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AIRSTREAM

2015 Interstate Owner's Manual



INTERSTATE

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Airstream Interstate Motorhome Owner's Manual

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Section 1 INTRODUCTION

The Owner's Manual for your new Airstream Motorhome is designed to respond to the most frequent inquiries regarding the operation, function, and care of the many systems that make modern motorhoming a joy.

The Airstream Interstate Motorhome is integrated into a Sprinter Van, designed and manufactured by Sprinter. Operation of the Sprinter, its engine, power train, and other related components are discussed in the Sprinter Operator's Manual and other literature provided by Sprinter. As a point of reference, those systems discussed in the Sprinter literature are warranted by Sprinter or their suppliers.

Airstream realizes our customers possess varying degrees of expertise in the area of repairing and maintaining the appliances in their motorhome. For this reason, the service and trouble-shooting information found in this manual is directed toward those with average mechanical skills. We also realize you may be more familiar in one area than you are in another. Only you know your capabilities and limitations.

We want you to use this manual, and hope you will find the information contained in it helpful; however, should you ever feel you may be "getting in over your head," please see your dealer to have the repairs made.

The operation and care of component parts such as, refrigerator, furnace, water heater and others are briefly explained in this manual.

All information, illustrations, and specifications contained in this manual are based on the latest product information available at the time of publication approval. Airstream reserves the right to make changes if and when new materials and/or 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.



WARNING

A warning is used for a hazardous situation which, if not avoided, could result in death or serious injury to persons.



CAUTION

A caution is used to advise caution when performing actions that could result in minor or moderate injury to persons and/or damage to equipment.

NOTE

A note is used to address practices not related to personal injury. This applies to hazardous situations involving property damage only.

Optional items may be available on all, or particular models. Additionally, some optional items can only be included during the manufacturing phase and cannot later be added to the motorhome.

The inclusion of optional items information in this manual does not imply or suggest the availability, application suitability, or inclusion for any specific unit.

NOTE

Your Sprinter Van Operator's and Warranty Manuals contain important cautions, warnings, operational, and warranty information on the Sprinter and its components. All information in the Sprinter manual should be reviewed and followed for your safety. The Airstream Interstate Owner's Manual may provide addition information and tips on the use of the Van as a motorhome; 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 Sprinter's manuals.

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Safety Precautions

Many things can be construed as safety related, but the most important is your common sense. If you are careless with matches, cigarettes, flammable material, or any other hazardous material, you surely realize your potential for accidents is greatly increased.

You will find many safety recommendations in this section and throughout the manual. The following recommendations are the ones we consider to be the most important.

Weight Distribution

Motorhomes have fresh water and wastewater tanks, a water heater, and storage areas. It gives you great flexibility in loading. With flexibility comes responsibility. If you want to load down all the storage compartments, the amount of fluids may have to be reduced. It is a trade off so plan wisely. Distribute your additional cargo as evenly as possible with the heaviest objects located as low as possible.

Do you really want to carry a full freshwater tank to a RV park 1,000 miles away and then hook up to a city water supply? 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 30 pounds of cargo.

Tire Safety

Properly maintained tires improve the steering, stopping, traction, and load-carrying capability of your vehicle. Refer to Section 9 - Maintenance for tire care and safety information. Also, be sure to read the Tire Safety Manual Addendum included with your owner's packet.

Appliances and Equipment

The appliances (stove, refrigerator, etc.) and equipment (hot water heater, furnace, etc.) typically operate on liquified petroleum (LP) gas. LP gas is flammable and is contained under high pressure. Improper use may result in a fire and/or explosion. Make sure to follow all instructions and warnings in this manual as well as those in the specific owner's manuals of the appliances and equipment.

Generator Safety

Do not operate the generator in an enclosed building or in a partly enclosed area, such as a garage. Be sure to follow all instructions and warnings in this manual and

the generator manufacturer's manual. Refer to Section 5 - Interior, under the Electrical heading, for generator information.

Mold

Mold and mold spores exist throughout indoor and outdoor environments. There is no practical way to eliminate all mold and mold spores in the indoor environment; however, the way to control indoor mold growth is to control moisture. Refer to Section 3 - General Information for information on controlling condensation and molds.

Chemical Sensitivity and Ventilation

Chemical Sensitivity

Immediately after the purchase of your new recreational vehicle and sometimes after it has been closed up for an extended period of time, you may notice a strong odor and/or experience a chemical sensitivity. This is not a defect in your recreational vehicle. Like your home, there are many different products used in the construction of recreational vehicles, such as carpet, linoleum, plywood, insulation, upholstery, etc. Formaldehyde is also the by-product of combustion and numerous household products, such as some paints, coatings, and cosmetics. However, recreational vehicles are much smaller than your home and therefore, the exchange of air inside a recreational vehicle is significantly less than in a home. These products, when new or when exposed to elevated temperatures and/or humidity, may off-gas different chemicals, including formaldehyde. This off-gassing, in combination with the minimal air exchange, may cause you to experience irritation of the eyes, nose, and throat, as well as sometimes headache, nausea, and a variety of asthma-like symptoms. Elderly persons and young children, as well as anyone with a history of asthma, allergies, or lung problems, may be more susceptible to the effects of off-gassing.

Formaldehyde

Formaldehyde is a naturally occurring substance and is an important chemical used widely by industry to manufacture building materials and numerous household products. It is also a by-product of combustion and certain other natural processes. Thus, it may be present inside the motorhome. Ventilation of the unit normally reduces the exposure to a comfortable level.

Trace levels of formaldehyde are released from smoking, cooking, use of soaps and detergents, such as carpet shampoos and cosmetics, and many other

Safety

household products. Some people are very sensitive to formaldehyde while others may not have any reaction to the same levels of formaldehyde. Amounts released decrease over time.

Your Airstream motorhome was manufactured using low formaldehyde-emitting (LFE) wood products, the use of which is typical in the recreation vehicle industry. Formaldehyde has an important role in the adhesives used to bind wood products used in recreation vehicles. The wood products in your trailer are designed to emit formaldehyde at or lower than industry guidelines and should not produce symptoms in most individuals.

While LFE wood products typically do not emit formaldehyde at a level that would cause symptoms in most individuals, it is possible, though not likely, for symptoms to occur when the Touring Coach is not properly ventilated. Ventilation is an essential requirement for Touring Coach use for many reasons. Any effects of formaldehyde can be greatly reduced by actions such as opening windows, opening roof vents, running the air conditioner (A/C), or some combination thereof. In addition, the emission of formaldehyde by these products naturally decreases rapidly over time.

Airstream strongly suggests you take measures to properly ventilate your motorhome on a regular basis. If you have any questions with respect to proper ventilation of your motorhome, please do not hesitate to contact your dealer or Airstream.

Ventilation

To reduce or lessen exposure to chemicals from off-gassing, it is of utmost importance that you ventilate your recreational vehicle. Ventilation should occur frequently after purchase and at times when the temperatures and humidity are elevated. Remember, off-gassing is accelerated by heat and humidity. Open windows, exhaust vents, and doors. Operate ceiling and/or other fans, roof ACs, and furnaces, and use a fan to force stale air out and bring fresh air in. Decreasing the flow of air by sealing the recreational vehicle increases the formaldehyde level in the vehicle's indoor air.

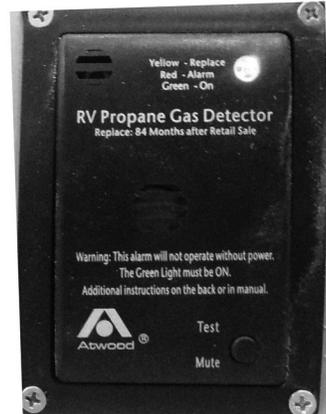
Do Not Smoke

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 submitted to your doctor or local health department.

Liquid Propane Gas (LPG) Detector



This alarm has a seven-year life; see end-of-life notification in LPG detector manual. Please read the entire detector manual before operating the unit.

The LPG detector is located in the kitchen area. LPG is a mixture of gases produced and sold commercially as a fuel for heating and cooking appliances. LPG is highly flammable and, as a result, can be explosive if ignited under certain circumstances. LPG is heavier than air and, if confined in a closed space, will accumulate close to the floor. The LPG detector is designed to alarm at less than 25 percent of the legal explosive limit. It will provide a visual and audible alarm by sounding an alarm every 5 seconds and lighting the red light emitting diode (LED).

Your LPG detector is wired directly to your Touring Coach battery and incorporates a 1-amp, in-line fuse. It has no internal battery backup. In normal stand-by mode, the LED indicator will be green.

Low Voltage

The operating voltage for the detector is 12 VDC. The actual voltage supplied to the detector in a recreational vehicle may drop below the minimum 8 VDC. The detector provides the user with a low voltage warning before reaching that level and will provide additional distinct, clear warnings and alarms after the 8 VDC level is reached. However, if available power supplied to the unit is below the operating voltage of 8 VDC, the detector will not detect gas or provide protection against dangerous levels of LPG.



WARNING

Activation of this detector indicates the possible presence of LPG, which can cause an explosion and/or fire, causing serious injury or death. This normally indicates a leak in the LPG installation or an LPG appliance. Extinguish all open flames, open your windows and door, and evacuate the unit immediately. Do not activate any electrical switch. Turn off the LPG at your gas tank(s). Do not re-enter your unit until a qualified repair technician has corrected the problem and certified the system as safe.



WARNING

It is not recommended that the detector be disconnected from the battery during periods of storage. There is a small heater on the sensor of the device that burns away impurities in the air during periods of normal use. During periods when power is interrupted, impurities can build up on the sensor. When power is returned to the detector, the detector alarm may activate until the impurities are burned off. This could take a number of hours, during which time the alarm will be constantly on.

Detector Test

The Test/Rest button is used to verify proper alarm function. Executing the test function sounds the alarm and illuminates the red LED. The test will sound the alarm twice, with 4 beeps in 1 second, followed by 5 seconds of silence. By pressing the button, you can verify that the alarm sounds and the LED functions properly.



WARNING

Have a qualified technician check your LPG system annually or if you detect any signs of leaks or malfunctions.

NOTE

Refer to Section 5 - Interior and Section 6 - Exterior for additional LPG warnings and safety information.

Smoke Alarm and Carbon Monoxide Detectors



2

Manufacturer: First Alert	Canada
Model SCO5RVA	Dicon Global, Inc.
United States	20 Steelcase Road, West,
BRK Brands, Inc.	Unit #3
3901 Liberty Street Road	Markham, Ontario. L3R 1B2
Aurora, Illinois 60504	Tel: 905-475-6006
For consumer inquiries	Fax 905-475-8560
call: 800-323-9005	For consumer inquiries call:
	800-323-9005

IMPORTANT. Dangers, Warnings, and Cautions alert you to important operating instructions or to potentially hazardous situations. Pay special attention to these items.

Parts of this section on the Smoke Alarm and Carbon Monoxide (CO) Detectors are a reprint of the manual included with each device and provided to you in the Airstream owner's briefcase. Please read, understand, and follow all aspects of the complete manual before activating and operating the Smoke Alarm and Carbon Monoxide Detectors. If you have not received the manual, use the appropriate contact information above to obtain one, or contact Airstream Customer Relations at 937-596-6111.

Features

- Separate sensors to detect smoke and CO; the two alarm systems work independently
- Powered by a 9-volt battery
- Side access drawer for easy battery replacement

Safety



WARNING

Have a professional technician check all safety related systems yearly or whenever any doubts of their ability to function properly arise.

Fire Safety Tips

Follow safety rules and prevent hazardous situations.

1. Use smoking materials properly. Never smoke in bed.
2. Keep matches or lighters away from children.
3. Store flammable materials in proper containers.
4. Keep electrical appliances in good condition and do not overload electrical circuits.
5. Keep stoves and barbecue grills grease, and debris-free.
6. Never leave anything cooking on the stove unattended.
7. Keep portable heaters and open flames, like candles, away from flammable materials.
8. Do not let rubbish accumulate.

Keep alarms clean and test them weekly. Replace alarms immediately if they are not working properly. Smoke Alarms that do not work cannot alert you to a fire. Keep at least one working fire extinguisher in your motorhome and an additional one in the kitchen. Have fire escape ladders or other reliable means of escape from an upper floor in case stairs are blocked.



WARNING

Smoke and CO Alarms are shipped with batteries deactivated. Ask dealer to activate batteries or activate batteries immediately upon delivery. Failure to follow warning will remove your protection.

Battery Activation

To activate battery, pull labeled clear plastic tab from device. If tab was previously removed, test batteries and replace as needed.

Basic Safety Information



WARNING

Danger: Carbon Monoxide is poisonous and can cause confusion, unconsciousness, and death. Follow all instructions, cautions, and warnings in this section and the generator operator's manual.

1. Never sleep in the vehicle with the genset running without ensuring the carbon monoxide detector is working. Primary protection against inhal-ing carbon monoxide is daily (every eight hour) inspection for visible and audible genset exhaust system leaks.
2. DO NOT operate the generator in an enclosed building or in a partly enclosed area such as a garage.
3. Review the safety precautions for fuel and exhaust fumes in the generator manual.
4. DO NOT operate the generator when the recreation vehicle is parked in high grass or brush. Heat from the exhaust could cause a fire in dry conditions.
5. Never operate your chassis or generator engine, or the engine of any vehicle, longer than necessary when the vehicle is parked.
6. DO NOT simultaneously operate generator and a ventilator which could result in the entry of exhaust gas. When exhaust ventilators are used, we recommend that a window on the opposite side of the unit "upwind" of exhaust gases be opened to provide cross ventilation.
7. When parked, orient the vehicle so that the wind will carry the exhaust away from the vehicle. DO NOT open nearby windows, ventilators, or doors into the passenger compartment, particularly those which can be "down wind", even part of the time.
8. DO NOT operate the generator when parked in close proximity to vegetation, snow, buildings, vehicles, or any other object that could deflect the exhaust under or into the vehicle.
9. DO NOT touch the generator when running, or immediately after shutting off. Heat from the generator can cause burns. Allow the generator to cool before attempting maintenance or service.

NOTE: The generator is located under the motorhome in front of the spare tire. The spare tire may have to be lowered to access the service door. See spare tire instructions in the Sprinter section of this manual.

**WARNING**

The Smoke and 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. See “If Your Smoke and CO Alarms Sounds” for more information on how to respond to an alarm. Failure to respond can result in injury or death.

The Silence Features are for your convenience only and will not correct a problem. See “Using the Silence Features” for details. Always check your motorhome for a potential problem after any alarm. Failure to do so can result in injury or death.

Test the Smoke and CO Alarms once a week. 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.

**WARNING**

Test Units in your motorhome after the vehicle has been in storage, before each trip, and at least once a week while in use. Failure to test units used in RVs as described may remove your protection.

Horn Pattern Selection for Smoke Alarm

When the alarm detects smoke, the default horn pattern is 3 beeps, pause, 3 beeps. To manually change the horn pattern to 6 beeps, pause, 6 beeps: open the battery drawer (with batteries installed), press and hold the test button down, and then close the battery drawer. To return to the default horn pattern of 3 beeps, pause, 3 beeps: open the battery drawer and then close the battery drawer.

- In the U.S. the horn pattern is 3 beeps, pause, 3 beeps.
- In Canada the horn pattern is 6 beeps, pause, 6 beeps.

Always test the alarm to verify the horn pattern for your area.

NOTE

See the First Alert User’s Manual for information on optional locking features.

Weekly Testing**WARNING**

NEVER use an open flame of any kind to test this unit. You might accidentally damage or set fire to the unit or to your home. The built-in test switch accurately tests the unit’s operation, as required by Underwriters Laboratories, Inc. (UL). **NEVER** use vehicle exhaust. It may cause permanent damage and will void your warranty.

DO NOT stand close to the Alarm when the horn is sounding. Exposure at close range may be harmful to your hearing. When testing, step away when horn starts sounding.

**CAUTION**

It is important to test this unit every week to make sure it is working properly. Using the test button is the recommended way to test this Smoke and CO Alarms.

Test the Smoke and CO Alarms

Press and hold the Test/Silence button for 3-5 seconds until unit starts to alarm.

During testing, you will see and hear the following sequence:

- The Horn will sound 3 beeps, pause, and sound 3 beeps. The Power/Smoke LED flashes red and the CO LED will be off. NOTE: For Canada, the horn will sound 6 beeps, pause, and sound 6 beeps. The Power/Smoke LED flashes red and the CO LED will be off.
- Next the Horn will sound 4 beeps, pause, 4 beeps. The Power/Smoke LED will be Off and the CO LED flashes Red.

If the unit does not alarm, make sure the batteries are correctly installed and test again. If the unit still does not alarm, replace it immediately.

Regular Maintenance

This unit has been designed to be as maintenance-free as possible, but there are a few simple things you must do to keep it working properly. Use only the replacement batteries listed below. The unit may not operate properly with other batteries. Never use

Safety

rechargeable batteries since they may not provide a constant charge.

- Test it at least once a week.
- Clean the Smoke and CO Alarms at least once a month: gently vacuum the outside of the Smoke and CO Alarms using your household vacuum's soft brush attachment. A can of clean, compressed air (sold at computer or office supply stores) may also be used. Follow manufacturer instructions for use. Test the Smoke and CO Alarms once a week. Never use water, cleaners, or solvents, since they may damage the unit.
- If the Smoke and CO Alarms becomes contaminated by excessive dirt, dust, and/or grime, and cannot be cleaned to avoid unwanted alarms, replace the unit immediately.
- Relocate the unit if it sounds frequent unwanted alarms. See "Where This Alarm Should Not Be Installed" for details.

Choosing a Replacement Battery:

Your Smoke and CO Alarms requires a 9-volt battery. They are shipped with batteries.



WARNING

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

If the CO Alarm Sounds



WARNING

Actuation of your CO Alarm indicates the presence of CO which can kill you. In other words, when your CO Alarm sounds, you must not ignore it.

1. Operate the Test/Silence button.
2. Call your emergency services, fire department, or 911. Write down the number of your local emergency service here:
3. Immediately move to fresh air/outdoors or by an open door or window. Do a head count to check that all persons are accounted for. Do not reenter the premises or move away from the open door or window until the emergency services responder has arrived, the premises have been aired out, and your CO Alarm remains in its normal condition.

4. After following steps 1-3, if your CO Alarm reactivates within a 24-hour period, repeat steps 1-3. Call a qualified appliance technician to investigate for sources of CO from fuel-burning equipment and appliances, and inspect for proper operation of this equipment. If problems are identified during this inspection, have the equipment serviced immediately. Note any combustion equipment not inspected by the technician, and consult the manufacturers' instructions, or contact the manufacturers directly, for more information about CO safety and this equipment. Make sure that motor vehicles are not, and have not, been operating in an attached garage or adjacent to the residence. Write down the number of a qualified appliance technician here:

Alarm: Move to Fresh Air

If you hear the CO alarm horn and the CO red light is flashing, move everyone to a source of fresh air. DO NOT remove the batteries.

If the Smoke Alarm Sounds

Responding to an Alarm



WARNING

If the unit alarm sounds and you are not testing the unit, it is warning you of a potentially dangerous situation that requires your immediate attention. NEVER ignore any alarm. Ignoring the alarm may result in injury or death.

Never remove the batteries from a battery operated Smoke and CO Alarms to stop an unwanted alarm (caused by cooking smoke, etc.). Removing batteries disables the alarm so it cannot sense smoke, and removes your protection. Instead, open a window or fan the smoke away from the unit. The alarm will reset automatically.

If the unit alarm sounds get everyone out of the motorhome immediately.

What to do in Case of Fire

- Do not panic; stay calm. Follow your family escape plan.
- Get everyone out of the motorhome as quickly as possible. Do not stop to get dressed or collect anything.

- Feel doors with the back of your hand before opening them. If a door is cool, open it slowly. Do not open a hot door. Keep doors and windows closed, unless you must escape through them.
- Cover your nose and mouth with a cloth (preferably damp). Take short, shallow breaths.
- Meet at your planned meeting place outside your motorhome, and do a head count to make sure everybody got out safely.
- Call the Fire Department as soon as possible from outside. Give your address, and then your name.
- Never go back inside a burning motorhome for any reason.
- Contact your Fire Department for ideas on making your motorhome safer.

Develop and Practice a Plan of Escape

- Make a floor plan indicating all doors used as escape routes from the motorhome.
- Have a family meeting and discuss your escape plan, showing everyone what to do in case of fire.
- At each campground, determine a place outside your motorhome where you all can meet if a fire occurs.
- Familiarize everyone with the sound of the Smoke Alarm and train him or her to leave your motorhome when they hear it.
- Practice a fire drill at least every six months or when new guests are with you. Practice allows you to test your plan before an emergency; you may not be able to reach your children or may be visiting a fellow camper while they sleep. It is important they know what to do.

Alarms have various limitations. See “General Limitations of Smoke and CO Alarms” for details.

Using the Silence Features



WARNING

Never remove the batteries to quiet an unwanted alarm. Removing the batteries disables the alarm and removes your protection. Do not use the Silence Feature in emergency situations. It will not correct a CO problem or extinguish a fire.

The silence feature is intended to temporarily silence the horn while you identify and correct the problem. The silence feature can temporarily quiet an unwanted alarm for several minutes. Press the Test/Silence button on the alarm cover for at least 3-5 seconds. After the Test/Silence button is released, the red LED blinks during the silence mode.

Silencing the Low Battery Warning

This silence feature can temporarily quiet the low battery warning “chirp” for up to 8 hours. You can silence the low battery warning “chirp” press the Test/Silence Button on the alarm cover.

Once the low battery warning “chirp” silence feature is activated, the unit continues to flash the green light twice a minute for 8 hours. After 8 hours, the low battery “chirp” will resume. Replace the batteries as soon as possible; this unit will not operate without battery power.

To deactivate this feature: Press the Test/Silence button again. The unit will go into Test Mode and the low battery warning will resume (LED flashes and unit sounds “chirp” once a minute).

What You Need to Know About Carbon Monoxide (CO)

What Is CO?

CO is an invisible, odorless, tasteless gas produced when fossil fuels do not burn completely, or are exposed to heat (usually fire). Electrical appliances typically do not produce CO.

These fuels include: wood, coal, charcoal, oil, natural gas, gasoline, diesel, kerosene, and liquid propane.

Common appliances are often sources of CO. If they are not properly maintained, are improperly ventilated, or malfunction, CO levels can rise quickly. CO is a real danger now that homes are more energy efficient. “Air-tight” homes with added insulation, sealed windows, and other weatherproofing can trap CO inside.

Symptoms of CO Poisoning

These symptoms are related to CO poisoning and should be discussed with ALL household members.

- 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 Carbon Monoxide can cause brain damage or death.

Important

This CO Alarm measures exposure to CO over time. It alarms if CO levels are extremely high in a short period of time, or if CO levels reach a certain minimum over a long period of time. The CO Alarm generally sounds an alarm before the onset of symptoms in average, healthy adults. This is important because you need to be warned of a potential CO problem while you can still react in time. In many reported cases of CO exposure, victims may be aware that they are not feeling well, but become disoriented and can no longer react well enough to exit the building or get help. Also, young children and pets may be the first affected. The average healthy adult might not feel any symptoms when the CO Alarm sounds. However, people with cardiac or respiratory problems, infants, unborn babies, pregnant mothers, or elderly people can be more quickly and severely affected by CO. If you experience even mild symptoms of CO poisoning, consult your doctor immediately.

Finding the Source of CO After an Alarm

CO is an odorless, invisible gas, which often makes it difficult to locate the source of CO after an alarm. These are a few of the factors that can make it difficult to locate sources of CO:

- Motorhome is well ventilated before the investigator arrives
- Problem caused by “backdrafting”
- Transient CO problem caused by special circumstances

Potential Sources of CO in the Motorhome

- Fuel-burning appliances like: a portable heater, gas kitchen range or cook top, furnace, hot water heater
- Damaged or insufficient venting: corroded or disconnected water heater vent pipe, leaking or damage furnace vent, or cracked heat exchanger, blocked or clogged appliance vents
- Improper use of appliances/device: operating fuel burning appliances or vehicle in an enclosed area (like a garage or screened porch)
- Transient CO problems: “transient” or on-again-off-again CO problems can be caused by outdoor conditions and other special circumstances

The Following Conditions Can Result in Transient CO Situations

1. Excessive spillage or reverse venting of fuel appliances can be caused by outdoor conditions such as:
 - Wind direction and/or velocity, including high, gusty winds, heavy air in the vent pipes (cold/humid air with extended periods between cycles)
 - Negative pressure differential resulting from the use of exhaust fans
 - Several appliances running at the same time competing for limited fresh air
 - Vent pipe connections vibrating loose from the furnace, water heater or other fuel burning appliances
 - Obstructions in or unconventional vent pipe designs which can amplify the above situations
2. Extended operation of non vented fuel burning devices (cooktop).
3. Temperature inversions, which can trap exhaust close to the ground.
4. Motorhome idling in an open or closed attached garage, or near a home.

These conditions are dangerous because they can trap exhaust in your motorhome.

Since these conditions can come and go, they are also hard to recreate during a CO investigation.

How Can I Protect My Family From CO Poisoning?

A CO Alarm is an excellent means of protection. It monitors the air and sounds a loud alarm before CO levels become threatening for average, healthy adults.

A CO alarm is not a substitute for proper maintenance of appliances.

To help prevent CO problems and reduce the risk of CO poisoning:

- Clean appliance vents yearly. Keep them free of debris, leaves, and nests for proper air flow. Also, have a professional check for rust and corrosion, cracks, or separations. These conditions can prevent proper air movement and cause back drafting. Never “cap” or cover a vent in any way that would block air flow

- Test and maintain all fuel-burning equipment annually. Most RV service centers offer appliance inspections for a nominal fee
- Make regular visual inspections of all fuel-burning appliances. Check appliances for excessive rust and scaling. Also check the flame on the burner and pilot lights. The flame should be blue. A yellow flame means fuel is not being burned completely and CO may be present. Keep the blower door on the furnace closed. Use vents or fans, when they are available, on all fuel-burning appliances. Make sure appliances are vented to the outside. Do not grill or barbecue indoors, in garages, or on screened porches
- Check for exhaust back flow from CO sources. Check the draft hood on an operating furnace for a back draft. Look for cracks on furnace heat exchangers
- Check the RV beside you at a campground. CO can come in an open window or vent
- Keep windows and doors open slightly. If you suspect CO is entering your motorhome, open a window or a door. Opening windows and doors can significantly decrease CO levels

General Limitations of Smoke and CO Alarms

Smoke and CO Alarms may not waken all individuals

Practice the escape plan before every excursion and with all newcomers to the vehicle, making sure that everyone is involved. Allow children to master fire escape planning and practice before holding a fire drill at night when they are sleeping. If children or others do not readily waken to the sound of the Smoke and CO Alarms, or if there are infants or family members with mobility limitations, make sure that someone is assigned to assist them in a fire drill and in the event of an emergency. It is recommended that you hold a fire drill while family members are sleeping in order to determine their response to the sound of the Smoke and CO Alarms while sleeping and to determine whether they may need assistance in the event of an emergency.

Smoke and CO Alarms cannot work without power

These 9-volt, battery-operated units cannot work if the batteries are missing, disconnected, dead; if the wrong type of batteries are used; or if the batteries are not installed correctly.

Smoke and CO Alarms will not sense:

The smoke and CO alarm will only sense smoke or CO at the sensor. Smoke or CO may be present in other areas. Doors or other obstructions may affect the rate at which CO or smoke reaches the sensors. Consider installing another alarm device (Combination CO and Smoke Alarm, or separate CO Alarms and Smoke Alarms) if you inhabit areas you believe need protection.

