Fold and secure the ladder in the compartment above the driver and passenger seats.

NOTICE

To avoid damaging the top: close all windows, turn off all lights, remove all personal items including bedding and pillows, disconnect and remove all USB powered devices, and ensure the canvas is dry prior to closure. Check that the top is fully latched and locked, and fasten the safety straps prior to operating the vehicle.

Cleaning and Sealing

Periodically clean the canvas to prevent soil build-up. Use a soft brush, sponge, or clean cloth to remove dirt from the fabric before washing. Clean the canvas with a soft cloth, water, and a small amount of mild soap to prevent damaging the water repellent treatment. Allow the canvas to fully dry prior to closing the top.

It is recommended to inspect and treat the canvas of the pop-top once a year. Apply a high-quality seam sealant following the sealant manufacturer's instructions. Once the sealant is dry, a water repellent spray like Kiwi® Camp Dry can be applied to the canvas if needed. Allow the canvas time to dry before closing the pop-top.

The exterior roof of the pop-top can be treated as a part of the vehicle when washing and waxing. Ensure the top is closed prior to washing the vehicle. Use a weak jet stream of water; do not pressure wash.

NOTICE

Test all products being applied in a non-conspicuous area. Do not use harsh soaps or detergents. Canvas must be completely dry prior to closing to avoid damage to the canvas.

Living Area, Rangeline 21PL Model

Smartbench



The Smartbench provides seating for two passengers and is mounted on L-track rails (airline-style cargo track) integrated into the Rangeline PL's Smartfloor system. Its sliding base allows the seat to be positioned forward or backward along the rails and securely locked in place. Integrated child seat attachment points are included as part of the LATCH system, [see How to Install a LATCH Equipped Seat on page 8-5](#).

This flexibility allows you to customize the interior layout to suit your needs. Move the seat rearward to open the living area and install the table, which is also movable along its slide rail to align with the seat, or move the seat forward to expand rear storage and bring passengers closer to the front.

The Smartbench can also be converted into a bed, providing additional sleeping space when needed.

To access the storage drawer under the seat, first lower the lockbar into the locked position. Then, push the knob to extend it and pull the drawer open.

Moving the Smartbench



1. Lift the locking bar to the OPEN (UP) position.
2. Slide the seat to the desired location.
3. Lower the locking bar to the LOCKED (DOWN) position.
4. Verify the seat is securely locked by attempting to move it forward and backward without using the locking bar.

⚠ WARNING

Failure to follow these precautions when moving the Smartbench can result in death or serious injury. Always observe the following:

- Ensure the locking bar is in the LOCKED (DOWN) position before travel and before using the seat. A seat that is not fully locked may move unexpectedly.
- After adjusting, verify the seat is securely locked by attempting to move it forward and backward without using the locking bar.
- The Smartbench must be in the seat configuration during travel to ensure all seatbelts are properly usable.
- Ensure all hands, feet, and personal items are clear of the seat while making adjustments.
- Do not attempt conversion while traveling.
- Be mindful of head clearance when using either the Smartbench or lift bed.

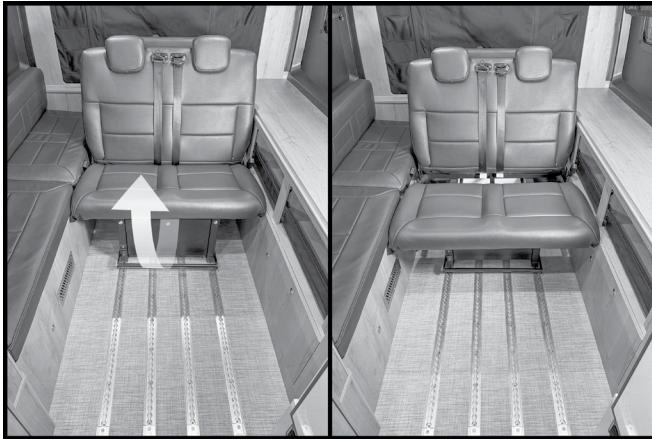
Converting the Smartbench to a Bed

Position the Smartbench about halfway along the tracks so the bed aligns well with the sofa and the folding portion of the backrest clears the rear doors. Reverse the steps to return to the seat configuration.

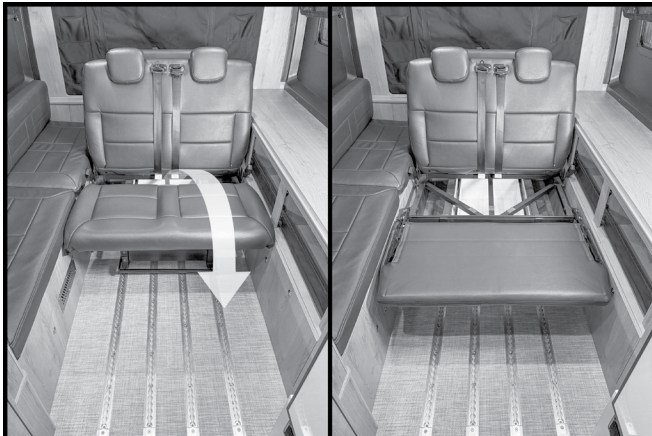
Step 1: Pull upward on the strap attached to the folding portion of the backrest and lower it into position.



Step 2: Lift the front of the seat and pull it out.



Step 3: Flip the seat forward.

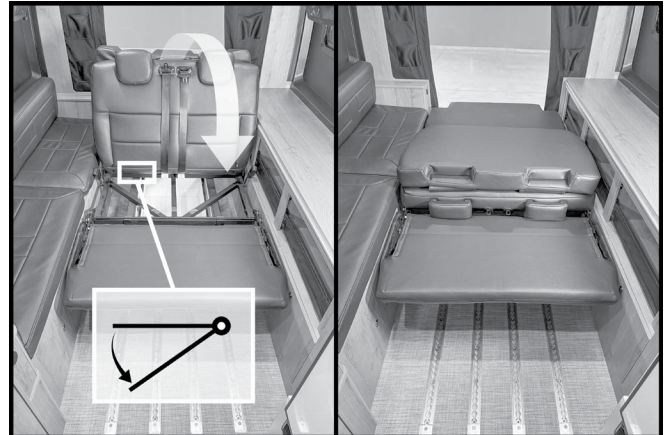


⚠ WARNING

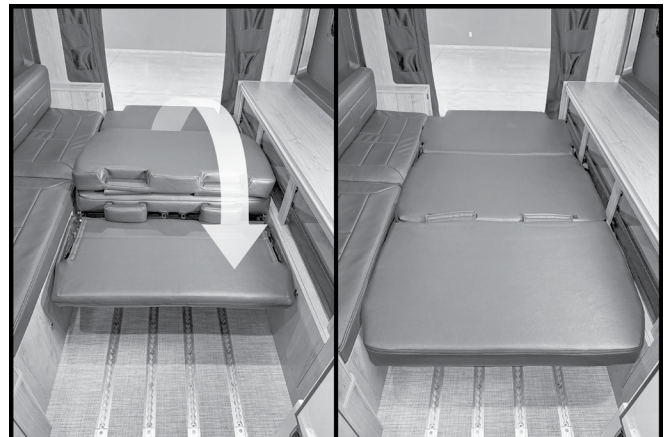
Failure to follow these precautions for Smartbench conversion and use can result in death or serious injury. Always observe the following:

- The Smartbench must be in the seat configuration during travel to ensure all seatbelts are properly usable.
- Ensure all hands, feet, and personal items are clear of the seat while performing the conversion.
- Do not attempt conversion while traveling.
- Be mindful of head clearance when using either the Smartbench or lift bed.

Step 4: Locate the handle at the base of the backrest and pull it to lower the backrest.



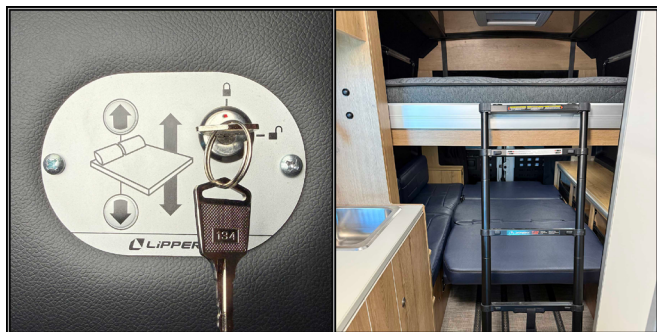
Step 5: Pull the backrest foam pad forward so it lays flat.



Motorized Lift Bed

Overview

The lift bed can be lowered to any desired height. When partially lowered, the motorized lift bed and Smartbench (in bed configuration) provide sleeping space for up to four occupants (two above, two below). When fully lowered to provide additional overhead space, sleep capacity is reduced to two occupants, as the Smartbench can no longer serve as a sleeping surface.



⚠ WARNING

Failure to follow these precautions when adjusting or using the lift bed can result in death or serious injury. Always observe the following:

- Do not occupy or use the lift bed as storage while traveling.
- Never operate the bed with the vehicle in motion. Fully raise the bed prior to travel.
- Remove the key to prevent misuse of the motorized lift. Always supervise children when using the lift bed.
- Ensure all occupants, pets, and cargo are clear of the bed and slide rail system when raising or lowering.
- Do not exceed weight limits: Bed MAX 600 lbs., Ladder MAX 250 lbs.
- Always latch the safety nets to the L-track on the walls before occupying the lift bed.
- Always use the ladder when entering or exiting the bed.

Operation

Follow the steps below to raise and lower the lift bed. The ladder is stored in a bag above the driver and passenger seats when not in use and must be stowed before travel. Ladder instructions are printed on labels attached to the ladder.

1. Park the vehicle and ensure it is stabilized and on a level surface before proceeding.
2. Place the Smartbench in the bed configuration before lowering the lift bed; [see Converting the Smartbench to a Bed on page 5-13](#).
3. Check that all occupants, pets, and cargo are clear of the bed and slide rail system.
4. Ensure the safety nets are removed from the sidewall L-tracks before raising or lowering the bed.
5. Insert the key into the bed motor switch and turn to the unlock position.
6. Press and hold the Up/Down buttons to adjust the bed to the desired height.
7. Once the bed is lowered, install the telescoping ladder using the brackets on the face of the bed. Ensure the ladder feet are in contact with the floor and that the ladder is fully engaged in the brackets. If the bed height is adjusted, readjust the ladder so that it remains fully engaged and the feet remain on the floor.
8. Latch the safety nets to the L-track on the walls before occupying the lift bed.
9. Once the bed is positioned as desired, turn the key to the lock position and remove it to prevent misuse of the lift.

NOTICE

Ensure the safety nets are removed from the sidewall L-tracks before raising or lowering the bed to prevent them from snagging during operation. Also, see Warning to always latch the safety nets to the L-track on the walls before occupying the lift bed.

NOTICE

If the lift bed is lowered and unintentionally contacts the Smartbench seat or cargo, stop operation, raise the bed, and prepare the area before continuing to lower the bed.

Manual Bed Lift Operation (Emergency Use Only)

In the event of motor failure or power loss, the bed can be raised or lowered manually.

⚠ WARNING

Always disconnect from all power sources before performing any operation on the bed lift system.

1. Remove the key so the control pad cannot be operated. Disconnect from any external power source and turn off the battery disconnect switch.
2. Facing the bed from the front of the vehicle, locate the forward-most LED light mounted to the underside of the bed (left-hand side).
3. Carefully pull the light from its recess to access the crank socket, ensuring the wiring is not damaged as the light is removed.
4. Attach the provided crank adapter to a cordless power drill and insert it into the socket. Manual operation with a hand tool is possible but requires significant effort.
5. Turn the crank clockwise to raise the bed or counterclockwise to lower it.
6. Carefully reinsert the wiring and light into the recess.

NOTICE

After manual operation, remove the key from the control panel and do not operate the bed lift until service is complete, as damage to the system may result. Have the bed lift system serviced by an authorized dealer as soon as possible.

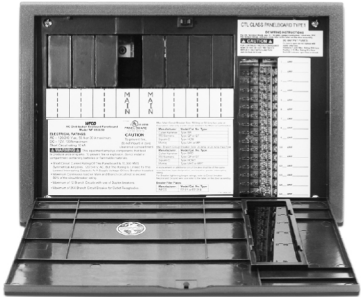
Maintenance

The Lift system has been designed to require very little maintenance. To ensure longevity of operation:

- When the bed is raised, visually inspect the slide rail assemblies.
- Check for excess buildup of dirt or other foreign material.
- Remove any debris that may be present.
- If the system squeaks or makes any noises, blow out any debris from the drive shaft and apply a dry lubricant to prevent and/or stop squeaking.

Electrical System Overview

Power Center



The Power Center is a self-contained 120 Volt AC (120V) power distribution center utilized in recreational vehicles. It houses the coach's circuit breakers and fuses. Its primary function is to provide circuit protection for all the 120V AC loads in the touring coach and is central to the overall electrical system.

The Power Center distributes 120V AC power to appliances and receptacles. Converter/Inverter output is routed through the breaker box to provide load safety protection. It also distributes 120V AC to the converter, which converts 120V AC to 12 Volt DC (12V) to power 12V systems.

The Power Center distributes incoming power from three sources: Shoreline power when connected to an external 120V AC power supply (city power), onboard generator power, and the 270Ah 12V LiFePO4 Deep Cycle House Battery via the 12V DC to 120V AC inverter.

⚠ WARNING

The power center is a centralized power switching, fusing, and distribution center. The potential of lethal electrical shock is present in this box. Inadvertent shorts at this box could result in damage and/or injury. All servicing of this box should be done by a qualified Service Technician.

⚠ WARNING

Disconnect/De-energize all main power service, shore power, generator power, and inverter power prior to servicing the breaker panel.

Circuit Breaker Protection

Standard residential-style (resettable) circuit breakers provide circuit protection for all 120V AC loads. Airstream has installed breakers per RVIA (NEC) listing requirements for the touring coach.

The 30 amp main breaker feeds individual branch breakers. The branch-breakers protect individual loads, which are identifiable by the affixed labels. Shutting off the main breaker will remove power to all branch loads.

A circuit breaker's ON/OFF switch function operates like a light switch: up is ON, and down is OFF. If an overload or short occurs, the breaker will snap to the OFF position to protect the connected circuit. As a result, any device running on the circuit will lose power. Before attempting to reset the breaker, consider the cause. If a connected device is faulty or uses a higher amperage than the circuit breaker's capacity, turn it off before resetting the breaker.

Before resetting the breaker, you need external AC power going to the breaker box. Firmly push the breaker switch to the OFF position and back to the ON position. If the breaker snaps back to the OFF position while resetting, a fault condition still exists and should be serviced by a qualified Service Technician. Suppose the breaker stays ON but snaps back OFF after turning on a possibly faulty appliance. In that case, a fault condition may exist in that appliance that will require service by a qualified Technician.

Ground Fault Circuit Interrupter (GFCI)

The GFCI breaker provides reliable overload and short-circuit protection. GFCI breakers protect against ground faults and provide additional safety to the occupants of the touring coach on all outlets/receptacles. A ground fault occurs when current travels along an unintended path to ground, possibly through water or a person, which may result in an electric shock. The GFCI compares the amount of current going to and returning from the device plugged into the circuit's outlet/receptacle. When the amount of current going to the device differs from the amount returning, the GFCI interrupts the current within a fraction of a second, removing power from the circuit, and protecting the user.

Each GFCI circuit breaker is calibrated to trip with a ground current of 5 mA or more. Since most people can feel as little as 2 mA, a shock may be felt. The shock should be of such a short duration that the effects would be reduced, less than what would normally be a dangerous level. However, persons with acute heart problems or other conditions that can make a person particularly susceptible to electric shock may still be seriously injured.

While the GFCI circuit breaker affords a high degree of protection, there is no substitute for knowing that electricity can be dangerous when carelessly handled or used without reasonable caution.

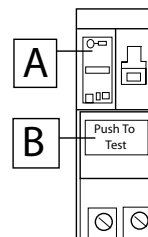
The system incorporates GFCI breakers that implement an auto-self-test functionality. When turned off, these breakers require external AC power to be present before they can be turned back on. If power is present, and the breaker refuses to stay on, consult an electrician or certified RV technician.

⚠ WARNING

The GFCI circuit breaker will NOT reduce shock hazard if contact is made between a HOT load wire and a neutral wire or two HOT load wires. GFCI circuit breakers provide protection only to the circuit to which it is connected.

GFCI Breaker Test

Perform this test on the GFCI circuit breaker each month and record the date.



1. With handle A in the "ON" position, press PUSH TO TEST button B.
2. Handle A should move to the TRIP position, indicating that the GFCI breaker circuit is open.
3. Move handle A to the "OFF" position and back to the "ON" position to restore power.

If the device remains on when the Test button is pushed, the GFCI is not working properly or has been incorrectly installed (wired improperly). If your GFCI is not working properly, call a qualified, certified electrician who can assess the situation, rewire the GFCI if necessary, or replace the unit.

Fuses

When blown, the fuses housed in the power center will be illuminated by a blown-fuse LED indicator to help determine which fuse needs replacing. The indicator will only illuminate if the affected circuit remains closed and/or has a load. For example, suppose a light is burned-out or the switch to the light is off, resulting in an open circuit. In this case, the fuse will not illuminate.

NOTICE

Most fuses will require a qualified technician to access and replace. Contact your dealer or Airstream Service Center.

120 volt System

120-volt AC shoreline power (city power) enters the coach through the SmartPlug cordset connection and is routed to the power distribution center and inverter/charger. The inverter/charger serves as a pass-through when connected to shore power, supplying 120V AC power to major appliances such as the electric element of the heating and hot water system, air conditioner, cooktop, microwave, and receptacles.

In addition to its pass-through function, the inverter plays a key role when off-grid (boondocking) by converting stored 12V DC battery power into 120V AC power, allowing appliances and outlets to function without shore power. However, the available power is dependent on battery capacity and charge level.

The Energy Management System (EMS) actively monitors power usage and automatically sheds loads when necessary to help prevent circuit overloads and breaker trips; [see Energy Management System \(EMS\) on page 5-21](#).

If an outlet or appliance is not working:

- Check the circuit breakers in your touring coach and at the shoreline connection.
- If a breaker trips repeatedly after being reset, the circuit may be overloaded or have a short.
- Reduce the number of devices running simultaneously to lessen the load on the circuit.
- If the issue persists, contact an Airstream Service Center for assistance.

Outlets and USB ports

There are multiple outlets with 120 V receptacles located both inside and outside the coach, as well as USB charging ports positioned conveniently throughout the interior.

⚠ WARNING

Exercise caution with liquids around electrical outlets. The countertop popup outlets are sealed when lowered but should be treated with the same caution as any electrical outlet.

NOTICE

The galley popup outlets are the only outlets the cooktop can be plugged into. The popup outlets are controlled by the EMS and were designed with cooktop use in mind. Depending on use of other 120V AC appliances and outlets, temporary interruptions in service may occur; [see Energy Management System \(EMS\) on page 5-21](#).

Galley Outlet, Rangeline 21PS Model



The galley countertop has a retractable flush-mounted popup outlet with 120V receptacles (to plug in the cooktop and other appliances/devices) and USB charging ports.

Press down on the top to raise and lock the outlet into the extended position. Press the black tab at the bottom to release the lock and lower the outlet.

Galley Outlet, Rangeline 21PL Model



The galley countertop has a retractable flush-mounted popup outlet with 120V receptacles (to plug in the cooktop and other appliances/devices).

Press the button at the front to raise and lock the outlet. To lower, press and hold the button and push the outlet down.

12 Volt System

State of Charge (SOC) is the primary concern when using only battery power (boondocking) from the onboard battery pack. SOC is displayed in percentages on the home screen and electrical screen of the Multiplex panel.

Everything except the A/C, hot water electric element, outlets, cooktop, and microwave runs on 12 volt power (note: some of these appliances have 12 volt electronic boards and require 12 volt power to operate).

Power is routed from the house battery to the 12 volt distribution panel and through its branch circuits to the rest of the touring coach. All 12 volt current is routed to a 12 volt fuse block. Power from the fuse block goes to a busbar holding Type 2 thermal breakers. The thermal breakers feed electrical components throughout the touring coach.

⚠ CAUTION

Thermal breakers break contact when overheated by a short or overload in the wiring. These breakers automatically reset when cooled down. A breaker continually overheating and breaking contact should be investigated by a qualified service technician.

NOTE

The engine battery and house battery are isolated from each other, preventing the two systems from drawing down simultaneously.

Undercarriage Electrical Components

Some features of the electrical system, like the generator, are mounted to the undercarriage. The battery for the **Rangeline PL** model is mounted in a tray attached to the undercarriage near the bumper.

While these areas are protected from normal road debris and water infiltration from normal operation, they are not submersible.

NOTICE

It is imperative that you do not allow any part of your touring coach to be submerged in water as it could cause damage to electrical components that a warranty would not cover.

Solar System

The rooftop solar panels on your Airstream help maintain the charge and extend the life of both the house and chassis batteries. To maximize solar charging efficiency, keep the panels clean and free from shade caused by trees or structures that might obstruct sunlight. For more information on solar power, [see DC-DC Charger, REDARC Alpha on page 5-27](#).

Electrical System Operation

Your touring coach has a powerful 270Ah 12V LiFePO₄ (Lithium Iron Phosphate) Deep Cycle House Battery, a 130 Amp Charger, a 3,000 Watt True Sine Inverter and vehicle alternator. These components work in conjunction to provide a seamless experience whether hooked up to shore power, boondocking on battery power, or driving to the destination.

The information in this manual touches on the highlights of the system, its components, essential functions, and operation. Before operating the system review the Inverter/Charger and Battery information in your Owner's Packet for important warnings/limits, operating instructions, and tips for using the battery. Visit Battle Born's website for more information: <https://battlebornbatteries.com>

⚠ WARNING

This manual provides an overview of the electrical system, its components, and basic operation. For detailed instructions, refer to the electrical component manufacturers' manuals in your Airstream Owner's Packet. It is important to review all manufacturer instructions and safety notifications before using the system.

Battery Disconnect Switch



The battery disconnect switch is behind the left rear door and must be on to charge the battery and/or operate the various electrical systems in the coach. Rotate the knob to the right and left to turn the power to your coach on and off.

The house and chassis batteries will continue to charge from shore power, the alternator, and solar panels even if the battery disconnect switch is turned OFF. However, when not connected to an external power source, turning the switch OFF disconnects the house batteries, cutting off all 12-volt power, except the battery heaters, which can still be manually activated with the dedicated key switch; [see Battery Heaters on page 5-25](#). It is recommended to turn the battery disconnect switch OFF during long-term storage or when conserving battery power while the coach is not in use.

NOTICE

Do not over rotate the battery disconnect switch. Over rotating can damage the switch rendering it inoperable, resulting in power loss.

Energy Management System (EMS)



The Energy Management System (EMS) monitors and regulates 120-volt power usage, automatically managing appliances to prevent circuit overloads. It ensures that total current draw stays within the user-selected shore power service limit, reducing the risk of tripped breakers.

For the **Rangeline 21PS** model, the control display is on the exterior of the roadside bed base. For the **Rangeline 21PL** model, it is located in the small roadside cabinet next to the power center.

By default, the system starts in 30A mode when power is supplied. Pressing **SELECT** allows the user to cycle between service modes to match available shore power. For example, a standard home outlet typically provides 15A service, requiring the user to select the corresponding mode. Campgrounds often provide full 30A service, allowing the system to operate at maximum capacity. In addition to changing this setting, [see Charging from a Residential Outlet on page 5-22](#). Pressing **SCROLL** cycles through system information, including total power usage, available service type, and currently shed appliances.

When 120V AC and 12V DC power are supplied, the system gradually energizes each EMS load control relay, allowing power to flow to connected appliances while monitoring total power consumption. If usage exceeds the service limit, the EMS will automatically shed (remove power from) appliances in the following order:

- 1 Electric heating element (heating/hot water system)
- 2 Air conditioner
- 3 Cooktop
- 4 Microwave

As each load is shed, the system calculates and stores the reduction in power demand, learning the power draw of each appliance and adjusting for voltage and temperature variations to improve accuracy.

Once power consumption drops below the limit and remains stable for at least two minutes, the EMS will automatically restore power to the shed appliances in reverse order (microwave first, then cooktop, etc.).

Inverter/Charger



Your touring coach is equipped with a Xantrex Freedom XC Pro 3000-watt inverter/charger and a remote control display (shown above). This system delivers 3,000 watts of continuous pure sine wave power, a 6,000-watt surge capacity, and a 130A battery charger for efficient lithium battery charging. The display, located above the main entry, provides real-time status updates, allows for settings adjustments, and offers charging information for seamless power management.

The inverter/charger functions as a pass-through, automatically directing 120V AC shore power to the onboard electrical system to operate appliances such as the electric element of the heating and hot water system, air conditioner, cooktop, microwave, and 120V receptacles. When shore power is unavailable, the inverter converts DC power from the house batteries into 120V AC electricity to run these same systems. Additionally, the charger converts 120V AC power into 12V DC to recharge the house batteries and supply power to the 12V DC system.



The Xantrex app enables remote monitoring and management from a connected device. To learn more or download the app, scan the QR code, visit your app store, or go to the manufacturer's website at <https://xantrex.com> and navigate to the product page. If viewing a digital version of this manual, click one of the icons below. Additional component instructions may be included in your Airstream Owner's Packet.



Charging from a Residential Outlet

Before connecting to a residential outlet, use the Xantrex Freedom FXC Control App to adjust the charger's "breaker rating" to 15A, or to the available service amperage.

Most standard residential outlets provide 15A service. If the charger's breaker rating is set above this, it may overload the residential circuit and trip a breaker. Also select the appropriate service mode for the EMS when operating appliances. For more information, see [Energy Management System \(EMS\)](#) on page 5-21.

NOTICE

Airstream calibrates all settings at the factory and recommends adjustments not be made.

NOTE

Even when not using 120V AC power, the inverter will draw a small amount of power if left on. To conserve battery power, turn the inverter off when not in use. Overloading the inverter will cause an automatic shutoff to activate. Removing the load will allow the inverter to reset.

12V Power Loss/Backup Converter, Rangeline 21PS

The backup converter, installed only on the **Rangeline 21PS** model, provides emergency power for all 12V systems. This redundancy feature is designed to keep your Airstream functional when connected to external AC shore power until the system can be serviced.

Before using the backup converter, verify that the 12V system is truly offline. First, ensure the battery disconnect switch is in the ON position by cycling it off and back on again. If you're connected to shore power or running the generator but still have no 12V power, check that the entire 12V system is down — not just a single circuit (i.e., no lights, no Firefly display, etc.). A single circuit issue may be caused by a blown fuse and wouldn't require the use of the backup converter. Finally, ensure the 110V breakers for the inverter are switched on. The converter will not function if it cannot receive power when plugged in and the battery is dead.

Once a complete 12V failure is confirmed, locate the backup converter behind the removable panel of the roadside bed base, and plug it in to restore temporary 12V power if shore or generator power is available.

NOTICE

The inverter will likely not function during this condition, so boondocking will not be possible until the system is repaired. The backup converter is intended only as a temporary emergency 12V power supply. The system should be serviced as soon as practicable to restore full functionality.

Generator

The onboard gasoline-powered generator makes your RV house electrical system fully self-contained. It allows you access to 120 volts when no shore power is available. The user controls all generator functions via touchscreen input at the Multiplex panel; [see Multiplex System on page 5-28](#).

To START the generator: press and hold START for at least 1 second. The system functions automatically upon starting the generator or upon enabling the Automatic Generator Start System (AGS).

Because the generator uses fuel from the gas tank, there is no need for a secondary fuel source. Upon reaching the 1/4 tank level, the generator will stop running to reserve enough fuel to get to a refilling station.

⚠ DANGER

Do not operate the generator in an enclosed building or a partly enclosed area such as a garage. Nor should the generator be operated while sleeping. Follow all instructions and warnings in this manual and the generator manufacturer's manual.

⚠ WARNING

Exposure to carbon monoxide, moving parts, and electricity hazards are possible due to unexpected starting of generator while in Auto Start mode.

NOTE

It is easier on your generator and appliances if you allow the generator to reach its normal operating speed (about a minute) before applying heavy current loads.

Automatic Generator Start (AGS)

The Automatic Generator Start System (AGS) provides optional automatic control of your onboard generator. The purpose of an AGS system is to automatically start and run the generator to charge the battery when the State of Charge (SOC) drops to a predetermined level. This feature protects the battery by ensuring it never discharges to the point of a low-voltage disconnect. Once the battery receives a sufficient charge, the generator will automatically turn off.

Generator start/stop settings and to set predetermined quiet times (so the generator will not start during the night or during posted quiet times), are controlled from the Multiplex touchscreen panel [see Multiplex System on page 5-28](#).

NOTE

The system will only allow the generator to run until the battery reaches a 95% SOC to avoid running the generator indefinitely.

Once enabled, AGS will remain enabled until you cycle the Ram ProMaster Ignition, disengage the AGS, or until you manually operate the generator.

The generator produces Carbon Monoxide (CO), a highly poisonous gas. Moving Parts and electricity can cause severe personal injury or death. To reduce exposure to these hazards, always disable AGS before:

1. Sleeping in the vehicle, unless equipped with a working Carbon Monoxide detector
2. Parking the vehicle in a garage or confined space
3. Parking the vehicle for storage
4. Servicing the generator, battery or other electrical appliances
5. Fueling the vehicle

House Battery



 A single 270Ah Battle Born Gamechanger 3.0 house battery provides onboard power. The battery for the **Rangeline 21PS** model is housed under the roadside bed base. The battery for the **Rangeline PL** model is mounted in a tray attached to the undercarriage near the bumper.

The battery area/compartment is designed for use with non-vented batteries only. Do not install batteries that require venting in this area/compartment. Failure to follow these instructions can result in fire, explosion, serious injury, or death. The following warning label is affixed in multiple locations on or near the battery system.

⚠ WARNING

The battery area/compartment is designed for the use of non-vented batteries only. Do not place a battery that requires venting into this area/compartment. Vented batteries can release poisonous and flammable gases. Can lead to a fire or explosion and result in death or serious injury.

The following is an overview of the battery and battery management system. Please read the Battle Born Gamechanger 3.0 manual (in your Owner's Packet) to learn more about using and maintaining the battery. For additional information, scan the QR code above to visit <https://battlebornbatteries.com/> and navigate to the Gamechanger 3.0 information page.

Lithium-ion batteries are superior to traditional lead-acid batteries in many ways. They provide longer life, faster charging, more usable energy, and have a lifespan of approximately 3000-5000 cycles.

A full discharge and recharge of the battery defines a cycle. The number of cycles a lithium-ion battery can sustain varies depending on its usage. A battery that is consistently discharged to only 50% SOC will have more cycles than a battery that is frequently discharged to 0% SOC.

To learn about the various methods of charging the battery, see [Battery Management and Charging](#) on page 5-26

⚠ WARNING

The battery manufacturer's manual in your owner's packet contains detailed operating instructions and important safety information. Please read the manual before using the battery.

Battery Management System (BMS)

The BMS is an internal component of the battery and is crucial to ensuring safe operation. The BMS monitors cell voltages, currents, and temperatures to ensure they operate in a safe range and will shut the battery down should any faults occur. The following are features of the BMS:

- Over/under voltage protection
- High current protection/short circuit
- High-temperature protection
- Low-temperature charging protection
- Cell balancing

High Voltage Disconnect

If an individual cell voltage exceeds a prescribed threshold during charging (approx. 14.7V), the BMS will prevent a charge current from continuing. Discharge is always allowed under this condition.

NOTICE

Even though the BMS will protect against issues from overcharging, it should be avoided. The recommended specs are 14.2-14.6 bulk/absorb and below 13.8 float.

NOTE

If the battery has not been balanced for a long period, a high voltage disconnect could occur at a lower voltage. The battery will rebalance after several full charges.

Low-Voltage Disconnect

If an individual cell falls below a prescribed threshold during discharge (approx. 10.5V), the BMS will prevent further discharge. Should this occur, connect the coach to external power using the shoreline power cord to bring the battery out of the low-voltage disconnect and fully charge the battery. Bringing a battery out of low-voltage disconnect only “wakes” the battery and allows it to accept a charge. Without shore or generator power, the battery may go back into low-voltage disconnect.

NOTICE

The manufacturer states you should charge (wake) your battery within 24 hours of entering low-voltage disconnect; otherwise, you risk damaging the battery and voiding the warranty.

Temperature Limits

- The battery has an operating temperature range of -4°F (-20°C) to 135°F (57.2°C).
- The BMS will not allow a charging current under 25°F (-3.9°C) but will continue to discharge down to -4°F (-20°C).
- The BMS will not allow a charging or discharging current if the internal temperature of the battery has reached 135°F (57.2°C)

Battery Heaters

The house batteries are equipped with internal heaters to maintain optimal performance in cold conditions and to facilitate charging by keeping the battery temperature above the threshold at which the Battery Management System (BMS) prevents charging. The heaters are controlled by a key switch. For the **Rangeline 21PS** model, the key switch is on the roadside bed base next to the EMS screen. For the **Rangeline 21PL** model, the key switch is located in the small roadside cabinet next to the power center. The battery disconnect does not need to be turned on for the heaters to function.

It's important to note that the BMS will prevent charging if the battery's internal temperature drops below 25°F (-3.9°C). When the key switch is turned on, the heaters automatically engage below 35°F and disengage above 45°F, maintaining a safe charging range. The key switch can generally remain on and requires no user input during normal use. It should only be turned off during long-term storage (3 months or more) when the unit isn't plugged in, to prevent battery over-discharge from heater draw.

NOTE

The BMS will not allow a charging current if the internal temperature is below 25°F, and it will not allow charging or discharging current above 135°F.

NOTE

If the battery is in low-voltage disconnect mode and the battery temperature is below 35°F, the heat function will need some time to warm the battery before performing the wake-up procedure.

Battery Management and Charging

Battery Monitoring/State of Charge (SOC)



Your coach is equipped with a Victron Energy SmartShunt, an advanced battery monitor that measures and communicates key battery parameters without the need for a traditional display. The SmartShunt connects via Bluetooth to the VictronConnect app on your connected device, allowing you to monitor real-time data such as state of charge (SOC), voltage, current, power consumption, and estimated remaining battery life. This information assists in effectively tracking and managing your energy usage.

To learn more or download the app, scan the QR code above, visit your app store, or go to the manufacturer's website at <http://www.victronenergy.com> and navigate to the product page. If viewing a digital version of this manual, click one of the icons below. Additional component instructions may be included in your Airstream Owner's Packet.

Use the code 000000 to sign up



If the inverter use is extensive, the house battery will deplete much quicker. Even when not using 120V AC power, the inverter will draw a small amount of power if left on. When not in use, turn the inverter off to conserve battery power.

If you plan on staying longer without access to a charge or plans to drive and charge from the alternator, you will want to conserve your battery power by using as few lights and appliances as possible. The two most significant loads on the battery are heating and cooling. The more these systems run, the more energy consumption. Consider reducing the temperature on the thermostat when using the heater and increasing the temperature on the thermostat when using the air conditioner.

Charging via Shoreline Connection

Plug the SmartPlug Cordset (shoreline power cord) into an external shoreline power supply (city power). Check that the cordset LED indicator light is blue, then plug the other end into the coach's roadside SmartPlug inlet. For more information about establishing a safe shoreline connection, at home or away, [see Shoreline Power Inlet and Cordset on page 6-8](#).

Next, select the appropriate service mode to match available shore power; [see Energy Management System \(EMS\) on page 5-21](#).

The amount of time it takes to charge the batteries depends on a variety of factors, including available shore power amperage, state of charge of the batteries, efficiency of the onboard charger, ambient temperature, and any power usage within the coach. Higher amperage shore power connections (such as 30A service) allow for faster shore charging while lower amperage connections (such as 15A) will extend charge times. Additionally, extreme cold or heat can affect lithium battery charging efficiency. For a full charge from a depleted battery pack condition, typical 30A charge times for the Advanced Power 3-battery system average around 5 hours, while the Advanced Power Plus 5-battery system typically takes about 9 hours under optimal conditions.

NOTE

Residential Outlets - To charge from a residential outlet, you must set the charger's "breaker rating" to 15A, or to the available service amperage; [see Charging from a Residential Outlet on page 5-22](#).

DC-DC Charger, REDARC Alpha

The REDARC BCDC Alpha, DC-to-DC charger, charges the house battery pack using available solar power, supplementing with power from the chassis battery as needed. Once the house battery is fully charged, excess solar energy is directed to the chassis battery. The unit operates automatically, requiring no user interaction, and draws from the chassis battery only when necessary and only while the engine is running, minimizing alternator load and maximizing solar energy use. Built-in isolation prevents the house batteries from draining the chassis battery when the vehicle is not running.



 The charger also includes a Start Battery Recovery feature—a function that resembles a jump-start—safely supplying a bulk charge to the chassis battery to help get the vehicle running again if the chassis battery is depleted. This can be initiated remotely via the RedVision® app. Refer to the REDARC Alpha manual and RedVision app for complete details. To learn more or download the app, scan the QR code above, visit your app store, or go to the manufacturer's website at <https://www.redarcelectronics.com/us/> and navigate to the product page. If viewing a digital version of this manual, click one of the icons above.

Charging via Solar Power

To maximize efficiency, ensure the solar panels remain clean and unobstructed by trees or structures that could block sunlight. For information on how solar charge is managed, [see DC-DC Charger, REDARC Alpha on page 5-27](#).

Charging via Generator

The first step is making sure the battery disconnect switch is on. All generator functions are controlled via touchscreen input at the Multiplex panel. There are a few options for charging the battery using the generator, the simplest of which is to select BATTERY TOP OFF from the home screen of the Multiplex panel.

Selecting the battery top-off icon starts the generator and runs it until the battery reaches a 95% Start of Charge. For additional information on generator operation and charging using the generator, [see Generator on page 5-23](#).

NOTE

The system will only allow the generator to run until the battery reaches a 95% SOC to avoid running the generator indefinitely.

Charging via Alternator

The first step is making sure the battery disconnect switch is on. The vehicle alternator will provide a charge to the house battery in addition to its function of charging the chassis battery. All switching is handled automatically so one need only drive the coach to provide a charge. Charge times will vary depending on current SOC and environmental factors.

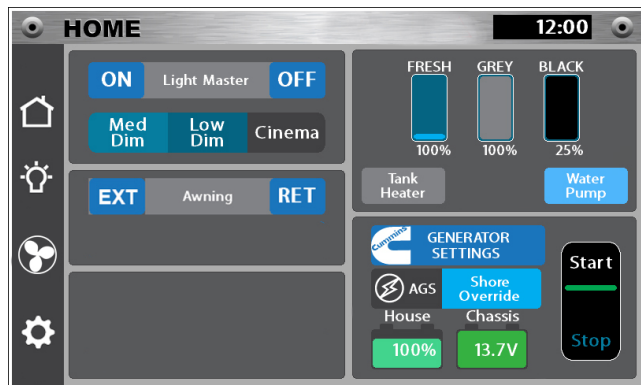
Battery Minder, Chassis Battery

Your Airstream is equipped with a BatteryMINDER® chassis battery maintainer that automatically helps preserve the vehicle's starting battery when the engine is not running. This system provides a low-level maintenance charge to help prevent the chassis battery from discharging when travelling and when in storage and requires no user interaction.

The battery maintainer should remain connected at all times to ensure the chassis battery remains adequately charged when the vehicle is not being driven.

- On the **Rangeline 21PS** model, the battery maintainer is located under the second-row bench seat.
- On the **Rangeline 21PL** model, the battery maintainer is located beneath the floor panel behind the driver's seat.

Multiplex System



Screen images may vary slightly with continuous improvements/firmware updates

The Firefly Multiplex System simplifies control of your touring coach's key features by integrating them into a single, intuitive touchscreen interface. Tapping a function icon toggles that system on or off. In most cases, icons are white when off and turn blue when on, although some controls, such as Light Master or Panel Lights, may not follow this color scheme.

The Home screen provides quick access to frequently used functions, along with real-time readings of tank levels and the status of major onboard systems. Use the menu bar on the left side of the screen to navigate to additional control pages for features such as lighting, awning, ceiling vent fan, and more—depending on your coach's configuration. A dedicated Settings screen is also available for adjusting general system preferences.

Although the interface is designed to be intuitive and easy to use, detailed instructions for specific systems are provided throughout this manual in their respective sections.

NOTICE

The Multiplex System is self-resetting should a circuit trip. The owner should never need to reset the system for any reason. If the main control panel or remote panels are not operating, this could indicate a short in the wiring that will require service by a certified technician.

NOTICE

You may encounter Warning screens when entering settings. Some Changes will affect functions of the touchscreens and your touring coach and should only be changed by a trained technician.

Cleaning the Multiplex Touchscreens

To clean the glass surface of the LCD touchscreens, power down the system and then gently wipe it with a soft, slightly damp cloth (using ONLY minimal amounts water or lens cleaner). Ensure the LCD is fully dry before powering the system up again.

NOTICE

The components of the Firefly system must not be exposed to liquids or moisture of any kind (including the use of any cleaning agents). The only approved exception is cleaning of the glass surface of the LCD touchscreen.

Multiplex Bluetooth® App

The multiplex system can be controlled wirelessly via Bluetooth® connection using the Vegatouch Mira app while in proximity to the touring coach. To download the app and connect via Bluetooth®:

1. Go to the settings screen on the multiplex panel inside your touring coach and tap the gear icon.
2. Select "mobile app" to reach the Mira information page where the required PIN is displayed.
3. Scan the QR code, download the app, and follow the on-screen instructions to connect using the PIN.

If you are unable to scan the QR code, search your app store for Mira, or select one of the following icons:



Ceiling and Directional Lighting



Some lights are turned on and off by pressing the light on the lens or next to the lens. Drop down lights allow directional control.

The Multiplex System touchscreen controls the LED lighting throughout your Airstream. The “Home” and “Lights” screens have a “Light

Master” switch that will allow you to instantly turn all the interior lighting in your touring coach, on or off.

Light Master Memory Feature:

The Light Master function has a memory. If you turn off individual lights and then press Light Master OFF, it will recall what lights were on the next time you press Light Master ON, and only those lights will come on.

Hold the Light Master ON for more than 1 second to reset the memory and turn on all the interior lights.

Light Master **LOCK** Feature:

If Light Master OFF is held or pushed twice, the Light Master On will not respond. Hold the Light Master ON to resolve.

NOTICE

Since your Airstream has LED lighting, there are no lights to change. If an LED light stops functioning, it will require service or replacement.

Entertainment Systems

Wireless Bluetooth® Speaker



Above the galley, you will find a removable/portable and rechargeable Bluetooth® speaker housed in a springloaded bracket. Bracket tension is adjustable

with the included wrench (mounted to the underside). Refer to your owner’s packet for instructions on how to connect to and use the speaker.

A secondary speaker mount is located on the curbside exterior of the touring coach and functions the same as above.

Phone Charger/Holder, Rangeline 21PS Model



The **Rangeline 21PS** model coach has a cordless phone charger on the side of the pantry, roadside, near the bed. With both a stationary and adjustable arm, your phone can be secured or removed with one hand. The rotating feature allows the phone to be mounted vertically or horizontally, depending on the user’s preference. The charger also has a holder for an additional phone and a USB port for corded charging.

TV and Antenna Prewire

Your Rangeline has been pre-wired to allow for the addition of an optional TV and over the air TV antenna. Contact your Airstream dealer for additional information on cost and installation.

Satellite Pre-Wire

You can establish a satellite connection using the curbside external ethernet port; [see 120-Volt Outlet and Ethernet Port on page 6-8](#). Once a connection is established externally, you can complete the set up on the interior of the **Rangeline 21PS** model by accessing the internal ethernet port and 110V outlet in the roof locker above to the microwave. For the **Rangleine PL**, connections roadside in the cabinet next to the power center.

Airstream Connected RV Antenna Pre-Wire



Your Airstream is pre-wired for the aftermarket installation of a Connected RV high-gain multi-band antenna. This antenna, along with the Airstream router (sold separately), provides access to the Internet by creating a local area network. For more information, scan the QR code above or visit <https://www.airstream.com/connected/>. Stay connected to the amenities you demand with a boosted Wi-Fi signal or a dedicated 4G LTE-A internet service (requires data plan activation). Contact your preferred dealer’s service department to schedule your installation.

NOTE

A data plan is required to activate the **Connected RV** features when purchasing an Airstream antenna and router. Instructions on setting up and data plans will be included with the router.

Appliances

The appliances installed in your Airstream typically include manuals provided by their respective manufacturers, which are often found in your owner's packet. If a manual didn't come with the appliance, the Certified Performance Checkout sheet in your owner's packet lists the manufacturer, model, and serial number for each appliance.

⚠ WARNING

Always read and follow each appliance manufacturer's instructions before use. Their manuals include critical safety information and guidance on proper use and maintenance.

The information contained in the appliance manuals supersedes any information contained in the Airstream Owner's Manual content on appliances. If you believe contradictory information on appliances is contained in this manual, or if any appliance manuals have not been provided with your Airstream, contact your dealer, the respective appliance manufacturer, or Airstream Customer Service at 937-596-6111 or email: support@airstream.com.

Maintenance

Follow the instructions and Warnings noted in the respective appliance and equipment owner's manuals.

Air Conditioner

In your owner's packet is a set of literature covering all operating and maintenance instructions. If the literature is misplaced, contact the A/C manufacturer or your Airstream dealer for replacement. All air conditioner functions are controlled using the touchscreen multiplex panel.

Proper voltage to the A/C is critical. A volt meter check may find voltage much lower at a campground shoreline outlet than the needed 110 to 120 volts. Your A/C may not function if the voltage is too low. Low voltage is usually associated with older or poorly maintained motorhome parks. Parking your touring coach so the power cord can be plugged in to a receptacle close to the fuse or circuit breaker box can alleviate low voltage problems. Avoid extension cords and adapters whenever possible. If an extension cord must be used, it should be rated at 30 amps and as short as possible to provide the most current.

If high temperatures are expected, make an effort to park in a shaded area. Starting the A/C early in the morning also helps. It is more efficient to hold

a comfortable temperature than it is to lower the temperature after the interior of the touring coach is already hot.

NOTICE

It is recommended to clean filters weekly when A/C is in full use. Review the air conditioning literature supplied in your owner's packet before proceeding.

Cooktop

Your Airstream is equipped with a single-burner induction cooktop, which requires specific types of cookware to function properly. Unlike traditional cooktops, which use an open flame or electric element to heat the pan, an induction cooktop uses magnetic induction to generate an electrical current directly in the cookware. This causes the pan itself to heat up—rather than the cooktop surface—resulting in faster, more efficient cooking and improved temperature control.

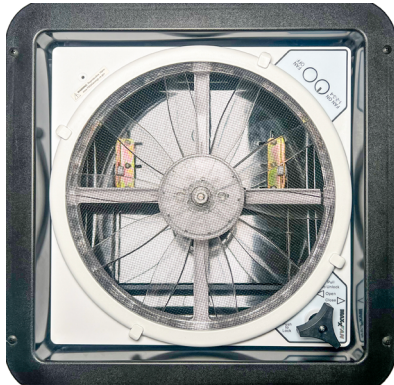
Cookware must be made from a metal that responds to a magnetic field. Cast iron and most types of stainless steel are compatible. Other types of cookware, such as aluminum, will only work if specifically designed for induction use with a bonded layer that responds to a magnetic field.

To test if cookware is compatible, simply hold a magnet to the bottom. If the magnet sticks, the cookware should work with the induction cooktop.

NOTICE

The cooktop is not intended for outdoor use. The galley popup outlet is the only outlet the cooktop can be plugged into. The popup outlet is controlled by the EMS and was designed with cooktop use in mind. Depending on use of other 120V AC appliances and outlets, temporary interruptions in service may occur; see [Energy Management System \(EMS\)](#) on page 5-21.

Ceiling Vent Fan



It is recommended to use the ceiling vent fan to remove hot air from inside the touring coach when the outside temperature does not require air conditioning or when cooking to remove smoke, steam, and other cooking fumes and odors. The ceiling vent fan can create a balanced airflow by opening a window during operation, allowing fresh air to be drawn in while hot, stuffy air is exhausted. The fan has a built-in rain cover that protects it from rain, whether the fan is on or off.

Operation

1. Pull down the knob to unlock the lid. Rotate the knob to open or close the vent. Push up on the knob to lock the lid.
2. Press FAN ON; continue pressing the button to cycle through the four fan speeds. Press FAN OFF to turn the fan off.

NOTE

The fan is designed to be fully opened or fully closed when the vehicle is moving.

Ceiling Fan Mode

With the fan motor running, close the lid to enter Ceiling Fan Mode. The fan will continue to run and circulate air.

Cleaning Instructions

1. Turn the fan motor off and remove power by turning off the battery disconnect.
2. Rotate the screen retainers to remove the screen.
3. Clean the screen with a mild soap and water solution, air dry, and reinstall.

⚠ CAUTION

Do not operate the fan with the screen removed as this could result in damage or injury.

NOTICE

Never place Lindeen™ or a similar cover over the ceiling fan. Greatly restricted airflow and increased sound levels will occur.

NOTICE

Do not use petroleum containing additives or solvent based products on any of the vent's components. The use of non-compatible chemicals will cause cracking and product failure.

Exhaust Vent (Lavy), Rangeline 21PS Model



The lavy/bath exhaust vent (shown above) removes moisture from the air and should be turned on when using the shower. The vent fan can be turned on and off using the switch on the pantry.

Exhaust Vent and Light, Rangeline 21PL Model



Operation

The bath exhaust vent removes moisture from the air when using the shower. To operate, you first need to open the vent by pushing upward on the handle. Once open, turn the fan on by pressing the ON/OFF button. A switch on the ring operates the light.

Turn the fan off before closing the vent. Pull down on the handle to close.