Smoke and CO Alarms may not be heard

The alarm horn loudness meets or exceeds current UL standards of 85 dB at 10 feet (3 meters). However, the Smoke and CO Alarms may not wake up a sound sleeper or one who has recently used drugs or has been drinking alcoholic beverages. This is especially true if the door is closed or only partly open. Even persons who are awake may not hear the alarm horn if the sound is blocked by distance or closed doors. Noise from traffic, stereo, radio, television, AC, or other appliances may also prevent alert persons from hearing the alarm horn. The Smoke and CO Alarms are not intended for people who are hearing impaired.



WARNING

The Alarm may not have time to alarm before the fire itself causes damage, injury, or death, since smoke from some fires may not reach the unit immediately. Examples of this include persons smoking in bed, children playing with matches, or fires caused by violent explosions resulting from escaping gas.

Smoke and CO Alarms are not a substitute for life insurance

Although this Smoke and CO Alarm warns against increasing CO levels or the presence of smoke, Airstream Inc. and/or BRK Brands, Inc. do not warrant or imply in any way that they will protect lives. Motorhome owners and users must still insure their lives.

Smoke and CO Alarms have a limited life

Although the Smoke and CO Alarms and all of their parts have passed many stringent tests and are designed to be as reliable as possible, any of these parts could fail at any time. Therefore, you must test these devices weekly. The unit should be replaced immediately if it is not operating properly. Any Smoke or CO Alarm that is beyond its replacement date should be replaced immediately.

Safety

Smoke and CO Alarms are not foolproof

Like all other electronic devices, the Smoke and CO Alarms have limitations. They can only detect smoke or CO that reaches the sensors. They may not give early warning if the source of smoke or CO in a remote part of the motorhome, away from the alarm device. The First Alert Users Manual provided in your owner's packet has troubleshooting and other important information. Please read, understand, and follow all information contained the First Alert Manual. If you have any questions concerning the alarm that cannot be answered in this manual or the First Alert manual please contact First Alert Consumer Affairs at 1 800.323.9005, M-F 7:30 AM to 5:00 PM (CST) or Airstream Customer relations 937.596.6111.

Basic Rules for Safety



WARNING

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



WARNING

DO NOT use cooking appliances for comfort heating. Cooking appliances need fresh air for safe operation. Before operation, open overhead vent or turn on exhaust fan and open window.

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

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.

A Warning Label has been located near the LP gas container. This label reads: DO NOT FILL CONTAINER (S) TO MORE THAN 80% PERCENT OF CAPACITY. Overfilling the LP gas container can result in uncontrolled gas flow that can cause fire or explosion. A properly filled container will contain approximately 80 percent of its volume as liquid LP gas.



WARNING

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



WARNING

If you smell gas

- Extinguish any open flames, pilot lights and all smoking materials.
- Do not touch electrical switches.
- Shut off the gas supply using the remote shut off switch.
- Open doors and other ventilating openings.
 - Leave the area until odor clears.
- Have the gas system checked and leakage source corrected before using again.

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

The regulator at the LP tank is under a gray, plastic cover. The protective cover helps to keep the vent on the regulator from being clogged by wasps or ice, but the regulator should be checked regularly to make sure the vent remains clear.



WARNING

Do not attempt to seal regulator cover.



WARNING

Check vent each time tank is filled to make sure it is clear of obstructions.

Detector Test

The Test/Rest button is used to verify proper alarm function. Executing the test function sounds the alarm and lights up the red LED. The test will sound the alarm twice, with 4 "beeps" in 1 second followed by 5 seconds of silence. By pressing the button, you can verify if the alarm sounds and the LED functions properly.

**WARNING**

Have a qualified technician check your LP Gas system annually or if you have any signs of leaks or malfunctions.

Fire Extinguisher

The fire extinguisher, just inside your forward door, should be checked for charge on a regular basis. Make sure your family, especially the cook, knows how to release the extinguisher storage bracket and how to properly operate the extinguisher. Check with your local fire department for professional advice on its operation and use if you find the directions on the extinguisher unclear. They will be able and willing to assist you and your family.

**Safety****Emergency Exit**

There are three avenues of escape from the motorhome in the event of an emergency, the driver's door, the passenger door, and the sliding side cargo door. As always, safety should be one of your top priorities. Make sure you and everyone traveling with you can operate these doors and exit rapidly without light. A little planning and a quick practice session at each camping site is well worth the time it may take.

**WARNING**

At each campsite, make sure you have not parked in such a manner as to block the operation of the doors or the escape avenues by being too close to trees, fences, or other impediments. Scenic views are one reason for traveling, but do not park so the beautiful lake or steep cliff is just outside your doors. Do not block access to the doors from the inside or outside of the vehicle.

**WARNING**

Read the directions carefully on the fire extinguisher. If there is any doubt on the operation you and your family should practice, then replace or recharge the extinguisher. You will find your local fire department will be happy to assist you and answer any questions.

**WARNING**

Do not smoke in bed. Keep matches out of reach of small children. Do not clean with flammable material. Keep flammable material away from open flame. We have all heard these warnings many times, but they are still among the leading causes of fires.

Other safety information on the LPG system of your motorhome is located in the Plumbing Section of this manual.

NOTES:

Section 3

GENERAL INFORMATION

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Limited Warranty Policy

Warranty Coverage

Airstream Inc. ("Airstream") warrants that it will repair or replace defects in material or workmanship in any components of a new Airstream motorhome purchased from an authorized Airstream dealer in the United States or Canada for 36,000 miles (57,937 Kilometers) or a period of thirty-six (36) months. In order to obtain coverage under this Limited Warranty, you must notify an authorized Airstream dealership or Airstream of the warrantable defect no later than ten (10) days following expiration of this Limited Warranty. Airstream's obligation to repair or replace defective materials or workmanship is the sole obligation of Airstream under this Limited Warranty. Airstream reserves the right to use new or remanufactured parts of similar quality to complete any warranty work.

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 limited warranty. All other warranties, express or implied, are hereby disclaimed by Airstream. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

Items Not Covered

This Limited Warranty does not provide coverage for any of the following:

1. Tires, batteries, stereo, television, range/stove, furnace, refrigerator, AC unit, toilet, water heater, microwave, generator, and other materials, parts, and components warranted by persons or entities other than Airstream. Please refer to the warranties of component manufacturers for terms and conditions of coverage.
2. Any part or component of the motorhome not manufactured or installed by Airstream.
3. Normal deterioration due to wear or exposure, including but not limited to rust, corrosion, oxidation, and cosmetic blemishes.
4. Normal maintenance and service items, including but not limited to light bulbs, fuses, lubricants, sealants and seals, door adjustments, and awning tension.
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 motorhomes, and motorhomes purchased directly or indirectly through auction, salvage, repossession, or other non-customary sale means.
7. Defects or damage caused by, in whole or in part, or in any way related to:
 - a. Accidents, misuse (including off-road use), or negligence.
 - b. Failure to comply with the instructions set forth in any owner's manual provided with the motorhome.
 - c. Alteration or modification of the motorhome, except such alterations or modifications approved in writing by Airstream.
 - d. Acts of God or other environmental conditions, such as lightning, hail, salt, or other chemicals in the atmosphere.
 - e. De-icing agents or other chemicals applied to the motorhome.
 - f. Failure to properly maintain or service the motorhome, including, but not limited to, the maintenance of lubricants, sealants, and seals.
 - g. 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.
 - h. Use of the motorhome other than for temporary recreation purposes, including, but not limited to, use of the motorhome for residential, disaster relief, commercial, or rental purposes.
 - i. The addition of weight to the motorhome that causes the motorhome's total weight to exceed applicable motorhome weight ratings, or addition of weight causing improper distribution of the weight of the motorhome.
 - j. Selection, use, and operation of any hitch assembly.
 - k. Failure to seek and obtain repairs in a timely manner.
 - l. Failure to use reasonable efforts to mitigate damage caused by defects.

General Information

- m. Failure to properly ventilate the motorhome.
- n. Improper electric power supply or improper vehicle hookup to other facilities.
- o. Acts or omissions of any person or entity other than Airstream.

Disclaimer of Incidental and Consequential Damages

Airstream hereby disclaims any and all incidental and consequential damages arising out of or relating to the motorhome, including expenses such as transportation to and from vehicle dealerships and Airstream repair facilities, loss of time, loss of pay, loss of use, inconvenience, commercial loss (including 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. This disclaimer is independent of any failure of the essential purpose of any warranties provided with a 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.

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 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 at the following address, specifying:

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
4. The nature of the problem and the steps or service which have been performed.

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

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.

Dealer Representations Excluded

The entire Limited Warranty provided by Airstream is set forth herein. Airstream will not be responsible for any additional representations or warranties made by any person or entity other than Airstream, and Airstream's obligations are solely as set forth in the terms and conditions of this Limited Warranty.

Warranty Transfer

This Limited Warranty is transferable to subsequent owners for the remaining duration of the warranty period, upon approval from Airstream. Transfer of this Limited Warranty will only be approved by Airstream upon all of the following:

1. Airstream's receipt of a completed transfer application form,
2. The payment of a \$250.00 processing fee to Airstream, and
3. The completion of an inspection of the condition of the motorhome, at the owner's expense, by an authorized Airstream dealer in accordance with Airstream's required procedure and Airstream's receipt of a written report as to the results of such inspection.

Transfer application forms are available from your dealer or Airstream's Service Administration Department.

Changes in Design

Airstream reserves the right to make changes in design and improvements upon its products from time to time, without imposing upon itself any obligation to install additional features in your motorhome.

Consumer Arbitration Program

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.

For recreation vehicles purchased in the State of California: The CAP-RV program operates as a certified mechanism under the review of the California Arbitration Certification Program. You must utilize the arbitration program before claiming rights conferred by 15 USC section 2310 (Uniform Commercial Code) or Civil Code section 1793.22(b) (Song-Beverly Warranty Act). You are not required to use the program if you choose to seek redress by pursuing rights and remedies not created by those laws.

Members of the armed forces who purchased the vehicle in California, 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.

Explanation of Airstream Limited Warranty

Along with your new Airstream motorhome, you have purchased the Airstream Limited Warranty. Read your Limited Warranty carefully. It contains the entire agreement with respect to Airstream's obligation on the Limited Warranty on your new vehicle. The terms of the Limited Warranty, and only those terms, will define Airstream's responsibility. When you receive your Limited Warranty file it for safekeeping.

Upon proof of purchase date to any Airstream Dealer Service Center, defects in materials or workmanship will be repaired or replaced without cost to the owner for a period of thirty six (36) months from the original purchase date, or 36,000 miles (57,937 kilometers), whichever occurs first. Written warranties of some manufacturers of components of the motorhome will be honored by Airstream for the duration on that manufacturer's warranty.

Airstream Limited Warranty Excludes:

Normal Wear

Items such as curtains, upholstery, floor coverings, and window, door, and vent seals will show wear or may even wear out within the 2-year warranty period, depending upon the amount of usage, weather, and atmospheric conditions.

Accident

We strongly urge our dealers and customers to inspect the motorhome upon receipt of delivery for any damage caused by accident while being delivered to the dealer, or while it is on the dealer's lot. Damage of this nature becomes the dealer or customer's responsibility upon acceptance of delivery, unless Airstream is notified and the person making the delivery verifies the damage. Glass breakage, whether obviously struck or mysterious, is always accidental and covered by most insurance policies.

Abuse

Lack of customer care and/or improper maintenance will result in early failure for which Airstream cannot be held responsible.

Exposure

Deterioration by sunlight is possible to such items as tires, curtains or upholstery. Steel or metal surfaces are subject to the elements, causing rust and corrosion that is normal and beyond the control and responsibility of Airstream.

Overload

Overload Damage due to loading beyond capacity or to cause improper balance is not covered by the Airstream Limited Warranty. The Airstream motorhome is engineered to properly handle any normal load. There are limits to the amount of load that can be safely transported depending upon speed and road conditions. If these limits have been exceeded, the Airstream Limited Warranty will not cover resulting damage. For additional information on the load capacity of your motorhome, consult your Sprinter and Airstream Owner's Manuals or gross vehicle weight rating plate.

Chemical Gassing

Chemical gassing is not a "Defect" in your recreational vehicle and is not covered by the Limited Warranty. Please follow the recommendations in this manual to address this concern.

General Information

Sprinter Van

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



WARNING

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

The Airstream Interstate Owner's Manual may provide addition information and tips on the use of the Van as a motorhome, however, no information, in whole or in part, in any Airstream manuals should be interpreted as advice or directions to disregard or void the Warnings, Cautions, Notices, or other information contained in the Sprinter's manuals.

Other Exclusions

Tires, batteries, and the generator are serviced by their respective manufacturers and will be handled by their service centers according to the terms of their written policy. Any warranty forms from these manufacturers should be completed promptly, preferably at time of purchase.

Service

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

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

Please contact your dealer if your motorhome needs service. Major service under your Airstream Limited Warranty is available through our nationwide network of Airstream Dealer Service Centers. An up-to-date list of Dealer Service Centers will be sent to you with an Owner's Survey shortly after your motorhome is delivered. Our website, www.Airstream.com also has a dealer locator on it. This list is current as of the date of this publication.

Occasionally, dealerships change or new dealers are added who may not appear on this list. For this reason, it is suggested you contact your local dealer from time to time for an updated list. Additional copies are available if you need them. All centers operate on an appointment basis for the utmost efficiency.

When you require service for your motorhome from the Airstream Factory Service Center or a Certified Dealer Service Center, please contact the service manager for an appointment, and inform him 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

P.O. Box 629, 419 W. Pike Street

Jackson Center, Ohio 45334-0629

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

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 <http://www.safercar.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 <http://www.safercar.gov>.

Camping

Suggested Pre-Travel Check List

Interior

1. Turn off water pump switch.
2. Close windows and vents.
3. Close all interior cabinet doors.
4. Latch refrigerator door. (Seal containers first.)
5. Hold down or securely stack all loose, hard, and sharp objects.
6. Drain toilet bowl.
7. Turn off interior lights.

Exterior

1. Disconnect and stow electrical hookup cord.
2. Check exterior lighting.
3. Check torque of lug nuts.
4. Check tires for correct pressure.
5. Adjust vehicle mirrors.
6. Pull forward about 50 ft, test brakes, and check site for forgotten objects and cleanliness.

Motorhome 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, 30-amp capacity;
5. 50-ft. electric cord, 12-3 wire, 30-amp capacity;
6. Wheel chocks;
7. Torque wrench;
8. Quality tire gauge;
9. Verify emergency light kit and is operational. (Found in driver's door.)

Motoring Essentials

1. Motorhome registration properly.
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. Pack the trunk so that you can reach the tools and spare tire without completely unpacking.
8. Keep sharp or hard articles securely packed.
9. Do not pack things in the passenger seating area. You will need the maximum space for comfort.
10. Wear easy wash, drip-dry traveling clothes.
11. Do not make your vacation trips a mileage marathon. Stop and relax frequently.
12. Verify first aid kit provided in passenger door is complete and up to date.
13. 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 is to:

1. Turn on LP gas supply and light appliance pilots if required.
2. Turn on water pump and open faucets until air is expelled from the system.

Before moving on, turn off the LP gas and water pump. 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. Deplete the water supply if using the system moderately or conservatively. You will need to maintain the level of your battery during this time. If your battery falls to 60 percent capacity, charge the battery by starting your generator.

General Information

Longer Trip

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 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 motorhome is built to be safely parked in any spot that is relatively level and where the ground is firm. Your facilities are with you. You are self-contained. Try to pick as level a parking spot as possible.

Extended Stay

Making 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.

When you plan to stay in the same place for several days, weeks, or months, you will want your motorhome 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. **WE DO NOT RECOMMEND PLACING TIRES IN A HOLE FOR LEVELING.** Check the tire section of the chassis portion of this manual for information on tire support.

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

Plug the 110-volt, 30-amp Electrical Cable into the City Power Service. Be sure you have the wire grounded and have the proper polarity. See Electrical Section for technical details.

To use the generator, you simply start it. All switching is done automatically. The generator can be started from the switch inside the curbside rear roof locker. It is easier on your generator and appliances if you'll allow the generator to reach its normal operating speed (about a minute) prior to applying heavy current loads.

A Cable/Satellite TV connection is located in the exterior compartment along with the switches for the dump valves, macerator pump, and macerator pump high-pressure hose reel.

Turn on the gas supply. Lighting a top range burner to bleed any air from the system will make it easier to start other appliances including the furnace.

When you stay for extended periods where electric or water hookups are not available, you must make regular checks on the condition of your 12-volt 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 motorhome to a dumping location.

Effects of Prolonged Occupancy

Your motorhome was designed primarily for recreational use and short-term occupancy. If you expect to occupy the motorhome 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 motorhome 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 motorhome 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 motorhome, action should be taken to minimize their effects.

NOTE

Your motorhome 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 and non-vented gas burners. 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 motorhome 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?

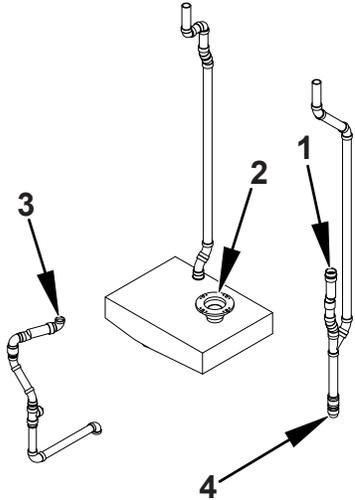
By controlling relative humidity, the growth of mold and mildew can be inhibited. In warm climates, use of the will reduce the relative humidity. Vents are located in the bathing and cooking areas and constant use is advised during food preparation and bathing, even during colder weather. Additionally, 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 motorhome 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 motorhome and its accessories, as described both in this manual and in accompanying literature, will provide the best protection to the motorhome.

General Information

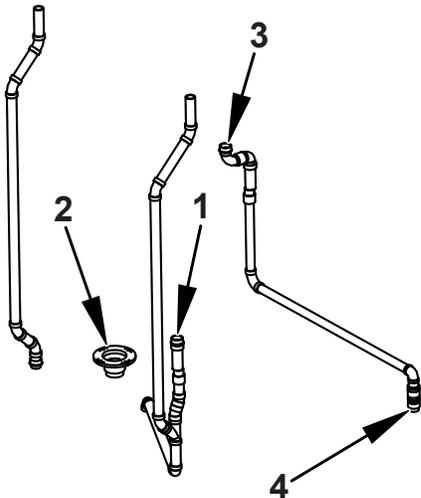
Waste Water System

Drain System Lounge EXT/Regular/Twin Models



1. Lavatory Drain
2. Black Water Tank (Toilet)
3. Galley Drain
4. Gray Water Tank

Drain System Grand Tour Models



1. Lavatory Drain
2. Black Water Tank (Toilet)
3. Galley Drain
4. Gray Water Tank

The main parts of the waste water system are the toilet, dual holding tanks, and tank dump valves (see Section 9 - Maintenance for dump valve information). 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 in the stationary position 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 sewage tank has been emptied, close the gate valves and put approximately 5 Gal of water in the sewage holding tank. This will 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 (they do not dissolve like toilet paper).
- Automotive antifreeze, ammonia, alcohols, or acetone.
- Table scraps or other solids that may clog the drains.

Shoreline Power Supply



The Power Cord hookup is located on the side of the motorhome. The cord may be stored in the rear exterior compartment. The power cord is plugged into the motorhome receptacle and the City Power Service.

NOTE

Use a minimum 10/3 cord with a maximum length of 25 ft.

Many campgrounds provide less than 30-amp service and your hookup may blow their fuse or circuit breaker. If this happens, reduce the load and replace the fuse or reset the breaker.

Cable TV Inlet

The exterior inlet is located on the side or rear panel of the motorhome and is labeled for your convenience. It also includes a hookup for a portable satellite dish.

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.

The Interstate motorhome has 12-volt heat pads installed with the fresh water and gray water holding tanks. The black water tank is above the floor, allowing heat from the furnace to protect it from freezing. The heating range of the pads is 44°F when it's on and 64°F when it's off. The lighted switch, when switch is lit the heating pad is on, for the heating pads is located on the forward shower wall inside the sliding cargo door. To conserve battery power, RV antifreeze may be used to protect the gray and black tanks. Battery power will last about 4 hours unless the unit is plugged into a 120-volt shoreline or the generator is ran to operate the inverter/charger.

NOTE

Drain and winterize all models if the water systems are not being used during winter traveling. Refer to Section 9 - Maintenance in this manual for winterizing instructions.

Some states do not allow LPG to be turned on while moving. While traveling in these states, simply use your common sense. How cold is it? How long will it be before you can turn the heat back on? Is the temperature dropping or rising? Remember, when towing at 50 MPH, the wind chill factor will cause the interior of the motorhome to cool much faster than a motorhome that is parked.

1. You must have a plentiful supply of propane gas as the heat from the furnace warms the motorhome and keeps the fresh water lines and black water holding tank from freezing.
2. If your stay is longer than overnight, you should endeavor to have 120-volt electricity available. The

house battery, fully charged, will not last more than about 15 hours in freezing weather, less (4 hours) with use of the tank heating pads. Of course, you can run your generator to recharge the battery, or even use the generator continually. Keep an eye on your LP Gas or engine fuel according to the type of generator your motorhome is equipped with. Since the generator starts off the house battery, it is recommended to start the generator prior to running the battery down.

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 12-volt power by using non-toxic RV-approved antifreeze in gray water holding tank instead of 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 motorhome. 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.
7. Remember to remove and drain the exterior shower faucet to prevent freeze damage.

Safety

As always, safety should be a top priority. Ensure that you, and everyone traveling with you, can quickly operate the main door and the emergency exit window in the dark. Plan for other means of escape in case these designated exits are blocked.

The escape windows(s) are identified by their red release handles. To release the escape windows, lift up on both latches, push on the glass, and swing it clear.

**WARNING**

The window operation should be checked before each trip and the latches lubricated with silicon spray or an equivalent lubricant every 3 months.

General Information



WARNING

Read the directions on the fire extinguisher carefully. If you have any doubts as to its operation, you and your family should practice, and then replace or recharge the extinguisher. Your local fire department will be able to assist you and answer any questions.



WARNING

Do not smoke in bed. Keep matches out of reach of small children. Do not clean with flammable material. Keep flammable material away from open flame. Always shut off the LP gas at the bottles when fueling a tow vehicle.

We have all heard the above warnings many times, yet the situations or occurrences they discuss are still among the leading causes of fires.

Safety information concerning the LPG system of your motorhome is located in Section 6 - Exterior of this manual.

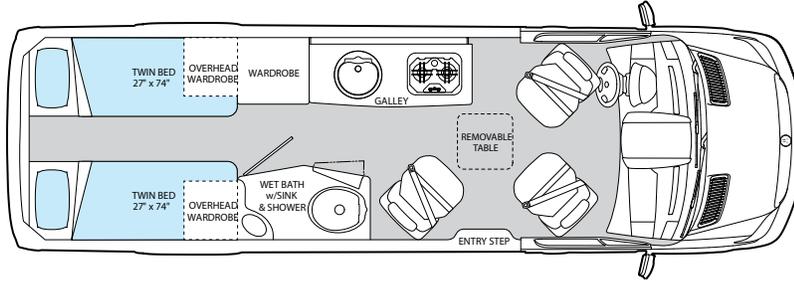
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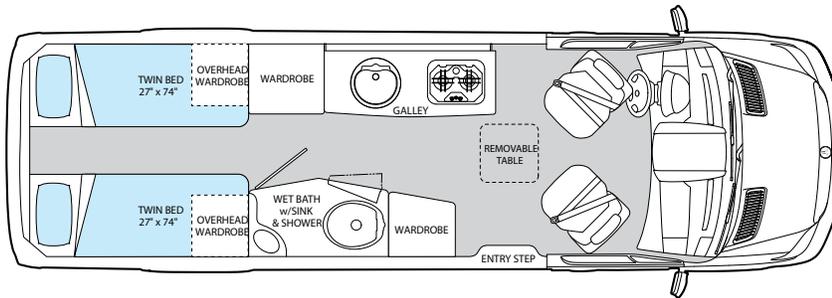
Floor Plans And Specifications

Floor Plans

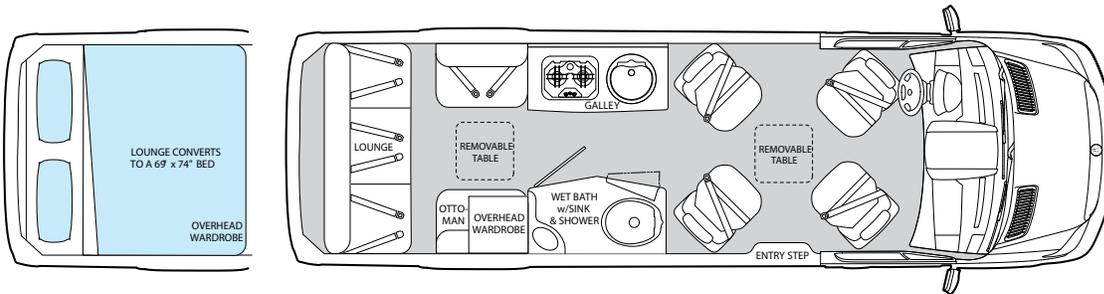
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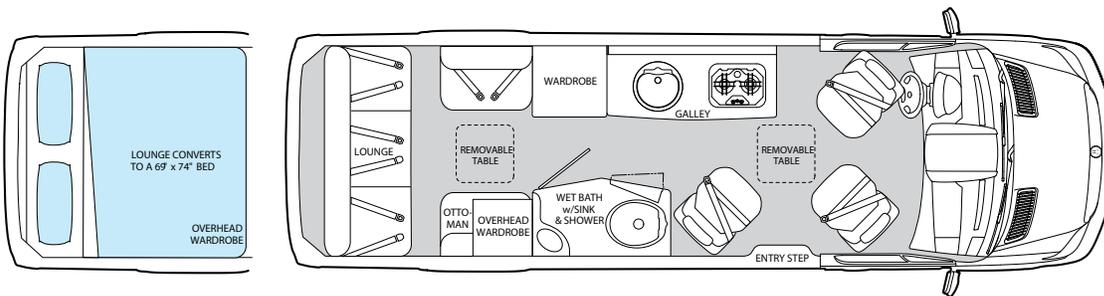
Interstate Twin Series Twin Dual Wardrobe



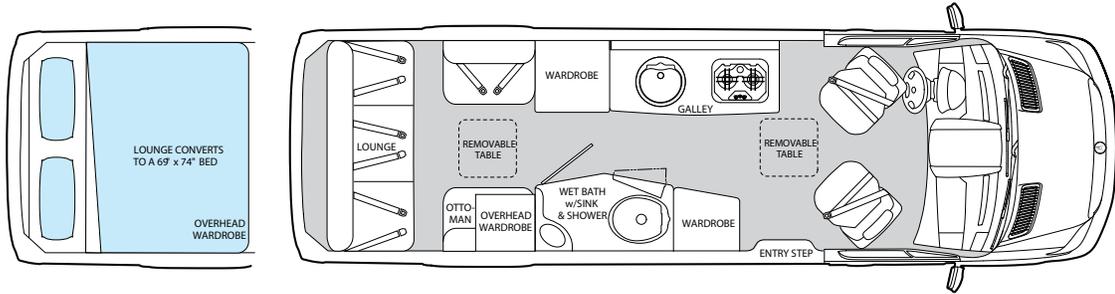
Interstate Lounge Series Lounge



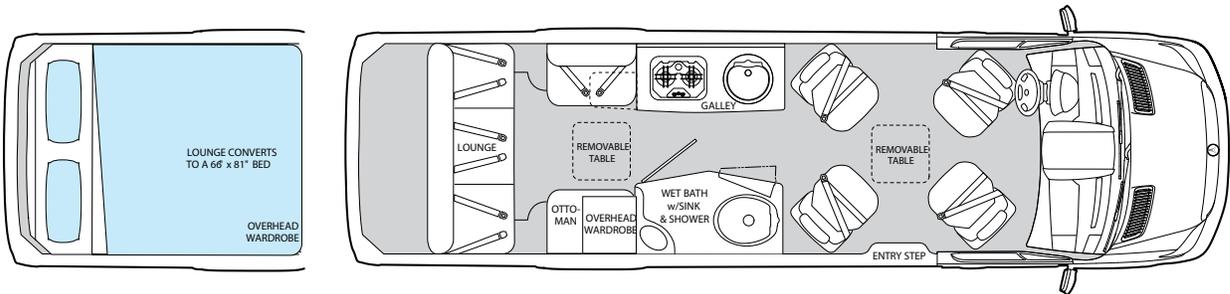
Interstate Lounge Series Lounge Wardrobe



Interstate Lounge Series Lounge Dual Wardrobe

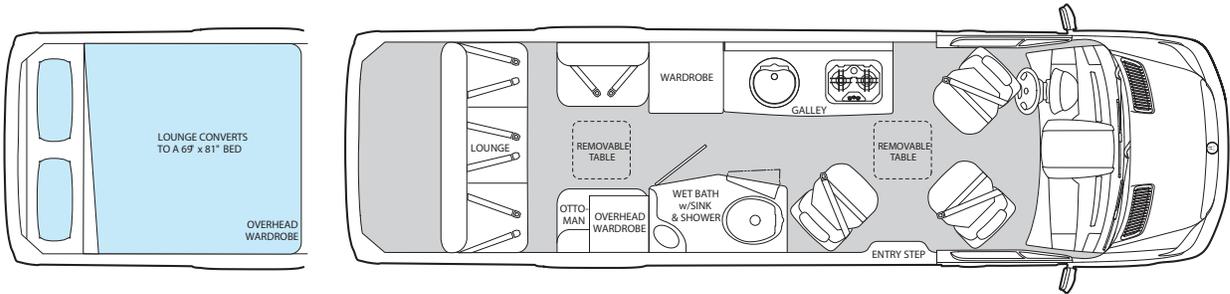


Interstate EXT Lounge EXT Series

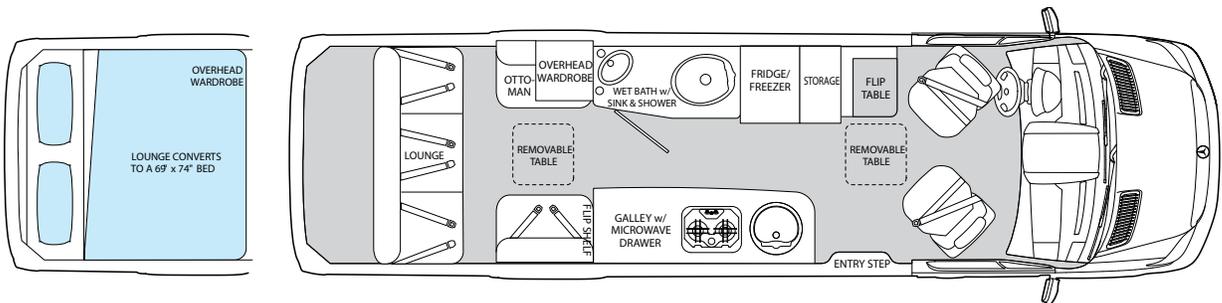


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Interstate EXT Lounge EXT Wardrobe Series



Interstate Grand Tour



Floor Plans And Specifications

Specifications

Specification Chart

NOTE

All weights listed in the Specification Chart are checked and updated throughout the model year.
Your production trailer may vary from weights listed.