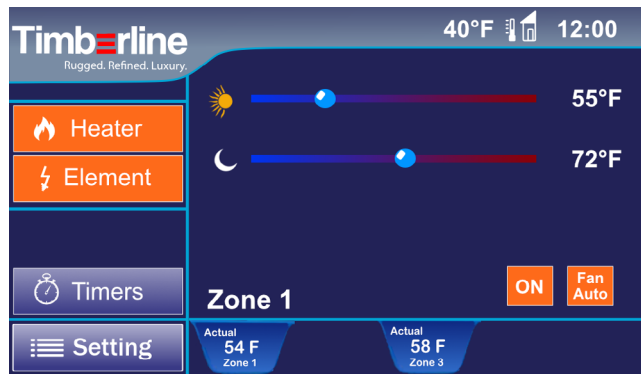
NOTICE

Turn off the fan before closing the vent. Damage to the motor can occur if the fan runs with the vent closed. Always close the vent prior to travel.

⚠ CAUTION

Do not operate the fan with the screen removed as this could result in damage or injury.

Hydronic Heating and Hot Water System



Your Touring Coach has a gas/electric hydronic heating and on-demand hot water system that runs on gasoline and an electric element, eliminating the need for LP gas. The system gets its fuel from the vehicle's gas tank.

⚠ DANGER

DO NOT run the hydronic heating/hot water system in enclosed buildings or a partly enclosed area such as a garage where exhaust fumes can accumulate and create unsafe conditions; **see Vehicle Engine, Generator, and Fuel-Burning Appliance Exhaust on page 2-5.**

⚠ WARNING

Carefully read all the manufacturer's instructions prior to operating. **NEVER** store flammable material in close proximity to the exhaust outlet on the side of the touring coach. Hot exhaust system components can cause burns if touched, even briefly.

NOTE

The system will automatically shut OFF if the Coach's fuel tank reaches the one-quarter level, leaving enough fuel to travel to a refilling station.

The heater portion of the system operates by circulating a heat transfer fluid (RV boiler antifreeze) through quiet air handlers that provide soft, radiant heat to warm the Coach's interior. When the Coach is cold, the fans run on high until the interior temperature reaches its target. The fans then automatically slow down to maintain comfort levels.

The water heater portion of the system circulates the same fluid through an instantaneous water heat exchanger, which produces hot water for showers and faucet use.

The Timberline touchscreen display controls the system. When making selections, the display's various touch controls change from blue **OFF** to orange **ON**.

The controls allow you to adjust the heat and whether you want to utilize gasoline and/or electric:

- The **HEATER** icon controls the gasoline burner
- The **ELEMENT** icon controls the 1500W electric element

See your Owner's Packet for a copy of the Timberline User Manual, where you will find detailed operation, maintenance, and troubleshooting instructions. Or, visit Timberline's website: <https://timberlineheat.com>

Heater and Water Heater Operation - Shore Power

When both the HEATER and ELEMENT icons are selected, the system automatically prioritizes using heat from the electric element. If there is greater heating demand on the system, the gasoline burner will automatically engage and heat the antifreeze for circulation.

The gasoline powered HEATER should only be operated when the vehicle is outside.

1. Select ELEMENT to activate the electric heating element (conserves fuel while connected to shoreline); and/or:
2. Select HEATER (prioritizes electric element and allows the system to engage the gasoline powered heater based on demand).
3. Select ZONE 1 (bed area) or ZONE 2 (all other areas) using the tabs at the bottom of the screen.
4. Select the ON/OFF icon to turn the heat on or off for the selected zone.
5. Use the sliders to adjust the system to your desired temperature for each zone. The top slider adjusts daytime temperatures. The lower slider sets nighttime temperatures. Times for day and night can be adjusted in the settings menu.

Water Heater Only Operation - Shore Power

1. Select ELEMENT to activate the electric heating element (conserves fuel while connected to shoreline); and/or:
2. Select HEATER (prioritizes electric element and allows the system to engage the gasoline powered heater based on demand).

Heater and Water Heater Operation - Boondocking

The gasoline powered HEATER should only be operated when the vehicle is outside.

1. Select HEATER.
2. Select ZONE 1 (bed area) or ZONE 2 (all other areas) using the tabs at the bottom of the screen.
3. Select the ON/OFF icon to turn the heat on or off for the selected zone.
4. Use the sliders to adjust the system to your desired temperature for each zone. The top slider adjusts daytime temperatures. The lower slider sets nighttime temperatures. Times for day and night can be adjusted in the settings menu.

Water Heater Only Operation - Boondocking

1. Select HEATER to turn on the water heater.

NOTE

When boondocking, the Element icon will change color when selected, but will not function unless connected to shoreline power.

Storage Mode

You can place the system in storage mode for short-term storage between trips. For information on how to use storage mode, see the Timberline User Manual provided in your Owner's Packet.

Safe Operation

DO NOT run the hydronic heating/hot water system in an enclosed building or a partly enclosed area such as a garage where exhaust fumes can accumulate and create unsafe conditions.

For information on the safe operation of this system read the Timberline User Manual provided in your owner packet, and also, [see Vehicle Engine, Generator, and Fuel-Burning Appliance Exhaust on page 2-5.](#)

Maintenance and Service Access

The Hydronic Heating and Hot Water System requires periodic maintenance. For information about maintaining this system read the Timberline User Manual provided in your owner packet, and also, [see Maintenance Schedule on page 9-2.](#)

On the **Rangeline 21PS** model, the Timberline unit is located curbside under the bed platform and includes an access panel for servicing the boiler antifreeze.

On the **Rangeline 21PL** model, the unit is located curbside under the bench seat. It is accessible by opening the front panel on the face of the bench seat and through an access panel under the cushion for servicing the boiler antifreeze.

NOTICE

To prevent equipment damage, the hydronic water heater should only be started after the water system is primed and ready for use.

Microwave Ovens

Depending on the manufacturer, Instructions may be included in your owner's packet. Refer to the Certified Performance Checkout sheet, included in your owner's packet, for manufacturer, model, and serial number information.

Refrigerator

Your Airstream is equipped with a 12V refrigerator. Review all refrigerator literature supplied in your owner's packet or stored in the refrigerator prior to operating it.

All units are supplied with a wide range thermostat designed to sense the evaporator (cold plate) temperature. The coldest position on the thermostat is reached by turning the knob to the highest number setting. The OFF position is typically reached by turning past the detent. or to zero

Turn the power on and set the thermostat to the midrange. You can make further adjustments to suit your personal requirements after the box has cooled down. Allow the refrigerator to come down to temperature before loading with product. Adding pre-cooled product will help keep the temperature stable when loading. Setting the thermostat to a higher setting will not decrease the time required for the unit to cool down to its normal operating temperature.

The frequency of defrost is dependent on the number of door openings, the ambient temperature and the humidity level. Typically, it is a good practice to defrost once there is ¼ inch of frost buildup on either side of the evaporator (cold plate).

When defrosting, the unit is shut off by turning the thermostat counterclockwise to the OFF (0) position. Prop the door open. We suggest placing a towel in the bottom of the refrigerator to catch excess moisture.

The interior can be cleaned with a non-abrasive cleaner. Do not use abrasive pads, as they will score the surfaces. Baking soda is recommended.

WARNING

Speeding up the defrost process with a knife or scraper is strongly discouraged due to the risk of personal injury and potential of rupturing the refrigerant circuit.

AIRSTREAM®

Section 6 EXTERIOR

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Exterior Care

 Airstream Supply Company is your trusted source for Airstream-approved cleaners, sealants, and other care products and supplies needed to properly maintain your Airstream's exterior. Scan this QR code to visit and explore our recommended assortment of RV care products and much more at airstreamsupplycompany.com.

Please refer to the Ram ProMaster manual for information on maintaining the bodywork. Airstream provides the following additional information to help you understand the finish and its care. Following these instructions will provide a long-lasting, high-gloss finish for your recreational vehicle.

NOTICE

Airstream's information on finish care may provide additional information and tips on the use of the Ram ProMaster Van as a touring coach; however, no information about the exterior finish of your touring coach in this manual should be interpreted as advice or directions to disregard or void the warnings, cautions, or other information contained in the Ram ProMaster's manuals.

Painted Surface Care

The painted finish on your touring couch consists of a layer of acrylic urethane base coat paint (the pigmented application that provides the color) and a top layer of clear coat. The protective clear coat surface requires regular maintenance, especially in harsh environments where it is more susceptible to damage.

Clear coats lose gloss and appear to fade as environmental and road contaminants accumulate on the surface over time. Regular washing is necessary to keep the surface from being damaged by contaminants (like road salt). However, washing alone will not adequately remove all forms of contamination and does not provide clear coat protection.

To maintain and protect the longevity of the clear coat, the surface must be waxed or sealed periodically after washing. Waxes and sealers protect the top coat from damage caused by the accumulation of environmental contaminants like bugs, bird droppings, tree sap, acid rain, ultraviolet exposure, and moisture. They also protect against road contaminants like salt and tar and help prevent scratches, swirl marks, and chipping. As an added benefit, they enhance the appearance, improving resale value.

If the paint is chipped, it should be repaired with touch-up paint. If the base coat is exposed, it will deteriorate over time, and the exposed metal surface will eventually rust. Contact your Airstream dealer for the correct touch-up paint. Paint color codes can be found on a sticker on the driver's seat pedestal.

Clear coat surfaces that have not been well maintained can develop imperfections like oxidation, swirl marks, and scratches, which may require professional detailing (polishing). Detailing should only be accomplished by a qualified technician or professional detailer.

Washing the Exterior

Before you begin, verify that all vents and windows are closed. Ensure the touring coach's surface temperature is not too hot (under 90°F). Direct sunlight causes water and soap to evaporate quickly, resulting in water spots, so try to wash the coach in a shaded area. If only partially shaded, keep the vehicle wet by hosing it down occasionally.

Airstream recommends using microfiber wash mitts. Inspect the wash mitt each time you pull it from the bucket to ensure it hasn't picked up debris. It's good practice to use two mitts, one for the wheels and undercarriage and one for painted surfaces. Soft bristle brushes are acceptable for use on tires, wheel wells, but are not intended for use on painted surfaces.

Fill a clean bucket with warm water and mild soap or a car wash shampoo, which most auto parts stores and large retailers carry. Avoid combination wash-n-wax products, as these waxes may cause buildup and are better suited for smaller vehicles.

Working your way from the top down, start by thoroughly rinsing the entire vehicle with a hose to remove debris that could scratch the surface. Dip the wash mitt into the bucket, and without ringing it out, wash all surfaces, working your way from the top down, frequently rinsing to minimize grit abrasion. Follow with a final rinse of water.

Dry the surface and windows with a chamois or microfiber towels, working from the top down. Check for debris as you go, especially when working close to the ground. Open all the doors and wipe down the door jams, edges of the doors, and door seals. Drying and cleaning these areas can help prevent the buildup of contaminants that can hold moisture and cause rust on any vehicle. Keeping the seals and jams clean also provides a better surface for the doors to seal when closed. Finish by drying off the wheel rims and tires.

⚠ WARNING

Do not use a round spray nozzle when pressure washing. Doing so can cause unseen damage to tires and other critical vehicle components, which may cause them to fail unexpectedly. Maintain a proper distance of approximately 1 foot when using a 25° nozzle. Never point the jet nozzle at tires, moldings, hoses, electrical components, seals, plug connections, etc.

NOTICE

Do not use solvent-based cleaners. Refer to the Sprinter manual's cleaning section for products to use on tough spots like insects and tree resin.

NOTICE

Never use any abrasive pads, course brushes, or harsh/abrasive chemical cleaners especially those offered by most automatic car wash operations. Wheels should be cleaned after each exposure to harmful chemicals/materials.

Protecting the Exterior

Only apply waxes or sealants directly after washing the coach to ensure no dirt remains that could scratch the paint, and only apply waxes or sealers in a shaded area. Always follow the directions on the product label. Some product labels may recommend applying wax to the entire vehicle and letting it dry before removal. However, with the large surfaces of a touring coach, it is best to work in sections, applying the wax to a portion, letting it dry, and removing it before moving on to another section. Use a high-quality microfiber towel to remove wax. Turn the towel frequently. Check the towel for debris as you go, especially when working close to the ground. Remove dried polish from crevices, trim, and moldings when finished.

NOTICE

Rubbing or polishing compounds should only be applied by experienced technicians.

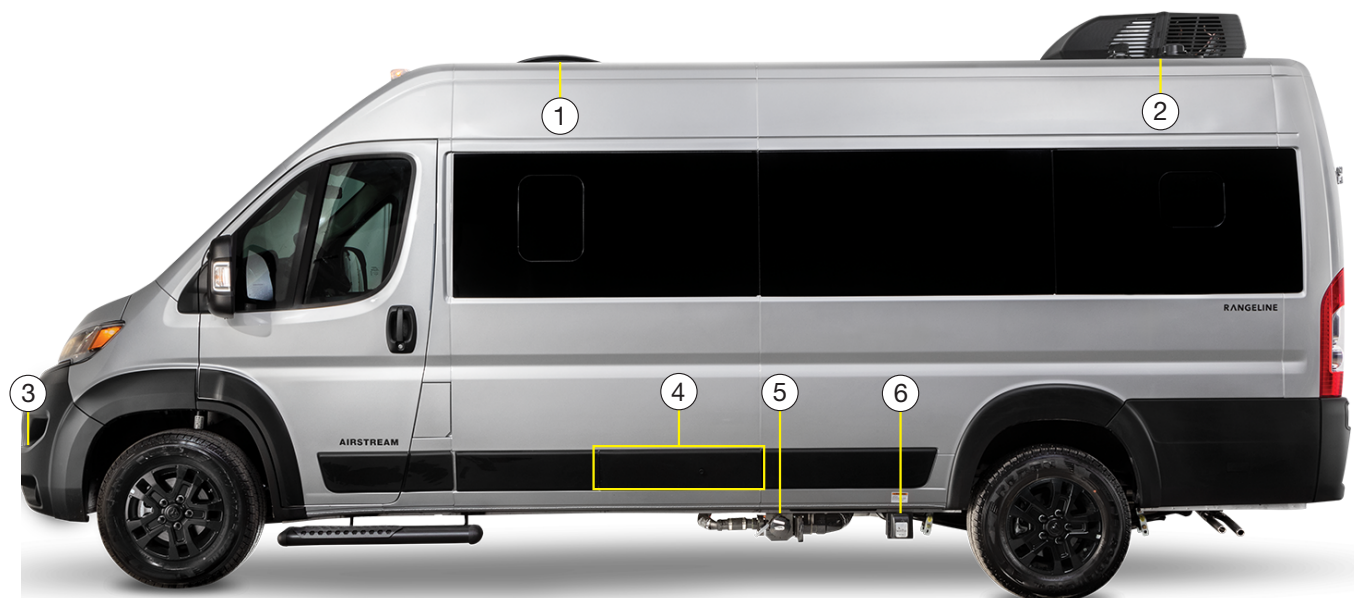
Seam Sealant Inspection

It is recommended that the caulking and sealant used in external seams and joints, such as window frames, light bezels, beltline, rub-rail molding, etc., be checked regularly. If this material has dried out or cracked, or if a portion has fallen out, it should be replaced with fresh material to prevent possible rain leaks. Caulking and sealing products are available from your touring coach dealer, most RV supply stores, and Airstream Supply Company.

Exterior

Exterior Components

Roadside



NOTE

Sections 6 and 9 contain additional information about these components. Mid-production changes may affect the exact location of the features shown above.

1. Ceiling vent fan; [see Ceiling Vent Fan on page 5-31](#).
2. Rooftop air conditioner; [see Air Conditioner on page 5-30](#).
3. Front bumper foot well step; for cleaning windshield (250 lb. MAX).
4. Water service compartment - contains sprayer port, city water fill, waste tank flush, and a courtesy light; [see Water Service Compartment on page 6-7](#).
5. Holding tank dump valve; [see Drain and Waste System on page 9-6](#)
6. SmartPlug power cord inlet; [see Shoreline Power Inlet and Cordset on page 6-8](#).

Curbside



NOTE

Sections 6 and 9 contain additional information about these components. Mid-production changes may affect the exact location of the features shown above.

1. Awning; [see Awning on page 6-9](#).
2. Rooftop air conditioner; [see Air Conditioner on page 5-30](#).
3. 120 volt AC outlet and Ethernet inlet; [see 120-Volt Outlet and Ethernet Port on page 6-8](#) and [see Satellite Pre-Wire on page 5-29](#)
4. Paw-shaped leash holder/tie-out; [see Pet Features on page 5-5](#).
5. Front bumper foot well step; for cleaning windshield (250 lb. MAX).
6. Speaker Mount; [see Wireless Bluetooth® Speaker on page 5-29](#).

Exterior Features

Windows

To open the window above the second-row seating or the window above the bed, depress the red button, and the springloaded silver latch will pop up, allowing them to slide open. Upon closing the window, push the silver latch button down until it clicks and locks back into place.

Clean your touring coach windows the same way you clean the windows in your home. Clean the seals with a damp cloth and mild detergent every 3 to 6 months. Do not use strong solvents, as they will damage the seals. A coat of natural silicone lubricant applied after the seal has dried will keep it flexible. Spread the lubricant evenly with a brush or finger, working it into the surface. This is a good practice for all rubber seals in your touring coach.

⚠ WARNING

Failure to properly clean and lubricate the window seals could result in the window sticking to the jamb and should only be released by a qualified technician trained in the procedure. Do not force, pry, or apply great pressure to open the window. Failure to heed this warning may cause the window to shatter and/or cause personal injury.

Gravity Water Fill



The gravity water fill is behind the right-rear door. Owners sometimes fill their tanks with “home” water to avoid using water from sources that may be distasteful. However, the more water you carry in the fresh water tank, the less cargo carrying capacity you have for other items.

Before filling, run water through your hose for a short time and flush it out. To fill the tank:

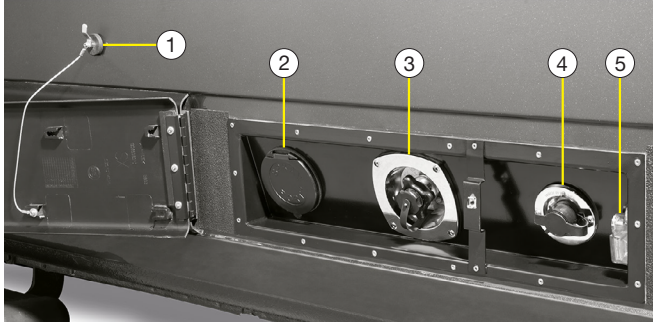
1. Remove the cap and insert a high-pressure RV/ Marine FDA-approved drinking water hose of at least ½-in. diameter made from material that is tasteless, odorless, and non-toxic.
2. Turn the water on at the water source to fill the tank. The small vent above the cap allows air to expel from the tank when filling.
3. Use the multiplex panel home screen to monitor the water level until the tank is full and shut the water off.

NOTICE

Since the fresh water tank fill is essentially in the interior of the unit. Please monitor the amount of water you are putting into the tank to ensure that you do not have overflow into the coach as this could result in damage that cannot be covered by warranty.

Water Service Compartment

Except for the Gravity Water Fill (shown left), the Water Service Compartment contains all other exterior fresh water inlets and outlets on the Rangeline.



Water Service Compartment Features:

1. Magnetic door hold with rubber foot
2. Sprayer Port
3. City Watery Hookup
4. Waste Tank Flush
5. Courtesy Light (on/off switch is on the light)

Sprayer Port

The sprayer port provides external water service allowing the connection of the quick connect fitting hose and sprayer nozzle. Water will flow from the onboard fresh water tank (when the water pump is on while boondocking) or city water when connected to a city water source.

City Water Hookup

For consistent water flow and plumbing line safety, an in-line regulator limits pressure to 50 psi.

Use a tasteless, odorless, non-toxic, high-pressure hose of at least 1/2-in. diameter designed for touring coach use. The city water inlet is a standard garden hose thread. We suggest you carry two lengths of hose in order to reach hookups farther away than normal, as well as to have a spare.

After hooking up the hose and turning on the city water valve provided in the park, slowly open a faucet. There will be a lot of spurts and sputtering until all the air is expelled from the touring coach system. It may take some time before a steady flow of water occurs. Once a steady flow reaches the first faucet, open the others long enough to expel the remaining air.

Waste Tank Flush

For information on how to use the waste tank flush and how to empty the holding tanks, [see Drain and Waste System on page 9-6](#).

Shoreline Power Inlet and Cordset



Your Airstream is equipped with a SmartPlug power inlet located on the exterior, roadside.

Before connecting power to your Airstream, plug the cordset (power cord) into the power source and check the cordset's Power Indicator Light. When the SmartPlug cordset is connected to a power source the LED light on the plug will indicate the following:

- Blue ON - normal power condition. OK to proceed.
- Blue OFF - no power condition. Check Connection and power.

In some older parks and other locations where three-pronged outlets are not available, certain precautions to ensure proper grounding and polarity must be taken. These precautions are listed below:

1. Attach the three-pronged plug to a two-pronged adapter. The third conductor line of this adapter has a short wire lead that must be grounded.
2. For proper grounding, connect the short ground lead to a grounded outlet box or to a cold water pipe. When no water pipe is available, drive a metal rod two feet into the ground and attach the ground lug to it, thus providing the unit with proper grounding.

NOTE

When the three-pronged plug can be used, there will be no problems with proper polarity or grounding with a properly-wired shoreline outlet.

As an RV owner, you may want to install a 30A 120V AC outlet in your home so you have a shore power hookup readily available. However, you must have the proper outlet installed. Typical household 30A outlets are wired 240 VAC for home appliances. **RV outlets are 30A 120V AC.** Ensure your electrician is aware of the difference, or they may mistakenly wire the outlet to 240 VAC.

NOTICE

Do not connect to a 240 VAC outlet. Connecting to a 240 VAC outlet may result in permanent damage not covered by warranty.

120-Volt Outlet and Ethernet Port

The touring coach is equipped with a 120-volt GFCI outlet, located on the curbside rear of the coach. Next to the outlet, you will find an ethernet port. Connect any external provider's ethernet connection to establish an ethernet connection. For location, [see Curbside on page 6-5](#).

Suspension Enhancements

Your touring coach has been outfitted with maintenance-free SuperSprings® helper springs and SumoSprings suspension components designed to increase the ride height, decrease vibration, stabilize sway, and soften harsh rebounds.

⚠ WARNING

The SuperSpring helper springs were installed based on model design specifications and must not be adjusted. Adjustments would alter ride height and modify ride characteristics.

Awning

The awning is designed to provide shade from the sun and may be used in light wind and rain. However, it should be retracted during heavy wind or rain, or anytime the vehicle will be left unattended. The awning crank rod is mounted above the rear door on the inside of the van.

Operation

To extend the awning, insert the T-shaped end of the crank rod into the socket on the awning. Crank the rod counterclockwise until the awning is extended far enough that the fabric is taut and the arms are slightly bent, with approximately a ¼-inch gap at the elbows.

To retract the awning, crank in the opposite direction until the awning box is fully closed.

Avoid overextending the awning or overtightening it when retracting. To remove the awning rod, push up and twist it clockwise (about ¼ to ½ turn) until the T-shape aligns with the socket then pull the rod out.

⚠ WARNING

Never operate the vehicle with the awning extended. Always confirm the awning is fully retracted before moving the vehicle to avoid injury or damage.

NOTICE

Before extending the awning, ensure the surrounding area is clear to prevent damage. If wind or prolonged rain is expected, or if the awning will be left unattended, retract it. The effects of wind and rain on the awning are unpredictable and can cause serious damage to the awning and vehicle. Such damage is not covered under warranty.

NOTICE

Do not use the awning if the fabric is damaged or if it cannot retract properly. Avoid retracting the awning when wet.

Care and Maintenance

Perform the following checks and care items periodically to ensure your awning operates properly and remains in good condition:

- Inspect pivot points for enlarged or holes.
- Check for broken or missing fasteners.
- Inspect end caps for cracking and splitting.
- Confirm that the awning box fully closes when retracted.
- Check canopy for torn fabric or loose stitching.
- Clean with mild soap and water and rinse thoroughly. Allow the awning to fully dry before retracting.
- Lubricate pivot points as needed.

Exterior

Screen Doors

Sliding Screen Door



The sliding door has an accordion-style screen door to provide ventilation and insect control. To operate, carefully pull the screen from its stowed position across the opening. Reverse the procedure when returning the screen door to its stowed position. Always stow the screen door before operating the main sliding door to avoid damage.

NOTICE

Check that the screen door is open before closing the exterior door. Failure to follow this caution could result in damage to the screen door.

Rear Screen



The rear screen is modular allowing the user to position, open, and close as desired. The edges are held in place with magnetic strips to allow for fast egress in an emergency. Push anywhere along the edge to open. The screen can be unzipped, rolled up, and held in place at the top by the attached straps, or it can be removed entirely and stowed.

AIRSTREAM®

Section 7

RAM PROMASTER VAN

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Ram Promaster Van

The Airstream Rangeline Touring Coach is integrated into a Ram ProMaster Van. Operation of the ProMaster, its engine, power train, and other related components are discussed in the Ram ProMaster Owner's Manual and other literature provided by ProMaster. As a point of reference, those systems discussed in this literature are warranted by Ram or their suppliers.

Important ProMaster Information

Your Ram ProMaster Van Owner's and Warranty Manuals contain important Cautions, Warnings, operational, and warranty information on the ProMaster and its components. All information in the ProMaster manual should be reviewed and followed for your safety. The Airstream Owner's Manual may provide additional information and tips on the use of the ProMaster Van as a touring coach; however, no information in the Airstream manual should be interpreted as advice or directions to disregard or void the warnings, cautions, or other information contained in the ProMaster manuals. If you believe there is a conflict in information, Warnings, Cautions, or safety-related information between the ProMaster and Airstream manuals, please contact the Airstream customer relations department immediately to resolve the conflict.

Fuel

The Ram ProMaster Owner's Manual contains important fuel requirement information on using unleaded gasoline ONLY. Ram states to use high quality unleaded regular gasoline having a posted octane number of 87.

Component Identification

If repairs are needed, it may be difficult to determine which parts are Ram and which are Airstream's responsibility. The following partial lists show the major components of the van and the company responsible for their servicing.

For assistance in locating a Ram service center in the United States visit <https://www.ramtrucks.com> and use their dealer locator or call 866-726-4636.

See Ram ProMaster Warranty Information for complete instructions on obtaining warranty service.

ProMaster Van - Serviced by Ram ProMaster or Promaster Suppliers

Chassis

Engine	Speed control
Exterior automotive lights	Advanced safety system
Engine battery	Security systems
Power mirrors	Automotive electrical systems
Engine cooling system	Instrument panel cluster
Fog lamps	Hitch receiver and tow plug
Transmission	Doors, cab, side and rear cargo
Chassis suspension	Drivers/passenger seats (except for seat covers)
Brakes	Windows and windshield
Drive axle and hubs	AM/FM radio antenna
Steering assembly, Steering wheel	Dash Multimedia Center
Automotive fuse panel	AC/heater/defroster
Wheels, Tires	Cargo door assist handle
Parking Brake	Camera system
Alternator	
Fuel pump	

Airstream Components - Serviced by Airstream Authorized Service Centers or Airstream suppliers.

Cab Area

Driver's and passenger's seat covers
Fire Extinguisher

Living Quarters

Interior furniture	Floor covering
Appliances in the lounge/ lavy/galley area.	All plumbing systems
Smoke/CO detector	SuperSprings® Suspension Components
Window Coverings	

Electrical Components

Power Center	Energy Management System
Inverter/Charger	12-volt living area system
House battery	Multiplex System
Battery disconnect	Appliances
Vents	Lighting
120-volt system	

Exterior

Exterior lights	Generator
Awning	Solar panels
Water Service Compartment	Exterior Outlet
Holding Tank Dump Valve	Smart Plug Inlet
Windows with screens	Pop-Top (optional)

NOTE

Some features listed may not be available on your touring coach.

NOTICE

Please contact Airstream or Onan for a service location if repairs are need for the generator.

If you need further clarification or information, contact the Airstream Customer Relations Department at (937) 596-6111 or email support@airstream.com before contacting a service center for an appointment.

If you wish to write, the address is:

Airstream Inc.
Attn: Customer Service
428 W. Pike Street
P.O. Box 629
Jackson Center, Ohio 45334

Tires

Underinflated and overinflated tires are dangerous. Underinflation can result in tire flexing, heat build-up, tire overloading, bad handling, poor fuel economy, and uneven wear. Overinflation can result in abnormal wear, bad handling, and a harsh ride.

Check tire inflation pressures following the Ram ProMaster Owner's manual guidance. Always check tire pressure when significantly changing the load you plan to carry in your touring coach. Always check tire inflation pressures when the tires are "cold." For tire size, inflation pressure, and load ratings, [see Specifications on page 4-4](#) and see your Ram Promaster Owner's Manual.

Proper front-end alignment improves tire tread mileage. Your front-end suspension parts should be inspected periodically and aligned when needed. Improper alignment may or may not cause the vehicle to vibrate. However, improper toe alignment will cause front tires to roll at an angle, resulting in faster tire wear. Incorrect caster or camber alignment will cause your front tires to wear unevenly and cause the vehicle to pull to the left or right.

Proper wheel balance is essential to ride comfort and can affect handling. Vibration from an out of balance wheel can cause added stress on suspension components, wheel bearings, and can cause loosening of joints, nuts, bolts, wiring and screws if left unaddressed.

Vehicle Placard and Tire Inflation Pressure Label

The TIRE AND LOADING INFORMATION placard lists the number of people that can be carried in the vehicle, the total weight your vehicle can carry, the tire size designed for your vehicle, and cold inflation pressures for the front and rear.

Check the ProMaster manual for all weights and tire information placard locations. Please take the time to read, understand, and follow all tire safety information provided.

Proper Tire Inflation

The level of air in your tires affects your vehicle's overall performance. Even the highest quality tire will perform poorly if improperly inflated. Each vehicle has a recommended cold inflation pressure. Check the ProMaster manual for all weights and tire information and the placard location; also [see Specifications on page 4-4](#).

Since the touring coach's loading configurations will vary, the load on each tire will vary. For this reason, check air pressure based for each tire's load.

Cold Inflation Pressure

Cold tire inflation pressure is defined as the tire pressure after the vehicle has not been driven for at least three hours or driven less than 1 mile (1.6 km) after sitting for a minimum of three hours. Inflation pressure is measured in units of PSI (pounds per square inch) or kPa (kilopascals). Check your tire air pressure at least once a month, before each trip, and each morning you drive during a trip. Make sure the valves and caps are free of dirt and moisture.

Underinflation

Underinflation increases susceptibility to damage due to road hazards, reduces tire casing durability, and causes a loss in fuel economy, plus uneven or irregular tire wear. Severe underinflation increases the risk of tread separation, handling difficulties, and possibly tire failure caused by overheating.

⚠ WARNING

It is a common practice for motorhome owners to lower tire pressure in their search for a smoother ride. This is not only dangerous, it is relatively ineffective, and the difference in ride quality is not significant. When minimum inflation pressure requirements are not met, tire durability and optimum operating conditions are compromised. Tire inflation pressure should always meet at least the minimum guidelines for vehicle weight.

Tire Inflation Procedure Precautions

- **BE SAFE** - Tires run with more than a 20% underinflation (approximate) must be dismantled and inspected by a trained professional. Due to the risk of explosion, it should not be inflated without a full inspection or a safety cage. Failure to do so could potentially result in a fatal injury.
- Use a calibrated gauge. A special gauge designed for larger tires will be required if your tire is rated for higher inflation pressures.
- It may be necessary to inflate your tires at a truck stop or truck service center to achieve adequate air pressure for your coach's needs.
- Only permanent air seal metal valve caps should be used.

⚠ WARNING

Due to RISK OF EXPLOSION damaged tires or tires run with more than a 20% underinflation (approximate) must be dismantled, inspected by a trained professional, and should not be inflated without using a safety cage.

- Do not bleed air from warm tires to reduce pressure buildup.
- Do not inflate tires to cold psi rating beyond rim specifications.

How Overloading Affects Your Tires

Tire pressure is what enables your touring coach tire to support loads. Overloading your tires can have serious consequences for passengers and your touring coach. Too much weight can cause stress on your touring coach's suspension system, brake failure, shock absorber damage, handling and steering problems, irregular tire wear, and possible tire failure. Excessive loads or underinflation can lead to excessive heat and tire failure. If you discover that your tires cannot handle the load, lighten the weight of the load on your tires.

Tires and Wheels

(This section is partially excerpted from the Ram ProMaster Van Owner's Manual.)

Examine tires for excessive tread wear and uneven wear patterns. Check for stones, nails, glass, or other objects lodged in the tread or sidewall. Inspect the tread for cuts and cracks. Inspect sidewalls for cuts, cracks, and bulges. Check the wheel fastener torque for tightness. Check the tires for proper cold inflation pressure. Use only wheels and tires of the same size, make, load rating, and pattern.

Do not install tires that are not approved for the size and type of wheel installed on the vehicle itself. Only use those wheel sizes that were delivered to you by your authorized Ram ProMaster dealer. Use only wheels and tires that have been tested and approved by the vehicle manufacturer.

Break in the tires at moderate speeds for a distance of about 65 miles.

WARNING

Always replace lug nuts that are damaged or rusted. Never apply oil or grease to lug nuts. Damaged wheel hub threads should be repaired immediately. Incorrect mounting bolts or improperly tightened mounting bolts can cause the wheel to come off. This could cause an accident. Make sure to use the correct mounting bolts. Check tightness of lug nuts regularly and retighten if necessary.

Tire Grip

Tire grip decreases rapidly on wet or icy roads, especially when the tread depth is below 1/8 inch. Adjust speed and driving style to suit road conditions.

Hydroplaning

Hydroplaning may occur, even at low speeds and with new tires, depending on the depth of the water layer on the road. Reduce vehicle speed, avoid grooves in the road, and apply brakes cautiously in the rain.

Flooded Roads

Most flood-related deaths happen when attempting to drive through moving water. Most cars will float (and be swept away) in 18-24 inches of moving water. Trucks and SUVs have only 6-12 more inches of clearance. Creeks and rivers can rise rapidly, and the road bottom can also wash away. When these conditions occur, water may be much deeper than it appears. Vehicles often roll to one side or flip over entirely when swept downstream, limiting the time necessary to escape.

Changing a Tire

(Partially excerpted from the Ram ProMaster Van Owner's Manual)

Any time a wheel has been removed and reinstalled on the vehicle, the wheel fasteners should be torqued using a properly calibrated torque wrench with a six-sided (hex) deep wall socket.

Tighten the lug nuts/bolts in a star pattern until each nut/bolt has been tightened twice. Ensure that the socket is fully engaged on the lug nut/bolt (do not insert it halfway). After 25 miles (40 km), check the wheel fastener torque to be sure that all the lug wheel bolts or lug nuts are properly seated against the wheel. For torque value, [see Specifications on page 4-4](#)

If new or repainted wheels are fitted, the lug nuts must be retighten again after about 600 to 3000 miles. Do not use remolded tires or retreads.

⚠ WARNING

To avoid the risk of forcing the vehicle off the jack, do not tighten the lug nuts/bolts fully until the vehicle has been lowered. Failure to follow this warning may result in personal injury.

⚠ WARNING

Fitting wheel sizes other than those supplied by Ram to the vehicle will change the ProMaster's handling characteristics and may lead to an accident resulting in severe personal injuries, death and property damage.

⚠ WARNING

The Ram ProMaster Owner's Manual contains important cautions, warnings, specifications, and operational information on changing, maintaining, and replacing of the tires and wheels. Read, understand, and follow the ProMaster manual sections for changing a tire.

⚠ CAUTION

Changing a tire on a touring coach chassis is a physically demanding procedure. It requires specialized tools and knowledge of safety procedures. Only you can determine your knowledge base and physical ability. Don't take any unnecessary risks. Find a safe area to park your coach, and call a tire service center and supply them with the information in the ProMaster Manual if you have any doubts about changing a tire.

Flat Tire

Airstream does not provide a spare tire with the Rangeline, however, you can purchase one aftermarket. Refer to your Ram Promaster Owner's Manual before attempting to change a tire.

If you get a flat tire while driving, gradually decrease your speed. Hold the steering wheel firmly and slowly move to a safe place on the side of the road.

⚠ WARNING

To help avoid personal injury, use a jack only to lift the vehicle during a wheel change. Never get beneath the vehicle while it is supported by a jack.

Precautions When Changing a Wheel

- Keep hands and feet away from the area under the lifted vehicle.
- Always set the parking brake and do not disengage when the vehicle is raised.
- Always block wheels before raising vehicle with jack.
- Always use the jack on a level surface.
- Do not jack the vehicle up more than 1-2 in. between the tire and the surface. Otherwise, the vehicle may tip over and may cause serious injury or death to you or others.
- Be sure that the jack arm is fully seated in the jack take-up bracket.
- Always lower the vehicle onto sufficient capacity jack stands before working under the vehicle.
- Do not damage, grease, or oil lug nuts or stud threads.

Procedure

- Park the vehicle on a firm, level, non-slippery surface.
- Switch on the hazard warning flasher switch, set the parking brake, and place the transmission selector in "P".
- Everyone must leave the vehicle before you jack it up.
- Everyone must leave the danger zone before you jack up the vehicle. Danger zones vary with locations. Take a minute and look at what might happen if the vehicle falls off the jack and rolls. Set up your danger zone.
- The vehicle must be safeguarded in accordance with legal regulations (such as using a warning triangle).
- Prevent vehicle from rolling away by blocking wheels with wheel chocks (not supplied with vehicle) or sizable woodblocks or stone. On a level road place one chock in front of and one behind the wheel that is diagonally opposite to the wheel being changed. When changing a wheel on mild uphill or downhill grade, place chocks on the downhill side blocking both wheels of the other axle. Do not jack vehicle up on a steep grade.

⚠ WARNING

Do not change wheels on a steep uphill or downhill grade. The vehicle may begin to move and fall from the jack, which could cause property damage, personal injury, and/or death.

Jack

Read, understand, and follow the Ram ProMaster Owner's manual instructions, cautions, and warnings for changing a wheel and jack point locations.

- Loosen the lug nuts before raising the vehicle.
- Close the release valve on the jack.
- Assemble the pump lever provided and insert it into the socket on the jack.
- Secure lever by turning it clockwise in the socket.
- Position the jack under the appropriate jack point and raise the vehicle by pumping the lever.

⚠ WARNING

A jack is intended only for raising the vehicle briefly, for changing a wheel. The jack must be placed on a firm, flat surface only. Do not crawl under the vehicle while it is raised with a jack. Do not start the engine while the vehicle is jacked up. Do not jack the vehicle up more than 1-2 in. between the tire and the surface. The vehicle may tip over and cause serious injury or death to you or others. Jack stands must always be used while working beneath the vehicle. Failure to follow these precautions could result in property damage, personal injury, and/or death.

Installing and Removing A Wheel

- Loosen the wheel fasteners (wheel bolts or lug nuts).
- Jack up the vehicle until the wheel is clear of the ground.
- Unscrew the fasteners and remove the wheel (keep the fasteners clean).

⚠ WARNING

If the vehicle moves forward or backward while it is being jacked up, lower it, stabilize the vehicle, and repositioned the jack. When the vehicle is jacked up, the jack must stand vertically (plumb-line).

Mounting a New Wheel

- Before fitting the spare wheel, clean rust and dirt off the contact surfaces of the wheel and the wheel hub and from wheel bolts or lug nuts.
- Note the specified wheel and tire size, tire load capacity, and speed code.
- Do not change the tire's direction of rotation.
- Do not damage, grease, or oil wheel bolts or lug nuts or their threads.

Centering Wheels With Wheel Fasteners

- Install the wheel and snug the wheel fasteners.
- Slightly tighten wheel fasteners.

Lowering the Vehicle

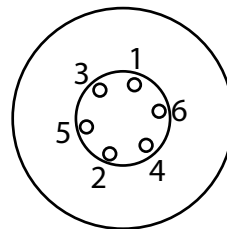
- Slowly open the jack release valve to lower the vehicle until tire is resting on the ground.
- Tighten the wheel fasteners in a crisscross pattern, as specified, with a torque wrench. For wheel fastener torque procedures, see the Ram ProMaster Van Owner's Manual.
- Remove the jack and stow.
- Check the tire pressure. For tire pressures see the Ram ProMaster Owner's Manual or [see Specifications on page 4-4](#).
- Retighten the wheel fasteners to the specified torque with a torque wrench after a distance of approximately 25 miles.

⚠ WARNING

Only certain tires meeting the tire size/load/speed index ratings contained in the Tire Pressure Tables, found in the Index Section of the Ram ProMaster's Owners, are certified to conform to FMVSS 120 for the ProMaster Vehicle at this time. Please check the sidewalls of your originally-equipped tires for specific makes/sizes, and speed load ratings when you need to replace your tires. To prevent accident, injury, or possible death, use only the correct tires for your tire replacement.

Wheel Bolt/Lug Nut Tightening

Torque wheel fasteners evenly to specification with a torque wrench using a crisscross pattern in the proper sequence:



⚠ WARNING

Consult the Ram ProMaster Owner's manual for extensive wheel installation, tightening, torque procedures, cautions, and warnings.

⚠ WARNING

Wheel fastener torque must be checked immediately after reinstalling a wheel and again after 25 miles. Torque all wheel fasteners evenly to specification using the proper sequence. For torque values, [see Specifications on page 4-4](#).

⚠ WARNING

Tightening by hand or with an impact wrench can result in loose or overtightened wheel fasteners, which could lead to a wheel falling off while driving or damage wheel and brake components.

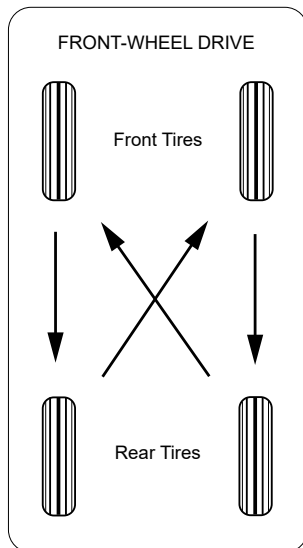
Tire Rotation

Front and rear tires perform different jobs and can wear differently depending on the types of roads driven, driving habits, etc. To obtain the longest tire life, you should inspect and rotate your tires regularly.

Many automotive dealers and tire dealers will perform a free tire inspection to look for uneven or abnormal tire wear.

Tires should be rotated every 6,000 to 8,000 miles. For the longest tire life, any time irregular wear is seen have the tires checked, alignment checked, and tires rotated by your truck or tire dealer. Have the cause of uneven wear corrected.

Rotation Pattern For Wheels



⚠ WARNING

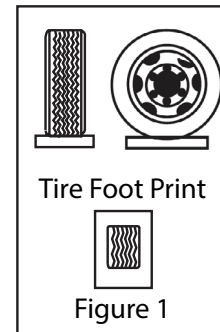
Read the Ram ProMaster Owner's Manual for complete instruction on tire rotation, installation, and maintenance.

Support

Since touring coach's may sit for long periods it is important to properly support the tires if blocks are used for leveling.

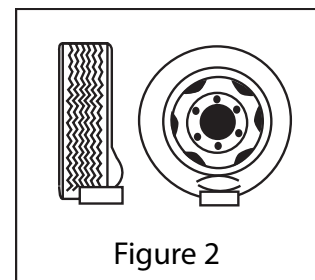
Caution must be taken to ensure that the tires are fully supported when using blocks to level the touring coach. The load on the tire should be evenly distributed on the block. If not done, the steel cables in the sidewall of the tires may be damaged and could lead to premature fatigue of the sidewall.

Correct



The CORRECT method is shown in Figure 1. The tire is supporting the full load. Please note that the block is wider than the tread and longer than the tire's footprint. This provides maximum support to the tire and ensures that the load is evenly distributed throughout the tire's footprint area.

Incorrect



INCORRECT method is shown in Figure 2: A portion of the tire is supporting the full load.

⚠ WARNING

Tires that are incorrectly supported may be damaged, which could lead to casing failure resulting in serious injury or property damage. If, on previous occasions, the tires have been incorrectly supported, hidden damage may be present. Please contact your local tire dealer and request an inspection and a determination of possible damage.

NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

AIRSTREAM®

Section 8 DRIVING

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Loading

One of the most critical aspects of safely operating a touring coach is understanding how to load them properly. Key considerations are the weight of the cargo, whether or not it is within limits, the location of the load, and how it affects vehicle handling.

The Cargo Carrying capacity tag (example below) is on every touring coach inside the door. Do not try to guess what your touring coach weighs loaded. Load your touring coach cargo, including water, fuel, etc., and take it to a public scale. Weigh each axle of your vehicle. Refer to your axle weight and tire limits to see if you are within a safe range; [see Specifications on page 4-4](#). Add the weight of passengers and total all axle weights and make sure you are below the GVWR.

Ensure the load is balanced. Do not load too much on any one side of the vehicle. Check side-to-side and front-to-back by stepping back and looking at your touring coach. Ensure there is not too much weight on any one side. A balanced load is much easier to tow or drive.

Be sure to secure all items. Loose items can cause damage and can be a safety issue.

MOTOR HOME OCCUPANT AND CARGO CARRYING CAPACITY
VIN #####
THE COMBINED WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED
XXX kg or XXX lbs
Safety belt 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

To arrive at the COMBINED WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED number, Airstream weighs the vehicle as finished and adds the weight of the chassis fuel. That number is subtracted from the GVWR of the touring coach and listed on the tag. The total weight of all cargo, including but not limited to dealer or customer modifications or additions, fluids (fresh water and holding tanks), food, clothes, tools, tongue weight of a towed trailer or vehicle, and passengers should never exceed the number listed while the touring coach is in transit.

The SAFETY BELT SEATING CAPACITY is the number of seat belts provided for occupants allowed onboard during travel.

The FULL LOAD OF WATER EQUALS number is arrived at by multiplying the fresh water tank by 1Kg/L or 8.34 lb/gal.

When loading the vehicle, keep the GVWR, GAWR, Tire Weight Ratings (listed on the vehicle tire Information placard), and the cargo and occupant capacity in mind, and do not exceed these specifications. Your safety depends on not overloading the touring coach, axles, and tires; [see Specifications on page 4-4](#).

Weighing

To determine the actual weight of your vehicle with cargo, water, and fuel it must be weighed on scales as you plan to travel. The most common scales are those used by states to weigh trucks along the highway. Grain elevators, cement outlets, and gravel pits in rural areas are good sources.

NOTE

The following page explains weighing instructions for this touring coach. If you have trouble locating scales, your State's Highway Patrol may be able to assist. Some state DOT websites also provide this information.

Vehicle and Trailer Weights and Ratings Definitions

Gross Vehicle Weight Rating (GVWR) is the maximum permissible weight of the touring coach.

Gross Vehicle Weight (GVW) comprises weight of vehicle including tools, installed accessories, passengers, cargo, and trailer tongue weight. It must never exceed the GVWR.

Gross Axle Weight Rating (GAWR) is the maximum permissible axle weight.

Gross Trailer Weight (GTW) is the maximum permissible trailer weight to be towed.

Trailer Tongue Weight Rating (TWR) is the maximum permissible weight of the trailer tongue. This counts as cargo when loading a touring coach.

NOTE

Check the ProMaster manual for all weights and tire information placard location.

Front Axle GAWR	GVWR	Rear Axle GAWR	GCWR - GVW
SCALE WEIGHT		Optional Tow Weight	
STEP 1 Front Axle GAW	STEP 2 GVW	STEP 3 Rear Axle GAW	STEP 3a Tow Weight minus Weight of Trailer or Vehicle Towed
INDIVIDUAL WHEEL POSITION WEIGHT			
STEP 4 Left Front Wheel Position	STEP 5 Left Side (Total LF + LR)	STEP 6 Left Rear Wheel Position	
Calculated	Calculated	Calculated	
Right Front Wheel Position Step 1 minus Step 4	Right Front (Total RF + RR) Step 2 minus Step 5	Right Rear Wheel Position Step 3 minus Step 6	

GAWR = Gross Axle Weight Rating

GVWR = Gross Vehicle Weight Rating

GCWR = Gross Combination Weight Rating

Procedure for Weighing a Touring Coach

Vehicle should be weighed loaded, as you normally travel.

1. Fill in first row from Specification Section of this manual; [see Specifications on page 4-4](#).
2. Weigh vehicle as shown in row 2 (Scale Weight) and fill in blanks.
3. Weigh one side of vehicle as shown in Individual Wheel Position Weight.
4. Calculate other side as shown in last row.

Weight and Loading Considerations

Touring coach's have fluid holding tanks and ample storage. It gives you great flexibility in loading. If you want to load down all the storage compartments, the amount of fluids may have to be reduced. Distribute your additional cargo as evenly as possible with the heaviest objects located as low as possible.

Even if you're going to a remote area, you can usually fill your water tank shortly before entering the area. Just reducing your load by 10 gallons of water lets you carry an additional 83.4 lbs. of cargo.

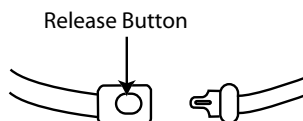
Safety

Seat belts

The driver, passenger, and second-row seats have federally approved seatbelts. Most states require, by law, that all passengers in a motor vehicle use seatbelts while in transit. All occupants should remain seated with their safety belts firmly attached while the touring coach is in transit.

The driver should adjust their seat so they can reach all controls easily with the belt on and use the full travel of the foot brake. Place seatbelts low around the hips to prevent sliding out from under them in case of an accident. Doing so places the body's load on the strong hipbone structure instead of around the soft abdominal area. Remember, there should only be one occupant per seatbelt when traveling.

For seatbelt buckle operation, see the Ram ProMaster manual.



⚠ WARNING

Become familiar with and follow all directions, advice, and warnings pertaining to seats, seatbelt operation, and restraint systems provided in the Ram ProMaster Owner's Manual. Do not allow passengers to ride anywhere in the touring coach except in seats with approved seatbelts.

Child Safety Seat

(Some text is partially excerpted from Ram ProMaster Owners Manual.)

⚠ DANGER

Never place a rear-facing child restraint in front of an air bag. A deploying passenger front air bag can cause death or serious injury to a child 12 years or younger, including a child in a rear-facing child restraint.