Interstate Series		
Model	Interstate	Interstate EXT
Chassis	Mercedes-Benz Sprinter 3500	Mercedes-Benz Sprinter 3500
Engine	Mercedes-Benz 3.0L V6 Turbo Diesel	Mercedes-Benz 3.0L V6 Turbo Diesel
Emissions	Blue TEC SCR Technology 50 States - EPA/CARB Standards	Blue TEC SCR Technology 50 States - EPA/CARB Standards
Horsepower/Torque	188 HP/325 lbs Torque	188 HP/325 lbs Torque
Transmission	5 Speed Automatic	5 Speed Automatic
Axle Ratio	3.92	3.92
Wheelbase	170"	170"
MPG*	18+ Estimated Highway	18+ Estimated Highway
Exterior Overall Length	23' 1"	24' 4 1/2"
Exterior Overall Height	9' 8" (Including A/C)	9' 8" (Including A/C)
Exterior Overall Width	6' 7.7"	6' 7.7"
Interior Height	6' 2.25"	6' 2.25"
Interior Width	5' 10"	5' 10"
GVWR	11,030 lbs	11,030 lbs
GCWR	15,250 lbs	15,250 lbs
UBW (Lounge Series)	8,860 lbs	9,087 lbs
UBW (Twin Series)	8,744 lbs	N/A
OCCC (Lounge Series)	2,286 lbs	1,943 lbs
OCCC (Twin Series)	2,515 lbs	N/A
Tow Capacity	Up To 6,400 lbs	Up To 5,000 lbs
Fuel Tank	26.4 gallon	26.4 gallon
Fresh Water Capacity	32 gallon (26 gallon Fresh Water Tank/6 gallon Hot Water Heater)	32 gallon (26 gallon Fresh Water Tank/6 gallon Hot Water Heater)
Gray Water Tank	27 gallon	27 gallon
Black Water Tank	15 gallon	15 gallon
LPG	18.9 gallon	18.9 gallon
Water Heater (Combination Electric & LPG)	6 gallon (Output of 9 gallon)	6 gallon (Output of 9 gallon)
Air conditioner	13,500 BTU	13,500 BTU
Furnace	16,000 BTU	16,000 BTU
Refridgerator (12 Volt & 110 Volt)	3.1 cubic feet	3.1 cubic feet
Microwave (Convection)	1.2 cubic feet	1.2 cubic feet
Cooktop	2 Burner	2 Burner
Generator (LPG)	2.5 kW	2.5 kW
Batteries (Coach)	(2) Deep Cycle Maintenance Free Group 24 AGM	(2) Deep Cycle Maintenance Free Group 24 AGM
Converter/Inverter	50-Amp Multi-stage Charger, 1,000 Watt Inverter	50-Amp Multi-stage Charger, 1,000 Watt Inverter
Shore Power	30-Amp/110-Volt Service	30-Amp/110-Volt Service
Front and Rear Parking Sensors	N/A	Standard
Bed Size (Lounge Series)	69" X 74"	69" X 82"
Bed Size (Twin Series)	27" X 74"	N/A
Rear Hidden Storage Compartment	N/A	Standard
30 cubic feet of Additional Rear Storage	N/A	Standard
Golf Bag Storage	N/A	Optioin
Airstream Warranty	3 Years/36,000 Miles	3 Years/36,000 Miles
Mercedes-Benz Warranty	3 Years/36,000 Miles	3 Years/36,000 Miles
Mercedes-Benz Engine Warranty	5 Years/100,000 Miles	5 Years/100,000 Miles

The Unit Base Weight (UBW) and Net Carrying Capacity (NCC) weights listed in the Specification Chart are for the base unit with no options and fluids.

Gross Vehicular Weight Rating (GVWR) is the maximum permissible weight of this motorhome when fully loaded. It includes all weight at the motorhome axle(s).

UBW is the dry weight of the base unit without options.

NCC is equal to GVWR minus UBW. 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.

Specification Tags

For precise cargo capacity, refer to the Cargo-Carrying Capacity tag on the inside of the door. The **WEIGHT OF CARGO SHOULD NEVER EXCEED** numbers shown on the tag, which is the maximum weight of cargo you can load and carry in your specific motorhome as built with its options.

Located on the front roadside of your motorhome are the Tire and Loading, and Vehicle Manufacturing tags.

The Tire and Loading information tag lists the Size and Cold Inflation Pressure of the tires on your vehicle, the weight of your motorhome as manufactured, and the GVWR.

The Vehicle Manufacturing tag lists the size of tires and wheel rims, maximum cold inflation pressures, the Vehicle Identification Number (VIN), and GAWR.

For a complete list of capacities, see the Specifications Chart on the previous page.

Tire Size with Maximum Inflation Pressure Cold

- LT 215/85 R16 - 61 psi

TIRE AND LOADING INFORMATION RENSEIGNEMENTS SUR LES PNEUS ET LE CHARGEMENT			
The weight of cargo should never exceed 744 kg or 1641 lbs. Le poids du chargement ne doit jamais dépasser 744 kg or 1641 lbs.			
TIRE PNEU	SIZE DIMENSIONS	COLD TIRE PRESSURE PRESSION DES PNEUS À FROID	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION VOIR LE MANUEL DE L'USAGER POUR PLUS DE RENSEIGNEMENTS
FRONT AVANT	LT215/85R16LRE	420 kpa (61 Psi)	303528
REAR ARRIÈRE	LT215/85R16LRE	420 kpa (61 Psi)	
SPARE DE SECOURS	LT215/85R16LRE	420 kpa (61 Psi)	
The factory manufactured weight of this motor home is 4259 kgs 9389 (lbs). The GVWR of this motor home is 5,003.00 kgs 11030 (lbs).			

MOTOR HOME OCCUPANT CARGO CARRYING CAPACITY
VIN:1B9HUWH29EJ303528
THE COMBINED WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED
744 kg OR 1641 LBS
Safety belts equipped seating capacity : 9
CAUTION:
A full load of water equals 112 kg or 249 lbs of cargo @ 1kg/L (8.3lb/gal)



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General Information and Cleaning

The interior of each Airstream motorhome has been designed for comfort, convenience, durability, and appearance. How you use it and how you take care of it, naturally, depends on you. However, if you learn to operate the interior components and take care of them and the motorhome properly, this knowledge will add to your pleasure, as well as the long life of your motorhome. All material should be professionally dry cleaned to remove any overall soiled condition.

Upholstery

Cleaning Instructions for Ultraleather™

Spot clean with mild soap and water. Air dry or dry quickly with warm setting of a hair dryer. For stubborn stains, use mild solvent (e.g. Fantastic or Formula 409). Disinfect with a 5:1 bleach solution. Ultraleather is cleanable by conventional methods using commercial dry cleaning solvents. This material cannot be machine-washed.

Stain Removal

Use mild detergent for coffee, tea, red wine, liquor, soft drinks, milk, ketchup, steak sauce, soy sauce, mayonnaise, butter, salad oil, chocolate, cosmetic foundation, lipstick, face cream, suntan oil/lotion, shoe polish, and urine.

Use a mild cleaning fluid (Woolite) on stains like machine oil and on more stubborn stains when mild detergent is not enough.

Cleaning Instructions for Majic Suede™

Any excessive spills should be blotted up quickly after the spill occurs. Using a clean cloth or paper towel, wipe gently. Do not soak fabric with the cleaning solution. Use wet wipes or a cloth dampened with water. Gently wipe the affected area. For stains that are more stubborn, follow the solutions below. More persistent stains may take a second treatment after allowing the fabric to dry. This product is extremely durable with special stain-resistant materials for easy soap and water clean-up.

A solution of 95 percent water and 5 percent dish soap cleans black ink, soft drinks, milk, steak sauce, mayonnaise, face cream, and suntan oils.

Ninety-one percent IP Alcohol cleans inks, permanent markers, coffee, tea, red wine, soft drinks, ketchup, mustard, makeup, and engine grease.



WARNING

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

Metal Interior Roof Skin

The metal interior skin on the ceiling is coated with a baked-on acrylic coating. Use soft rags or wash mitts always moving lengthwise with the grain of the aluminum. NEVER rub hard on the coating. Oil, grease, dust, and dirt may be removed by washing with a 5 percent solution of commonly used commercial and industrial multi-purpose detergent in water. Cleaning should be followed by a thorough clean water rinse. 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 grain of the metal.

After cleaning and drying, a good grade of nonabrasive automotive paste or liquid wax once a year will increase the life of the finish and help remove minor scratches and abrasions. It will also protect the metal from minor scratches and make subsequent cleaning easier.

If a substance is found on the coating that cannot be removed by normal washing procedures, Airstream recommends using DX 330 Acryli-Clean made by PPG Industries. Follow all directions and Warnings on the product container. Acryli-Clean should be used by trained personnel only, using the proper equipment under controlled conditions. Use the Acryli-Clean as sparingly as possible to remove oil or grease. Rinse with cool water immediately after use.



CAUTION

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 unit. NEVER rub with excessive pressure on the coating. Even the softest rag will damage the coating if excessive pressure is applied.

Interior

Counter Area

Your Airstream is equipped with Corian® countertops which can be cleaned with common household cleaners. For most residues, you can clean your Corian® countertops with warm soapy water, an ammonia-based household cleaner, or a dedicated countertop cleaner, like Clean EnCounters®.

Avoid cleaning countertops with window cleaners. They leave a waxy build-up that dulls the surface. For the toughest problems, use *Deep Cleaner* from Stone Care Interstate to clean your DuPont™ Corian®.

Sinks

Cleaning can be accomplished using a mild liquid detergent on a soft cloth. A complete home owner's guide for your sinks is supplied in your owner's packet. Please read these instructions before use.

Vinyl Floor

General Maintenance



CAUTION

Warn occupants entering the vehicle when the floor is wet or fresh wax has been applied. Just like a home, the floor can be slippery and falls are possible.

The amount of daily usage will determine how often cleaning is required. Sweep as necessary with a soft broom. Care must be taken if you use a vacuum cleaner. Do not use vacuum cleaners with "beater bars." Wipe over with a clean damp mop or cloth, which should be rinsed frequently in clean water. Remember that all floors can be slippery when wet. When necessary, wash with a solution of clean water and mild detergent or domestic floor cleaning emulsion. Rinse thoroughly and soak up residual water. For additional luster, buff with a dry cloth. Spots, marks, and spillages should be wiped up as soon as possible. Cushioned floors with an additional protective coating such as Beauflor Premium Protect, Multi Protect, and Ultra-grip, do not normally require polish. Other floors (Bartoli/Lioni) will require polishing to protect the floor's surface from staining agents and to give a surface shine. For such floors, apply a liquid emulsion floor polish immediately after installation and thereafter at 6 - 12 month intervals as required. Always follow the manufacturer's instructions when using a floor polish or cleaner.

NOTE

Do not use wire or nylon wool scouring pads, furniture polish, spirit based polish, powder, liquid abrasive cleaners, bleach, or strong detergents.

Always follow the manufacturer's instructions. Check that the cleaner/polish is suitable for use with cushioned vinyl floor coverings.

Protecting Your Floor From Physical Damage

Avoid the following:

Rubber backing on doormats may result in yellow discoloration of the floor immediately beneath. Choose a natural fiber mat. Rubber feet on furniture may cause staining. Remove them altogether or place coasters or felt pads between them and the floor.

For spirit-based products such as shoe polish, solvents, hair dye, and permanent marker pens, wipe up spots and marks as quickly as possible. This also applies to turmeric, mustard and strongly colored foodstuffs.

Corrosive substances such as acid and alkaline solutions can damage the surface of the floor. Clean up any spills quickly and carefully avoiding direct contact with the substance. Wear protective clothing such as gloves when doing so. Bitumen/tar from freshly resurfaced or melted roads and pathways, and some inexpensive rubber shoe and slipper soles can cause stains. The above materials are likely to cause damage but are not considered restrictive.

Cabinets/Overhead Lockers

The furniture is manufactured from of a high-pressure laminate and can be cleaned with soap and water, or you can use a common solvent on tough spots. Furniture polish can be used sparingly. Plexiglass doors must be cleaned with a anti-static cleaner and cloth. Windex or common ammonia products will damage the coating on the surface.

NOTE

Do not use any abrasive material, abrasive cleaners, cloths and pads as there is the possibility they could scratch the surface. A protective pad should always be placed under hot utensils.

Wet Bath

To clean your fiberglass shower stall unit, use warm water and a liquid detergent. Do not use abrasive cleaners; they may scratch and dull the surface of your fiberglass unit. Stubborn stains can be removed with solvents such as turpentine, paint thinner, or acetone. Restore dulled areas by rubbing with an automotive-type liquid cleaner, and then put the soft glow back into the sides of your unit with a light application of liquid wax. DO NOT wax the shower bottom as it may become slippery leading to a fall.



CAUTION

Applying wax to the base of the shower floor is not recommended, as this could create an unsafe surface.

Telephone Shower Head

The telephone shower head is designed to give maximum flexibility in usage, and provides for water-saving techniques when using your motorhome on self-containment. It can be held in the hand and moved about the body. Normally, the best water conservation procedure is to wet the entire body and then turn the water off. Apply soap, lather thoroughly, and then rinse the soap off. The telephone shower head is also used to fill the tub portion of the shower pan. When you have finished using the shower, make sure to shut the water off at the faucet.

Bath Wall Extension

The bath wall next to the toilet is hinged and designed to extend into the hallway to provide more space. A latch at the top of the swinging wall is provided to secure the wall in the extended position. Always secure the wall with the latch in one of these two positions.



WARNING

Warning: During transit, Airstream recommends the wall be retracted and secured, freeing up hall space for emergency exits.

Driver and Passenger Seats

The driver and passenger heated seats are provided by Sprinter, sent out to be recovered by Airstream to match the interior decor.

The seat adjustment mechanism provided by Sprinter allows the seat to be moved forward or backward and swivel left or right. A release bar under the front of the

seat is used to move the seat forward and backward. Pressing down on a handle centered under the front of the seats allows the seat to swivel. Return seat to full upright position before using swivel adjustment. The heated seats are activated by dash-mounted switches.

Lumbar and other seat adjustments are part of the reupholstered Sprinter seat and their operation is explained in the Sprinter manual.



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 adjust driver's seat swivel or fore and aft mechanism while vehicle is moving. The seat could move unexpectedly causing loss of control.

Captain's Chairs, Second Row

The captains chairs have three adjustments. A lever on the side of the seat reclines the seat back. A lever on the seat pedestal under the front of the seat allows the seat to be adjusted forward or back, and a lever on the pedestal under the side of the seat allows the seat to swivel. Return seat to full upright position before using swivel adjustment.

NOTE

Seat backs on cab and second row seats must be returned to full upright position and seat moved forward before seat is swiveled. Failure to do so could result in damage to the seats upholstery, the wall panels, and the seat decorative skirt.

Rear Lounge/Bed

The dinette seats and rear center lounge transform into a rear bed. The center power lounge is operated by a switch located under the curbside rear roof locker. Remove headrests and press switch to lower seat back. Do not attempt while sitting on bed.

The side dinette seats fold out by lifting up on the seat edge and pulling out. The backrests will slide down into place as the seats slide out. Raise the countertop extension before pulling out the roadside sofa to prevent the sofa from hitting it. To sleep, stow the extension.

Clean ultra leather coverings with standard products used for that purpose. Follow instructions on the cleaning products container.

Interior



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 smoking material can cause upholstered furniture fires.

Collapsing Clothes Rod

A collapsing clothes rod is located below the rear overhead, behind the rear lounge/bed.



Dinette

The dinette table is a pedestal table. The top is stored between the galley and the captains chair. The table pedestal is stored in back of the rear center sofa on the rear lounge model accessed by opening the two rear cargo doors and inside the roadside wardrobe in the twin bed model. The pedestal table can be placed in floor mounted threaded holders located between the dinette seats or the second row captain chairs. The pedestal is inserted into the floor cups and twisted to lock into place.



WARNING

Return table top and pedestal to their respective storage positions before moving vehicle. In an emergency stop or accident the top and pedestal could cause personal injury and/or death.

Exhaust Fans

The Interstate motorhomes are equipped with Maxxair roof vents in the living area.

In the bathrooms, round ventilators are used and are opened by pushing straight up on the crossbar handle. The round switch can then be turned to engage the fan motor.



Three Piece Privacy Sun Shade



Privacy curtains are provided for the front windshield and cab windows. The curtains have pockets sewn into them that slide over the sunvisors and straps on each end that slide over the seat belt mechanism.

Light brushing with an upholstery brush or gentle use of a vacuum cleaner will suffice in most situations. For heavy soiled conditions dry clean only. Washing the curtain may void the warranty.

Remote Switches and Ceiling Light/ Directional Lighting

Remote switches for appliances are located on the wall behind the second row captain's passenger side. There is one for the aisle lights, bath lights, dimmer control, and ceiling lights. There is another remote switch with a red indicator; this for lighting the water heater. On the same panel with the red indicator light there is a switch for the step and the patio light.



Light Bulbs

All interior lights are sealed LED requiring fixture replacement if a light burns out or malfunctions. The exterior lights are the same except for the porch light, which uses a B7038 bulb replacement.



WARNING

Always replace the light bulb or light fixture with the correct bulb or matching fixture for that light. Always be sure power is turned off and bulb or fixture is cool before removing. Take proper precautions for a broken bulb or fixture to prevent lacerations. Failure to heed these Warnings could cause fire, property damage, personal injury, or death.

Storage Tips

Kitchen cabinets should have the heaviest items stored on the bottom and lighter items overhead. After loading, put skillets and canned goods on the floor or bottom shelf, and cereals and crackers in the overhead roof locker. Use unbreakable-type plates and saucers, and consider storing your dish towels around them.

Clothes hung in wardrobes should be kept on hangers that snap over the clothes rods to keep them from bouncing off on rough roads. Evening dresses should be kept in plastic bags similar to those dry cleaning businesses use. Dust will work its way into the motorhome and soil clothes. Try to avoid large bulky coats. Layers of lighter clothing will usually keep you warmer, are more versatile, and are easier to store.



WARNING

Keep flammable material away from the furnace.

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, pump filter, hot and cold water lines, water heater, fresh water line low point drain valves, and faucets. Full explanations on the locations and use of these feature are explained in this section.

Before using a water system, check that the water heater by pass valve is turned to the use position. The by pass valve is located on the back of the water heater under the lounge on the roadside, accessed by opening the rear cargo doors and reaching under the lounge. See Winterizing and Storage for further information on the by pass. Check that the exterior water heater drain plug is installed. Close all low point drain valves and the fresh water tank drain valve.

Water Pump

The water pump switch (monitor panel mounted, see Appliances in this section) operates the pump. Once the switch is turned on, the pump will run until the water pressure reaches approximately 55 psi. At this point, an internal pressure switch will shut it off. When a faucet is opened, the water pressure will drop and the pump will start to run again.

As a general rule, the water pump should be turned off while using a city water hookup; however, the water pressure at some campgrounds may be low. The water pump can be turned on to assist the city water hookup pressure. Be sure there is some water in the fresh water tank. The pump will only use the water that is needed out of the tank to bring the pressure up to the usual standard of 55 psi.

Access to the water pump will be necessary for periodic cleaning of the strainer screen. Refer to Section 8 - Maintenance for water pump access and strainer screen removal.

Interior

City Water Hookup

The city water hookup is located on the side of the motorhome. For consistent water flow and plumbing line safety, an inline regulator limits pressure to 65 psi.



Use a tasteless, odorless, non-toxic, high-pressure hose of at least 1/2-in. diameter designed for motorhome 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 motorhome system. If the water heater is empty, it will take some time before all the air is expelled and a steady flow of water occurs at the faucet. Once a steady flow is achieved at one faucet, the others should be opened long enough to expel the air in the lines going to them.

Your plumbing system has a built-in pressure regulator to protect your lines and faucets from extremely high pressures on some city water systems.

Draining System

Fresh Water Lines and Tanks

Fresh water drain valves consist of low point water line drain valves and fresh water tank drain valves. The valves are in-line or petcock-type valves.

Refer to Section 9 - Maintenance for necessary drain valve locations and draining procedures of fresh water lines and tanks.

Drain and Waste System

Your motorhome has a drain and waste system that includes waste-holding tanks made from corrosion-free, molded plastic, with trouble-free dump valves.

NOTE

Never put wet strength paper towels or tissues in your holding tank since they will not dissolve

and can catch 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 completely dissolve.

The main (Black Water) holding tank enables you to use the toilet for several days away from disposal facilities. The wastewater from the sink, shower, bath, and lavatory drains into the auxiliary (Gray Water) holding tank.

Each tank has its own dump valve with both tanks draining through a common outlet. Therefore, only one sewer hose connection is needed when hooking up to a dump station.

Almost all campgrounds will have dumping facilities. Park directories, such as Woodalls and Rand McNally, also list dumping stations.

Refer to Section 9 - Maintenance for important information on Black and Gray Water tanks draining, cleaning, and rinsing procedures.

Check your monitor panel frequently (see Appliances in this section). When the Black Water holding tank is completely full, sewage cannot be emptied from the toilet bowl. If the Gray Water holding tank is overfilled, drain water will back up into the shower floor pan and cause an unpleasant cleaning job. Never drain the tanks at any place other than an approved dumping station.

Deodorizers

There are many deodorizers 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 in your tank.

Toilet

The motorhome toilet in your Airstream is a design that has been used for many years. There are two pedals. The large pedal opens and closes the slide mechanism, and the smaller pedal opens and closes a water valve.

In normal use, when you are hooked up to city water, both pedals are depressed together. This dumps the sewage and fresh water and flushes down the side of the bowl. Water will continue to run into the bowl for a short time after the pedals are released.

When you wish to conserve water, hold the hand-spray head over the bowl and hold down the thumb-operated lever. When depressing the pedal, all the water is routed through the hand-spray.

NOTE

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.

Please see the toilet owner's/user manual for warranty and user tips, and maintenance information.

Faucets

Lavatory Faucet



Lavatory Faucet - Airstream part #602251 (USA), part #602364 (CSA)

For general information and technical service, contact: 1-574-389-8986

ITC

1015 Verdant

Elkhart, IN 46517 USA

Galley Faucet



Galley Faucet - Airstream part #602197

For general information and technical service contact: 1-800-544-4881

Dometic/Smev

509 S. Poplar

LaGrange, IN 46761

USA

customersupportcenter@dometicus.com

Faucet Cleaning and Care

All that is needed to clean your faucet is a soft, damp cloth. ITC does not recommend the use of scour pads, cleansers, or chemicals. The abrasive nature of these substances could damage the faucet's finish. A non-abrasive car wax will help to protect the finish.

Electrical

120-Volt Power

NOTE

Make sure to read, understand, and follow all electrical component owner's manuals provided in the owner's packet before operating the motorhome. Observe all operating instructions and Warnings as well as all recommended maintenance schedules and procedures.

How the System Works

When you're plugged into shoreline power or starting your generator, 120-volt current is fed to an Automatic Switch Over Box. Power from the box runs to the

Interior

120-volt circuit breakers on the Energy Management System. The module and box are explained more in depth later in this chapter and are located under the roadside rear lounge.

Circuit 4 can also be powered by the inverter part of the inverter/charger. See circuit 4 function in the next section for information on which receptacles can work on the inverter.

Energy Management System (EMS)

A complete, detailed EMS manual is included with your owner's packet.



WARNING

The ENERGY MANAGEMENT SYSTEM is a centralized power switching, fusing, and distribution center. Power from the 120-volt power source is fed into the box. 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.