⚠ DANGER

Never install a rear-facing child restraint in the front seat of a vehicle. Only use a rear-facing child restraint in the rear seat. If the vehicle does not have a rear seat, do not transport a rear-facing child restraint in that vehicle.

Safety experts recommend that children ride rear-facing in the vehicle until they are two years old or until they reach either the height or weight limit of their rear-facing child restraint. Two types of child restraints can be used rear-facing: infant carriers and convertible child seats.

The infant carrier is only used rear-facing in the vehicle. It is recommended for children from birth until they reach the weight or height limit of the infant carrier. Convertible child seats can be used either rear-facing or forward-facing in the vehicle. Convertible child seats often have a higher weight limit in the rear-facing direction than infant carriers do, so they can be used rear-facing by children who have outgrown their infant carrier but are still less than at least two years old. Children should remain rear-facing until they reach the highest weight or height allowed by their convertible child seat.

LATCH (Lower Anchors and Tethers for Children)

LATCH is a system that makes child safety seat installation easier (without using seatbelts). The LATCH system is a standard feature on the second row bench seat.

The LATCH equipped touring coach has two sets of small bars, called anchors, located in the crease of the seat where the back and bottom cushions meet. LATCH compatible child safety seats have a lower set of attachments that fasten to these vehicle anchors.

How to Install a LATCH Equipped Seat

ALWAYS read and follow the vehicle owner's manual and child safety seat manufacturer's instructions for correct installation and proper use.

1. Fasten the child safety seat's top tether to the vehicle's anchor on the back of the seat (located near the bottom of the seat).
2. Fasten the child safety seat's lower attachments to the vehicle's lower anchors (located in the crease of the seat). Tighten and adjust according to the instructions and check for a secure fit. The child safety seat should not move more than an inch forward or sideways.



NOTE

If you are unsure if your child safety seat is compatible, look for the following LATCH logo.



Trailer Towing and Driving Tips

(Some text is partially excerpted from Ram ProMaster Owners Manual.)

⚠ WARNING

Failure to use proper equipment and driving technique can result in losing vehicle control when towing a trailer. Improper towing or failure to follow the instructions contained in this section can result in serious injury. Follow the guidelines below carefully to ensure safe trailer operation. Ask your authorized Ram ProMaster or Airstream dealer if you require an explanation of the information contained in the manuals.

Trailer Hitches

Units have hitches and wiring installed by Ram. The ProMaster has a 7-way connector for lights and a charge line. Review all sections of the Ram ProMaster Manual prior to towing. Remove the hitch ball adapter from the receiver when not in use to reduce the possibility of damage.

Since this vehicle is designed and intended primarily as a load-carrying vehicle, towing a trailer will affect handling, durability, and economy. Maximum safety and satisfaction depend upon properly using the correct equipment and avoiding overloads and other abusive operations.

⚠ WARNING

The total weight of the touring coach and trailer must not exceed the GCWR listed in the specification section of this manual. The maximum towing capacity varies according to the size of the touring coach and its GCWR. Vehicles should be properly equipped for towing trailers. Information on trailer hauling capabilities and special equipment required may be obtained from your Ram ProMaster and/or Airstream dealer.

Loading a Trailer

You should not exceed the permissible GTW (Gross Tongue Weight) or the trailer GVWR when loading a trailer.

Maximum permissible values are listed on the safety compliance certification labels for the vehicle and trailer. For their location, see the Ram ProMaster Owner's Manual. The lowest value listed must be selected when determining how the vehicle and trailer are loaded.

The tongue weight must be approximately 10-15 percent of the loaded trailer weight to ensure proper handling but not to exceed the hitch rating.

Tongue loads can be adjusted by proper distribution of the load in the trailer and checked by weighing the loaded trailer separately and then the tongue. The tongue weight at the hitch must be added to the GVW to prevent exceeding your ProMaster towed vehicle's rear GAWR.

Touring coach tires should be inflated to the highest pressures shown on the ProMaster Tire Information Placard when towing trailers. See Ram ProMaster Owner's Manual for its location. This vehicle's Cargo Carrying Capacity (CCC) is reduced by the amount that equals the trailer tongue load on the trailer hitch.

Checking Weights of Vehicle and Trailer

To ensure the tow vehicle and trailer are within weight limits, weigh the vehicle-trailer combination on a commercial scale (tow vehicle including driver, passengers, cargo, and trailer fully loaded); [see Weighing on page 8-2](#).

Also, check the vehicle's front and rear axle weights and tongue weight. The values as measured must not exceed the ProMaster weight ratings listed on vehicle information placards and in the Ram ProMaster manual; [see Specifications on page 4-4](#).

NOTE

Check the Ram ProMaster manual for all weights and tire information placard locations.

Attaching a Trailer

Please observe maximum permitted trailer dimensions (weight and length).

Most states and all Canadian provinces require safety chains between your tow vehicle and trailer. The chains should be crisscrossed under the trailer tongue. They must be attached to the hitch receiver and not to the vehicle's bumper or axle. Be sure to leave enough slack in the chains to permit turning corners.

Most states and all Canadian provinces require a separate brake system for towing trailers.

⚠ WARNING

The towing vehicle's braking system is rated for operation at GVWR, NOT at the GCWR. A separate, functioning brake system is required for any towed vehicles or trailers weighing more than 1000 lb (450 kg) when fully loaded. NEVER exceed the GVWR, or the GAWR specified on a touring coach certification label. Also, NEVER exceed the weight ratings of a trailer hitch installed on a touring coach. Failure to heed any part of this warning could result in loss of control of the touring coach and towed vehicle or trailer which may cause an accident and serious injury. For specified towed vehicle braking requirements, consult the Ram ProMaster Owner's Manual that comes with this vehicle.

⚠ WARNING

Do not connect a trailer brake system (if trailer is so equipped) directly to the vehicle's hydraulic brake system if your vehicle is equipped with anti-lock brakes. If you do, neither the vehicle's brakes nor the trailer's brakes will function properly. Property damage, injury, or death to you or others may be the result.

The provided vehicle electrical wiring harness for trailer towing has a brake signal wire for hookup to a brake controller. Most states and all Canadian provinces require a breakaway switch on trailers with a separate brake system. The switch activates the trailer brakes in the possible event that the trailer might separate from the tow vehicle. Please consider using a trailer sway control system. For further information, see your authorized Ram ProMaster or Airstream dealer.

Towing a Trailer

There are many different laws, including speed limit restrictions, having to do with trailer towing. Make sure that your vehicle-trailer combination will be legal for where you reside and where you'll be driving. A good source for this information can be the State Attorney General, State Police, or local authorities.

Before driving with a trailer, check the hitch, breakaway switch, safety chains, electrical connections, lighting, and tires. Also, adjust the mirrors to permit an unobstructed view beyond the rear of the trailer.

If the trailer has brakes using an electric brake controller, start your vehicle and trailer moving slowly, and then apply the brakes manually using the brake controller to be sure the brakes are working properly. Read and follow the controller manufacturer's recommendations.

Always secure items in the trailer to prevent load shifts while driving. While towing a trailer, occasionally check to be sure the load is secure.

The vehicle and trailer combination is heavier, therefore limited in acceleration ability, and requires longer stopping distances. It is more prone to reacting to side wind gusts and requires more sensitive steering input. Handling characteristics are different and less stable than when operating the vehicle without a trailer. It is important to avoid sudden maneuvers.

If possible, do not brake abruptly, but rather engage the brake slightly at first to permit the trailer to activate its brake. Then increase the braking force.

When driving in mud and sand, let the momentum carry the rig through. Apply power gently and use as little as possible. Stay in the tracks of the vehicle ahead and keep the tow vehicle in the highest possible gear. If you are stuck, it is best to tow out the entire rig together without unhitching.

Despite even the best hitch, you will notice that whenever a large bus or truck overtakes your rig the displaced air first pushes the trailer rear slightly to the right and then affects the front. It may be necessary to steer very slightly, momentarily, toward the bus or truck to help compensate for the sway induced by the passing-vehicle. Do not apply the vehicle brakes, as this can tend to exaggerate the situation. You may find, however, that briefly applying the trailer brakes with your manual control will help eliminate sway.

To gain skill and an understanding of the vehicle's behavior, you should practice turning, stopping, and

backing up in an area free from traffic. We want every owner to be a safe and courteous driver. A few hours of towing practice in a large empty parking lot will make pulling your trailer over the road much easier. Line out two corners for left and right turns. You may also use these corners to practice backing and parking.

⚠ WARNING

On slippery pavement, do not use engine drag to help slow down as this may cause the rear wheels of the tow vehicle to skid. On icy pavement, drive slowly and if you feel the tow vehicle skidding, gently apply the trailer brakes only. This will bring the tow vehicle and trailer back into a single line. Chains do not help trailer wheels.

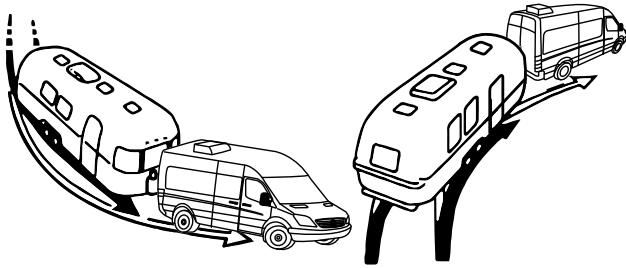
Towing a Boat

While it is possible to tow a boat with your touring coach, Airstream does not recommend it. If you plan to pull and launch a boat, use caution when backing down boat ramps, and do not submerge any part of your touring coach in water. The slope of some boat ramps may be lower than others, requiring a portion of the tow vehicle to be submerged when launching. While this may be okay for some vehicles, your touring coach has sensitive electronics that water infiltration would irreparably damage.

NOTICE

It is imperative that you do not allow any part of your touring coach to be submerged in water as it could cause damage to electrical components that a warranty would not cover.

Tracking



During practice, observe that the tracks made by the trailer wheels are distinctly different from those made by the tow vehicle. Studying this will make it easier for you to correct mistakes. Consider truck or trailer-type fender or door grip rear view mirrors for maximum visibility. In most states, the law requires them.

After thoroughly inspecting your hitch, brakes, and tires, you should be ready to tow. Check traffic, signal that you are about to pull away, and start slowly. Look often in your mirrors, observe the trailer's action, and then carefully move into the proper traffic lane. Remember that the trailer wheels will not follow the path of the tow vehicle wheels; therefore, wider turns are a necessity.

Try to pick the lane you want on freeways or expressways and stay in it. Always maintain plenty of space between you and the car ahead, at least the length of the tow vehicle plus trailer for every ten mph. To pass another vehicle, you will need longer to accelerate. You must also allow for the trailer length when returning to the right-hand lane. On a two-lane road, cars may be lining up behind you because you are traveling at a lower speed. It is courteous and sensible to signal and pull over at the earliest safe opportunity and let them pass.

⚠ WARNING

Consider that when towing a trailer, the handling characteristics are different and less stable from those with operating the vehicle without a trailer. It is important to avoid sudden maneuvers. Sudden maneuvers may lead to loss of control over the vehicle-trailer combination.

Brake Controller

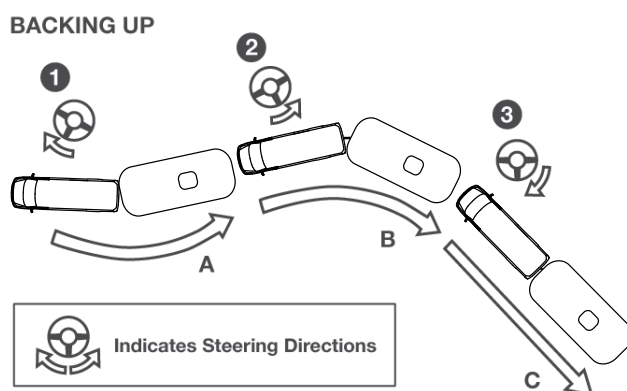
The brake controller (if so equipped) is activated when you apply the brakes of the tow vehicle. Your tow vehicle brakes will automatically apply the trailer brakes first when properly adjusted. This will help keep your tow vehicle and trailer in a straight line and make you stop as if you were driving the tow vehicle alone. If swaying or swerving should occur, briefly operating the controller separate from the vehicle brakes may help correct the situation. Practice this maneuver on a clear highway. Do not wait for an emergency.

⚠ WARNING

Per Ram, if you use a trailer brake controller with your trailer, the trailer brakes may be activated and deactivated with the brake switch. If so, there may not be enough brake pressure to hold both the vehicle and the trailer on a hill when the brake pedal is released. In order to avoid rolling down an incline while resuming acceleration, manually activate the trailer brake or apply more vehicle brake pressure prior to releasing the brake pedal.

Backing Up

While backing, the important thing to remember is to GO SLOW and if you see the trailer turning the wrong way, correct it immediately. Concentrate on the rear of the trailer. With your tow vehicle and trailer in a straight line, back up slowly and turn the bottom of the steering wheel in the direction you want the trailer to go. Watch the side mirror until the rear of the trailer is pointing in the desired direction. Your tow vehicle will be following the trailer in an arc. Straighten the tow vehicle and trailer by turning the steering wheel more sharply, and then when they are in line, straighten the steering wheel.



Start in position (A) start. Turning steering wheel as shown in (1). will put you in trailer position (B). Turning steering wheel show in position (2) puts you in trailer position (C). Steering position (3) returns front wheels to straight backing.

NOTICE

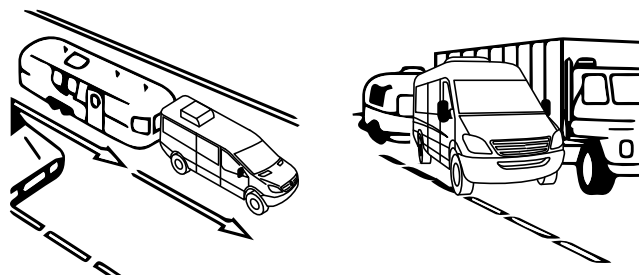
Always try to back to your left because the visibility is much better.

When you do not make it on the first try it is usually much easier to pull forward to your original straight position and start over.

If your spouse or traveling companion normally directs you when backing they should position themselves forward of the tow vehicle so the driver can easily see them. Their directions should always indicate to the driver the direction the rear of the trailer should go. A little practice in a parking lot with the person giving directions can save a lot of frustration when backing into a campsite.

Passing

Extreme care must be exercised when passing another vehicle. A vehicle with a trailer attached will require additional passing distance than when driving without a trailer. Because your vehicle and trailer is longer than your vehicle alone, you will also need to go much further ahead of the passed vehicle before you can return to your lane.



Parking Your Touring Coach

To reduce the risk of personal injury or damage to the vehicle power train as a result of vehicle/trailer movement when parking, always:

- Keep right foot on the brake pedal.
- Shift gear selector lever to position "N".
- Have a second person place wheel chocks on downhill side of left and right trailer wheels.
- Slowly release the brake pedal allowing the vehicle and trailer to roll into chocks until stopped.
- Press the electronic parking brake button to the left of the steering wheel.
- Move gear selector lever to position "P".
- On inclines, turn wheels toward the road curb.

⚠ WARNING

CHOCK THE TRAILER WHEELS when stopping on a hill or slope. Leaving your tow vehicle in gear is not enough for standstill safety. Do not use trailer brakes as parking brakes.

Additional Towing Information

Refer to the Trailer Towing section in your Ram Promaster Owner's manual and carefully review all sections related to towing, and engine and transmission overheating.

⚠ WARNING

Never open a radiator cap when the tow vehicle is hot. Add coolant when the vehicle is cool.

Towing Your Touring Coach

See the Ram ProMaster Owners Manual for towing information.

⚠ WARNING

Considerable damage may occur if the touring coach is improperly lifted for towing purposes. Only qualified professional towing service companies with proper equipment should be used. Observe all cautions and warnings in the Ram ProMaster Owner's Manual before towing your touring coach.

Safety Check List

Your Airstream Touring Coach should be given a thorough safety check before a trip. Regular use of the following list will provide safe operation of your touring coach and will help you spot any malfunctioning equipment and correct the problem as soon as possible. The list is to help you and may not be all-inclusive.

⚠ WARNING

Failure to heed the following items may cause damage to the vehicle or personal injury.

Exterior Check List (Before Entering Vehicle)

1. Check condition of tires and keep tires at recommended inflation pressure per the tire; [see Specifications on page 4-4](#).
 2. Check all exterior components are unhooked and properly stowed.
 3. Check that all external compartments and water/waste connections are properly closed, latched, and/or locked.
 4. Check that items stored on exterior of vehicle are securely tied down.
 5. Verify if any items stored on exterior of vehicle would present a clearance problem.
 6. Follow all automotive manufacturer's recommendations on checking and filling fluid levels.
 7. Check exterior lights and general condition of vehicle.
- ### Interior Check List (Before Driving)
1. It is important that all doors be completely closed and locked during travel.
 2. Turn off water pump and close all faucets.
 3. Check that refrigerator door is closed and latched if equipped.
 4. Check that nothing heavy is stored in overhead or high cabinets, which could fall out and cause injury. Heavy items should be stored in lower cabinets.
 5. Ensure the table is in the locked position on the slide and the extension is stowed and locked into position.
 6. Stow the bed in the folded position and velcro the frame into place.
 7. Stow the cooktop.
 8. Check that counter tops and shelves are clear of even small items that could become projectiles during emergency braking or an accident.
 9. Check that internal stowage is secured.
 10. Check that lights and switches are set in positions safe for travel.
 11. Adjust the driver's seat so that you can easily reach and operate all controls. Make sure both driver and passenger seats are facing forward in the upright position, and the swivel function (if equipped) is locked in the forward facing position. Do not adjust driver or passenger seat swivel or recline mechanisms while vehicle is moving. The seat could move unexpectedly causing loss of control.
 12. Check that all passengers have seatbelts on properly.
 13. The freedom of movement of the brake and accelerator pedals must not be impaired.
 14. Check rear view mirrors adjustment, inside and outside. Adjust window coverings if necessary for maximum visibility.
 15. Secure children in a federally-approved child restraint device.

AIRSTREAM®

Section 9 MAINTENANCE

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Maintenance

Maintenance Schedule

⚠ WARNING

Failure to maintain your touring coach can cause premature and unexpected parts breakage and/or erratic operation that may be hazardous.

NOTICE

See appliance manufacturer's literature for further information.

First 20 Hours

Generator	Change oil after the first 20 hours of run time
-----------	---

To break in the generator, run at 50% load for two hours, then at 75% load for two hours. Refer to the generator manufacturer's manual for more details.

Every 1,000 miles or 60 days

Smoke and CO Alarm	Test and replace battery as required
--------------------	--------------------------------------

Tires	Check tire pressure; see Specifications on page 4-4
-------	---

GFCI Circuit Breaker	Test and record
----------------------	-----------------

Once a Month

Hydronic System	Run the burner for at least 15-20 minutes to help maintain the system
-----------------	---

Every 5,000 miles or 90 days

Wheel Fasteners	Torque to Specifications; see Specifications on page 4-4
-----------------	--

7-Way Plug	Spray with contact cleaner
------------	----------------------------

Every 10,000 miles or 6 months

Tires	Inspect and rotate
Windows, and Door Seals	Clean with mild detergent and apply 303 Aerospace Protectant
Exterior	Wax

Every Year

Hydronic System	Test alkalinity in the system coolant and inspect the exhaust system for damage
-----------------	---

Seams	Check and reseal exterior seams, windows, lights, and vents as needed
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Interior Cabinets	Visual inspection of latches and locks, hinges and slides; silicone spray as needed
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Pop-Top	Inspect and treat the canvas; see Cleaning and Sealing on page 5-11
---------	---

Every Year or 150 Hours

Generator	Change oil Replace air filter element
-----------	--

Every 450 Hours

Generator	Replace spark plug Replace fuel filter Replace air filter element
-----------	---

Refer to the generator manufacturer's manual for all service/maintenance requirements.

Once every three years

Hydronic System	Replace Heat Transfer Fluid/ Century Chemical Boiler Antifreeze
-----------------	--

Airstream Service and Parts

Please contact an Airstream dealer service center to schedule maintenance and obtain replacement parts; see [Service Centers on page 3-5](#).

NOTE

Availability of parts and service may vary. Some parts may occasionally be delayed, back-ordered, or replaced with compatible alternatives.

Replacement parts for dealer service and repair and common items such as filters and hardware can be found in the parts book specific to your Airstream model.



Airstream parts books are posted on our website as soon as they're finalized, typically around the midpoint of model year production. Scan this QR code or visit <https://www.airstream.com> and navigate to the owner's section to locate the parts book for your model Airstream.



Airstream Supply Company is your trusted source for Airstream-approved cleaners, polishes, and other care products and supplies needed to properly maintain your Airstream's interior and exterior. Scan this QR code to visit and explore our assortment of RV care products and camping supplies at <https://airstreamsupplycompany.com>.

Tire Care

The most important function of tires is to provide traction while moving and grip when steering or stopping. The tires on your touring coach are designed for highway use and must be properly maintained to maximize tire life and provide a safe mode of transportation.

For tire size and inflation pressure, see [Specifications on page 4-4](#). For additional information on tire care, inflation procedures, maintenance, and tire handling, see [Tires on page 7-3](#). Also see your Ram Promaster Owner's manual and review all tire care and tire safety information.

⚠ WARNING

Wheel fastener torque must be checked immediately after reinstalling a wheel and again after 25 miles. Torque all wheel fasteners evenly to specification using the proper sequence; see [Wheel Bolt/Lug Nut Tightening on page 7-8](#). For torque values, see [Specifications on page 4-4](#).

Tire Care Tips

To reduce the risk of tire failure:

- Check the pressure in your tires, including your spare (not provided with vehicle), at least monthly when the tires are cool (after the vehicle has been stopped for 3 hours and then driven less than 1 mi). Do not reduce pressure when tires are hot. Use a tire gauge to check pressure and maintain it at the proper level.
- Never overload your tires. Heed the maximum load-carrying capability of your tires.
- Never operate your vehicle in excess of lawful speeds, the maximum speeds justified by driving conditions, or in excess of speeds recommended for the tires you are using.
- Make every effort to avoid running over objects that may damage the tire through impact or cutting, such as chuck holes, glass, metal, etc.
- Never drive on smooth tires. Tires should be removed when 2/32 in. of tread depth remains. In most states, it is illegal to drive with less than 2/32 in. remaining tread depth.
- Park out of the sun whenever possible when in warm climates. In desert regions, use tire covers to prevent ultra violet light deterioration.

Tire Inspection and Storage

Before taking your touring coach on a trip, inspect tires and wheel rims for any condition or damage that might result in tire failure. Inspect the front and back of sidewalls, tread area, valve stems, valve stem caps, and wheel rims for the following:

- Sidewalls for bulges, cracking, punctures, cuts, abrasions, and foreign objects (nails/screws).
- Tread for foreign objects, irregular/uneven wear, bulges, cracking, punctures, and cuts. An uneven wear pattern can indicate misalignment or worn suspension parts.
- Check that tread depth remains above at least 2/32 inch. Tread depth gauges are available at most automotive parts stores.
- Wheel rims for missing wheel weights, bead or flange damage from curb strikes, and overall general condition.

⚠ WARNING

Due to RISK OF EXPLOSION damaged tires or tires run with more than a 20% underinflation (approximate) must be dismantled, inspected by a trained professional, and should not be inflated without using a safety cage.

Since many touring coaches see infrequent seasonal use, tires may take years to wear out. Tires will age and deteriorate over time so they may require replacement even if tread depth is optimal. Tires with any of the conditions listed above may require replacement. If you are unsure, consult a tire installer. Any tire with tread depth less than 2/32 inches deep should be replaced before your next trip.

Store your touring coach in a cool, dry area away from major heat sources and extreme cold. An enclosed storage area is best, with no exposure to electromagnetic sources such as generators or transformers. Cover your tires from direct sunlight if you must keep your touring coach outside. Take your touring coach to your tire dealer for service to check or correct any of these conditions.

Plumbing

Water System (Self-Contained)

The fresh water system consists of a city water hookup, fresh water tank gravity fill, fresh water tank and drain valve, water pump, hot and cold water lines, hydronic heating and hot water system, faucets, and an external sprayer port. Full explanations on the locations and use of these features are explained in this section. Also, [see Water Service Compartment on page 6-7](#).

Before using the water system, ensure the low point drain valve is closed; [see Plumbing Component Locations, Rangeline 21PS on page 9-8](#).

Fill the water tank by opening the right rear door to access the gravity water fill. For instructions on using the gravity water fill, [see Gravity Water Fill on page 6-6](#).

NOTICE

To prevent equipment damage, the hydronic water heater should only be started after the water system is primed and ready for use.