Product Description

The ENERGY MANAGEMENT SYSTEM is a completely self-contained 110-volt power distribution and energy management system intended to be used in recreational vehicles. It is housed in a sheet metal enclosure with removable front panel. It provides circuit protection for all the 110-VAC loads in the motorhome and a system of energy management to minimize the over-loading and tripping of circuit breakers. The Energy Management System is located under the rear lounge.

Refer to Section 9 - Maintenance for important battery maintenance information.

Energy Management

The ENERGY MANAGEMENT SYSTEM controls 110-volt operated circuits to help keep the total 110-volt current draw to less than 30 amps. These circuits may be any type load, but are typically heavier loads, those whose use can be "postponed" until a time when current is available for their use.

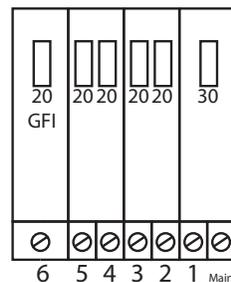
Circuit Protection

Circuit protection for ALL the 110-VAC loads is offered by standard, resettable circuit breakers, provided by

Airstream. There are four positions available for circuit breakers. These may be single or dual units. Airstream uses both single and dual breakers as needed according to the options ordered on a unit. One of these breakers (MAIN) is a 30-amp unit that acts as the main breaker for the entire system. The 110-volt power is brought into the box from either a shoreline outlet, generator, or the inverter can be used to feed circuit 4 only. The line side of this cable is fed through the magnetically coupled current transformer to the Main breaker. This breaker back-feeds power into the circuit breaker bus bar to feed power to the branch breakers. All the 120-volt loads in the motorhome are fed from the branch breakers.

The 120-volt Distribution Panel on the front of the EMS contains the main breaker and the branch circuit breakers for your motorhome. The 110-volt circuits may be turned "on" by putting their breaker switch up to the on position or "off" by flipping the switch down to the off position. If a circuit is over loaded or an open (short) circuit occurs, a branch breaker will "kick" out. To reactivate the circuit, try to reset the breaker switch. To reset the tripped GFI breaker push the handle down slightly to off then lift up to on. If the breaker kicks out again, a qualified electrical service technician should trouble shoot the circuit. Each panel is labeled with the components powered by individual circuits.

110-Volt Breaker Panel



30 amp, Main

Circuit 1. 20 amp, roof A/C (option)

Circuit 2. 20 amp, water heater

Circuit 3. 15 amp, coffee maker (option)

Circuit 4. 20 amp, goes through inverter to refrigerator receptacle, middle roadside receptacle, entertainment center receptacles, and main TV

Circuit 5. 20 amp, microwave

Circuit 6. 15 amp, GFI, Rear, exterior, and galley receptacles

Main: All 110 voltage flows through this breaker to the other branch circuit breakers. Shutting off this breaker will shut down all 120-volt branch circuits fed through the panel.

Circuit 1. Roof Air Conditioner (option): Supplies power to roof A/C when option is installed. When no A/C is installed the 30-20 dual breaker becomes one 30-amp breaker.

Circuit 2. Water Heater: 20 amp. - Water heater power supply when used is 110 VAC.

Circuit 4. Refrigerator, middle roadside, and entertainment center receptacles, and main TV: This circuit goes through the Inverter/Charger. Circuit 4 can be supplied power from the inverter if needed and is protected by a GFI circuit breaker located on the Inverter/Charger as well as the breaker on the panel. Check both breakers if any receptacles or appliances on Circuit 4 does not work. Also check the middle roadside GFI receptacle and reset if needed. This receptacle and other receptacles down stream from this GFI receptacle will not work if the GFI is kicked out.

Circuit 5. Microwave: Microwave power supply.

Circuit 6. GFI Breaker: Supplies power to the rear, exterior, and galley receptacles.

NOTE

There are also two breakers located on the inverter/charger. One breaker protects the charger while it is charging the batteries, the other breaker protects circuit 4 in conjunction with the distribution panel breaker. This breaker for circuit 4 may trip even if the inverter is off.

NOTE

Any time Main or A/C breaker is tripped, turn A/C off before resetting. Wait 2 minutes to restart A/C.

Ground Fault Circuit Interrupter

Most states require trailers with exterior 110-volt receptacles and receptacles close to a water sources, such as a faucet to have a ground fault circuit interrupter (GCFI). When properly installed, the GFCI circuit breaker provides reliable overload and short circuit protection PLUS protection from Ground Faults that might result from contact with a "HOT" load wire and ground.

IMPORTANT NOTE: The GFCI circuit breaker will NOT reduce shock hazard if contact is made between a "HOT" load wire and a neutral wire or 2 "HOT" load wires.

Each GFCI circuit breaker is calibrated to trip with a ground current of 5 mA or more. Since most persons can feel as little as 2 mA, a distinct shock may be felt if the need for protection exists. However, the shock should be of such short duration that the effects would be reduced to less than the normally 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 the knowledge that electricity can be dangerous when carelessly handled or used without reasonable caution.



WARNING

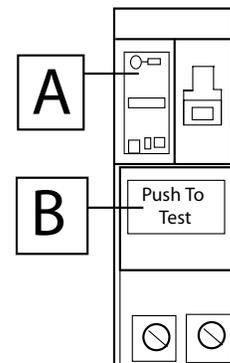
The GFCI circuit breaker provides protection only to the circuit to which it is connected. It does NOT provide protection to any other circuit.

GFCIs are proven lifesavers; however, consumers need to take a few minutes each month to do this simple test. By taking action, you can help protect your family from the risk of electric shock.

GFCI Breaker Test

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

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



Energy Management with Three Hour Averaging

Interior

The current entering the main circuit breaker is routed through a sensor. This sensor measures the current flowing through the main breaker, which is the total amount being drawn by all the 110-volt circuits in the motorhome. When this current exceeds 30 amps, the EMS will turn off the controlled loads in an effort to bring the total current to the limit of the incoming service.

The ENERGY MANAGEMENT SYSTEM limits the average current entering the main circuit breaker over a three-hour period to 80 percent of the 30-amp service rating. Therefore, if the average current entering the main service breaker over a three hour period exceeds 80 percent of 30 amps (24 amps) the 30A Smart EMS will automatically change the service limit to 80 percent. Correspondingly, the 30A Smart EMS will restore the service limit to the full 30-amp value when the average current drops below 80 percent of the 30-amp rating. When the lowered service limits are enabled, the decimal point in the lower right-hand corner of the Load Meter on the Display module will be lit.

In addition, the ENERGY MANAGEMENT SYSTEM feature is used when the generator is the power source to prevent the generator's circuit breaker from tripping due to an overload. The Control Module is configured to enable the feature using the configuration dip switches.

Controlled Loads

The system offers control of up to four 110-VAC powered loads. Loads that are controlled are connected to one of the relay circuits of the EMS. There are five total control relays in the EMS. Only four of these can be used in a given application.

Operation

In operation, when 110 VAC and 12 VDC are initially applied, the system will energize the relays at one second intervals, closing the normally open contacts on each of the five relays while monitoring the total current. If the total should exceed the service limit, the system will turn off the last load that was turned on. As it does this, it calculates the amount of current that was removed, which is the value for that load. This value is placed in memory. The system has "learned" the amount of current that particular appliance draws. This feature compensates for the difference in current draw over a range of line voltage and ambient temperature, by relearning the load each time it is turned off.

The system now waits until the total current is lower than the service limit, by the amount in memory, before it will turn that load back on. This ensures that there is sufficient current to operate the load.

Display Panel



Service

The "Select" button allows the service type to be set to either 30 amp or 20 amp, to match the incoming service.

When power is first applied, the system will be in the 30-amp mode. The 30A LED will be ON when the system is in the 30-amp mode. Momentarily pressing the "SELECT" button will switch the system to the 20-amp mode. Momentarily pressing the button again will switch the system back to the 30-amp mode.

Press the "SELECT" button to switch to 20-amp service if it is necessary to use a 20-amp adaptor such as the one pictured or you know the shoreline power is 20 amp, The 20A LED will light up.

The generator supplies 20-amp service and is set to switch the system automatically to the 20-amp mode whenever the generator is the power source. The "GEN" LED will illuminate when the generator is supplying power, the 20A light will not.

The Display Panel is protected by a 5-amp automotive-type fuse located under the EMS 110-volt Distribution Panel cover. Remove four screws from the cover to access the fuse.

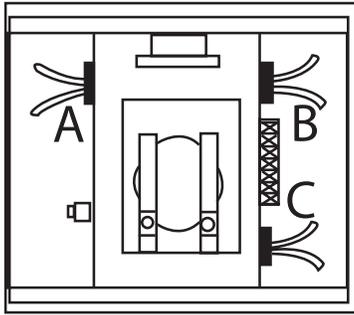
Status

The water heater, roof A/C, coffee maker receptacle,

and microwave are set at the factory to be the controlled circuits and are shed in this order.

This means if a power hungry electric grille is plugged into an outlet and the system begins to use more than 30-amps it will begin to shed loads and will shut off the water heater.

120-Volt Automatic Switch Over Box



The switch over box automatically switches the 110-volt feed to the Energy Management System Module from shoreline to generator and back as you choose which way to power the motorhome. You simply decide whether to plug into a 120-volt shoreline or start the generator and the box will do the rest. If the generator is accidentally started while plugged into shoreline the box will sense the generator incoming power, contact points inside the box will switch cutting the shoreline connection, and establishing the generator connection. This protects the system from a possible overload from dual power sources.

Generator/City Power

- a. To Energy Management System module main breaker
 - b. From generator
 - c. From shoreline
1. When plugged into shoreline power, the current path is from C to A.
 2. When you start your generator, the points switch and the power flow is from B to A. Stopping the generator releases the points back to shoreline feed.
 3. If you're plugged into shoreline and you start the generator, the points still switch since the generator has the priority, so the current flow is still B to A.

12-Volt System

NOTE

Make sure to read and understand all electrical Component owner's manuals provided in the owner's Packet before operating the motorhome. Observe all operating instructions and Warnings as well as all recommended maintenance schedules and procedures.

The major portion of electrical power in your Airstream is 12 volt. The 12-volt current powers almost every thing except the roof A/C, water heater, 110-volt receptacles, and microwave oven. Some of these appliances have 12-volt electronic boards.

All 12-volt current is routed to a 12-volt pass-through power stud mounted on the battery box. The power stud is the hub of the 12-volt system. It ties together the inverter/charger, house battery, and battery separator.

Power from the stud goes to a buss bar with four breaker positions holding three Type 2 thermal breakers. The thermal breakers feed the rear lounge motor, the tank heater pads, and the battery disconnect switch. The fourth position is left open to add a breaker for an optional solar panel. The breaker buss bar with breakers is located under the roadside rear lounge.



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.

Power is then routed from the battery disconnect switch to the 12-volt distribution panel, located inside the rear center lounge door, and through its branch circuits to the rest of the motorhome.

12-Volt Operation

The only thing you have to do is make sure the house battery does not run down. In normal usage, there is not any problem, since you would normally be plugged into a 110-volt shoreline at night or when camping. When you're plugged into shoreline power or running the generator, with the battery disconnect turned to "ON" the inverter/charger charges the battery and carries much of the load.

Some nights you may not find a place to plug into city power. This should not be a problem; you can comfortably run your lights, water pump, and vents in a

Interior

normal fashion without depleting the battery.

If you are not plugged into city power, and you plan on staying longer than a day or two, you'll want to conserve your battery by using as few lights and appliances as possible. Check the monitor system regularly. If you notice the lights becoming dim, it's much easier on the battery if you start the generator or run the chassis engine before the battery runs down. The generator starts from the house battery. If the house battery becomes depleted, the chassis engine can be started to charge it. It should only take a few minutes before the generator will start.

The engine battery and house battery are isolated from each other by the Battery Separator, preventing the two systems from drawing down simultaneously. They will connect through the Separator if charging from the engine, generator, or inverter/charger is detected.

House Battery

The house battery (two standard batteries) in the rear lounge model is located under the curbside rear lounge in a vented battery box. The box lid is accessible through an access door in the lounge top.

The battery (Lifeline GPL) in the twin bed model is located under the roadside rear twin bed. The box lid is accessible through an access door in the bed top.

Power through the battery goes through a pass through 12-volt power stud mounted on the battery box.



CAUTION

When installing a battery, always observe polarity.

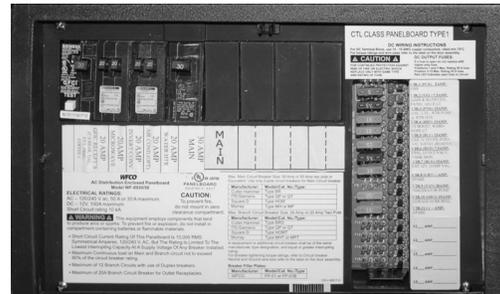
Converter

Power Center (All Interstate Models)

Closed



Open



All Interstate models have the Power Center installed at the base of the bed. Open the decorative door for access to 12-volt fuses and 110-volt breakers.

Battery Storage

When storing your Interstate and leaving the house, batteries in place, it is recommended that the vehicle be plugged into a 110-volt, 30-amp shoreline connection for 24 to 48 hours every 30 days.

Remove the battery from the vehicle if you are storing for an extended period of time (e.g. over 30 days). Keep the battery on a maintenance charger and store in a dry, cool, and ventilated space such as your garage, if possible.

Battery Disconnect Switch



Push knob in before manually rotating it to the ON, OFF, or DISABLE function.

NOTE

The system will not operate if power falls below 8-volt threshold.



The manual disconnect switch, located inside the rear lounge door on the rear lounge model and on the front of the roadside twin bed on the twin bed model, is used to turn off power from the battery to the 12-volt distribution panel.

Turning off the disconnect switch will cut power to 12-volt systems fed from the 12-volt distribution panel, but will allow the batteries to charge from the engine or inverter/charger.

The holding tank heat pads, rear lounge motor, solar panel (option), and generator (option) are not connected to the 12-volt distribution panel and are wired direct in through the thermal breakers. The battery disconnect will not disable these systems.

The inverter/charger, lounge motor, tank heating pads, generator starter, and lounge motor power are not supplied through the distribution panel.

The inverter/charger and the generator start are wired directly to the house battery. Although they can be started and run on this battery feed, the power they supply goes to the 12-volt pass through stud. The battery disconnect switch must be on for power to be supplied from these sources to the distribution panel.

NOTE

As a safety precaution, the electric gas shut-off solenoid closes automatically when 12-volt power is disconnected, cutting gas to appliances. It will reopen when power is restored.

Battery Separator

The Battery Separator is located under the center lounge on the rear lounge model and the roadside bed on the twin bed model, and is accessed by opening the rear cargo doors. It is designed as a solenoid priority system to protect the chassis charging system from excessive loading, while allowing house batteries to be charged.

Protect the Charging System

The Battery Separator monitors the battery system to determine if the batteries are being charged. The charging can be accomplished through the inverter/charger or the engine charging system. When the engine battery or house batteries are charging, the Battery Separator will engage, joining the two battery banks. If charging ceases and voltage decreases in either bank, the Battery Separator will disconnect the two banks from each other, protecting the banks from being discharged simultaneously.

NOTE

In the event the engine battery is depleted, Sprinter recommends using a trickle charge only when charging the battery. When jumping the engine battery, do not use a power boost.

Please read and follow battery charging procedures in the Sprinter Owner's manual.

Magnum Inverter/Charger



Magnum Inverter/Charger is a DC to AC inverter and a 50-amp multi-stage battery charger. It has a remote control module mounted in the roadside rear roof locker.

The Inverter/Charger charges the batteries and converts 12-VDC to 110-VAC current for distribution to circuit 4 in the 120-volt distribution panel. Circuit 4 is explained in the 120-volt Power section.



WARNING

An extensive owner's manual for the Inverter/Charger is provided in the Airstream Owner's Packet. Make sure to read, understand, and follow all information, notes, Cautions, and Warnings in the manual before operating the Inverter/Charger.

Interior

12-Volt Distribution Panel Diagram

Except Grand Tour

Circuit 1: Unused On Rear Lounge Model 5-amp,
EMS System On Twin Bed Model

Circuit 2, 20 amp Yellow

Recessed Ceiling Lights

Patio Light

Aisle Lights

Circuit 3, 20 amp, Pink

Galley Lights

Water Pump

Water Heater (Switch Light Only)

Circuit 4, 15 amp, Brown

Entertainment Cabinet 12V Jack/Booster

Circuit 5, 20 amp, Blue

Bath Ceiling Vent

Main Area Ceiling Vent

Lounge Reading Lights

Furnace & Thermostat

AC & Thermostat (Option)

Energy Management Display Module

Circuit 6, 7.5 amp, Red

Refrigerator Power

Freezer

LP Detector

Lp Gas Valve

Monitor Panel

Circuit 7, 20 amp, Black

External 12V Receptacle

Gray Holding Tank Dump Valve

Black Holding Tank Dump Valve

Exterior Sewer Light

Circuit 8, 10 amp, Gray

Radio Power Relay

Rope Lights

Battery Separator

Circuit 9, 20 amp, Tan

Waste Pump Macerator

Circuit 10, 2 amp, Orange

Macerator Pump Hose Reel

Grand Tour Models

Circuit 1, 5 amp, Purple

EMS System On Twin Bed Model

Circuit 2, 7.5 amp Yellow

Main ceiling lights

Bath ceiling lights

Patio Light

Aisle Lights

Circuit 3, 15 amp, Pink

Galley Lights

Water Pump

Water Heater (Switch Light Only)

Circuit 4, 15 amp, Brown

Entertainment Cabinet 12V Jack/Booster

Rope lights

Circuit 5, 15 amp, Blue

Ceiling Vents

Reading Lights

Furnace & AC

Thermostat

Circuit 6, 15 amp, Red

Refrigerator Power

LP Detector/LP Gas Valve

Tank Monitor

Circuit 7, 20 amp, Black

External 12V Receptacle

Dump Valve

Circuit 8, -- amp, Gray

Spare

Circuit 9, 20 amp, Tan

Macerator Pump

Circuit 10, 15 amp, Orange

Macerator Pump Hose Reel

Circuit 11, -- amp,

Spare

Switch And Component Locations

Front shower panel
 Main ceiling lights
 Bath ceiling lights
 Aisle lights
 Patio light
 Lighted tank heat pad switch (fresh and gray water)
 Step-extend disable switch

Under Galley Roof Locker**3-Gang Switch Galley Lights**

Rope lights
 Galley lights
 Galley reading lights

1-Gang Switch

Water pump

Front Entertainment Cabinet

12V TV jack/booster
 Two Audio-video hookups (3-position)

Switched Individually

Shower vent
 Ceiling vent
 Reading lights (main switch must be on to operate)
 Flip-down TV light (will work off chassis dome light also)

Exterior Roadside Wall Switch Box

Gray water tank dump valve switch
 Black water tank dump valve switch
 Macerator pump switch
 Macerator hose reel switch

Inside Curbside Roof Locker

Monitor panel display
 Inverter remote switch
 Generator remote switch
 Energy management system display
 Water heater switch/display
 Solar standard

LP Valve Switch and Remote Fill

Located behind the passenger side rear fender.

Heat/AC Thermostat

Located on wardrobe wall.

External 12V Receptacle and Coaxial Receptacle

Located on the roadside exterior wall.

Radio Power Relay

The radio power relay is behind the removable radio. The automatic relay allows the radio to be played while in transit, from the engine battery, or by the house battery while camping, or for up to 30 minutes after the key has been removed from the ignition.

Engine Start Assist

An auxiliary start assist button is located on the dash just below the headlamp switch. If, for some reason, the chassis battery runs low, pushing and holding this button while turning the ignition key will supply power from the coach batteries to the engine starter. Release the button when the engine starts.

Power Awning Switch

The power awning switch is located on the passenger seat pedestal. The sliding cargo door must be closed during deployment. Awning will retract, but will not extend while the vehicle is running.

Rear View Camera Controls

The rear view camera controls are on the add-on rear view mirror/monitor. The camera turns on automatically when in reverse or can be turned on manually with the switch on the mirror/monitor to view in transit. Please disregard the Connected/Disconnected pop up message when the monitor turns on and the No Connection message when the monitor moves out of standby mode. They will turn off after about 15 seconds. See Monitor Owner Manual included in your Owner's Packet for operation and hookup information.

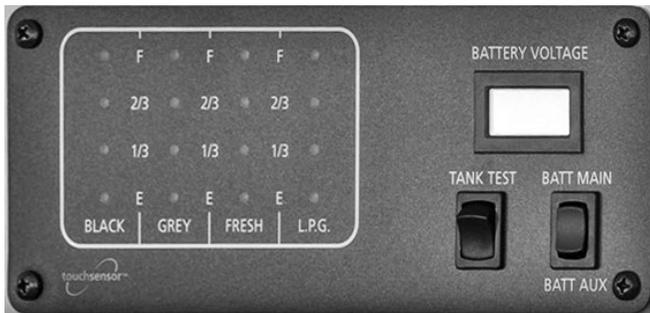
Interior

Auxiliary Fuse Locations

In addition to the 12-volt fuses and breakers described in this section, some components have additional fuse protection as supplied or required by their manufacturer. These locations are:

1. LP detector: 2-amp fuse behind detector
2. Battery Separator power line to engine battery: 150-amp in-line fuse inside Sprinter battery compartment under the driver's floorboard
3. Monitor panel battery voltage display: Sprinter battery compartment on fuse power distribution bar under driver's seat (5 amp)
4. Inverter: 150-amp in-line fuse under rear lounge or roadside bed by inverter/charger
5. Dash radio: 10-amp fuse on back of radio
6. Rear view camera (option): 1.5-watt in-line fuse behind antenna booster
7. Thermostat display: Fused to 5-amp breaker on front of furnace

Monitor Panel



TouchSensor Technologies, LLC

Phone: 630.221.9000

<http://www.touchsensor.com>

The monitor display panel shows the fluid levels of the Black Water, Gray Water, and Fresh Water tanks, and the LP gas tank. Push the Tank Test rocker switch to tank fluid show levels in 1/3 increments.

The panel also shows the voltage status of the main (engine) and the auxiliary (house) battery by using a labeled rocker switch.

The fluid tank monitor system has been calibrated at the TouchSensor factory for the size tanks the Interstate uses and, therefore, should never need another calibration. On the rear of the monitor panel there is an adjustable potentiometer to manually

adjust the monitor panel reading of the LPG tank level. This is set at the Airstream factory for the tank on the Interstate motorhome and needs no further adjustment.

Entertainment System

The Interstate comes standard with a Samsung Blu-Ray player and a Samsung 22" 1080P, HD LED TV.

TV P/N 690651

Blu-Ray player P/N 512693



The Interstate is equipped with the Kenwood Excelon, bringing automotive stereo and navigation up to speed with modern technologies.



Antenna Manufacturer:

Winegard Company

3000 Kirkwood Street

Burlington, Iowa 52601-2000

Phone: 800-843-4741

Winegard's Model RS 3460 RoadStar™ omnidirectional antenna provides excellent reception of VHF/UHF TV channels. The RoadStar compact modern styling is unobtrusive and blends well with the designs of recreational vehicles.

The UV stabilized copolymer housing makes the antenna virtually impervious to weathering and color change. The unique omnidirectional characteristics of model RS-3460 provide excellent reception in areas where stations are in different directions without the need for a complex rotor system. A built-in amplifier

provides up to six times the received signal on VHF and nine times the UHF signal ensuring the best possible reception in color and black and white.

Cleaning Antenna Housing

The surface of the antenna is a tough laminated ultraviolet shield. Clean only with mild soap and water. Use no solvents, alcohol, or cleaning fluids.

In-Motion TV Antenna Pre-Wire

The motorhome is pre-wired with a coax cable for an in-motion TV antenna. One end of the cable is coiled above the rear center roof locker above the removable interior top panel and the other end is coiled behind the removable entertainment cabinet side panel where the TV booster is mounted. A receiver can be placed inside the cabinet. An HDMI cable is located in the center rooflocker and runs to the rear or wardrobe TV.

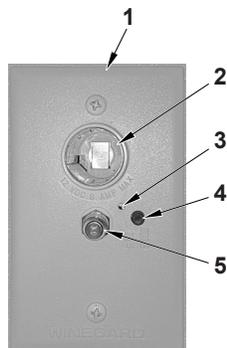
TV Booster/12-Volt Outlet

NOTE

The TV booster must be on to receive antenna signals and off for cable/satellite TV operation.

The TV booster amplifies the signal from the TV antenna. Pushing the booster button switch activates and deactivates the booster. A green light illuminates when the booster is activated.

Review the antenna and booster manuals included in your owner’s packet before operating the system.

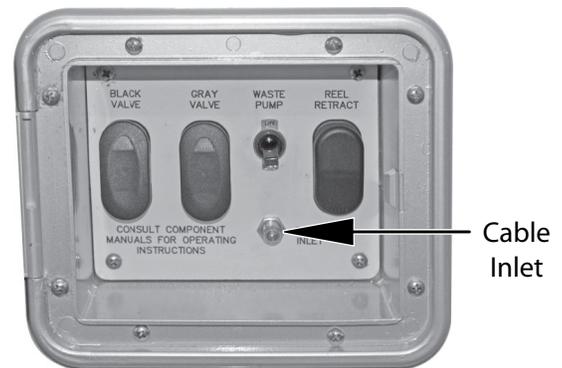


- 1. TV/12-volt outlet plate
- 2. 12-volt outlet
- 3. Light
- 4. Booster switch
- 5. TV cable outlet

A 12-volt port, two RCA jack cords, and a plug-in are provided with the Audio/Video Package. These are used for an Apple iPod or MP3 player input. Use the SOURCE button on the radio to access the auxiliary port into which the iPod or MP3 player is plugged.

Satellite Antenna Pre-Wiring

Your unit is pre-wired for a portable satellite antenna. The exterior inlet is located on the side or rear panel of the motorhome and is labeled for your convenience. The interior pre-wire, consisting of a two-pin power/ground connector and a coax cable pigtail, is located in the front roof locker under the Blu-Ray player.



Solar Panel

Airstream utilizes the Ameresco Solar solar panel and the Sun Explorer Charger Controller/Display System. Manuals on their use are included with the Airstream owner’s packet.

Manufacturer: Ameresco Solar (Solar Panel)

42191 Zero Dr.

Temecula, CA 92563

Phone: (866) 263-7372

www.ameresosolar.com

Manufacturer: Atkinson Electronics Inc. (Controller/Display System)

14 W. Vine St.

Murray, UT 84107

Phone: (801) 261-3600

www.atkinsonelectronics.com

Refer to Section 9 - Maintenance for Solar Panel Pre-Wire diagram and information.

Interior

110-Volt Electrical System

City Power

When your motorhome is hooked up to 110 volt, the converter system automatically charges the motorhome batteries with the battery disconnect switch in the USE (ON) position and, if the seven-way cord is hooked up, your tow vehicle battery as well. The speed and degree of charge depends on how much power is used for lights and appliances, as only the surplus goes to charging the battery. If you are making an extended stay, then you should keep your motorhome hooked up to a 110-volt current if it is available.

While you are connected to the 110-volt receptacle, the wiring is protected by circuit breakers in the breaker panel. The circuit breaker panel for the 110-volt system is located in the converter. Open the brown decorative converter door under the dinette. In the event of a failure of a 110-volt circuit, first check your motorhome circuit breakers and the breaker for the outlet into which your motorhome shoreline cord is plugged. If a breaker continues to trip after you have reset it several times, your circuit may be overloaded with appliances or there may be a short in the circuit. Try lessening the load on the circuit. Perhaps an electric griddle, hair dryer, or an electric heater can be turned off. If that does not solve the problem, consult an Airstream Service Center.

The 110-volt electrical system provides power to operate the A/C, converter, and 110-volt receptacles for portable appliances. The power is carried through the 110-volt city power flexible cord to the 110-volt distribution panel, and then is distributed to each appliance or receptacle. Exterior outlets for 110 volts are located on the curbside exterior wall between the wheels and above the wheel well.

All wire, components, and wiring methods conform to federal and state requirements.

Converter

The Airstream converter system enables you to use the 12-volt lights and equipment whether operating on self-contained battery power or hooked up to 110-volt city power. The 12-volt light bulbs give off the same light as regular household bulbs, so that when operating on self-contained battery power, everything works normally except the 110-volt convenience outlets and 110-volt appliances.

NOTE

When operating with city power, make very certain that the service is 110 volt, not 220 volt.

The converter system is a transformer designed to maintain constant output voltages regardless of the variances that occur in city power systems. The design eliminates the need for complex electronic sensing systems to charge the batteries, minimizing the possibility of failures and greatly increasing its overall reliability.

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.

To operate self-contained, simply disconnect the power supply cable.

Ground Fault Circuit Interrupter

Most states require motorhomes with exterior 110-volt receptacles and receptacles close to a water sources, such as a faucet, to have a GFCI. When properly installed, the GFCI circuit breaker provides reliable overload and short-circuit protection, plus protection from ground faults that might result from contact with a **HOT** load wire and ground.



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.

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 distinct shock may be felt if the need for protection exists. However, the shock should be of such short duration that the effects would

be reduced to less than the normally 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 the knowledge that electricity can be dangerous when carelessly handled or used without reasonable caution.



WARNING

The GFCI circuit breaker provides protection only to the circuit to which it is connected. It does NOT provide protection to any other circuit.

GFCIs are proven lifesavers; however, consumers need to take a few minutes each month to perform this simple test. By taking action, you can help protect your family from the risk of electric shock.

GFCI Receptacle Test



To properly test GFCI receptacles:

- Push the Reset button located on the GFCI receptacle first to assure normal GFCI operation.
- Plug a device, such as a night light, with an ON/OFF switch into the GFCI receptacle and turn the product to the ON position.
- Push the Test button located on the GFCI receptacle. The device should turn off and a red light should illuminate, indicating the GFCI is tripped.
- Push the Reset button again. The device should come on again.

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.

Use the following chart for recording GFCI breaker and receptacle tests.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2013												
2014												
2015												
2015												
2016												
2017												

Appliances

All appliances are delivered to Airstream, Inc., with in-depth owner's manuals. Those manuals are included in the delivery case supplied by your dealer. The manuals may contain Warnings, Cautions, and operating instruction that should be read and followed before operating the appliances.

The information contained in the appliances manuals supersedes any information contained in the Airstream Motorhome Owner's Manual on appliances. If you believe contradictory information on appliances is contained in this manual, please contact the Airstream Customer Service Department at 937-596-6111 or write to:

Airstream Factory Service Center
 P.O. Box 629
 419 W. Pike Street
 Jackson Center, OH 45334-0629
 (937) 596-6111

If any appliance manual(s) have not been provided with your motorhome, contact your dealer or the respective appliance manufacturer.



WARNING

For additional Liquid Propane Gas (LPG) safety and warning information, refer to Section 2 - Safety and Section 6 - Exterior of this manual.

Maintenance

Follow the instructions and Warnings noted in the respective appliance and equipment owner's manuals, as well as those mentioned below.

Annual maintenance should be conducted on propane gas appliances and equipment by an authorized dealer or repair facility.

Interior

Insects can build nests in the burners of various appliances and equipment. The burner and burner orifice of the propane gas appliances and equipment should be cleaned by an authorized dealer or repair facility any time circumstances or conditions warrant, but no less than on an annual basis.



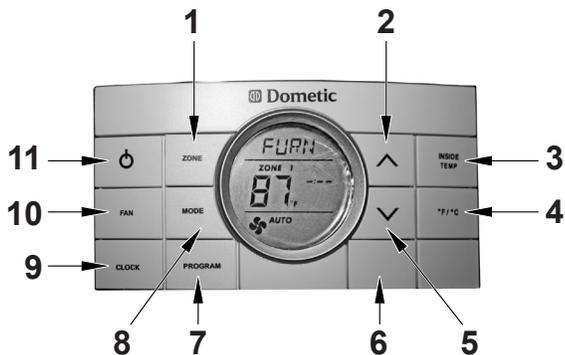
WARNING

Most LPG appliances used in recreational vehicles are vented to the outside of the vehicle. When parked close to a gasoline pump, it is possible that gasoline fumes could enter this type of appliance and ignite from the burner flame, CAUSING A FIRE OR AN EXPLOSION.

NOTE

Airstream recommends shutting off the gas supply at the LPG tanks before refueling the tow vehicle or entering a refueling station.

Dometic CCC 2 Thermostat



Item	Description
1	Press to select zone
2	Press to increase temperature or humidity set-point
3	Press to display inside temperature
4	Press to select temperature format
5	Press to decrease temperature or humidity set-point
6	Press to display relative humidity set-point
7	Press to select program 1 or 2
8	Press to select mode
9	Press to set clock
10	Press to select fan speed
11	Press to select On and OFF

1. To turn ON the Dometic Comfort Control Center 2 (CCC 2) thermostat when the back light is off, first press any button to wake up the CCC 2 thermostat. Then press and release the ON/OFF button.
2. Press the MODE button to cycle through the mode options. A mode is an operation that can be performed by the unit and is controlled by the CCC 2 thermostat. The available modes are: OFF, COOL, HP (HEAT PUMP), HS (Heat Strip), FAN, FURN (Furnace), and AUTO. The available modes are determined by your system options.
3. Press the ZONE button to cycle through the available zones to be programmed. Each zone signifies a unit designated to cool, heat or dehumidify a specific area of an motorhome. The Dometic CCC 2 thermostat can control up to four units (zones).
4. Press the UP or DOWN buttons to increase or decrease the room air temperature (set-point). The set-point is the desired inside room air temperature.
5. Press the FAN button to select the fan speed. The options are AUTO, HI, MED, or LO.
6. Press the CLOCK button to initiate the clock setting sub-menu on the CCC 2 thermostat. When entering this menu, the "hour" digits will flash first. Press the CLOCK button again and the "minutes" digits will flash. Press it a third time and the "AM" or "PM" icon will flash. Press the UP and DOWN buttons to set the "hour," "minute," and "AM/PM" setting. Press the CLOCK button one more time to store the new time in memory and exit the clock setting sub-menu.
7. Press and hold the INSIDE TEMP button and the LCD will display the current inside temperature recorded at the CCC 2 Thermostat, instead of the temperature set-point. The LCD will also display "IN" to indicate that the inside temperature is being displayed. When the INSIDE TEMP button is released, the LCD will return to the programmed temperature set-point.

Special Features

- Auto Fan
- Stage Select
- Programs 1 & 2
- Auxiliary Heat
- Load Shed
- Automatic Generator Start (optional)

LCD Error Code

When the system determines that one of the faults listed below has occurred, an error code will be displayed in the LCD for the zone in which the error occurred. During normal operation, a blinking zone number indicates a fault has occurred. The error code is displayed in place of the temperature setpoint.

Error Code:

E1: Loss of communication between the CCC 2 thermostat and all system power module boards. System will shut down.

E1: Loss of communication between the CCC 2 thermostat and an individual system power module board. The LED will display error code E1 and the zone number that lost communication. Any additional zones that lose communication will blink in addition to the current zone.

E2: Open circuit or out-of-range Indoor Temperature Sensor. All heat, cool, and dehumidify operation will be locked out. Manual fan operation can continue.

E3: Shorted Indoor Temperature Sensor. All heat, cool, and dehumidify operation will be locked out. Manual fan operation can continue.

E4: Open circuit or out-of-range Outdoor Temperature Sensor (select models). Heat pump and dehumidification operation will be locked out. Air conditioner, furnace, heat strip, and fan operation can continue to operate.

E5: Open circuit or out-of-range Freeze Sensor (select models). Air conditioner and dehumidification operation will be locked out. Heat pump, furnace, heat strip, and fan operation can continue to operate but displays the last temperature set-point.

E6: Open Circuit Humidity Sensor (select models). Air conditioner and dehumidification operation will be locked out. Heat pump, furnace heat strip, and fan can continue to operate.

E7: Loss of 120-VAC power to all power module boards on the system. The system will shut down.

E8: Invalid zone configuration. The heat pump and heat strip DIP switches are both set to the ON position in one zone. Heat pump, heat strip, A/C, and dehumidify operation will be locked out in the affected zone.

E9: Invalid zone configuration. The dehumidifier DIP switch and either the heat pump or heat strip DIP switches are set to the ON position in one zone. Heat pump, heat strip, A/C, and dehumidify operation will be locked out in the affected zone.

Air Conditioner

Manufacturer: Dometic Sales Corporation
2320 Industrial Parkway
P.O. Box 490
Elkhart, IN 46514
Phone: (800) 544-4881

NOTE**Review the air conditioning literature supplied in your owner's packet before proceeding.**

The roof A/C used on Airstream motorhomes are one of the most popular on the market today. 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.

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 current drops below 105 volts. Low voltage is usually associated with older or poorly maintained motorhome parks. Many motorhomes, built only 20 or 30 years ago, may not have air conditioners capable of operating on some receptacles. Parking your motorhome 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 as short and heavy 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 motorhome is already hot.

Furnace

Manufacturer: Atwood-Hydro Flame Corporation
1120 N. Main St.
Elkhart, IN 46514
Phone: (800) 825-4328 (US or Canada)

The manufacturer of the furnace in your motorhome has been well known in the motorhome industry for many years. The furnace burns LP gas, and is powered by 12-volt current from the batteries or power converter

Interior

when plugged in to city power. Operating instructions are located in your owner's packet. If they should become misplaced, new literature can be ordered directly from the manufacturer or your Airstream dealer. The manufacturer also offers a detailed service guide for your furnace.



WARNING

Carefully read all the manufacturer's instructions prior to operating. NEVER store flammable material next to the furnace or in close proximity to the furnace exhaust outlet on the side if the motorhome.

NOTE

If warranty service is required, use only a service location recommended by the furnace manufacturer or your Airstream dealer.

Range

Manufacturer: Atwood

6320 Kelly Wills Rd.

Greenbriar, TN 37073

Phone: (800) 825-4328 (US or Canada)

There is little difference between the operation of home gas ranges and the motorhome's range. If, however, you are used to an electric range, operating confidence can be quickly gained by reading the manufacturer's directions provided in the owner's packet. Manufacturer's service and parts manuals are also available.



WARNING

The operation manual for the range is titled motorhome Cooking Appliances. If this has not been provided with your motorhome, contact the listed manufacturer to obtain. Their manual contains specialized Warnings and Cautions that should be reviewed prior to operating the appliance.

Microwave Ovens

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

Refrigerator/Freezer

Manufacturer: Dometic Sales Corporation

2320 Industrial Parkway

P.O. Box 490

Elkhart, IN 46514

Phone: (800) 544-4881

The Grand Tour model comes equipped with a refrigerator unit on the top and a separate Freezer unit on the bottom. All other models come with the standard refrigerator with a freezer compartment inside at the top of the refrigerator.

Review all refrigerator literature supplied in your owner's packet or stored in the refrigerator prior to operating it.

In an absorption refrigerant system, ammonia is liquefied in the finned condenser coil at the top-rear of the refrigerator. The liquid ammonia then flows into the evaporator (inside the freezer section) and is exposed to a circulating flow of hydrogen gas, which causes the ammonia to evaporate, creating a cold condition in the freezer.

The tubing in the evaporator section is specifically sloped to provide a continuous movement of liquid ammonia, flowing downward by gravity, through this section. If the refrigerator is operated out-of-level when the vehicle is not moving, liquid ammonia will accumulate in portions of the evaporator tubing. This will slow the circulation of hydrogen and ammonia gases, or in severe cases, completely block them, resulting in a loss of cooling.

Any time the vehicle is parked for several hours with the refrigerator operating, the vehicle should be leveled to prevent this loss of cooling. The vehicle needs to be leveled only so it is comfortable to live in (no noticeable sloping of floor or walls).

When the vehicle is moving, the leveling is not critical, as the rolling and pitching movement of the vehicle will pass to either side of level, keeping the liquid ammonia from accumulating in the evaporator tubing.

Operation

The refrigerator requires 12-volt current to operate, even if running on LP or 110-volt modes. The 12-volt current is used to power the circuit board that directs the refrigerator functions. When running in a mode such as LP, it means the heat source, by far the largest power requirement to evaporate the ammonia, is being provided by an LPG burner.

The refrigerator is equipped to automatically switch between sources as needed, with 120 volt taking priority when both sources are available.

All Nova Kool 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 right (clockwise); conversely turning the thermostat knob to the left (counterclockwise) yields a warmer setting. The OFF position is reached by turning hard counterclockwise past the click. The reference point is shown with an indicator sticker beside the knob.



Start up

Turn the power on and set the thermostat between 3 and 4. 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 e.g., 7, will not decrease the time required for the unit to cool down to its normal operating temperature. The unit will cool at the same rate on DC as on AC.

Defrost & Cleaning

The frequency of defrost is dependant 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 at either the breaker panel or 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. Speeding up the process with a knife or scraper is strongly discouraged due to the likelihood of rupturing the refrigerant circuit; in the event this happens contact us at (604) 523-6515 ext.104.

Now that the unit has been defrosted, the interior can be cleaned with a non-abrasive cleaner. Do not use “Brillo” or “SOS” type abrasive pads, as they will score the surfaces. Baking soda is recommended.

NOTE

When unit is plugged into 110-volt power and the switch is in auto mode, 110-volt power is the primary source of operation.

Water Heater

Manufacturer: Atwood

6320 Kelly Wills Rd.

Greenbriar, TN 37073

Phone: (574) 264-2131

NOTE

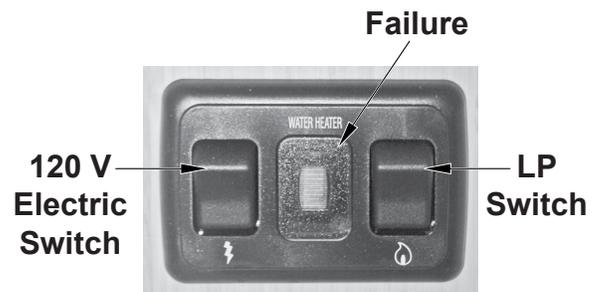
Review the water heater literature supplied in your owner’s packet before proceeding.



WARNING

Hydrogen gas can be produced in a hot water system served by this heater if it has not been used for a long period of time (generally two weeks or more). Hydrogen gas is extremely flammable. To reduce the risk of injury under these conditions, it is recommended that the hot water faucet be opened for several minutes at the galley sink before using any electrical appliance connected to the hot water system. If hydrogen is present, there will probably be an unusual sound heard such as air escaping through the pipe as the water begins to flow. Do not smoke or allow an open flame near the faucet at the time it is open.

Electronic Ignition



The switch used to light your electronic ignition water heater is located in the bathroom above the lavatory top. When the switch is turned on, the red light will illuminate, indicating ignition mode. Normally, the burner will ignite in just a few seconds, and the light will extinguish. If your LPG system has not been used for some time, the system may go into safety lockout (about 20 seconds) before the air is all expelled from the lines. Turning the switch off for 30 seconds and then back on reinstates the ignition mode.

Interior

Safety

If your water system is full and cold, and the water heater is ignited, the system can see pressures as high as 120 psi before the relief valve starts to open. Since the water system normally operates in the 40-psi range, the expanding water puts unusual stress on the system. This normally does not cause any problems, but the stress is easily alleviated. As the water is heating, simply open any faucet and run as little as a cup of water. Removing this small amount of water will reduce the pressure buildup significantly.

For fun, watch the sequence of events your family goes through when you park the motorhome and ignite the water heater. More than likely, someone will run water and relieve the pressure without even realizing it.

Maxxair Vent Fan



Maxxair Vent Fan

Model 00-06201-005

Manufacturer:

MAXXAIR CORP.

Corporate Headquarters, 5513 West Sligh Ave

Tampa, FL 33634

The MaxxFan is a unique, one-of-a kind ventilation system that keeps your motorhome interior safe from any weather, rain, or shine. It circulates hot, musty air out at any time, in any weather. It includes a built-in rain shield that moves into position, automatically, every time the MaxxFan vent is opened. Best of all, this rain shield tucks away when the MaxxFan is closed, providing a low profile, euro-style appearance.

The MaxxFan opens and closes like most standard roof vents using a manual knob located at the ceiling. The controls for the fan are placed at the ceiling around the fan intake screen. In addition, the MaxxFan features an easy to remove screen. Simply rotate four retaining knobs and remove the screen for cleaning, no tools required. The MaxxFan's large exhaust vent employs a rigid louver system that, along with the internal heavy-duty screen, keeps rain, debris and critters from entering the vent area when opened.



WARNING

Do not use petroleum containing additives or solvent based products on any of the MaxxFan's components or its corrosion resistant hardware.



CAUTION

This product has been manufactured using prime UV stabilized Polymers for maximum toughness and durability. However, the use of non-compatible chemicals will cause cracking and product failure. Please clean all parts with mild soap and water only.

NOTE

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

Non-Compatible Chemicals

Do not use the following chemicals on plastics:

ketones, esters, acetone, or other like solvents, halogenated hydrocarbons, amines, aromatic hydrocarbons, (loctite formulas)

Generally Compatible

Use the following chemicals in low concentration where possible:

acids, alcohol, alkalis, aliphatic hydrocarbons, mild soap solution (avoid strong alkaline material), silicone oil or greases (avoid those containing aromatic hydrocarbons or other additives). Review the contents of your cleaning materials carefully.

If your MaxxFan fails to operate properly under normal conditions, please call MaxxAir using the toll free number listed below or your dealer. If calling MaxxAir, please have the motorhome retail sales date and the MaxxFan Serial Number readily available when you call. The Serial number for your MaxxFan is located on the fan control plate under the round insect screen frame. Refer to your operating guide. Rotate the four retaining knobs 180 degrees and remove the screen to view. Do not operate the MaxxFan with the screen removed

Maxxfan Toll Free Customer Service

(800) 780-9893, 8:00 am - 5:00 p.m. EST, Monday - Friday

NOTES:

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Exterior

The exterior of your Airstream Interstate Motorhome, except for the optional body kit, has been painted by Sprinter. The care of the paint is detailed in the Sprinter manual. The following additional information is provided by Airstream to help you understand the finish and its care. Following these instructions will provide a long lasting, high-gloss finish for your recreational vehicle. These same procedures can also be applied to your everyday automobile, producing the same long-lasting results.

NOTE

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

Waxes and Polishes

Over 90 percent of all automotive finishes are clear coat. The finish on your motorhome is a state-of-the-art Acrylic Urethane Basecoat/ClearCoat. This means you will wash and polish a clear urethane coating designed to protect the basecoat: the pigmented coating that provides color. As its main function is protecting the basecoat, the clearcoat needs to be maintained especially in harsh environments. Clearcoats do not fade themselves, but appear to fade or lose gloss as the surface becomes contaminated by the environment. If this contamination is not removed frequently, the result will be a dull or low-gloss finish. Occasional washing alone will not adequately remove some forms of contamination and polishing will be required.

Polishes and waxes primarily serve the following purposes:

1. To remove minor surface imperfections caused by water spots and acid rain
2. To remove minor scratches by filling them and leveling the surface
3. To beautify the paint finish appearances with more depth and high-gloss
4. To protect the paint finish from the elements

Do not use products that contain harsh abrasives such as rubbing or polishing compounds. These products should be used by experienced technicians with the proper training and equipment. Most polishes and waxes are designed to clean and polish in one application.

A hand-applied polish or wax will offer outstanding performance and protect the Interstate's finish. When applying polish or wax, do so in a shaded area making sure the surface is at the specified temperature according to the polish manufacturer's recommendations. Due to the variations of polishes and waxes, incorporate the following suggestions into the polishing technique:

1. Condition the polishing pad by rubbing a slight amount of polish on it.
2. Use only the amount of polish specified in the label directions.
3. Work a small area at a time.
4. Rinse off and remove dried polish from crevices, trim, and moldings.
5. Follow the products manufacturer's directions.

How to Care for Your Motorhome Finish

Keeping your motorhome looking its best at all times involves keeping the paint finish clean and in good condition. This means periodic washing and polishing, as well as getting the paint finish repaired as soon as possible when the paint is damaged or affected in any way. The purpose of the paint finish is twofold:

- Provide an aesthetically pleasing appearance.
- Protect the vehicle from the environment.

Your motorhome is exposed to many environmental conditions that have an adverse effect on the paint finish:

1. Road salts and sodium chloride
2. Road tar/bugs
3. Bird droppings/tree sap
4. Industrial fallout/acid rain/pollution
5. Ultraviolet exposure and moisture

The most common problems resulting from these conditions are corrosion, staining, and chemical spotting. These problems can be minimized through regularly-scheduled washing and polishing.

Washing Your Motorhome

Make sure the motorhome's surface temperature is not too hot, under 90°F, and not in direct sunlight. A shady area is ideal for washing your vehicle, as direct sunlight causes water and soap to evaporate too fast, resulting in water spotting. Use a mild soap or detergent.

Most auto care stores carry a car wash shampoo. Try to avoid combination wash-n-wax products as these waxes cause buildup and are designed for smaller surfaces. Have two dedicated sponges or wax mitts: one for the paint finish and one for the wheels and under carriage. Brushes or wash mitts that have plastic bristles are acceptable for use on tires and wheel wells, but are not intended for use on the paint finish. Avoid using such items on painted surfaces, as they will damage the motorhome paint and finish.

Wash the wheels and wheel wells first as this removes heavy dirt and debris and prevents it from splattering on already clean panels. Wet the entire area down to remove loose dirt and grime, and hand wash one area at a time using your dedicated paint finish sponge or wash mitt. Wash from the top and work your way down, frequently rinsing to minimize grit abrasion. Follow with a final rinse of water.

This process will remove most contamination from the motorhome's surface. For stubborn stains such as road tar, use an ammonia-based glass cleaner or a small amount of rubbing alcohol on a damp cloth immediately followed by warm soapy water and rinse with clean water. This may not dissolve the road tar, but will loosen tar and bug stains and remove them from the surface. Do not use solvent-based cleaners on bird droppings or tree sap as these are water-based stains and will eventually dissolve using an ammonia-based glass cleaner, warm soapy water and a little "elbow grease." Once again, after removing stubborn stains immediately rinse with clean water.

Drying the motorhome is just as important as washing your vehicle as today's tap water and well water contain many chemicals that could water stain your motorhome's finish. We suggest using a damp natural or synthetic chamois, however, there are other drying products such as lint free micro-fiber towels that work just as well.

Follow the simple cautionary measures, and your new finish will give you maximum gloss and durability.

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

Body Kit



The body kit provided by Airstream is made from state-of-the-art high impact plastic. The same material is used in the automotive industry for moldings, bumper guards, and trim. The kit is made to color specifications and requires no paint or finish. The cleaning procedures are the same as the painted finish on the Sprinter body; however, there are several automotive plastic care products on the market for exterior parts that will provide added protection from UV ray damage, dirt, and stains. Find one you like and use it as often as needed to help prevent fading.

Exterior

Windows

Clean your motorhome 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 motorhome.



WARNING

Failure to properly clean and lubricate the window seals could result in the window sticking to the jamb. Window seals that become stuck to the window jamb should 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.

For replacement of a damaged window, contact an Airstream Service Center.

Alcoa Dura Bright Rims

Cleaning Instructions

These rims require no chemicals to clean them. Simply use a mild soap, water, clean towel, and rinse. Follow these steps for an easy clean and shine.

1. Rinse the wheel prior to washing with a brush. This will prevent scratching.
2. Mix a mild detergent and water. Any car wash or household detergent will work.
3. Using a soft clean brush and soap solution, clean the rims. (Do not use any abrasive-type brushes or pads.)
4. After cleaning the surface, rinse thoroughly to remove all soap so it will not spot. Towel drying will help this as well.



CAUTION

Do not use any acid or alkaline cleaners. This will cause damage to the coating.



CAUTION

When using a power washer, maintain a proper distance from the motorhome. The proper distance is approximately 2.2 ft. when using a round jet nozzle, and 1 ft. when using a 25 degree flat spray jet nozzle. Never point the jet nozzle at moldings, hoses, electrical components, seals, plug connections, etc. Never use round jet nozzles on tires, the pulsating water can damage the sub-structure of tires.

Exterior Shower



All units are equipped with an exterior shower. This shower consists of a shower hose, shower head, and water valve inside of a lockable exterior door. Water is supplied by the pump or city water hookup. The shower valve/hose assembly is stored inside the rear doors. To use: lift the hinged exterior cover, align the handle to the off position, and insert the shower handle assembly into the wall mounted shower inlet. The assembly can only be inserted and removed with handle aligned to the off position. Press the spout button and rotate the handle counter clockwise to the desired temperature. To remove handle assembly, return the handle to the off position, press the spout button to relieve any residual pressure and pull the handle out of the wall insert. Snap the cover completely shut so the rubber o-ring seal will seal out road dust and grime from the insert assembly.

Exterior Sliding Step



The curbside sliding door has a sliding step with auto retract, step out warning buzzer, and a lock extended switch located just inside the sliding door on the forward shower wall. Please read, understand, and instruct passengers of the following operational and safety information pertaining to the step.

The step extends and retracts as the sliding door is opened and closed with the engine off and step lock extend switch off. The step will not extend with the engine running.

The step retracts automatically and will not extend when the engine is started and running to prevent damage while in transit.

If the step does not retract fully, a warning buzzer will sound. The vehicle should not be driven if the step fails to retract completely. This buzzer is controlled by a 10-amp fuse.

The step's 15-amp fuse is located in the Sprinter fuse panel under the driver's seat, position F-12.

Lock Extended Switch

To use the lock extended switch, turn the engine off, open the door to extend the step, and turn the switch on. The step will now remain extended while opening and closing the door. Turn the switch off to return the step to normal operating mode.



WARNING

The lock extended switch must be turned off before starting the engine. Failure to follow this instruction may cause property damage or personal injury.

If you forget to turn the lock extended switch off before starting the engine, the step will retract when the engine is started; however, it will not extend when the engine is turned off and the door is opened. To reset the step, turn the engine off and the step lock extended switch off with the door closed.



WARNING

LOOK BEFORE YOU LEAP. The step will not extend with the opening of the sliding door when the engine is running. Check that the step is extended before leaving and entering vehicle. Failure to follow this warning could result in person injury.