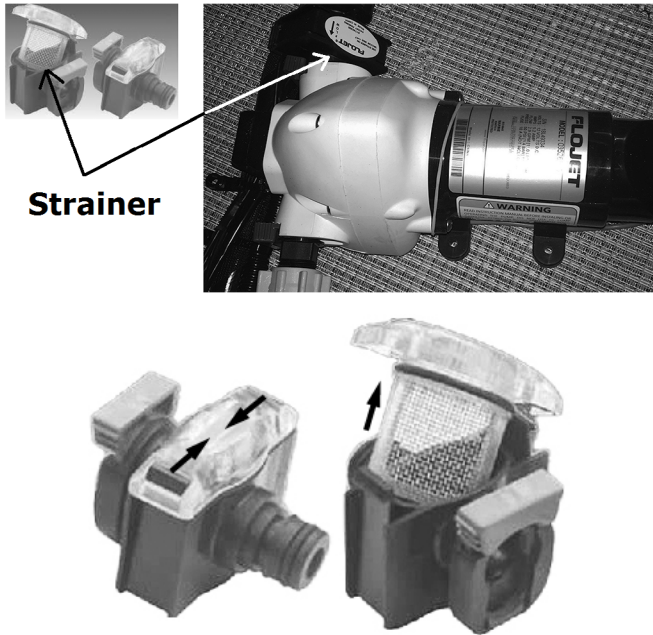
Water Pump and Strainer

To locate the water pump and strainer, . Turn the water pump on by pressing the Water Pump icon on the Multiplex home screen. When turned on, the water pump's controller maintains a consistent regulated water pressure and steady water flow based on demand.

The water pump is typically left off when hooked up to a city water supply. However, if city water pressure is lower than desired the water pump can be turned on to facilitate increased water pressure, provided there is a supply of water in the fresh water tank. The tank will be depleted by the amount needed to supplement the flow of city water.

NOTE

If water flow is interrupted, check the water supply and turn the pump off and back on.



Cleaning the Strainer

The strainer is mounted at the water pump inlet. Visually inspect it for accumulation of dirt/debris that could affect water flow and clean as needed:

1. Rotate the strainer housing to a position allowing access to the clear-view screen retainer and the tabs holding it in place.
2. Pinch the tabs inward to release the clear plastic retainer (as shown above).
3. Pull the retainer and screen out of the housing for cleaning. Rinse all debris from the screen.
4. Replace the screen assembly by aligning the screen in the seating grooves and pressing down gently until the tabs are back in place.

Disconnecting the Strainer/Water Pump Lines

The inlet and outlet hoses and the strainer assembly are held in place by self-sealing, blue, quick-connect fittings:

1. Grasp the blue tab on the female fitting by the grooved finger edges and pull straight out on the tab to release the male fitting.
2. Be sure that both the female and male fittings on the disconnect are free of all debris and damage before replacing them.
3. Check the pump system for leaks when reinstalling the disconnect fittings.

NOTICE

Failure to check the quick disconnect fitting for water leaks when reinstalling inlet and outlet hoses or the water pump strainer may cause the pump system to leak, causing damage to personal property.

NOTICE

Turn the water pump off when the touring coach is left unattended or in motion.

Sanitizing

Airstream recommends sanitizing the fresh water system before and after storage, after installing new components, and whenever contamination is suspected. How often to sanitize—and what solution to use—depends on how frequently the RV is used, the taste and quality of the water, and the environments it has been exposed to, such as extreme heat, high humidity, or questionable water sources.

Use a sanitizer that effectively disinfects without damaging system components. While bleach is widely used for its ability to kill bacteria, viruses, fungi, and some protozoa, it can also corrode metal and degrade seals. In some configurations, susceptible components like the water heater cannot be bypassed, meaning the solution will circulate through the entire system. To avoid damage, Airstream generally recommends using an RV-specific fresh water system cleaner formulated to be safe for all fresh water system components. Follow the product's instructions for dilution and contact time.

If contamination is severe, bleach may be necessary. Refer to your water heater's manual for additional information. If bleach is not recommended, bypass the water heater whenever possible, and flush the system thoroughly when finished. Use the standard sanitization formula: 0.13 ounces of household bleach per gallon of water, or 1 milliliter per liter. This produces a 50 ppm free chlorine solution, consistent with RVIA ANSI A119.2 and widely accepted potable water disinfection practices.

Refer to the sanitization procedure that follows to introduce the solution into the system. Gather the following supplies ahead of time. These are available at most RV supply stores:

- Sanitization Solution
- Gallon-size container(s) or a clean bucket suitable for potable water.
- Container from which you can pour the sanitizing mixture into the gravity water fill or an RV antifreeze hand pump kit.

Sanitizing the Fresh Water System

1. Determine the amount of solution you need for your tank capacity; [see Specifications on page 4-4](#) for tank capacity.
2. Pour the solution into a container and fill it with water to make a concentrate.
3. Using the gravity water fill, pour or pump the concentrated mixture into the fresh water tank

4. Immediately fill the tank using a city water connection to dilute the concentrate to the proper sanitization ratio.
5. OPEN all faucets (hot and cold).
6. Turn the water pump ON and run it until the mixture starts coming out of the faucets and the odor of chlorine is detected. Move from one fixture to the next, shutting them off as you go until all the lines are full.
7. Turn the pump OFF and leave the solution in for the product's recommended contact time (4 hours for bleach).
8. Drain the tank, refill with fresh water, and run the faucets until the solution is flushed from the system. For fresh water tank drain location, [see Plumbing Component Locations, Rangeline 21PS on page 9-8](#).

Drain and Waste System

Your touring coach has a Drain and Waste System, including holding tanks made from corrosion-free, molded plastic, and trouble-free dump valves. The waste water holding tank lets you use the toilet for several days before it needs emptying at an approved disposal facility.

Sink and shower wastewater drain into the gray water holding tank. Wastewater from the toilet drains into the waste water holding tank. Each tank has a dump valve that drains through a common outlet so only one waste hose connection is needed when connecting to a disposal site.

Check your monitor panel frequently (main Multiplex control panel or Seelevel monitor). When the waste water holding tank is completely full, the toilet bowl cannot be emptied. If the gray water holding tank is overfilled, drain water will back up into the shower floor pan, resulting in unsanitary conditions.

CAUTION

Failure to monitor holding tank levels could result in unsanitary wastewater overflow.

Never drain the tanks at any place other than an approved dumping station. Almost all campgrounds will have a dump station. Park directories like Woodalls and Rand McNally list dumping stations, and the GPS navigation system may be able to locate nearby dumping stations or highlight stations along your route.

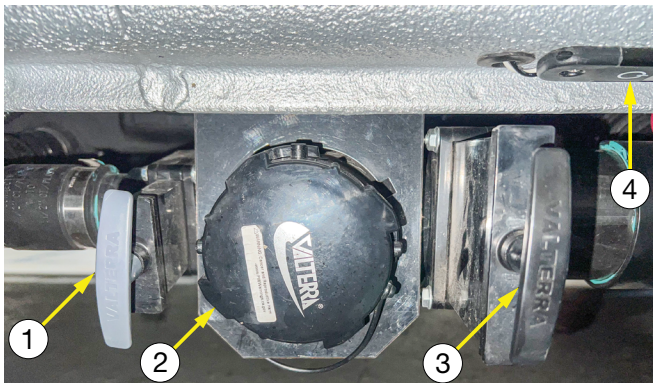
NOTICE

Do not use a pipe snake on clogged drains, as it could damage internal drain system components.

NOTICE

Never flush hard or solid objects, sanitary napkins, facial tissue, or paper towels down the toilet and into the holding tank. They can get caught in the mechanism of the dump valve. Colored toilet tissue is slower to dissolve than white. Most motorhome accessory stores offer tissue designed for RVs that will dissolve.

Emptying the Holding Tanks



1. Gray Tank Valve
2. Drain Hose Hookup
3. Waste Tank Valve
4. Courtesy Light

Dump the waste water tank before the gray tank. Doing so will help rinse the valve outlet and hose with gray tank water. To empty the tanks:

1. Remove the sewer drain hose from the storage tube under the coach.
2. Attach the outlet adapter to the clear-view elbow outlet on the end of the drain hose.
3. Attach the hose to the coach's drain hose hookup by pressing the bayonet fitting onto the outlet. Rotate clockwise until secure.
4. Attach the outlet end of the hose to the disposal site; position the hose on a slope to ensure it drains completely.
5. Pull the black plastic "T" handle to open the waste tank dump valve, allow the tank to drain completely, and close the dump valve.

6. Flush the waste tank; see [Waste Tank Flush](#) on page 9-8.
7. Close the waste tank valve.
8. Pull the gray plastic "T" handle to open the gray tank dump valve, allow the tank to drain completely, and close the dump valve.

Extended Stays

When you are in a park with a disposal facility, empty the tanks every few days or whenever they become almost full. Pumping a large volume of liquid through the tanks at a time will keep toilet paper and other solids completely washed away. Remember to empty the waste water tank first and then the gray water tank using the gray water to flush the system. This practice will help avoid the accumulation of solids in the tank, which could lead to an unpleasant cleaning job.

Should solids accumulate, fill the tank about half full with water using the waste tank flush inlet and then drive the touring coach for a few miles. Don't wait until the tank is packed solid. The turbulence and surging of the water will usually dissolve the solids into a suspension so the tank can be drained. Draining the tanks as described will protect them from freezing during storage.

Waste Tank Flush



The coach has a garden hose style connection to flush the waste water holding tank; [see Water Service Compartment on page 6-7](#).

Airstream advises flushing the waste water holding tank each time it is emptied to prevent clogging of the water jets and accumulation of waste solids inside the tank. Start by emptying the waste tank at an approved dump station and close the dump valve. To flush the tank:

1. Attach a water hose to the flush inlet (do not use the fresh water tank hose for this purpose).
2. Turn the water on and monitor the waste tank level. A spray head with multiple holes will spray the tank's interior surface. Fill the tank about half full and turn the water off.
3. Empty the waste holding tank; [see Emptying the Holding Tanks on page 9-7](#)
4. Close the waste holding tank valve and repeat this process until the water runs clear.

NOTICE

Use the waste tank flush regularly to keep the holes on the spray head from becoming clogged.

Drain Systems Cleaning

The only cleaning agents that can be used without causing harm to the system are household ammonia and tri-sodium phosphate in small quantities. Do not use any product that contains any portion of petroleum distillates. This type of product will attack the rubber seals of your toilet and dump valve. Also, do not use any dish detergent or abrasive cleaners. All products should be marked as approved for ABS drain systems.

Winterizing and Storage

When storing your touring coach, use the same precautions you would in your home regarding perishables, ventilation, winterizing, and rain protection. In addition, for prolonged storage periods, flush out all the drain lines and waste holding tanks. Also, drain the entire water system, including the fresh water tank. Instructions for draining the water system are explained in the following paragraphs on winterizing.

The primary consideration in winterizing is to protect the fresh water lines, waste drain lines, waste holding tanks, hydronic heating and hot water system, and battery from freeze damage.

NOTICE

In very cold weather, winterizing the touring coach is recommended to prevent damage to the waste systems.

NOTICE

Ram recommends disconnecting the negative battery cable from the Ram chassis battery for vehicle storage of more than 3 weeks.

NOTICE

Ram recommends any time you store your vehicle or keep it out of service for two weeks or more, run the air conditioning system at idle for about five minutes in the fresh air and high blower setting prior to storing. This will ensure adequate system lubrication to minimize the possibility of compressor damage when the system is restarted.

Fresh Water Plumbing Component Locations

Plumbing Component Locations, Rangeline 21PS

Low Point Drain Valve - the fresh water system and fresh water tank are drained from a single valve. To access, remove the vent cover from the curbside bed base.

Water pump - behind the large access panel on the face of the curbside bed base.

Winterization Valve - behind the large access panel on the face of the curbside bed base.

Water Service Compartment - roadside exterior; [see Water Service Compartment on page 6-7](#).

Plumbing Component Locations, Rangeline 21PL

Low Point Drain Valves - A set of valves is located in the small roadside cabinet next to the power center. The lines run through the undercarriage, allowing the system to drain onto the ground.

Water pump and Winterization Valve - Behind the large rearward access panel on the face of the curbside benchseat.

Water Service Compartment - roadside exterior; [see Water Service Compartment on page 6-7](#).

Instructions for Winterization

To perform these steps, you will need an adapter with an air regulator to connect an air compressor to the city water inlet, and access to an air compressor. Adapters are available at most RV stores.

1. Level the touring coach from side to side and front to rear, turn the water pump OFF, and disconnect the city water.
2. OPEN all the hot and cold water faucets.
3. OPEN the low-point drain valve and allow the system to drain; [see component location this page](#).
4. Attach the quick connect hose/sprayer nozzle to the sprayer port (water service compartment). Operate the nozzle to drain any remaining water and then disconnect the hose; [see Sprayer Port on page 6-7](#).
5. Allow all water to stop draining and proceed to the next step.
6. For this step, you will need someone to operate the toilet foot pedal/flush valve. Using the air compressor, apply at MAX 50 PSI of air pressure at the city water inlet (water service compartment) until no water remains in the system. Operate the foot pedal on the toilet. You may need to depress the pedal a few times to work out all the water by allowing some air pressure to build up between flushing. Once all the water has been blown from the system, disconnect the air and continue to the next step.

NOTICE

Do NOT exceed MAX 50 PSI when clearing water from the system with compressed air. To much air pressure could damage the system.

7. For this step, have a catch pan or a towel ready to place under the water pump outlet to prevent water from running out into the touring coach. Remove the quick-connect outlet fitting from the water pump; [see Disconnecting the Strainer/Water Pump Lines on page 9-5](#).
8. Turn the pump ON briefly to remove any remaining water from the pump head and lines running from the tank.
9. Check the water pump strainer to be sure no water remains; [see Cleaning the Strainer on page 9-5](#).
10. RECONNECT the water pump if you plan to add RV antifreeze using the optional steps below. Otherwise, leave the fittings from the pump disconnected until the system is ready to be used again. Best practice: leave a note as a reminder near the multiplex screen that the water pump is disconnected.
11. Fully charge the battery; [see Battery Management and Charging on page 5-26](#).
12. Turn OFF the battery disconnect switch; [see Battery Disconnect Switch on page 5-21](#).

Additional Steps for Winterization

An additional and highly recommended step to winterization is to consider adding a non-toxic RV antifreeze (approved for drinking water systems) to the water lines using the winterize valve to draw RV antifreeze from a container into the water system, using the water pump.

Before beginning, read the RV antifreeze manufacturer's label for instructions specific to the antifreeze you plan to use. It may take a few gallons to fill the entire system so prepare accordingly. As you follow these steps, it will be helpful to have another person watching and operating the faucets, shower head and toilet valve.

1. RECONNECT all lines and CLOSE all drain valves.
2. Ensure the external sprayer port hose is disconnected.
3. OPEN the sink and shower drains if they are closed.
4. Ensure all the water faucets and shower heads, hot and cold, are OPEN.



5. SET the winterize valve selector to “winterize” by rotating it clockwise (normal flow position shown above); [see Plumbing Component Locations, Rangeline 21PS on page 9-8](#).
6. Uncoil the hose connected to the winterize valve and place it in the RV antifreeze container.
7. Turn the water pump ON and run it until antifreeze starts coming out of the faucets. Once antifreeze is running from the taps you can start closing them. Move from one fixture to the next, shutting them off as you go until all the lines are full. Turn the pump OFF as you empty and transition from one antifreeze container to the next.
8. Allow the antifreeze to flow down drains. Flush the toilet and allow antifreeze to flow down the toilet. If equipped, work the hand shower sprayer while holding it down in the shower until antifreeze is coming out. Dump any remaining small amounts of antifreeze down a drain.
9. Shut the water pump OFF once all the lines are full.
10. OPEN all the faucets and leave them open.

NOTICE

Remove all RV antifreeze spillage from all sinks, drain pans, and faucet parts after winterizing. Failure to do so could damage surface finishes. Do not use water to rinse antifreeze down the drain as it will dilute the antifreeze.

11. Fully charge the battery; [see Battery Management and Charging on page 5-26](#).
12. Turn OFF the battery disconnect switch; [see Battery Disconnect Switch on page 5-21](#).

Water Heater Winterizing

If the touring coach is to be stored during winter months, the water lines must be drained to prevent damage from freezing. The water heater only holds a couple of cups of water in the heat exchanger, which is drained with the low point drain valves; [see Instructions for Winterization on page 9-9](#).

Restoring Service

1. Close the low point drain valve, holding tank dump valve, and all faucets.
2. If disconnected, reconnect the water pump line.
3. Add water to the fresh water tank.
4. Turn the water pump ON.
5. Open and close faucet valves one at a time until water runs clear signaling the RV antifreeze is flushed out of the lines. Recheck water clarity at all faucets.
6. Turn OFF water pump.
7. Hook up city water, open faucet valves, and recheck water clarity.

Toilet Winterizing

The toilet is winterized using the procedures on the previous page; [see Instructions for Winterization on page 9-9](#).

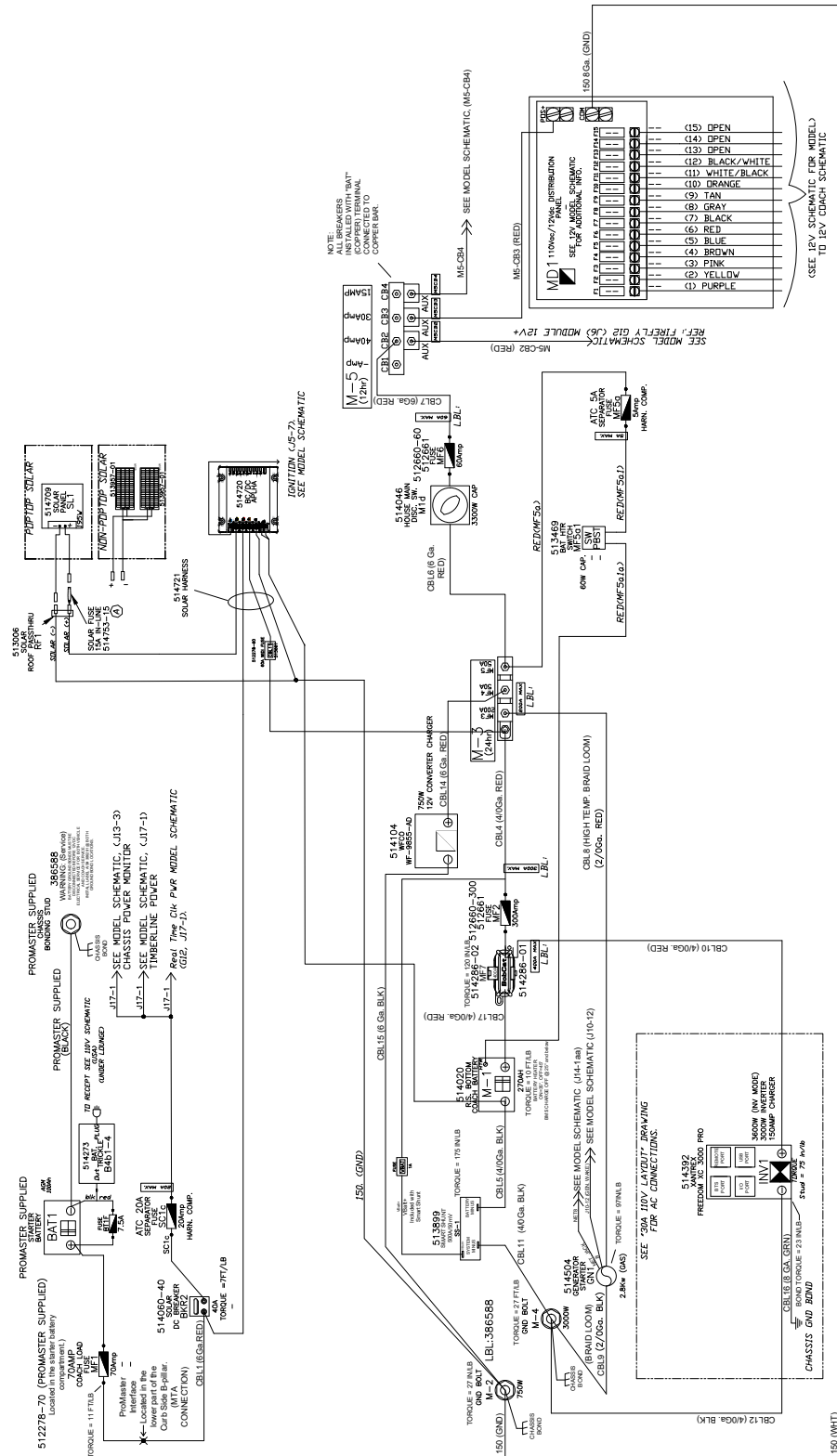
NOTICE

To avoid damage when using air pressure to blow water from the lines, make sure the toilet valve is in the open position.

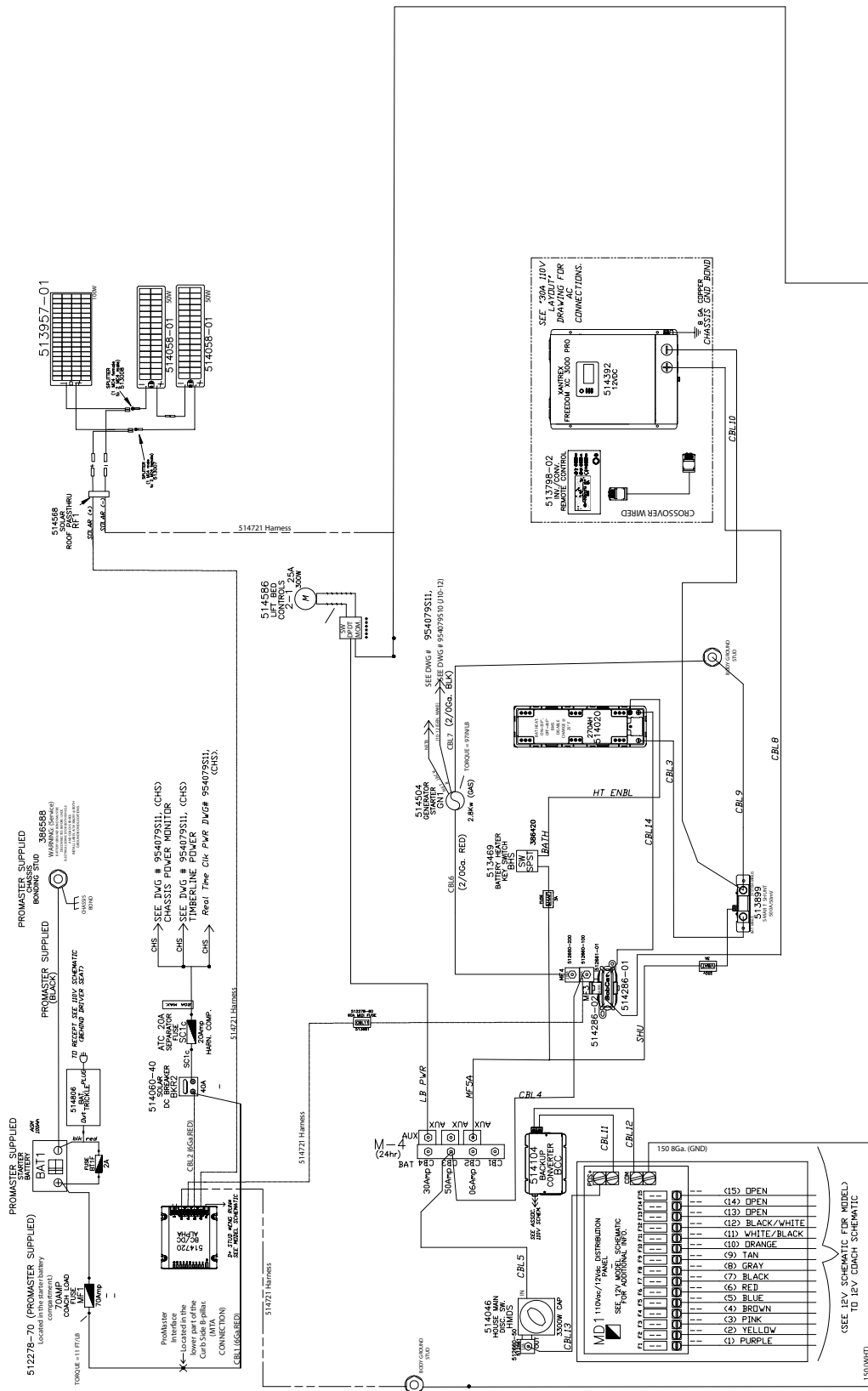
NOTICE

If water is frozen in the toilet, do not attempt to flush until the ice thaws. Never use automotive type antifreeze.