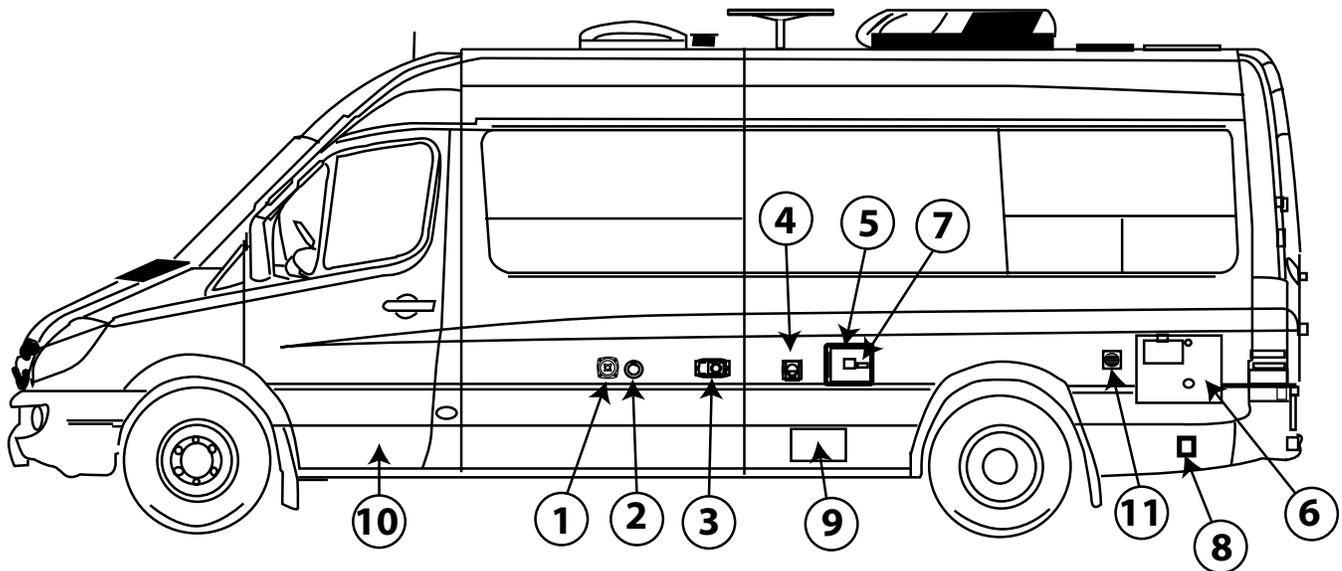


CAUTION

Check that the step is retracted before moving vehicle. Failure to follow this caution could result in property damage.

Exterior

Roadside Exterior Features (Excludes Grand Tour)



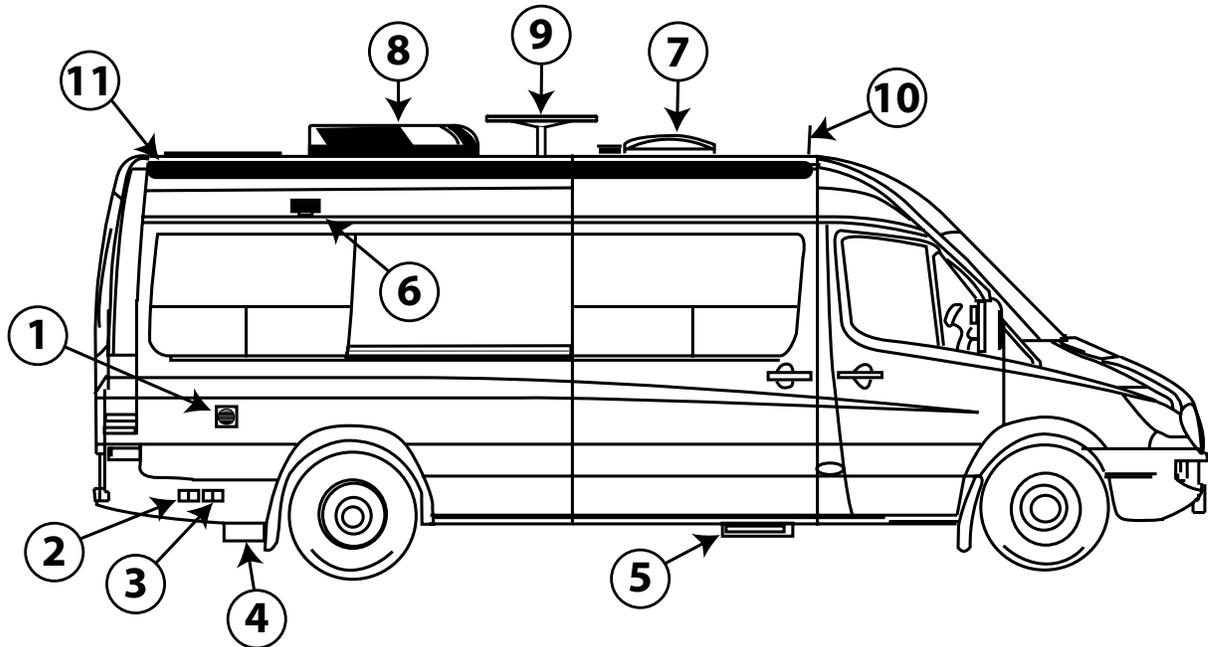
Roadside Exterior Features

NOTE

This is a basic explanation of the location and function of exterior features. More in-depth explanations of certain feature's care and maintenance is include in this manual in other sections.

1. City water hookup provides access for city water to your fresh water system. Use ½ inch minimum hose for water supply.
2. Water fill is used to fill the fresh water tank. Use only clean fresh potable water.
3. Furnace exhaust vent should be cleaned regularly. When operating furnace, be sure exhaust can escape into a well ventilated area. Air coming from vent can be hot. When parking the motorhome, be sure to have proper clearance in venting area.
4. Exterior shower outlet can be used on the water pump or with the city water hookup after faucet/ valve/hose assembly is inserted.
5. Utility hatch contains the cable/satellite TV inlet, the switches for the dump valves, macerator pump and macerator pump high-pressure hose reel.
6. Electronic ignition water heater door and vent is part of the plumbing system. The intake vent, drain plug, and exhaust vent are located inside this door. Regular maintenance by a qualified service technician is required to keep the water heater operating efficiently.
7. Cable/Satellite TV inlet is located inside the utility hatch and is pre-wired for cable/satellite TV. A portable satellite dish can be connected and used in the cable connection.
8. 110-volt power cord inlet, 30-amp service is required. Power cord is stored inside rear cargo doors in a plastic storage compartment.
9. Macerator hose reel compartment stores the electric reel holding the pump hose and the Black Tank Flush.
10. Body kit.
11. House battery vent (rear twin model only) allows battery gasses from the battery compartment located under the rear lounge to escape and fresh air to enter.

Curbside Exterior Features (Excludes Grand Tour)



Curbside Exterior Features

NOTE

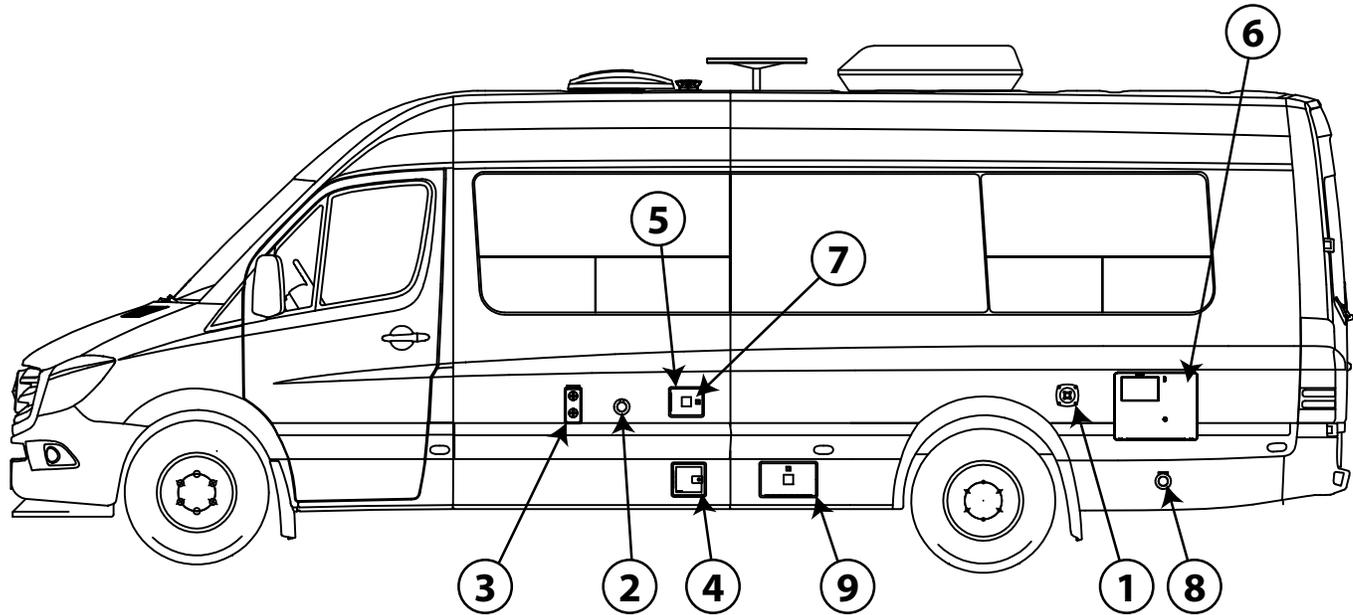
This is a basic explanation of the location and function of exterior features. More in-depth explanations of certain feature's care and maintenance is include in this manual in other sections.

1. House battery vent (rear lounge model only) allows battery gasses from the battery compartment located under the rear lounge to escape and fresh air to enter.
2. Exterior 110-volt outlet provides an exterior GFCI protected electrical source.
3. TV outlet/12-volt power port provides reception for an exterior television. It is pre-wired and integrated into the Cable TV/Satellite TV system. There is also a 12-volt outlet.

4. LP tank remote fill and shutoff location.
5. Sliding step with auto retract has a step out warning buzzer and a lock extended switch for easy entry into the motorhome.
6. Porch light is switched just inside the sliding cargo door on the forward shower wall.
7. MaxxAir roof vent is an exhaust-only vent. Complete operating instructions are in the appliance section of this manual. Keep all vents clear to encourage airflow.
8. Roof air conditioner
9. Power boosted omni-directional TV antenna is wired into TV outlets on exterior of coach and inside unit at entertainment center cabinet.
10. Radio antenna
11. Patio awning operating and care instructions are including in this section of this manual.

Exterior

Roadside Exterior Features (Grand Tour)



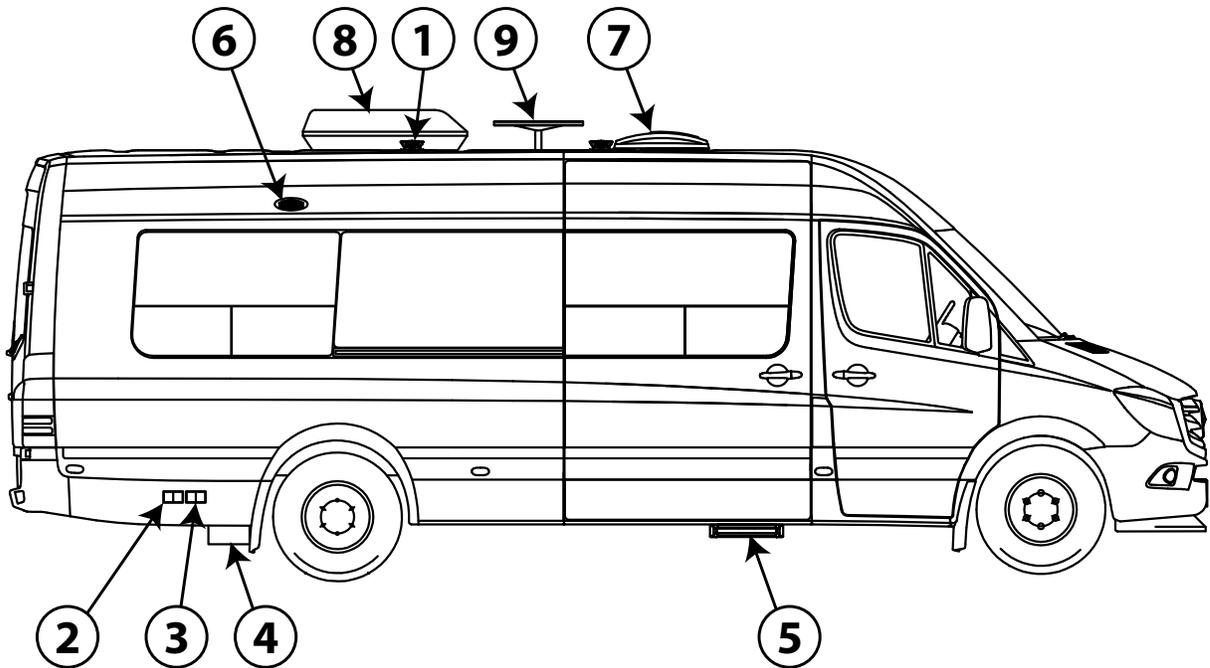
Roadside Exterior Features

NOTE

This is a basic explanation of the location and function of exterior features. More in-depth explanations of certain feature's care and maintenance is include in this manual in other sections.

1. City water hookup provides access for city water to your fresh water system. Use ½ inch minimum hose for water supply.
2. Water fill is used to fill the fresh water tank. Use only clean fresh potable water.
3. Furnace exhaust vent should be cleaned regularly. When operating furnace, be sure exhaust can escape into a well ventilated area. Air coming from vent can be hot. When parking the motorhome, be sure to have proper clearance in venting area.
4. Exterior shower outlet can be used on the water pump or with the city water hookup after faucet/ valve/hose assembly is inserted.
5. Utility hatch contains the cable/satellite TV inlet, the switches for the dump valves, macerator pump and macerator pump high-pressure hose reel.
6. Electronic ignition water heater door and vent is part of the plumbing system. The intake vent, drain plug, and exhaust vent are located inside this door. Regular maintenance by a qualified service technician is required to keep the water heater operating efficiently.
7. Cable/Satellite TV inlet is located inside the utility hatch and is pre-wired for cable/satellite TV. A portable satellite dish can be connected and used in the cable connection.
8. 110-volt power cord inlet, 30-amp service is required. Power cord is stored inside rear cargo doors in a plastic storage compartment.
9. Macerator hose reel compartment stores the electric reel holding the pump hose and the Black Tank Flush.

Curbside Exterior Features (Grand Tour)



Curbside Exterior Features

NOTE

This is a basic explanation of the location and function of exterior features. More in-depth explanations of certain feature's care and maintenance is include in this manual in other sections.

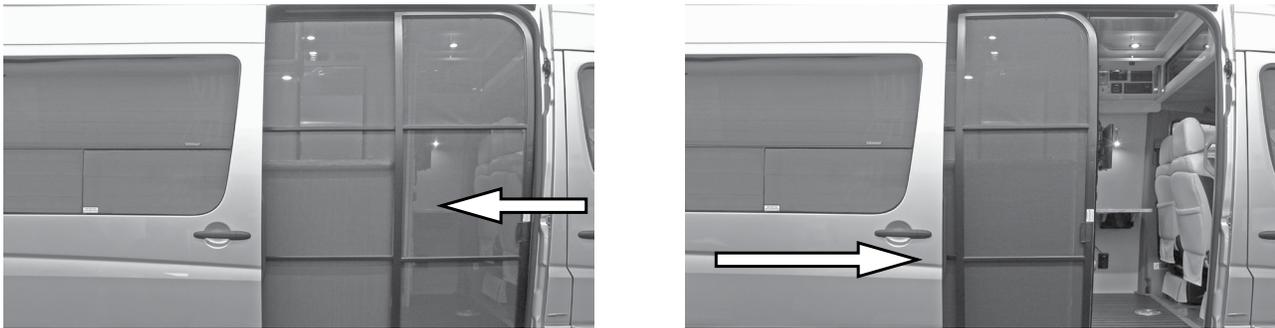
1. Tank vent
2. Exterior 110-volt outlet provides an exterior GFCI protected electrical source.
3. TV outlet/12-volt power port provides reception for an exterior television. It is pre-wired and integrated into the Cable TV/Satellite TV system. There is also a 12-volt outlet.
4. LP tank remote fill and shutoff location.
5. Sliding step with auto retract has a step out warning buzzer and a lock extended switch for

easy entry into the motorhome.

6. Porch light is switched just inside the sliding cargo door on the forward shower wall.
7. MaxxAir roof vent is an exhaust-only vent. Complete operating instructions are in the appliance section of this manual. Keep all vents clear to encourage airflow.
8. Roof air conditioner
9. Power boosted omni-directional TV antenna is wired into TV outlets on exterior of coach and inside unit at entertainment center cabinet.

Exterior

Side Screen Door (Grand Tour)

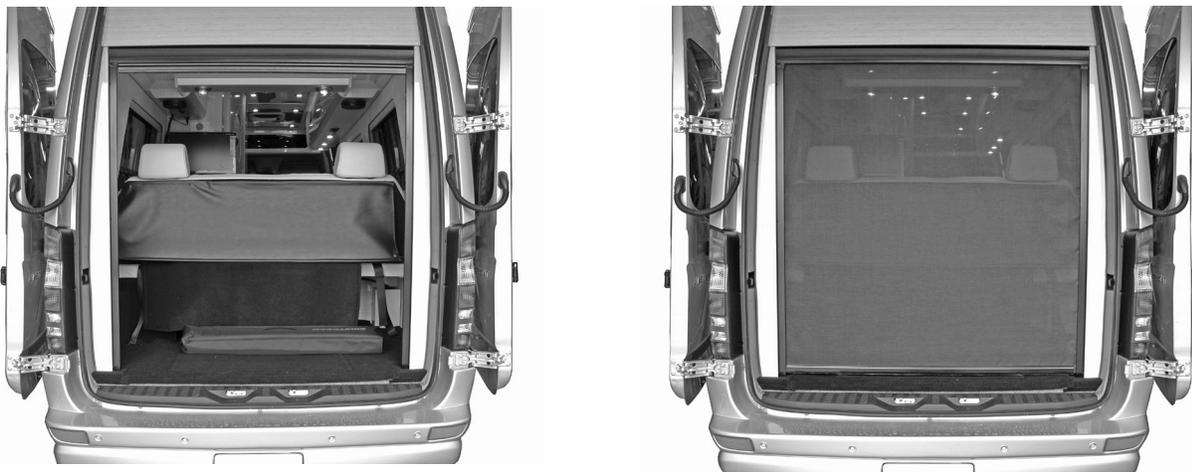


Do not shut the exterior door when the screen door is closed. The screen door must be open before you shut the exterior side door.



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

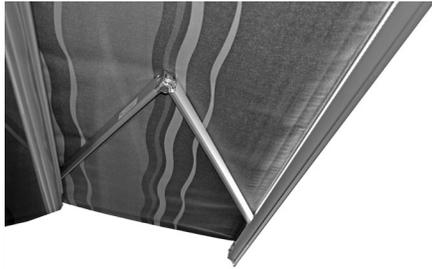
Remote Controlled Rear Power Screen (Grand Tour)



To lower the power screen, press the down button on the remote control. The screen will stop when it reaches the lowest position. To raise the power screen, press the up button on the remote control. You can stop the screen at any point by pressing the opposite direction button on the remote control.

Fiamma Power Awning

The awning manufacturer provides a complete Owner/ Operator Manual for the Fiamma Power Awning located in your owner's packet. The switch for the power awning is located in the passenger seat pedestal and accessed under the seat pedestal skirting.



The awning will retract but won't extend while vehicle engine is running and a warning buzzer will sound.



 **CAUTION**

Awnings on standard length Interstates can be damaged if the rear doors are opened completely, as the doors will hit the awning while extended.

NOTE

Never use the awning with damaged fabric. Make sure the awning can be correctly rolled up. A damaged fabric does not allow a correct rolling up of the awning.

Awning Use In Wind and Rain

The Interstate has a new automatic extra strong awning, with no legs, provided with a Wind Detective® System wind sensor. In order to grant maximum comfort and complete safety, the 12V electric awning can easily be opened by a switch located on the passenger seat pedestal of the vehicle.

The Wind Detective® System is an innovative wind sensor system that automatically activates the 12V motor and closes the awning in case of strong winds, thus avoiding possible damage to the awning.

The awning is used for sun protection, so please roll up the awning in case of rain, wind, or snow.

NOTE

If wind or extended periods of rain are expected, roll up the awning and secure as for travel.

The effects of wind and rain on any awning are unpredictable. Severe damage to the vehicle and or the awning may result and cannot be covered by warranty.

NOTE

Awning will not extend while vehicle engine is running.

Care and Maintenance

1. CARE OF FABRIC: Fiamma recommends cleaning with Fiamma Brill.
2. PERIODIC MAINTENANCE Like any other part of the motorhome, an owner should periodically inspect the awning. The following items should be checked.
 - a. All mounting brackets are tight.
 - b. Check all pivot points for enlargements of holes or broken rivets.
 - c. Check end caps for cracking and splitting.
 - d. Check that awning rail is tight against coach and all screws are tight.
 - e. Check canopy for loose stitching and possible shrinkage or puckering.
 - f. Clean and lubricate all tension knobs and pivot points.

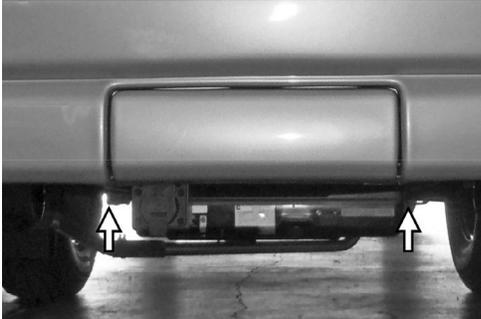
Fuse Location: Chassis fuse panel under driver's seat, position F-10.

Exterior

Hitch Cover

How To Remove The Hitch Cover

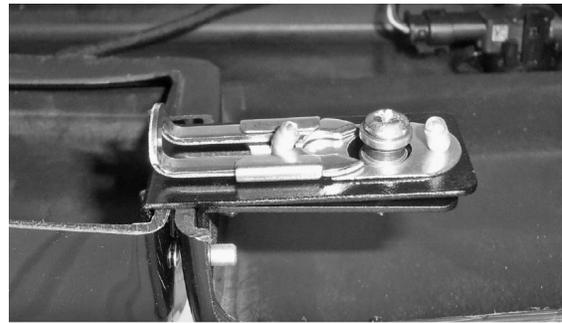
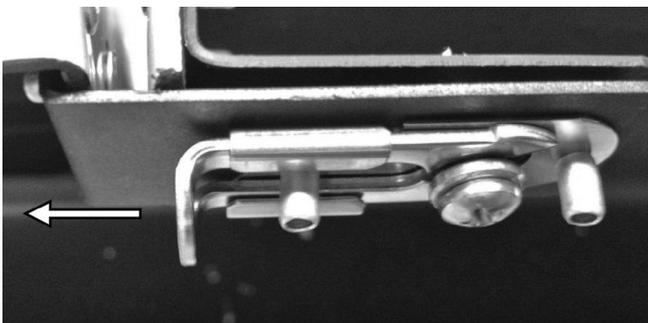
Before Removal



After Removal



1. Kneel down behind the rear bumper. There are two side latches on the rear cover located on the lower backside of the cover. Both will need to be slid to the inside to be unlatched properly as shown below.



2. Push out latch past the pin on both sides to release as shown below.



3. Pull straight down to remove cover. Once removed you can store this in one of the rear storage compartments. Reverse these instructions to reinstall.



Section 7

SPRINTER VAN

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

Important Sprinter Information

Your Sprinter Van Operator's and Warranty Manuals contain important Cautions, Warnings, operational, and warranty information on the Sprinter and its components. All information in the Sprinter manual should be reviewed and followed for your safety. The Airstream Interstate Owner's Manual may provide addition information and tips on the use of the Sprinter Van as a motorhome; 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 Sprinter manuals. If you believe there is a conflict in information, Warnings, Cautions, or safety-related information between the Sprinter and Airstream manuals, please contact the Airstream customer relations department immediately to resolve the conflict.

Fuel

NOTE

The Sprinter Owner's Manual contains important fuel requirement information on using Ultra-Low Sulfur Diesel, Bio fuels, and very low temperature operation. Please read, understand, and follow this information.

Component Identification

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

Sprinter Van Serviced by Sprinter or Its Suppliers

For assistance in locating a service center in the United States:

Customer Assistance Center

Three Mercedes Drive

Montvale, New Jersey 07645-0350

1-877-762-8267

See Sprinter Warranty Information Manual for complete instructions.

- | | |
|---|---------------------------------|
| Engine | Speed control |
| Exterior automotive lights | Automotive electrical system |
| Engine battery | Instrument panel cluster |
| Power mirrors | Hitch receiver and tow plug |
| Engine cooling system | Doors, cab, side and rear cargo |
| Fog lamps | Heated drivers/passenger seats |
| Transmission | Cab door windows and windshield |
| Chassis suspension | Radio/CD player/antenna |
| Brakes | Dash AC/heater/defroster |
| Drive axle and hubs | Cargo door assist handle |
| Steering assembly, Steering wheel | Radio |
| Rear window defroster and heated windshield | Lane keeper assist |
| Automotive fuse panel | Blind spot assist |
| Rear backup alarm | High beam assist |
| Wheels, Tires | Collision prevention assist |
| Parking brake | Parktronics |
| Alternator | |
| Fuel pump | |

Driver's and Passenger's Seats and Restraint Systems

Sprinter provides the swivel pedestals and Airstream provides the seat decorative skirting and recovers the front seats to match the surrounding decor.

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

Cab Area

Driver's and passenger's seat skirting and covers.

Floor Mats

Optional Burlwood Dash Kit

Rear View Mirror/Monitor Option



Sprinter Van

Living Quarters

Second row cab seats, swivels	Smoke/CO detector
Fire extinguisher	Three piece sun and privacy shield
Interior furniture	Window Coverings
Appliances in the lounge/lavy area.	Floor covering
	All plumbing systems

Exterior Electrical Components

Monitor panel and its system	Living area entertainment center
Generator and components	Roof AC
Inverter/Charger	Awning
2 GPL-house batteries	Power Step
Battery disconnect	TV antenna
Power vents	Radio antenna
120-volt system	Exterior body kit
Sliding step	2 TVs
Exterior patio light	Blue ray player
4 cranking windows (3 on Grand Tour) provided by C.R. Laurence	
12-volt living area system	

Exterior

Alcoa Dura Bright Rims	Exterior patio light
Exterior body kit	Radio antenna
Power step	Awning

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

If you wish to write, the address is:

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

TIRES

Under inflation or over inflation of tires is dangerous. Under inflation can result in tire flexing, heat build-up, tire overloading, bad handling, bad fuel economy, and uneven wear. Over inflation can result in abnormal wear, bad handling, harsh ride, an increased chance of damage from road hazards.

Tire inflation pressures should be checked as per the Sprinter's Owner's manual and when significantly changing the load you plan to carry in your motorhome. Set the correct tire pressure before loading the vehicle. If the vehicle has been loaded, check the tire pressure and correct if necessary. Always check tire inflation pressures when the tires are "cold."

Inflation recommendation is 61 psi. Front and rear pressures are shown for each model and GVWR, and are based on the GVWR and front and rear axle ratings (GAWRs) printed on your vehicle VIN plate and certification label. Tires must be inflated to these pressures when the vehicle is fully loaded or an axle GAWR is reached.

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, which will result in faster tire wear. Incorrect caster or camber alignment will cause your front tires to wear unevenly and can cause the vehicle to "pull" to the left or right.

Vehicle Placard and Tire Inflation Pressure Label

The TIRE AND LOADING INFORMATION placard supplies information on the size and the cold tire inflation pressure for the original equipment tires supplied with your vehicle. Check the Sprinter manual for all weights and tire information placard location.

A MOTORHOME TIRE SAFETY ADDENDUM is included with your Airstream owner's packet. Please take the time to read, understand, and follow the information contained in the booklet.