12-Volt Main Schematic, Rangeline 21PS Model



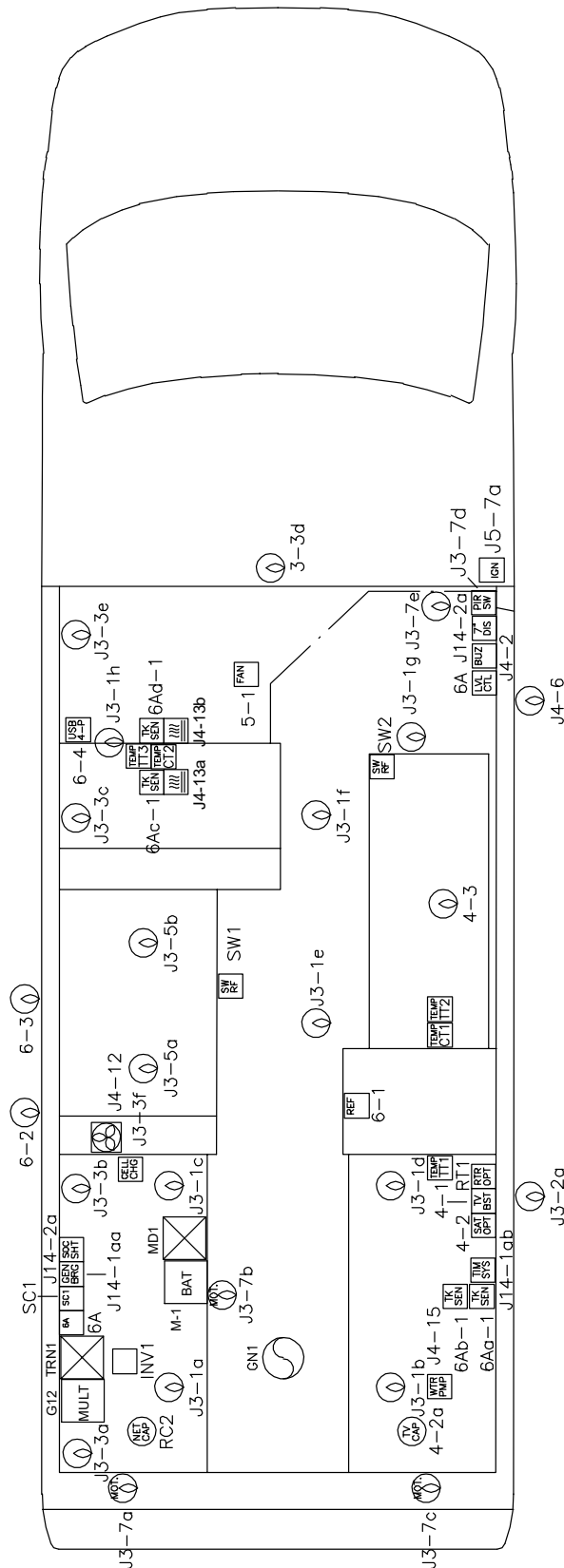
12-Volt Main Schematic, Rangeline 21PL Model



12-Volt Model Schematic, Rangeline 21PS Model

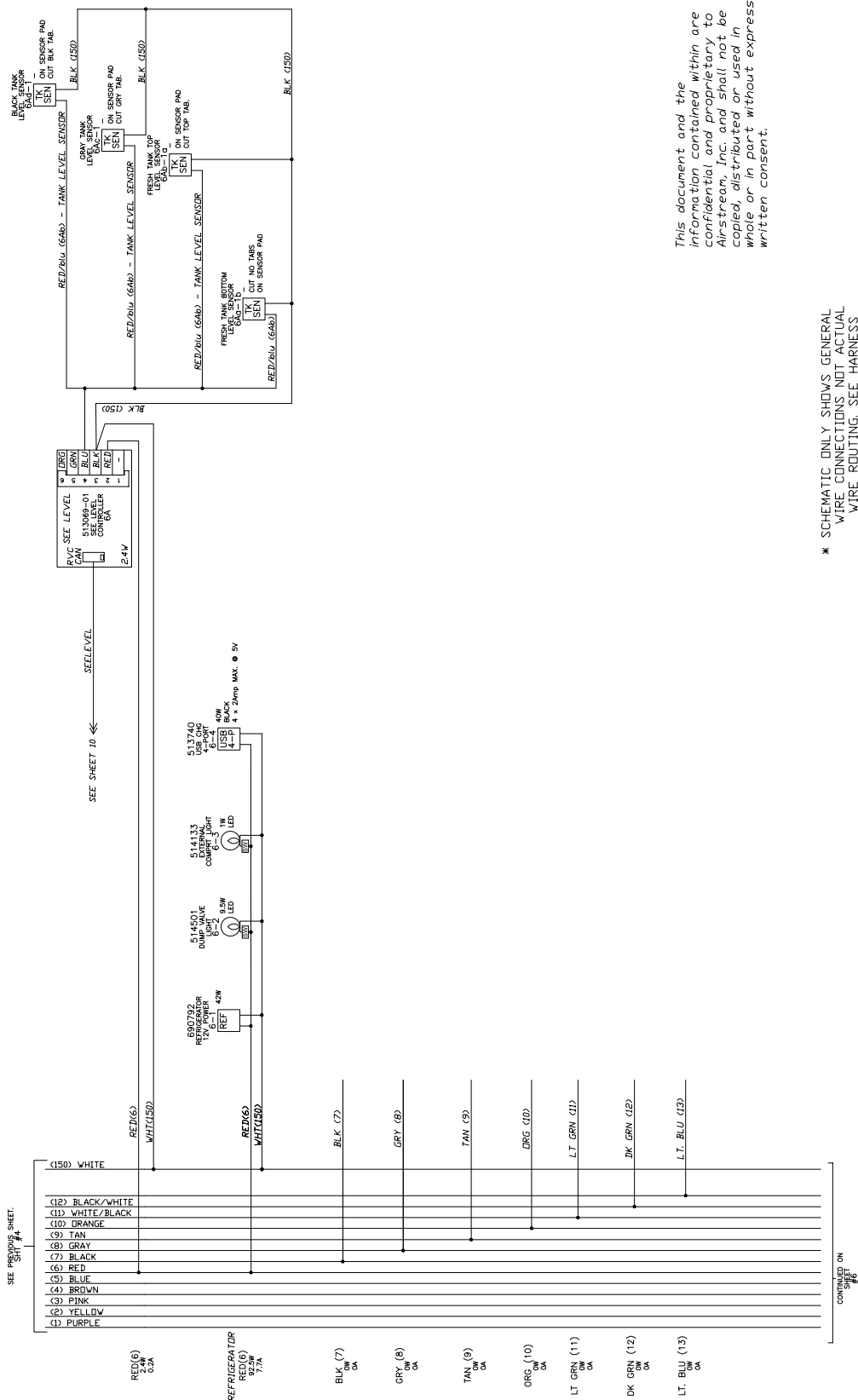
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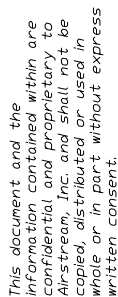
NOTE:
1) THIS LAYOUT SHOWS ALL 12VDC DEVICES. SOME DEVICE SYMBOLS ABOVE WILL NOT BE LISTED ON SHEET #2, BUT WILL APPEAR IN THEIR RESPECTIVE SCHEMATIC (VAN A/V OR 12V ELECTRICAL MAIN). FOR 110VAC SEE 30A 110V LAYOUT DRAWING.
2) HIDDEN SCREEN ENABLE BUTTONS AND NO PRE-WIRE TO DEVICES. (Hidden Firefly Program only)

12-Volt Model Schematic, Rangeline 21PS Model



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* SCHEMATIC ONLY SHOWS GENERAL WIRE CONNECTIONS NOT ACTUAL WIRE ROUTING. SEE HARNESS DRAWINGS FOR ROUTING.

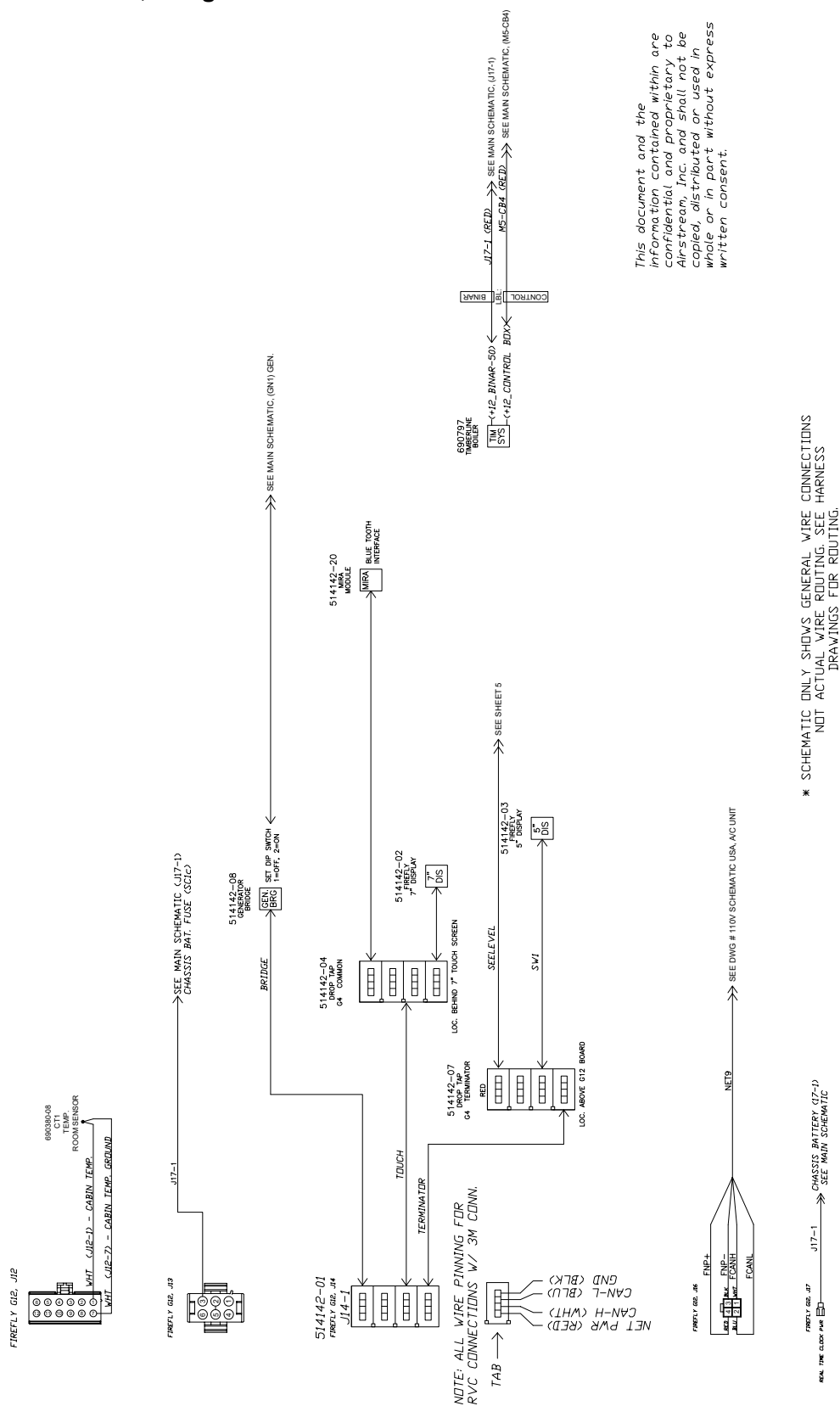


* SCHEMATIC ONLY SHOWS GENERAL WIRE CONNECTIONS
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DRAWINGS FOR ROUTING.

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12-Volt Model Schematic, Rangeline 21PS Model



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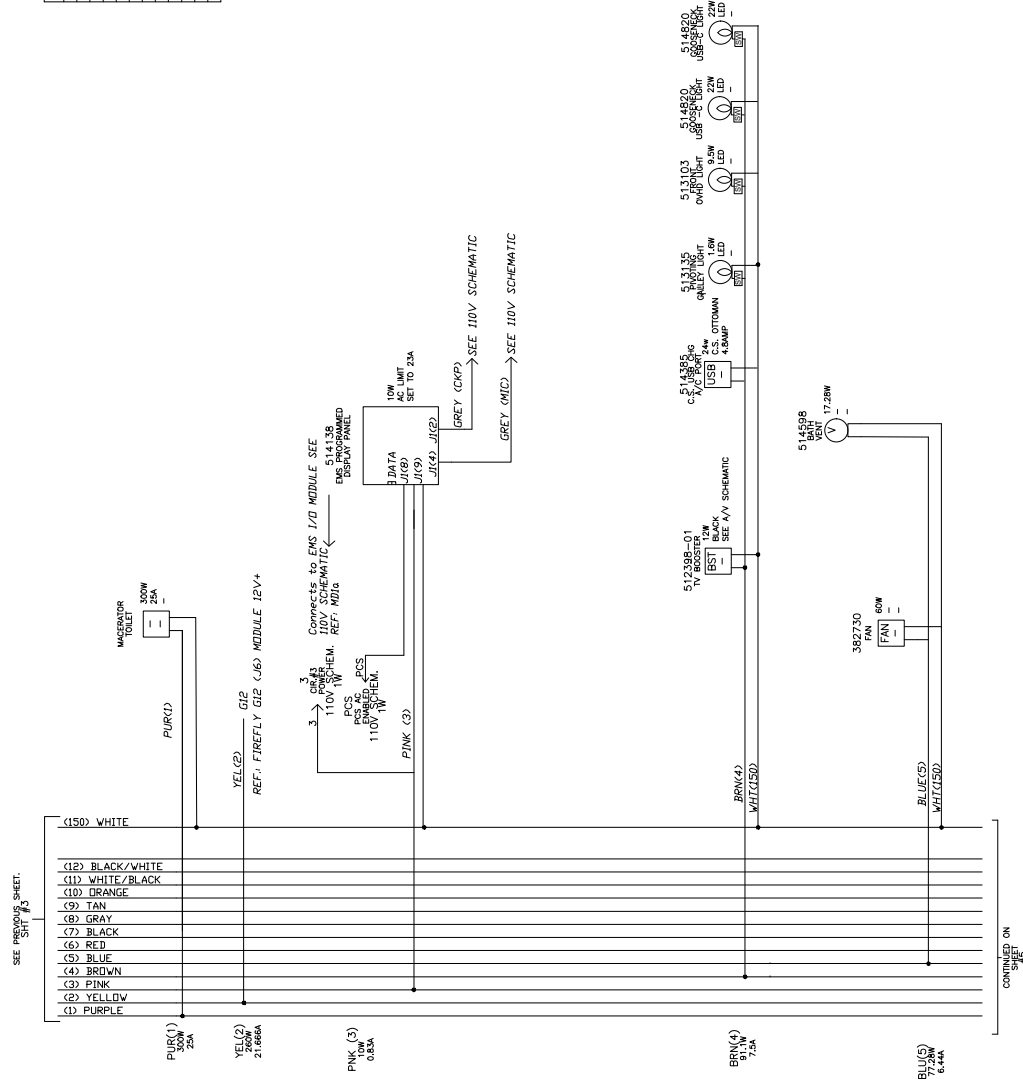
* SCHEMATIC ONLY SHOWS GENERAL WIRE CONNECTIONS
NOT ACTUAL WIRE ROUTING. SEE HARNESS
DRAWINGS FOR ROUTING.

12-Volt Model Schematic, Rangeline 21PL Model

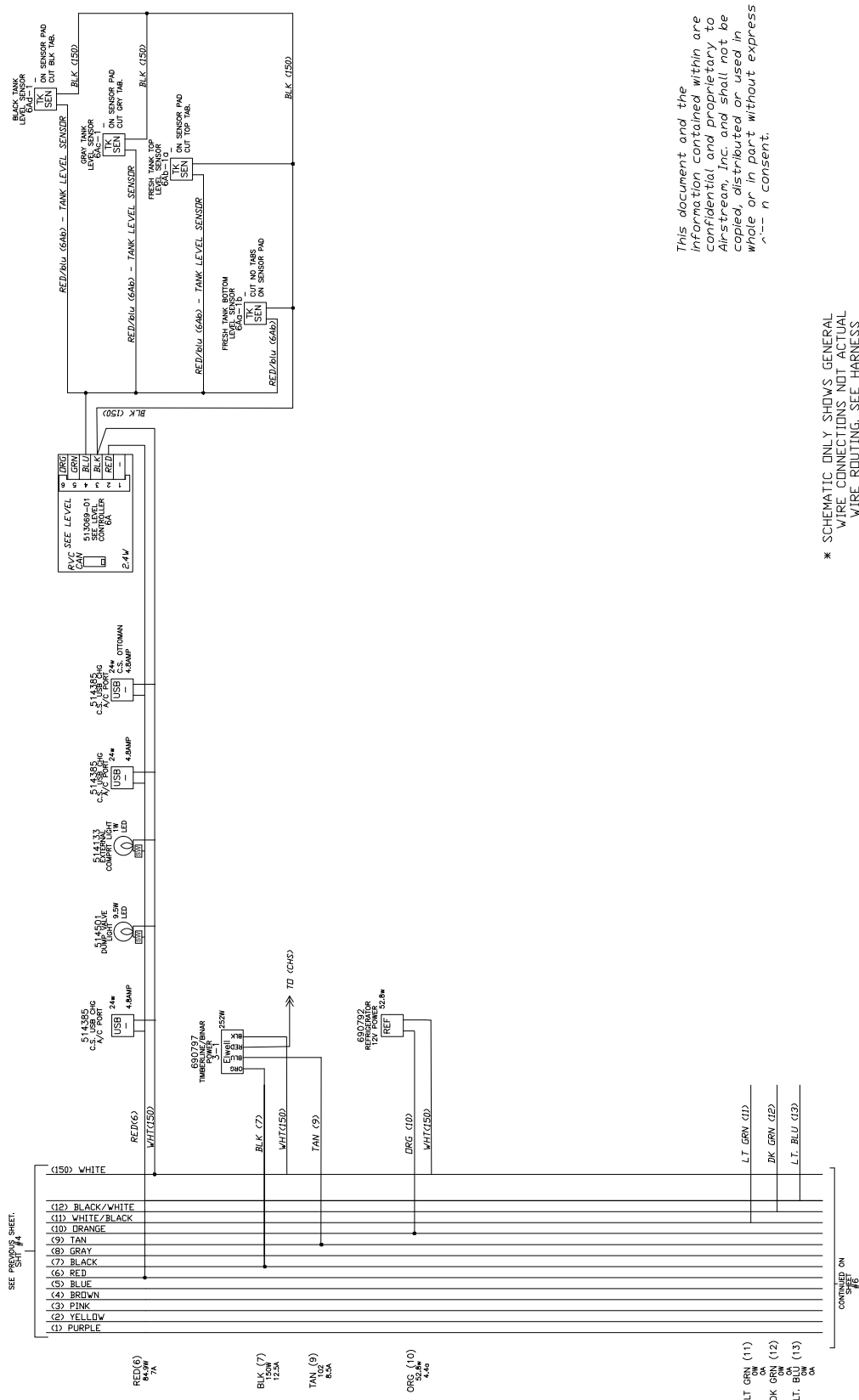
CIRCUIT LOAD CHART

CIRCUIT	WATTS	CIRCUIT AMPS @ 12Vdc	CIRCUIT FUSE (AMP)
300	25		
PURPLE (1)	21.581	1.8	3
PINK (2)	10	0.83	3
BROWN (4)	91.1	7.5	10
BLUE (5)	77.28	6.44	10
RED (6)	84.9	7	10
BLACK (7)	150	12.5	80
BLACK (8)	102	8.5	15
TAN (9)	102	8.5	15
ORANGE (10)	52.8	4.4	25
WHITE/BLACK (11)	0	0	—
BLACK/WHITE (12)	0	0	—

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12-Volt Model Schematic, Rangeline 21PL Model



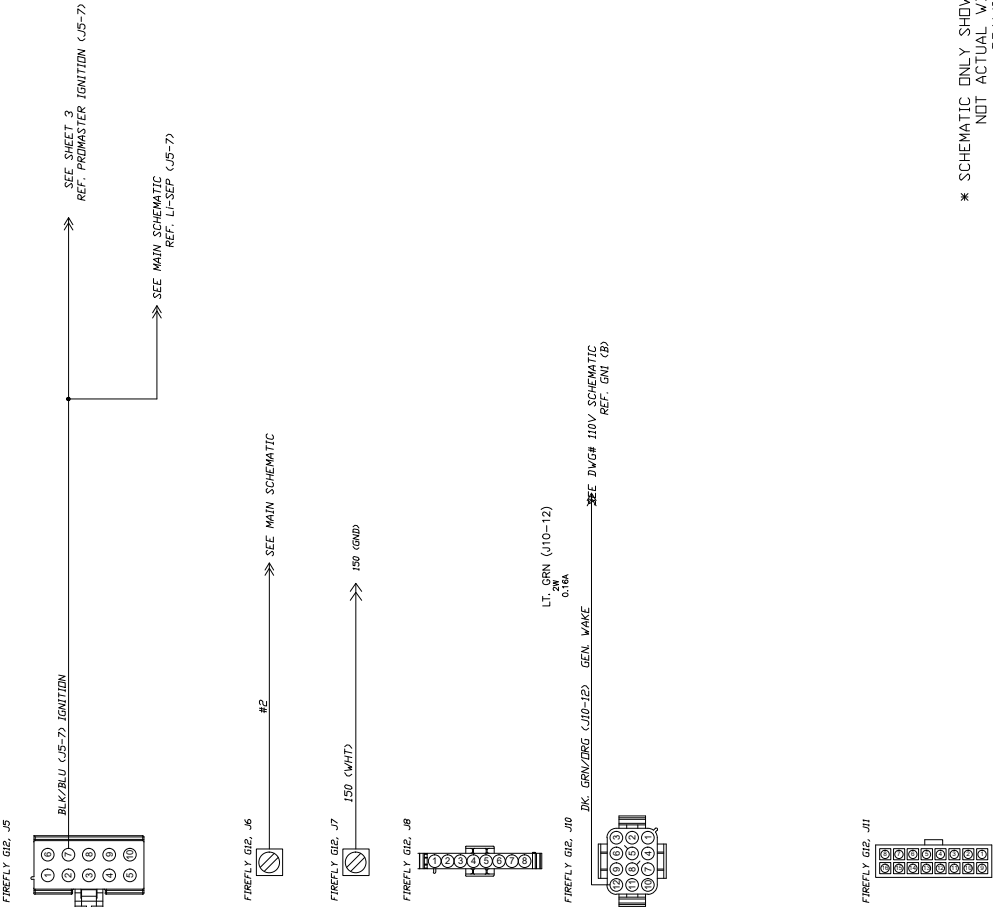
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12-Volt Model Schematic, Rangeline 21PL Model

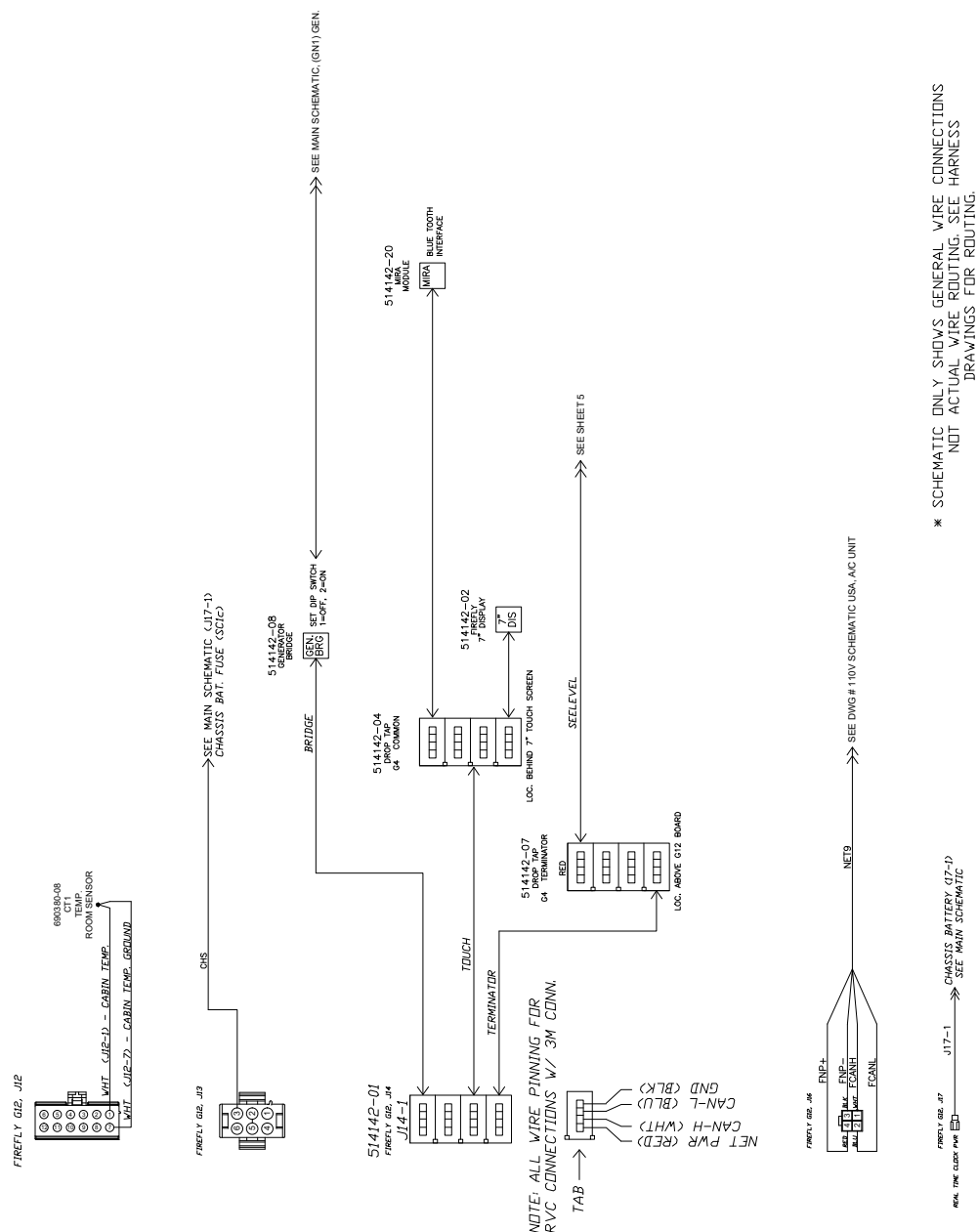


* SCHEMATIC ONLY SHOWS GENERAL WIRE CONNECTIONS NOT ACTUAL WIRE ROUTING. SEE HARNESS DRAWINGS FOR ROUTING.