Proper Tire Inflation

The level of air in your tires affects your vehicle's overall performance. Not even the highest quality tire will perform well if it's not inflated properly. The correct pressure varies from vehicle to vehicle and depends in part upon driver preference. Each vehicle has a recommended inflation pressure, usually found on a

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

Correct tire inflation is a key component in tire care. The recommended inflation pressures for your tires are indicated on the certification label or in your owner's manual. Since motorhomes can be loaded with many different configurations, the load on each tire will vary. For this reason, air pressure should be checked based on the load on each individual tire. Cold Inflation Pressure should be adjusted to handle the maximum tire load, and all tires on the axle should carry the same inflation pressure. COLD TIRE INFLATION PRESSURE is the tire pressure checked in the morning before you drive more than a few miles or before rising ambient temperatures or the sun's radiant heat affect it. Check your tire air pressure at least once a month, before each trip, and each morning you drive during a trip. Tire pressure should be checked cold, as tire pressure ratings have been designed with typical running heat/pressure build up in mind. Make sure the valves and caps are free of dirt and moisture.

Under Inflation

Under inflation brings a higher risk of 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 under inflation brings about an increased risk of tread separation, handling difficulties, and possibly tire failure, which is caused by overheating.

NOTE

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.

- It may be necessary to inflate your tires at a truck stop or truck service center in order to achieve adequate air pressure for your coach's needs
- Only permanent air seal metal valve caps should be used.
- Be safe - if a tire has been run 20 percent under inflated, it must be dismantled and inspected by a trained professional. It should not be inflated without a full inspection or without using a safety cage. Use

a calibrated gauge. If your tire is rated for higher inflation pressures, a special gauge designed for larger tires will be required.

- Don't bleed air from warm tires to reduce pressure buildup.
- Don't inflate tires to cold psi rating beyond rim specifications.

How Overloading Affects Your Tires

Tire pressure is what enables your motorhome tire to support loads. Overloading your tires can have serious consequences for passengers and your motorhome. Too much weight can cause stress on your motorhome's suspension system, brake failure, shock absorber damage, handling and steering problems, irregular tire wear and possible tire failure. Excessive loads or under inflation can lead to an excessive amount of 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 Sprinter Van Operator's Manual.)

Check tires regularly for even tread wear, tread depth (note legal requirements), and signs of external damage. Use only wheels and tires of the same size, make, 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 Sprinter dealer.

Use only wheels and tires that have been tested and approved by the vehicle manufacturer.

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



WARNING

Always replace wheel nuts that are damaged or rusted. Never apply oil or grease to wheel 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 wheel nuts regularly and retighten if necessary.

Sprinter Van

After changing a wheel, the wheel nuts must be tightened once the vehicle has been driven for about 30 miles.

If new or repainted wheels are fitted, the wheel nuts must be retighten again after about 600 to 3000 miles.



WARNING

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

Do not use remolded tires.

Tighten all wheel nuts evenly in the sequence indicated to 133 lbf/ft. + or - 14 lbf/ft with a torque wrench.

NOTE

Read the Sprinter manual for wheel torque and wheel tightening procedures.

Tire Grip

Tire grip is greatly reduced on a wet or icy road. Speed and driving style must therefore be adapted to suit road conditions. In winter, install M + S radial tires. Below a tread depth of 1/8 in., tire grip begins to decrease rapidly on wet roads.

Hydroplaning

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

The majority of flood-related deaths are caused by people attempting to drive through moving water. Driving into flood waters may be the most dangerous thing one might ever try. Considering the following:

- 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 very rapidly and the road bottom can also wash away, making the water much deeper than it appears.
- Once cars are swept downstream, they will often roll to one side or perhaps flip over entirely. The driver has a few seconds to escape the vehicle. Many drivers panic as soon as the vehicle submerges and are found later with their seat belt intact.

Changing the Tire

(partially excerpted from the Sprinter Van Operator's Manual)



WARNING

The Sprinter Operator'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 Sprinter manual sections for changing a tire.



CAUTION

Changing a tire on a motorhome 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 unit, and call a tire service center and supply them with the information in the Sprinter Manual if you have any doubts about changing a tire.

Flat 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. The pressure of the spare wheel always has to be checked regularly (at least after every tenth time at the filling station).

The vehicle tool kit and the jack are located in a hatch under the front passenger foot well.



WARNING

The jack is designed exclusively for jacking up the vehicle at the jack take-up brackets built into either side of the vehicle. To help avoid personal injury, use the jack only to lift the vehicle during a wheel change. Never get beneath the vehicle while it is supported by the jack.

Precautions When Changing a Wheel

- Keep hands and feet away from the area under the lifted vehicle.
- Always firmly set parking brake and block wheels before raising vehicle with jack.
- Do not disengage parking brake while vehicle is raised.

- 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 wheel nuts or stud threads.

Procedure

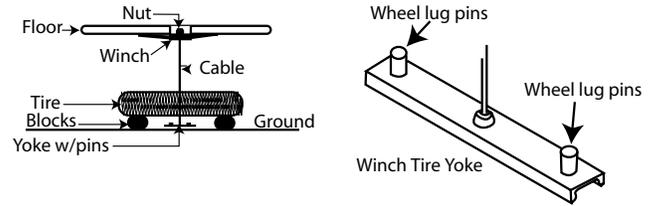
- Park the vehicle on a firm, level, non-slippery surface.
- Switch on the hazard warning flasher switch, apply the parking brake, and place the transmission selector in "P".
- Everyone must leave the vehicle before you jack it up.
- Everyone must leave the danger zone before you jack up the vehicle. 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.

Spare Tire Carrier



Airstream remounts the spare tire and installs the spare tire winch assembly. The spare tire is located under the rear of the motorhome against the bottom of the chassis floor structure .

A winch mounted under the rear floor is used to lower and raise the spare tire. The winch has a nut sticking up through the floor under the center rear lounge on the rear lounge model accessed by opening the rear cargo doors. The nut is located inside the roadside bed on the twin bed model and is accessed by opening the bed storage door. To remove the spare tire, use the ratchet and a 19-mm deep well socket located in the tire replacement bag under the passenger-side compartment floor to turn the winch nut counter clock wise. Place blocks under the tire before it reaches the ground to block the tire up and remove the weight from the yoke. Slide the yoke through the rim, and slide the tire from under the motorhome.

To store a spare tire reverse the removal instructions. The winch tire yoke has two pins that align with the wheel rim lug holes. The yoke pins must be placed in the lug holes to prevent the wheel assembly from sliding against the cable during transit and possibly cutting it. Be sure the wheel is turned on the correct side so pins will fully engage the lug holes. The side of the rim that goes against the hub goes against the floor.

NOTE

Spare tire carrier winch is designed for hand operation only. Do not use impact type power tools to drive this device.





WARNING

Defective spare tire equipment or an improperly stored spare tire could damage your equipment and/or cause serious, possible fatal injuries to people inside your motorhome, other motorists and pedestrians. The yoke pins must be inserted into the spare tire lug holes while the wheel is in the store position during travel. The cable and support system must be free from defects and in good working order. The complete system should be checked before each trip and every 1000 miles during a trip for any signs of wear or possible failure. Please contact your dealer or Airstream Customer Service if you have any questions on the use of this equipment.

Jack

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



WARNING

The jack is intended only for raising the vehicle briefly, for instance when changing a wheel. The jack must be placed on a firm, flat surface only. Do not change wheels on either uphill or downhill grades. Do not crawl under the vehicle while it is raised with the 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.

The jack is located together with vehicle tool kit under the hatch in the front passenger foot well.

- Loosen the wheel 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.

REMOVING A WHEEL

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

NOTE

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).

INSTALLING A WHEEL

Mounting the New Wheel

- Before fitting the spare wheel, clean rust and dirt off the contact surfaces of the wheel and the wheel hub and from the wheel 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 nuts or their threads.

Centering Wheels With Wheel Nuts

- If dual assemblies are used, before placement, the inner wheel should be inspected to ensure all ball bearing rings are in the proper position.
- Install the wheel and snug the wheel nuts.
- Slightly tighten wheel nuts.

Lowering the Vehicle

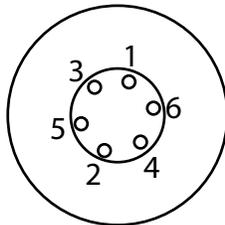
- Slowly open the jack release valve to lower the vehicle until tire is resting on ground.
- Tighten the wheel nuts in a crosswise pattern, as specified, with a torque wrench. For tire pressure and wheel bolt torque procedures, see the Sprinter Van Operator's Manual.
- Remove the jack and stow it in the vehicle tool kit.
- Check the tire pressure. For tire pressures see the Sprinter Operator's Manual.
- Retighten the wheel nuts to the specified torque with a torque wrench after a distance of approximately 30 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 Sprinter's Operators or Owner's Manual, are certified to conform to FMVSS 120 for the Sprinter 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 Tightening



NOTE

Consult the Sprinter Operators manual for extensive wheel tightening and wheel torque procedures, cautions, and warnings.

Tighten all wheel nuts evenly in the crosswise sequence indicated.



WARNING

For safety reasons, the wheel tightening torque must be checked immediately after changing a tire and again after 30 miles to 133 Lbf/ Ft. + or - 14 Lbf./Ft. The wheels could otherwise come loose.

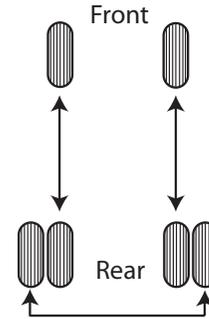
TIRE ROTATION

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 dual rear wheels.



NOTE

Read the Sprinter Operator's Manual for complete instruction on tire rotation, installation, and maintenance.

Vehicles with aluminum alloy wheels may require tires to be dismantled and remounted so as to leave rims in original locations.

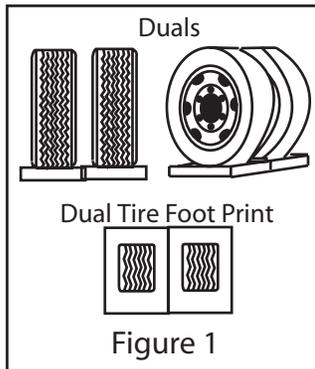
SUPPORT

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

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

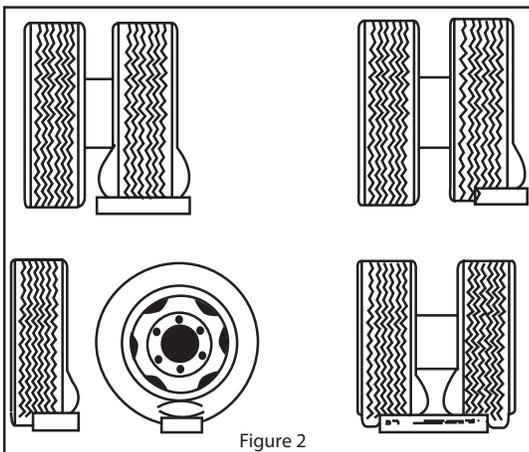
Sprinter Van

CORRECT



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

INCORRECT



INCORRECT methods are shown in Figure 2: One tire, a portion of one tire, or portions of two tires are 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.

Tow Vehicle

When buying a new vehicle to tow your trailer, we suggest including towing options offered by most tow vehicle manufacturers. These include such things as a heavy-duty alternator and radiator, heavy-duty springs and shock absorbers, transmission cooler, heavy-duty fan and flasher unit, etc., for the make of the vehicle.



WARNING

Springs that are too stiff can hinder the action of the weight equalizing hitch and prevent the transfer of weight to the front of the vehicle.

NOTE

Only use springs heavy enough to support your loaded vehicle (not including trailer). Having a too-harsh spring rate on your tow vehicle will only shorten the life of the tow vehicle and trailer, and will cause your trips to be less enjoyable.

Transmissions may be manual or automatic, but an automatic transmission may prolong your tow vehicle's life and generally does a better job of controlling engine loads than does the average driver using a manual transmission.

Having adequate power is very important when considering the purchase of a new vehicle or the trailer-towing capability of your present one. Auto dealers are provided with guidelines to use when helping a customer decide on a tow vehicle. Guidelines are not determined solely by the power output of the engine. The gear ratio of the differential is also a very important part of the guideline.

Inspect the tow vehicle's hitch regularly for loose bolts or nuts, cracked welds, loose ball mounts, worn parts, etc.

New trailerists often carry more food and other supplies than really needed. Remember that every item you take along is one more thing to stow and adds weight to the total load you must pull. Consolidate items in shelves, lockers, and in the refrigerator. It is better to have one full and one empty locker than two half empty ones. Special care must be taken not to overload the front and rear ends of the trailer.

Section 8 **DRIVING**

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Driving

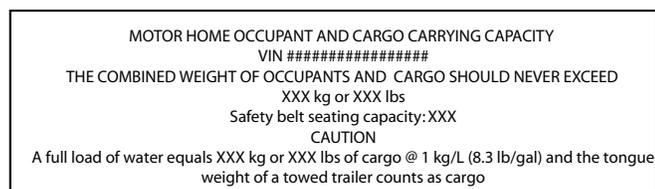
Loading

One of the most critical aspects of safely operating a motorhome is knowing the weight involved and where it is placed. The first thing to determine is how much cargo is being loaded and confirming that it is within the capacity of the equipment being used. Determining WHERE that load is placed is critical to the way your rig will handle on the road.

Do not try to guess what your motorhome weighs loaded. Load your motorhome including water, propane, 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. Total all axle weights and make sure you are below the GVWR. If you are not overloaded, make sure your load is balanced. Do not load too much on one side. A balanced load is much easier to tow or drive.

Front to back balance is also important. Step back and look at your motorhome. Make sure there is not too much weight on the hitch or on the rear of the motorhome. Be sure to secure all items. Loose items can cause damage and can be a safety issue.

The Cargo Carrying capacity tag shown below is installed on every motorhome and can be found on the inside of the door on your vehicle.



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 full tanks of LP and chassis fuel. That number is subtracted from the GVWR of the motorhome and listed on the tag, The total weight of any and all cargo, including but not limited to dealer or customer modifications or additions, fluids (freshwater, holding, and water heater tanks), food, clothes, tools, tongue weight of a towed trailer or vehicle, and passengers should never exceed the number listed while the motorhome is in transit.

The “SAFETY BELT SEATING CAPACITY” is the number of passengers that seat belts are provided for.

The “A FULL LOAD OF WATER EQUALS” number is arrived at by multiplying the fresh water tank and water heater capacities by 1Kg/L or 8.3 lb/gal.

When loading the vehicle it is important to keep the GVWR, GAWR, Tire Weight Ratings (listed on the vehicle tire Information placard), and the cargo and occupant capacity in mind and not to exceed these specifications. Your safety depends on not overloading the motorhome, motor home axles, and tires. See the specification section for the weight rating list of these items.

Weighing

To determine the actual weight of your vehicle with personal cargo and water, 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. In rural areas, grain elevators and cement outlets are a good source and another would be a gravel pit. Note: Weighing instructions for this motorhome are explained on the next page. If you have trouble locating scales, a call to your State Highway Patrol will usually find them cooperative in assisting you.

Vehicle and Trailer Weights and Ratings Definitions

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

Gross Vehicle Weight (GVW) comprises weight of vehicle including tools, spare tire, 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 motorhome.

NOTE

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

Procedure for Weighing a Motorhome

Vehicle should be weighed loaded, as you normally travel.

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

1. Fill in first row from Specification Section of this manual.
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.

Information for line 1 is located in the specification section in this manual.

NOTE

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

Weight Distribution

Motorhomes have Fresh Water and Gray Water Tanks, a water heater, and storage areas. It gives you great flexibility in loading. With flexibility comes responsibility. If you want to load down all the storage compartments, the amount of fluids may have to be reduced. It's a trade off so plan wisely. Distribute your additional cargo as evenly as possible with the heaviest objects located as low as possible.

Do you really want to carry a full fresh water tank to a RV park 1,000 miles away and then hook up to a city water supply? 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 gal of water lets you carry an additional 83.50 lb of cargo.



Driving

Safety

Seat belts

Federally approved seat belts are provided for the use of the driver, the right front passenger, the second row captain's chairs, and the rear lounge. Most states require by law that all passengers in a motor vehicle use seat belts while in transit. It is strongly recommended that all occupants remain seated with their safety belts firmly attached while the motorhome is in transit. The driver should adjust his or her seat so that he or she is able to reach all controls easily with the belt on, and be able to use all the travel on the foot brake. Seat belts should be placed as low as possible around the hips to prevent sliding out from under them in case of an accident. This places the load of the body on the strong hipbone structure instead of around the soft abdominal area. Remember, there should only be one occupant per seat belt when traveling.

The driver and front passenger seat belt buckle operation and is explained in the Sprinter manual.

The rear lounge and rear captain chairs seat belt buckles are secured by inserting the male end into the female buckle until the buckles are secured. To release the buckle press the release button on the female end.



Become familiar with and follow all directions, advice, and warnings pertaining to seats, seat belt operation, and restraint systems, provided in the Sprinter Operator's Manual. Do not allow passengers to ride anywhere in the motorhome except in seats that are equipped with approved seat belts.



Children must be secured in a federally-approved child restraint device. Failure to use proper restraints while in transit can result in severe or fatal injuries. Never place an infant seat that faces to the rear on the front passenger seat. Never place an unbelted infant seat on any seat while in transit.

Child restraint devices are designed to be secured with lap or lap/shoulder belts. All instructions supplied by the restraint manufacturer must be followed.

Statistics have shown children are safer when properly restrained in a rear seating position than in a front seating position.

Don't hesitate when it comes to passenger safety. Make sure all passengers are properly restrained.



WARNING

Drinking alcohol or taking drugs and driving is a very dangerous combination. Even a small amount of alcohol or drugs can affect your reflexes, perception, and judgment. The possibility of a serious or even fatal accident is sharply increased when you drink alcohol or take drugs and drive. Never drink alcohol and/or take drugs and drive or allow anyone to drive after drinking alcohol and/or taking drugs.

Trailer Towing and Driving Tips

(Some text is partially excerpted from Sprinter Operators Manual.)



WARNING

Failure to use proper equipment and driving technique can result in a loss of 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 assure safe trailer operation. Ask your authorized Sprinter or Airstream dealer if you require an explanation of information contained in the manuals.

Trailer Hitches

Units have hitches and wiring installed from the Sprinter manufacturer. The Sprinter 7-way connector is used for lights and charge line on a trailer. For further information, please see your authorized Sprinter dealer.

To reduce the possibility of damage, remove the hitch ball adapter from the receiver when not in use.

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 depends upon proper use of correct equipment and avoiding overloads and other abusive operation.

**WARNING**

The total weight of the motorhome 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 motorhome 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 Sprinter and/or Airstream dealer.

Loading a Trailer

When loading a trailer, you should ensure neither the permissible GTW (Gross Tongue Weight), nor the trailer GVWR are exceeded.

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

To assist in attaining good handling of the vehicle/trailer combination, it is important that the tongue weight be maintained at approximately 10-15 percent of the loaded trailer weight, but not to exceed the hitch rating. Tongue loads can be adjusted by proper distribution of the load in the trailer, and can be checked by weighing separately the loaded trailer and then the tongue.

The tongue weight at the hitch ball must be added to the GVW to prevent exceeding your Sprinter towed vehicle's or rear GAWR.

When towing trailers, motorhome tires should be inflated to the highest pressures shown on the Sprinter Tire Information Placard. See Sprinter Operator's Manual for its location. The Cargo Carrying Capacity (CCC) of this vehicle is reduced by the amount that equals the trailer tongue load on the trailer hitch.

Checking Weights of Vehicle and Trailer

To assure that the tow vehicle and trailer comply with the maximum permissible weight limits and to know the actual weights, have the loaded vehicle-trailer combination (tow vehicle including driver, passengers, and cargo and trailer fully loaded) weighed on a commercial scale as explained earlier in this section.

Also, check the vehicles front and rear axle weights and tongue weight. The values as measured must not exceed the Sprinter weight ratings listed on vehicle

information placards and in the Sprinter manual. These ratings are also listed in the Specification section of this manual, page J-1. NOTE: Check the Sprinter 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 vehicles bumper or axle. Be sure to leave enough slack in the chains to permit turning corners.

Most states and all Canadian provinces required 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 motorhome certification label. Also, NEVER exceed the weight ratings of trailer hitch installed on a motorhome. Failure to heed any part of this warning could result in loss of control of the motorhome and towed vehicle or trailer and may cause an accident and serious injury. For specified towed vehicle braking requirements, consult the Sprinter Operator'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 brake away 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 Sprinter 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 not only for where you reside, but also for where you'll be driving. A good source for this information can be the State Attorney General, State Police, or local authorities.

Before you start driving with a trailer, check the trailer's hitch, brake away switch, safety chains, electrical connections, lighting, and tires. Also, adjust the mirrors to permit unobstructed view beyond the rear of 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.

When towing a trailer, check occasionally to be sure the load is secure, and lighting and trailer brakes (if so equipped) are functioning properly. Always secure items in the trailer to prevent load shifts while driving.

Take into consideration that when towing a trailer, the handling characteristics are different and less stable from those when operating the vehicle without a trailer. It is important to avoid sudden maneuvers.

The vehicle and trailer combination is heavier, and therefore is 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.

In order to gain skill and an understanding of the vehicle's behavior, you should practice turning, stopping and backing up in an area which is free from traffic.

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

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.

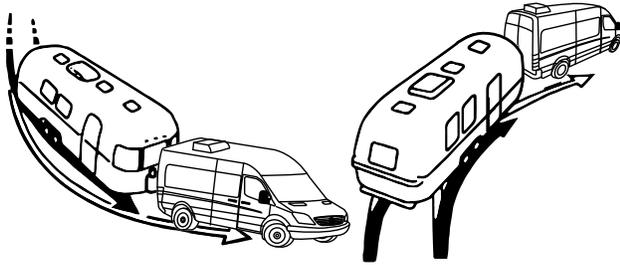
During practice, observe that the tracks made by the trailer wheels are distinctly different from those made by the tow vehicle.

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 action of the trailer, and then carefully move into the proper lane of traffic. Remember that the trailer wheels will not follow the path of the tow vehicle wheels; therefore, wider turns are necessary when turning to the left or right.

On freeways or expressways, try to pick the lane you want 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 10 mph. Remember that in order to pass another vehicle, you will need longer to accelerate. You must also allow for the length of the trailer when returning to the right hand lane.

Tracking



On a two-lane road cars may be lining up behind you because you are traveling at a lower speed. It is both courteous and sensible to signal and pull over at the earliest safe opportunity and let them pass.

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 and then grope for the controller.

When towing a trailer, you might encounter a temporary cooling system overload during severe conditions such as hot days when pulling on a long uphill grade, when slowing down after higher speed driving, or driving long idle periods in traffic jams. If the hot indicator light comes on, or the temperature gauge indicates overheating and you have your AC turned on, turn it off. Pull over in a safe place and put on your emergency brake. Don't turn off the engine. Increase the engine idle speed. Lift the engine hood and check for fluid leaks at the radiator overflow outlet. Check to see that all drive belts are intact and the fan is turning. If you have a problem have it fixed at the next opportunity. If there is no problem the light should go off or temperature should come down within one minute. Proceed on the highway a little slower. Ten minutes later resume normal driving.



WARNING

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

When going downhill in dry weather, downshift so that engine compression will slow the whole rig down. Take dips and depressions in the road slowly and do not resume normal driving speeds until you are sure that the trailer wheels are clear of the dip.



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.

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 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.



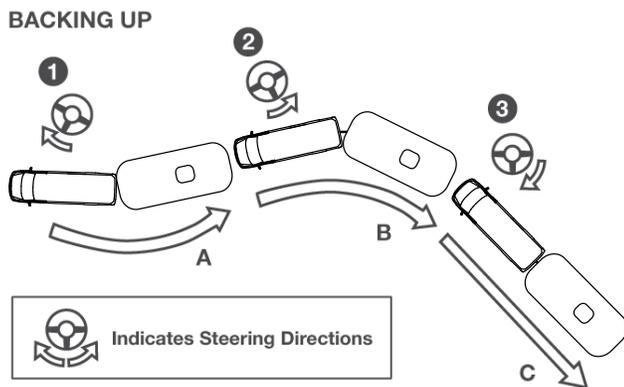
WARNING

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.

Driving

Backing Up

In BACKING UP the important thing to remember is to DO EVERYTHING SLOWLY and to correct immediately if you see the trailer turning the wrong way. 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 from the window or in the 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.

NOTE

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.



WARNING

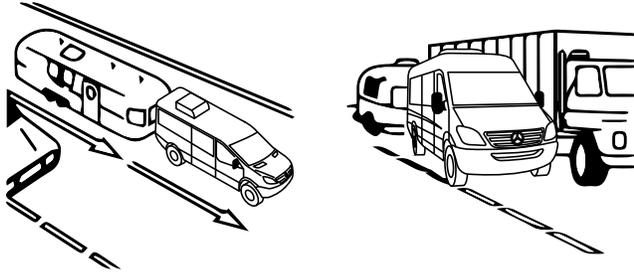
Take into consideration that when towing a trailer, the handling characteristics are different and less stable from those with operating the vehicle without a trailer. It is important to avoid sudden maneuvers. Sudden maneuvers may lead to loss of control over the vehicle-trailer combination.

NOTE

If the transmission continually shifts between gears on inclines, manually shift to a lower gear. A lower gear and reduction of speed reduces the chances of engine overloading and/or overheating. When going down a long hill, shift into a lower gear and use the engine's braking effect. Avoid riding the brakes, thus overheating the vehicle and trailer brakes. If the engine coolant rises to an extremely high temperature (e.g. coolant temperature needle approaching the red zone) when the AC is on, turn off the AC. Engine coolant heat can be additionally vented by opening the windows, switching the climate control fan speed to high and setting the temperature control to the maximum hot position.

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 Motorhome



WARNING

To reduce the risk of personal injury or damage to the vehicle power train as a result of vehicle/trailer movement, 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 brake pedal cannot vehicle and trailer roll into chocks until stopped.
 - Firmly depress parking brake pedal.
 - Move gear selector lever to position “P”.
- On inclines, turn wheels toward the road curb.

Towing Your Motorhome

NOTE

Considerable damage may occur if the motorhome 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 Sprinter Operator’s Manual before towing your motorhome.

NOTE

Do not tow the vehicle if the key cannot be turned in the ignition lock.

If the key cannot be turned, the ignition lock remains locked and the vehicle cannot be steered. With the engine not running, there is no power assistance for the braking and steering systems. In this case, it is important to keep in mind that a considerably higher degree of effort is necessary to brake and steer the vehicle. The vehicle must not be towed with the front axle raised and key in position two in the ignition lock, as the drive wheels could then lock due to the acceleration skid control (ASR). See the Sprinter Operators Manual for information on the ASR.

Safety Check List

Your Airstream motorhome should be given a thorough safety check before a trip. Regular use of the following list will provide safe operation of your motorhome 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 and loading placard on the driver’s door B-pillar.
2. Turn off remote LPG valve switch.
3. Check that macerator hose, city water hookup, TV cable/satellite, and all exterior components are unhooked and properly stowed.
4. Check that all external compartments and filler openings are properly closed, latched, and/or locked.
5. Check that items stored on exterior of vehicle are securely tied down.
6. Verify if any items stored on exterior of vehicle would present a clearance problem.
7. Follow all automotive manufacturer’s recommendations on checking and filling fluid levels.
8. Check exterior lights and general condition of vehicle.