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12-Volt Model Schematic, Rangeline 21PL Model

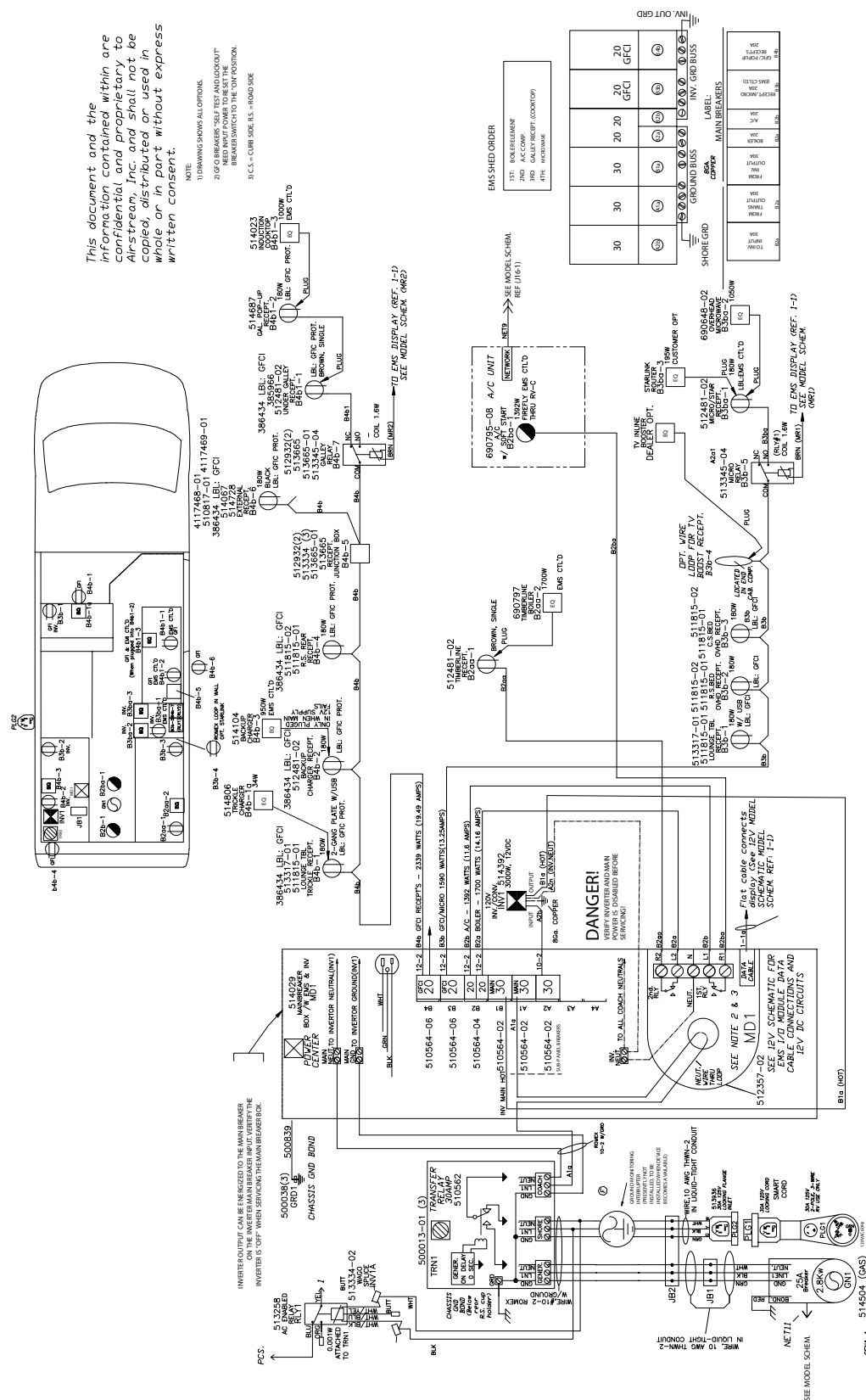
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30-Amp 120-Volt Schematic, Rangeline 21PS Model

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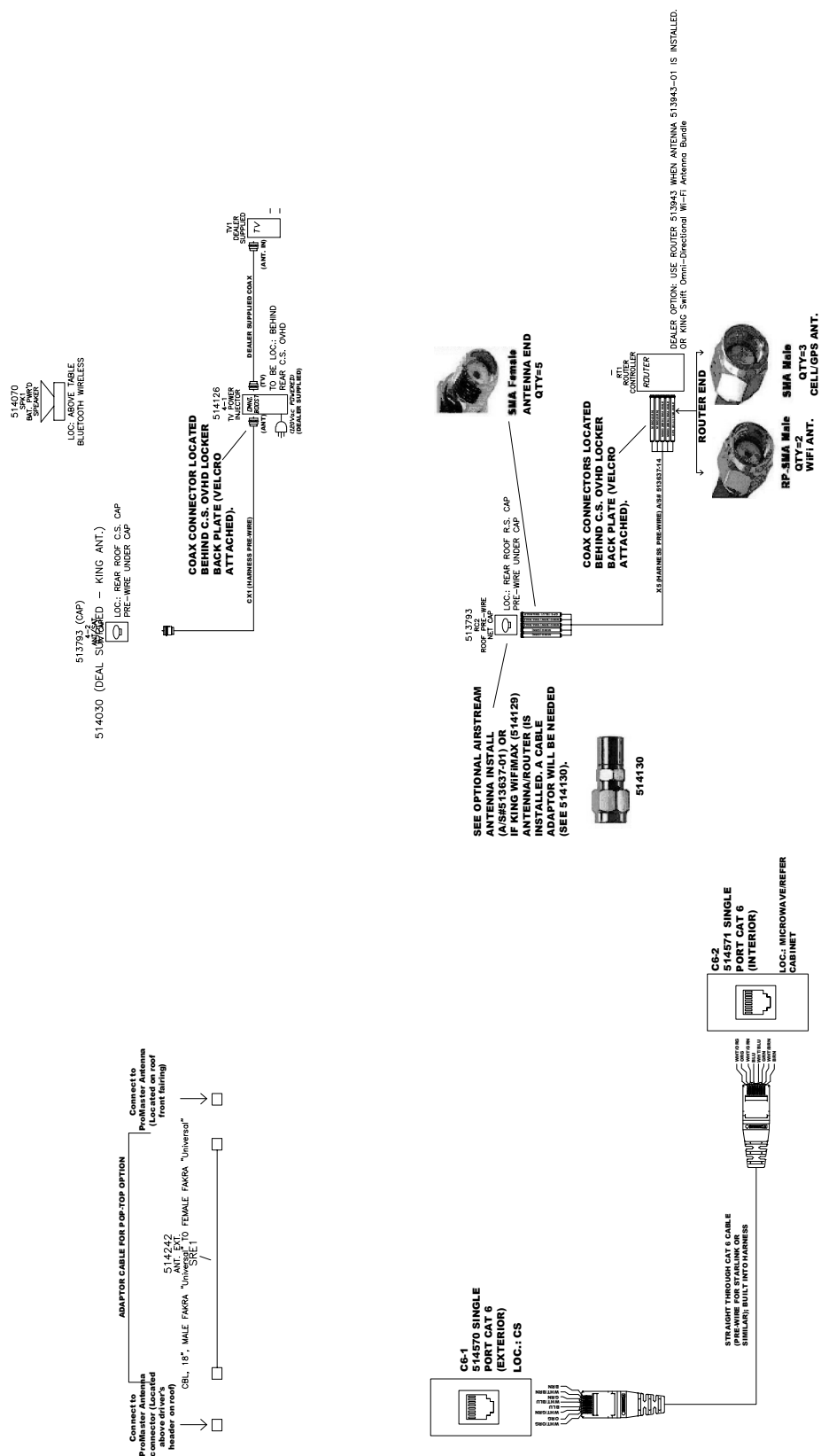
NOTE:
1) DRAWING SHOWS ALL OPTIONS.
2) GFC BREAKERS "SELF TEST AND LOCKOUT"
NEED INPUT POWER TO RESET THE
BREAKER SWITCH TO THE "ON" POSITION.
3) C.S. = CURB SIDE, R.S. = ROAD SIDE



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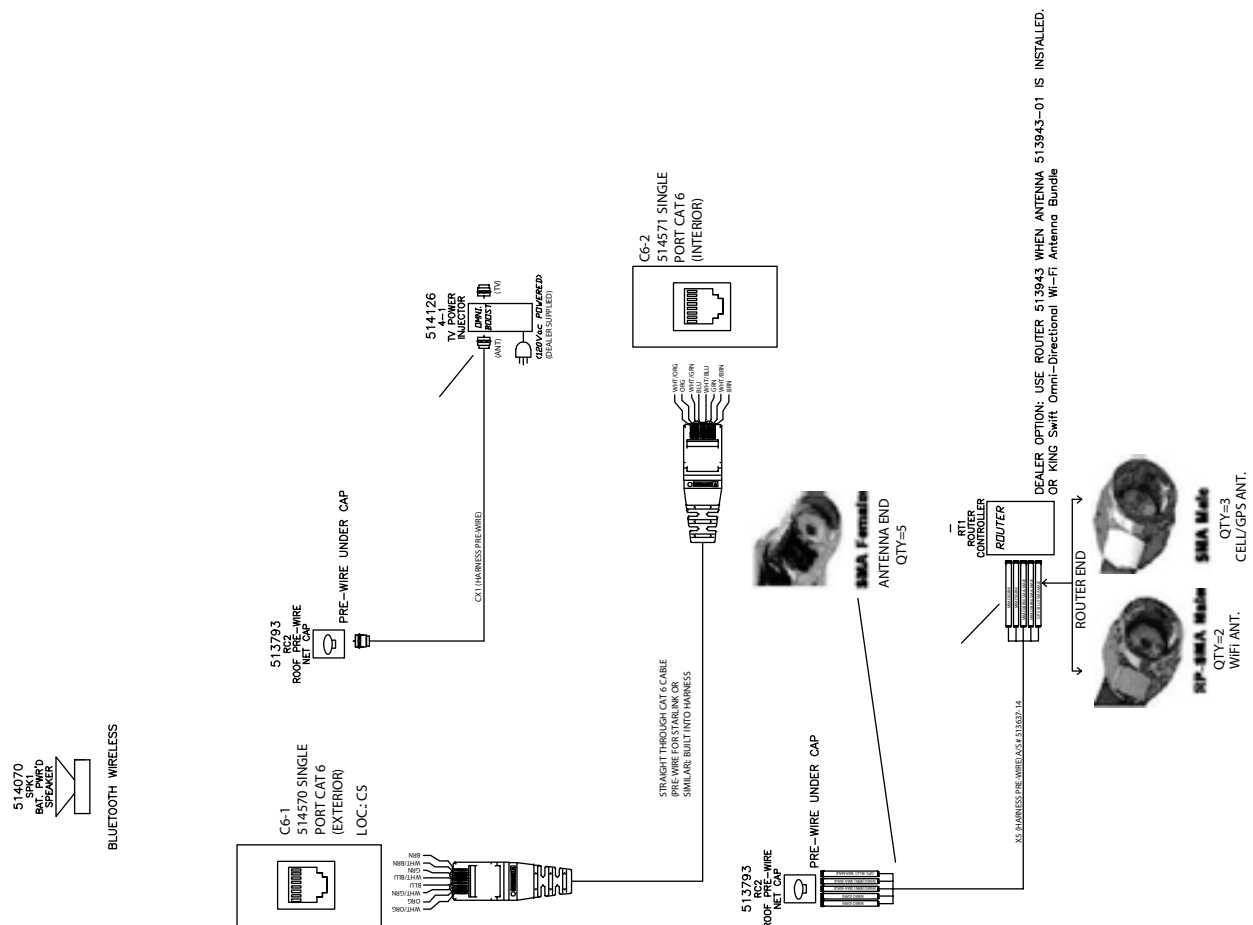
Audio and Video Schematic, Rangeline 21PS Model



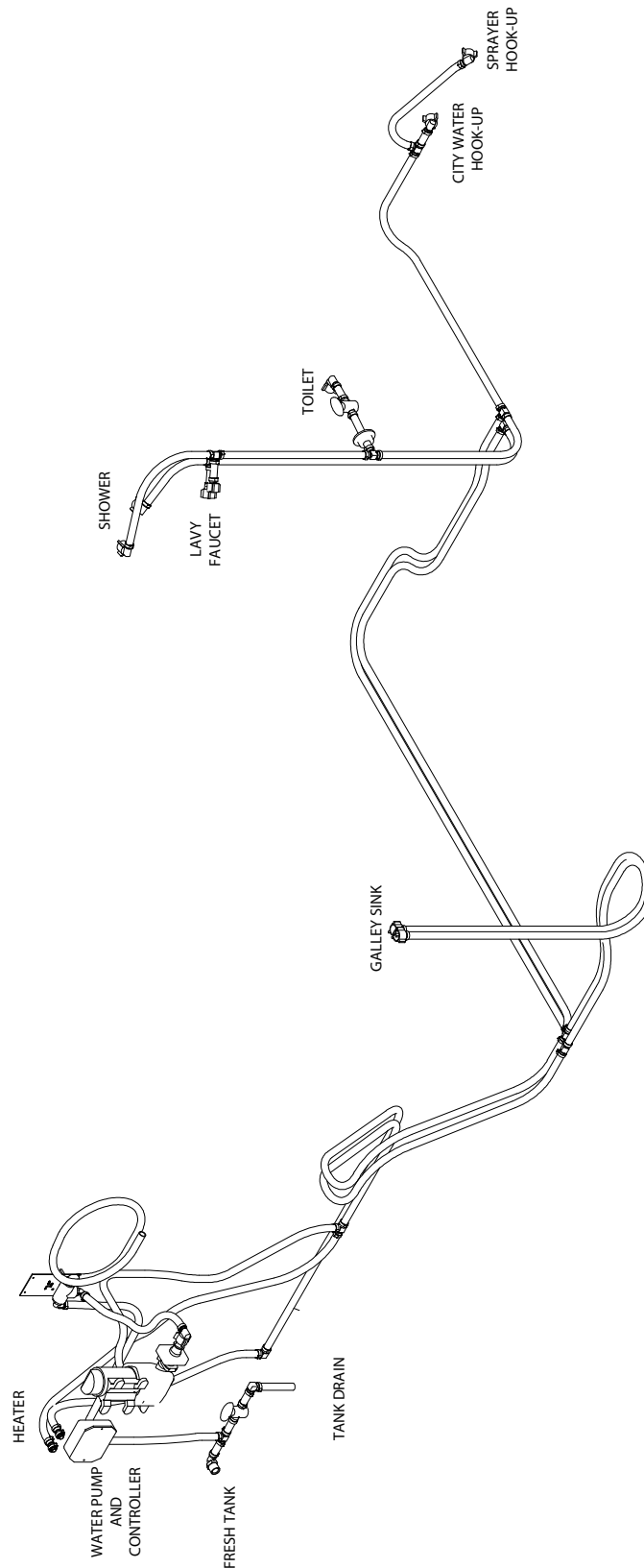
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Audio and Video Schematic, Rangeline 21PL Model

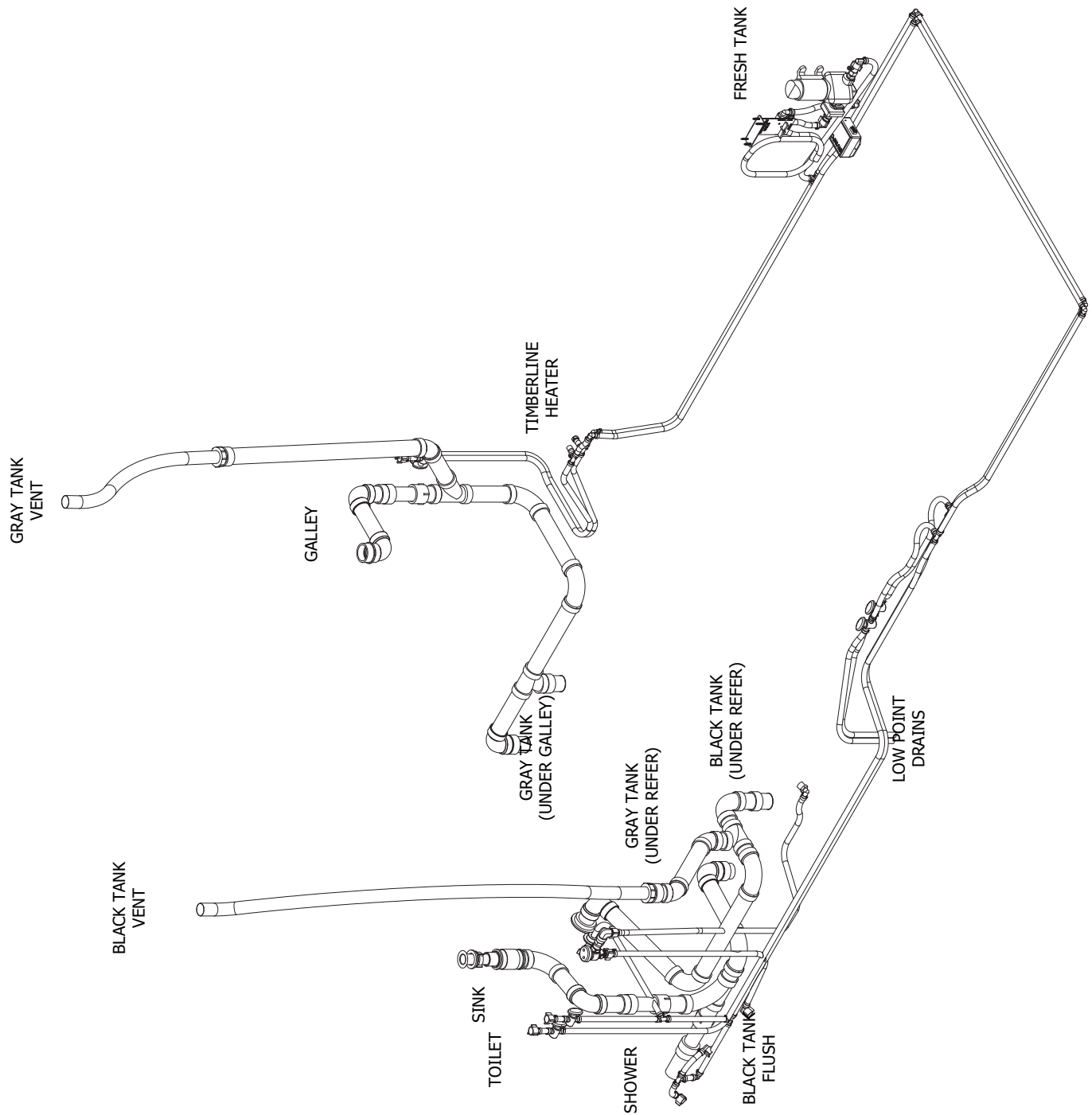
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Fresh Water Layout, Rangeline 21PS Model



Fresh Water Layout, Rangeline 21PL Model



FAQs and Answers

Electrical

1. *What should I do to maintain my generator?*

Answer: During the initial break in period, you will need to check your oil every 4 hours during the first 20 hours of operation. Once you reach 20 hours of operation, you will need to change the oil. (Refer to the Onan's Owner's manual for more information); [see Generator on page 5-23](#) and [see Maintenance Schedule on page 9-2](#).

2. *My generator stalls out or quits running if I turn a corner.*

Answer: Make sure you check the oil level. There is a sensor built into the generator that will shut the engine down if it is too low. Turning the corner or stopping quickly while oil is low can cause this to happen; [see Generator on page 5-23](#).

3. *What size battery do I have in my Airstream Rangeline?*

Answer: Your Airstream is factory equipped a Battle Born 270Ah 12V LiFePO4 Deep Cycle Gamechanger 3.0 House Battery; [see House Battery on page 5-24](#).

4. *My generator will not run properly while I am showing I have ¼ tank of fuel; however, it runs fine when tank is showing ½ or more.*

Answer: This could be a demand issue. If you are using other appliances, the outside temperature is below 32°F, and the BTU output is lower than at 72°F, the generator will not run properly. This would cause the generator to stall out or run poorly by not creating the proper 120 volts of power; [see Generator on page 5-23](#).

5. *What is the battery disconnect switch function?*

Answer: The switch is used to cut power when the Rangeline is not being used or put into storage to preserve battery charge. It disengages or engages the 12-volt power supply from the house battery; [see Battery Disconnect Switch on page 5-21](#).

6. *Do you recommend using a surge protector when plugged into shore power?*

Answer: Your Airstream is breaker protected. However, with the use of more personal electronic devices and the number of motorhome users in parks, added protection is always a plus.

7. *What is my inverter powering?*

Answer: The inverter provides power to the microwave. It also powers outlets on the inverter circuit (identified by the affixed "Inverter Circuit" label). The inverter/charger performs multiple functions; [see Inverter/Charger on page 5-22](#).

Plumbing

1. *Do I need a water regulator?*

Answer: No, your Airstream is equipped with a built-in regulator rated for 50 psi.

2. *How do I get fresh water into my Rangeline?*

Answer: You can use the onboard fresh water tank and 12-volt pump for your water supply when camping in a remote area, or hook to an external water source via potable water hose to exterior water inlet when parked at a campground; [see Water Service Compartment on page 6-7](#).

3. *What is the difference between the gray water tank and the waste water tank?*

Answer: The gray water tank holds water from shower and sink drains. The waste water tank holds sewer water from the toilet; [see Drain and Waste System on page 9-6](#).

4. *How do I use the waste tank flush?*

Answer: For information on how to use the tank flush; [see Waste Tank Flush on page 9-8](#).

5. *The gray water tank valve will not open while I have the waste water tank valve open.*

Answer: Only one valve can be open at a time.

Audio-Video

1. *Can I install a TV and antenna; what about Wi-Fi?*

Answer: Yes, your coach is pre-wired for installation; [see TV and Antenna Prewire on page 5-29](#).

Chassis

1. *Where is my spare tire located?*

Answer: A spare tire is not supplied with the touring coach.

2. *How do I jack the touring coach up to change a tire?*

Answer: Please refer to the Ram owner's manual.

3. *Where can I find my touring coach's serial number?*

Answer: A label is attached on the driver's side B-pillar or the passenger's door. This label will also provide the inflation pressure of the tires and weight specifications.

Appliances

1. *I am planning for a trip in my Airstream. How should I get the refrigerator cooled down?*

Answer: Turn the battery disconnect switch ON and set the refrigerator thermostat between 3 and 4. It may take several hours to completely cool the refrigerator. Also consider that every time the door is opened, it may take an hour to recoup the lost air.; [see Refrigerator on page 5-34.](#)

2. *My air conditioner freezes up. What is the problem?*

Answer: In high humidity conditions, the AC manufacturer recommends you operate your AC (manual mode) on the high fan setting and all vents should be open to have maximum air flow over the coils; this helps reduce icing. Also, dirty AC filters can restrict air flow and cause the AC to ice up; [see Air Conditioner on page 5-30.](#)

Maintenance

1. *Can I have my awning out with heavy winds?*

Answer: No this may cause damage if it is too windy; [see Awning on page 6-9.](#)

2. *I want to clean the exterior of my Airstream. What do you suggest?*

Answer: Airstream recommends washing based on operating conditions, and waxing a minimum of twice a year. Any automotive wax designed specifically for clear coated surfaces will provides good wax protection; [see Painted Surface Care on page 6-2.](#)

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AIRSTREAM®

Resource Guide

Welcome to Airstream

We have developed a Welcome Book to help get you up to speed quickly and learn the ins and outs of Airstream life. Inside this guide you will find all the resources below and much more.

- A Timeline of Airstream History
- A Guide to Getting Started
- Benefits and Support
- Meet Your People
- Plan a Trip
- Document your Journey

Get Your Welcome Book



Travel Trailer



Touring Coach

Airstream Resources

Owner's Hub



Owner's Manuals



Name Your Airstream



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Make plans to visit Airstream in Jackson Center, Ohio to take a factory tour and visit the Heritage Center to experience the history of our iconic brand.

My Airstream

Model Information

Model Year _____

Purchase Date _____

Model Name _____

VIN Number

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Airstream Serial Number

Airstream Dealer

Name: _____

Contact: _____

Phone: _____

Email: _____

Website: _____

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