Driving

Interior Check List (Before Driving)

1. It is important that all doors be completely closed and locked during travel.
2. Turn off living area water pump.
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. Stow galley flip up shelf and pedestal tables.
6. Check that counter tops, range top, and shelves are clear of even small items that could become projectiles during an emergency braking or accident.
7. Retract and latch the wetbath wall.
8. Do not cook unless motorhome is parked and stable. Hot food or liquid could scald due to a sudden stop or accident while traveling.
9. Be sure all LPG controls on the appliances are turned off.
10. Check that any internal stowage is securely held in place
11. Check that lights and switches are set in positions safe for travel.
12. Adjust the driver's seat so that you can easily reach and operate all controls. Make sure seat is locked in position. Do not adjust driver's seat swivel or recline mechanisms while vehicle is moving. The seat could move unexpectedly causing loss of control.
13. Check that all passengers have seat belts on properly.
14. The freedom of movement of the brake and accelerator pedals must not be impaired in any way.
15. Check rear view mirrors adjustment, inside and outside. Adjust window coverings if necessary for maximum visibility.
16. Secure children in a federally-approved child restraint device.

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Maintenance

Maintenance Schedule



WARNING

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

NOTE

See appliance manufacturer's literature for further information.

Every 1,000 miles or 60 days	
Battery	Visually inspect battery and cables for corrosion.
Smoke and CO Alarm	Test and replace battery as required.
Tires	Check tire pressure (See Specifications).
GFI Circuit Breaker	Test and record.

Every 5,000 miles or 90 days	
Door Step	Lubricate and inspect moving parts.
LPG Regulator	Check bottom vent for obstructions.
Wheel Lug Nuts	See Specification Chart in this manual for wheel torque ratings.
7-Way Plug	Spray with contact cleaner.

Every 10,000 miles or 6 months	
Tires	Inspect and rotate.
Spare Tire Carrier	Lubricate moving parts.
Windows, and Door Seals	Clean with mild detergent and coat with "Slipicone."
Exterior	Wax

Every year	
Battery	Clean, neutralize, and coat terminals with petroleum jelly.
LPG Tank	Have purged by LPG supplier.
Seams	Check and reseal exterior seams, windows, lights, and vents as needed.

Suggested Maintenance and Replacement Parts

(Part numbers listed are Airstream part numbers and can be ordered by calling a certified Airstream dealer.)



WARNING

Always replace the bulb or light fixture with the correct bulb for that light or matching fixture. Failure to heed this warning could cause fire, property damage, personal injury, or death.

Exterior 12-Volt Lighting – For additional exterior lights refer to your Chassis Owner’s manual.	
Patio Light	912 bulb PN – 14831WR
NOTE: Most Exterior Lighting is LED and a replacement fixture will be required.	

Interior 12-Volt Lighting	
Rope Light	PN – 512310
Shower Light LED	PN – 512376 (replacement fixture required)
Reading Light LED	PN – 512392 (replacement fixture required)
Eyeball Light LED	PN – 512603 (replacement fixture required)
Recessed Spot Light LED	PN – 512463 (replacement fixture required)
Courtesy Light LED	PN – 512377 (replacement fixture required)
Wardrobe Light Single LED	PN – 512736 (replacement fixture required)
Wardrobe Light Double LED	PN – 512737 (replacement fixture required)
NOTE: Most Interior Lighting is LED and a replacement fixture will be required.	

Replacement Fuses – For additional fuses refer to your Chassis Owner’s manual.		
Cable Kit	7.5A ATC Fuse 12VDC	PN – 500773-07
Solar Charging System	10A ATC Fuse 12VDC	PN – 500773-10
Television Install	15A ATC Fuse 12VDC	PN – 500773-15
Battery System	150A BF1-32	PN – 512278-150
Inverter	200A BF1-32	PN – 512278-200

Replacement Breakers - USA Breakers	
10-ampBreaker, 12V DC, Type II #12V15APP	PN – 510947-10
15-ampBreaker, 12V DC, Type II #12V15APP	PN – 510947-15
20-ampBreaker, 12V DC, Type II #12V20APP	PN – 510947-20
25-ampBreaker, 12V DC, Type II #12V25APP	PN – 510947-25
30-ampBreaker, 12V DC, Type II #12V30APP	PN – 510947-30
50-ampBreaker, 12V DC, Type II #12V50APP	PN - 510947-50
30-ampBreaker, Bryant	PN - 510564-02
20-20-ampBreaker, Bryant	PN - 510564-04
20-15-ampBreaker, Bryant	PN - 510564-08
15-ampBreaker, Bryant	PN - 510564-09
20-20-ampBreaker, Bryant	PN - 510564-2020
30-20-ampBreaker, Bryant	PN - 510564-3020

Maintenance

Replacement Rivets		
	Interior	
Part Number	330127-05	330127-08
Rivet Name	AD45ABS	AD48ABS
Head Style	Dome Head	Dome Head
Body Diameter (Inches)	0.125 (1/8)	0.125 (1/8)
Hole Size	0.129-0.133	0.129-0.133
Drill Number	30	30
Grip Range In (Inches)	0.251-.312	0.376-0.500
Length Under Head (Max. Inches)	0.453	0.640
Head Diameter (Nominal)	0.250	0.250
Head Height (Max. Inches)	0.040	0.040
Typical Sheer Strength (lb)*	155	155
Typical Tensile Strength (lb)*	235	235
*Values shown are a guide only and may vary depending upon the application.		

Replacement Filters	
Air Conditioner	PN - 690323-322

Laminate Touch-up	
Seam-Fil White	PN - 360301-02
Seam-Fil Tan	360301-05
Seam-Fil Asian Sand	360301-06
Seam-Fil Asian Night	360301-08
Fil-Stik Black	PN - 28431W-01
Fil-Stik Gray	PN - 28431-02
Fil-Stik White	PN - 28430W-03
Fil-Stik Light Maple	PN - 28431W-04

Exterior Care

The following exterior care products are recommended by Airstream. Read and follow label directions. Exterior sealant should be checked and resealed once a year.

Walbernize Super Seal (PN - 28433W) - Use to clean and polish while depositing a reflective, water-proof, glaze finish. Recommend two applications a year.

Acryl-R Seam Sealer and Applicator Head (PN - 28430W [16 oz can]) - Use to seal all metal to metal seams, including but not limited to, segment seams, sides and bottom of riveted frame windows, compartment door frames, marker lights, tail lights, and anywhere a fine bead of gray sealant is required.

AdSeal Premium Quality Sealant Adhesive (PN - 365330-01 [10 oz tube-White]) - Use to seal all exterior roof components.

AdSeal Premium Quality Sealant Adhesive (PN - 365330-03 [10 oz tube-Gray]) - Use anywhere a thicker bead of gray sealant is required.

Sikaflex 221 Multi-Purpose Polyurethane Sealant (PN - 360180-04 [10 oz tube-Black]) - Use to seal below the rubrail, or anywhere a thicker bead of black sealant is required.

Tire Care

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

Tire Care Tips

To reduce the risk of tire failure, we strongly recommend the following:

1. Check the pressure in your tires, including your spare, 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 recommended level.
2. Never overload your tires. Heed the maximum load-carrying capability of your tires.
3. Check your tires frequently for scrapes, bulges, separations, cuts, or snags resulting from use. See your tire dealer immediately if any such condition is discovered.
4. 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.
5. Make every effort to avoid running over objects that may damage the tire through impact or cutting, such as chuck holes, glass, metal, etc.
6. 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.
7. Park out of the sun whenever possible when in warm climates. In desert regions, use tire covers to prevent ultra violet light deterioration to tires.

Tire Inspection and Storage

Before taking your motorhome on a trip or when removing it from an extended storage period, make it a practice to inspect the overall condition of your tires. Check for any type of condition or damage that might result in failure. A thorough check should include both inside and outside sidewalls, tread area, and the condition of hardware such as valve stems, valve caps, and wheels. The tread should be checked for any unusual wear, cracking, penetrations, and/or cuts. An uneven wear pattern can indicate misalignment or worn suspension parts.

Since many motorhomes are used seasonally and sometimes stored for extended times, it is possible that tires will take many years to wear out. Tires, as any rubber product, will age over time. If tires show cracking in the sidewall or tread surfaces that are more than 2/32-in. deep, they should be replaced before your next trip or vacation. Store your motorhome 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. If you must keep your motorhome outside, cover your tires from direct sunlight. Take your motorhome to your tire dealer for service to check or correct any of these conditions.

Maintenance

Battery (Maintenance Free)

Your Airstream motorhome is factory-equipped with a 12V, deep cycle AGM Lifeline battery.

Vendor:

Lifeline Batteries Inc.

292 E. Arrow Highway

San Dimas, California 91773

Phone: 909-599-7816

Fax: 909-599-0596

Lifeline Battery-Amp Draw

CO detector = .00025 amp

LPG detector = .00025 amp

Kenwood Stereo Memory = .001

Tank heaters bi-metal thermostat = No Draw

Magnum Inverter = .650 amps

If drawing at .750 amps per hour, within 178 hours the battery will discharge to 10.5 volts and will show 100 percent discharged. In 80 hours it will be at 11.9 volts and 65 percent capacity. Once a battery is discharged, it will begin to sulfate and lose its capacity and longevity.

A battery will discharge on its own, 2 percent per month. A battery at 13.1 volts will be at 12.84 volts in 30 days. This is .00866 per day in voltage drop, at 70°F.

NOTE

It is necessary to periodically check the battery and charge. We suggest check the batteries at least every 2 weeks in freezing weather. The temperature at which a battery will freeze depends on the condition of its charge. As an example: a fully charged battery with a specific gravity of 1.265 will not freeze until the electrolyte temperature drops to -71.3°F, while a discharged battery will freeze at +19°F.

Maintain a clean battery top and check terminals and cables for tightness and cleanliness. A dirty battery will dissipate its charge through surface contamination. Clean battery top with a damp cloth and dry thoroughly.

The terminals should be tight and free of corrosion. To clean terminals, neutralize with a solution of baking soda, rinse in clear water, and dry.

To ensure maximum battery capacity on the charge

and the discharge, the battery terminals and the inside portion of the cable connector should be scraped or brushed until both of these surfaces are shiny-bright. The cable connectors should then be reconnected to the battery and tightened. The complete assembly, battery post, and cable connector should be coated with heavy-body mineral grease, petroleum grease, or petroleum jelly.

NOTE

Reconnect the battery cables to the correct battery posts.

The red cable must first be connected to the positive (+) post and then the black cable to the negative (-) post. The polarity of your tow vehicle must also be negative (-) ground since it must always match the motorhome. Most tow vehicles are negative grounded, but always check your vehicle owner's manual to be sure.

During the winter, the batteries should be removed from the motorhome and stored in a cool, dry place, where there is no danger of freezing. They should be kept full of water, cleaned, and charged monthly. A battery that is allowed to completely lose its charge will never regain its original power or a full charge.

For battery service or replacement, go to any service station or dealer who sells and services the make of battery installed in your motorhome.

Battery Cleaning

Battery maintenance is an important issue. The battery should be cleaned using a baking soda and water mix, with a ratio of two tablespoons of baking soda to a pint of water. The cable connection needs to be cleaned and tightened regularly.

Battery Storage

The following recommendations may be helpful if the battery is to be stored:

- When storing the battery in a vehicle or vessel, it is not necessary to leave it on charge. Disconnect the negative battery cable. This will prevent inadvertent discharging of the battery which may lead to a complete discharge.
- Fully charge the battery before putting it in storage and store in a cool place.
- Boost charge the battery every 2 to 3 months to ensure maximum battery life.

Glass Mat Batteries

(Standard with Solar Panel Charging System)

The installed battery is Lifeline GLP-24.

LPG System

Your motorhome is equipped with a permanently-mounted tank for LPG with a remote fill and remote gas supply shut off switch. LPG burns with a clean blue flame. LPG is used where subfreezing temperatures are common, since it boils at -44°F. Keep in mind at these temperatures the BTU is lower than at 30°F. How long a full tank of gas will last is dependent on usage. In cold weather, when you are using the furnace, using large amounts of hot water, or cooking extensively, you will naturally use more LPG than you will in warm weather, or when doing limited cooking. On the average, with normal cooking and other appliance use, you can probably count on 2 to 4 weeks of usage from the tank, if you are not running your generator.

If you have allowed the tank to run out, air may have gotten into the lines. In this event the air must be allowed to bleed from the lines before lighting appliances. Follow the appliance manufacturer's instructions and light the appliance closest to the LPG supply tank. Then move to the next closest, etc.

LPG Tank Remote Fill

The LPG tank is filled by accessing the remote fill hookup located in the compartment under the passenger side rear fender behind the rear wheels. Be sure the fill is free of dirt. It may help to remind your LPG supplier to only use a clean fill hose to fill your tank. Turn off the remote switch when the LPG system is not in use, as it draws 12-volt current from the batteries.



WARNING

Only certified LPG suppliers should fill the LPG tank. Turn remote gas supply switch off before filling or refilling LPG tank.



WARNING

Always shut off the LPG gas when refueling the motorhome.

Remote Gas Supply Switch



A remote switch for shutting off the gas to all appliances is located in the same compartment. The switch activates an electric solenoid which opens and closes, shutting the gas off at the tank. This switch should be turned off during the filling of the LPG tank.



WARNING

Be careful when working around electricity, as it can carry dangerous amperage and cause sparks or combustion.

NOTE

The electric gas shut-off solenoid closes automatically when 12-volt power is disconnected. It will reopen when power is restored.



WARNING

All LP gas appliances must be turned off during refueling of motorhome fuel tank and permanently-mounted LPG tank.

Gas lines should be checked periodically for leaks with ammonia-free soapy water.

Maintenance



WARNING

Do not use open flame to search for problems. If gas can be smelled, appliance pilots fail to stay on, or any other abnormal situation occurs, use the remote supply switch to shut off the tank valve immediately and call on a qualified LPG service center or Airstream Service Center.



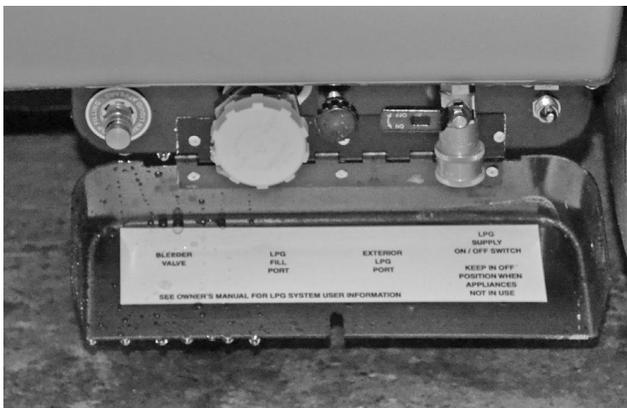
CAUTION

Moisture in the LPG tank will cause a malfunction of the regulator in controlling proper pressure. This may result in the flame lifting off the burner, or the flame may go out frequently. Many refueling stations will add approximately ¼ to ½ gal of alcohol to lower the moisture temperature. Moisture will then pass through the regulator without the formation of ice crystals.

LPG Regulator

The LPG regulators used on Airstream motorhomes are designed for low-pressure service, with a normal outlet pressure setting of 11.5-in. water column. Only personnel trained in the proper procedures, codes, standards, etc., should service regulators. Have the regulator inspected each time the tank is refilled. Replace any regulator that has had water in the spring case, or shows evidence of external corrosion or corrosion inside the spring case.

LPG Connections



A quick-connect, low-pressure LPG connection is located under the passenger side rear quarter panel behind the dual wheels. It is a utility connection to use for an outside grill or other LPG appliance.

The connections are relative easy to use. Check that the remote LPG shut off switch is turned completely off. Slide the collar on the female end back and plug the male hose into the connection. Release the collar and check that the hose is properly connected by giving a firm pull on the hose. Turn the LPG remote shut off switch on and recheck all connections to the appliances and quick connection to be sure no leaks are present.

Follow all instructions, cautions, and warnings presented in this manual when connecting and disconnecting appliances.

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, pump filter, hot and cold water lines, water heater, fresh water line low point drain valves, and faucets. Full explanations on the locations and use of these feature are explained in this section.

Before using a water system, check that the water heater bypass valve is turned to the use position. The bypass valve is located on the back of the water heater under the lounge on the roadside, accessed by opening the rear cargo doors and reaching under the lounge. See Winterizing and Storage for further information on the bypass. Check that the exterior water heater drain plug is installed. Close all low point drain valves and the fresh water tank drain valve.

To Operate the System with the Water Pump

Fill the water tank by opening the exterior gravity feed water fill door. A high-pressure RV/Marine FDA approved drinking waterhose of at least ½-in. diameter made from material that is tasteless, odorless, and non-toxic can now be inserted, or use a clean bucket and funnel to fill the tank. It's a good idea to let the water run through a hose for a short time to flush it out. RVers sometimes fill their tanks with "home" water to avoid strange water that may be distasteful to them on short outings. Remember, the more water you carry in the Fresh Water tank, the less cargo carrying capacity you have for other items.

The amount of water in the tank may be checked on the Monitor Panel, or you may fill the tank until water flows out of the fill.

Fill the water heater by opening the hot side of either the galley, wet-bath, or exterior shower faucet and turning on the water pump switch located under the

galley roof locker or by connecting to an exterior city water source. Close the cold side of all faucets. For some time the open faucet will only sputter. This is because the water heater is being filled and air is being pushed out through the lines. Once the water heater is full, a steady stream of water will come from the faucet.

Now open a cold faucet. It will sputter for a short time, but will soon expel a steady stream. All other faucets can now be opened until all air is expelled.

Once the system is filled with water and the faucets are closed, the water pump will shut off. When a faucet is opened, the pump will come back on automatically. If the faucet is just barely open, it is normal for the pump to cycle on and off rapidly.

It is normal for a pump to occasionally cycle when all faucets are off to keep the water pressure at the set point. However, if it cycles frequently (e.g. more than a few times an hour) the plumbing system, pump, and pump strainer should be checked to be sure it is not losing pressure through a slow water leak or back through the pump.

NOTE

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

NOTE

Turn the water pump off when the motorhome is left unattended.

Water Pump and Strainer



Manufacturer:

USA

Flojet

20 Icon

Foothill Ranch, CA 92610

Phone: 949-859-4945

Canada

Fluid Products Canada

55 Royal Road

Guelph,
Ontario, N1H 1T1

519-821-1900

The water pump and strainer are located under the galley, accessed by removing the galley drawer. The strainer should be visually checked for accumulation of sand or debris that could affect water flow.

To clean the strainer screen: With the clear plastic at the top, press on the sides of the strainer releasing the tabs holding the clear plastic top in place, hold the sides in, and pull straight up on the clear plastic top to remove the screen assembly. Rinse all debris from the screen. Replace the screen assembly by aligning the screen in the seating grooves and pressing gently down until tabs catch and hold the clear plastic top in place.

The inlet and outlet hoses and the strainer assembly are held in place by self-sealing, blue, quick-connect fittings. To disconnect a hose or the strainer, grasp the blue tab on the female fitting by the grooved finger edges and pull straight out on the tab. This will release the male fitting connected to the hoses and strainer. Be sure that both the female and male fitting on the disconnect are free of all debris and are not damaged before replacing. Check the pump system for leaks any time the disconnect fittings on the hoses and/or strainer are removed.



CAUTION

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.

City Water Hookup

To operate the system using a city water source:



The city water inlet is a standard garden hose thread. Use a high-pressure, RV/Marine FDA-approved drinking waterhose of at least 1/2-in. diameter made from material that is tasteless, odorless, and non-toxic. We suggest you carry two lengths of hoses so you have the ability to reach hookups further away than normal. This ensures you have a spare should one fail or become damaged unexpectedly.

Maintenance

After hooking up the hose and turning on the city water valve provided in the park, slowly open a faucet. There will be spurts and sputtering until all the air is expelled from the motorhome system. Be sure to turn the water heater bypass to the normal flow position as described earlier in this section so it will fill. If the water heater is empty, it will take some time before all the air is expelled and you get a steady flow of water at the faucet. Once a steady flow is achieved at one faucet, the others should be opened long enough to expel the air in the lines going to them.

Your plumbing system has a built-in pressure regulator to protect your lines and faucets from extremely high pressures on some city water systems. An after-market external regulator is not recommended, as it could lower the water pressure at the inlet and thus to your faucets and shower.

Sanitizing

Potable water systems require periodic maintenance to deliver a consistent flow of fresh water. Depending on use and the environment the system is subject to, sanitizing is recommended prior to storing and before using the water system after a period of storage. Systems with new components, or ones that have been subjected to contamination should also be disinfected as follows:

1. Use one of the following methods to determine the amount of common household bleach needed to sanitize the tank.
 - a. Multiply "gallons of tank capacity" by 0.13; the result is the ounces of bleach needed to sanitize the tank.
 - b. Multiply "Liters of tank capacity" by 1.0; the result is the milliliters of bleach needed to sanitize the tank.
2. Mix the proper amount of bleach into a container of water.
3. Pour the correct amount of solution (water/bleach) into the Fresh Water tank and fill with potable water.
4. Open all faucets (hot and cold) allowing the water to run until the distinct odor of chlorine is detected.
5. The standard solution must have 4 hours of contact time to disinfect completely. Doubling the solution concentration will allow for contact time of one (1) hour.
6. When the contact time is completed, drain the tank. Refill with potable water and flush the plumbing of all sanitizing solution.

NOTE

The sanitizing procedure outlined above is in conformance with the approved procedures of RVIA ANSI A 119.2 and the U.S. Public Health Service.

Exterior Shower



Remove and drain the hose, and open the valves before opening the low point drain lines for winterization.

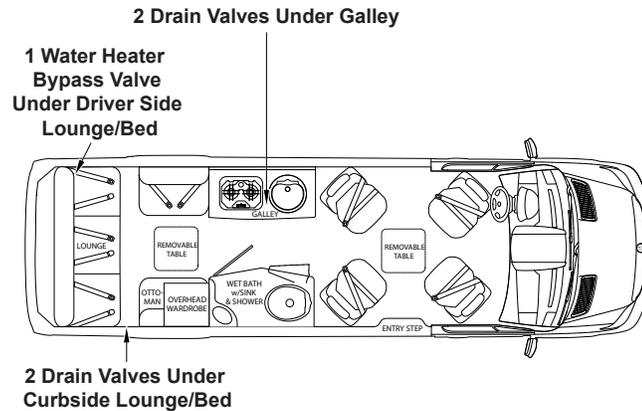
Heated Fresh Water Tank



The Interstate motorhome has 12-volt heat pads installed with the fresh water and Gray Water holding tanks to help prevent freezing. Operating range is 44°F - 64°F. The tank pads are controlled by a lighted switch located on the forward shower wall just inside the sliding door. The switch is lit when the pads are on. **Battery power will last about 4 hours** unless the unit has a 120-volt source (generator or shoreline) to operate the inverter/charger. To conserve battery power in a remote location RV, non-toxic antifreeze may be used to protect the tanks in freezing conditions.

Drain Valve Locations

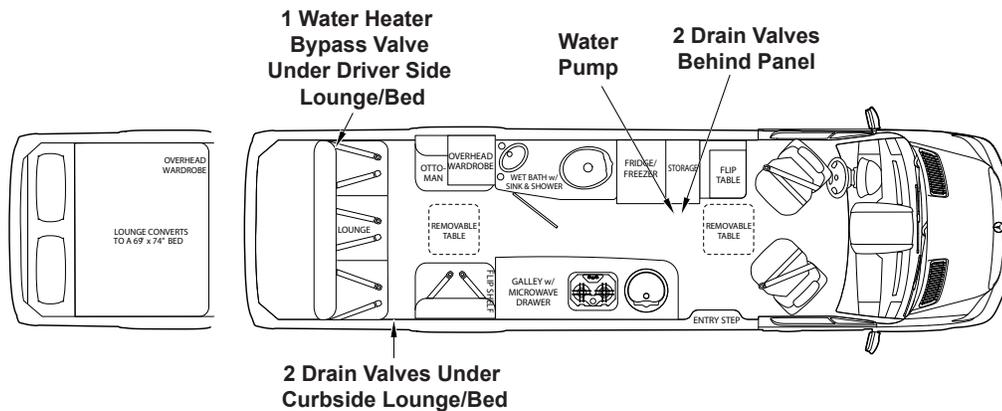
(Excludes Grand Tour Model)



The fresh water system has five fresh water line low point drain valves. There are two under the galley accessed by removing the drawer and two under the curbside lounge or bed accessed by removing the cup holders. The cup holders lift up and out of the armrest, and one water heater bypass valve located under the driver side lounge or bed.

The fresh water tank drain valve is located on the front of the tank pan under the motorhome.

(Grand Tour Model)



The fresh water system has five fresh water line low point drain valves. There are two beside the fridge in front of the storage area accessed by removing the panel and two under the curbside lounge or bed accessed by removing the cup holders. The cup holders lift up and out of the armrest, and one water heater bypass valve located under the driver side lounge or bed.

Maintenance

Shut Off Valve

There is one shut off valve in the motorhome. It is for the toilet and is on the water feed line beside the toilet base.

Toilet

Manufacturer:

USA: Thetford Corporation

7101 Jackson Road,

Ann Arbor, MI 48103

(1-313-769-6000)

Canada: Thetford Sanitation Ltd.

2710 Slough Street Mississauga,

Ontario, Canada, L4T 1G3

(1-888-215-5410)

The RV toilet in your Airstream is a design that has been used for many years. In normal use, when you are hooked up to city water, both pedals are depressed together. This dumps the sewage and flushes fresh water down the side of the bowl. Water will continue to run into the bowl for a short time after the pedals are released. Follow the manufacturer's instruction on operating, cleaning, and sanitizing toilet.

NOTE

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.

Troubleshooting

1. Leaks:
 - a. Back of toilet: check water supply line connection at water valve. Secure or tighten as necessary. If leak persists from water valve, replace.
 - b. Vacuum breaker leaks while flushing: replace vacuum breaker or water module, depending on model.
 - c. Between closet flange and toilet: check flange nuts for tightness. If leak continues, remove toilet and check flange height. Use Thetford spacers to adjust, if necessary, to 7/16-in. above floor. Replace flange seal.
2. Toilet won't hold water:
 - a. Check for and remove any debris from blade-ball seal track.
 - b. Check blade/ball seal compression mechanism. If blade/ball seal is worn, replace.
3. Harder than normal pedal or hand lever operation: Apply light film of Thetford Toilet Seal Lubricant & Conditioner or silicone spray to blade/ball. (Note: To avoid damage, do not use spray lubricants other than silicone.)
4. Poor flush: Pedals or hand levers must be held fully open during flush. A good flush should be obtained within 2 to 3 seconds. If problem persists, remove the water supply line and check flow rate. The flow rate should be at least 10 qt (9.5 L) per minute.

Maintenance

If the bowl-sealing blade does not operate freely after extended use, it may be restored to its original, smooth operating condition by applying a light film of silicone spray to the blade. To clean the toilet use Thetford Aqua Bowl or any other high grade, non-abrasive cleaner. Do not use highly concentrated or high acid content household cleaners. They may damage the rubber seals.

Removal

1. Shut off water valve behind toilet or main water supply and flush toilet.
2. Disconnect water supply line from toilet. You will probably find a small mirror very useful.
3. Remove mounting nuts.
4. Cover riser or tank inlet with cardboard to prevent debris from falling into tank.

NOTE

Always replace flange seal when toilet has been removed.

Toilet Winterizing

Draining Method: Turn off motorhome's water supply. Drain toilet bowl. Disconnect supply line at water valve. Completely drain the toilet's water supply line.

NOTE

To avoid damage when using air pressure to blow water from the lines, make sure toilet valve is in the open position.

NOTE

If water is frozen in the toilet, do not attempt to flush until the ice thaws.

Antifreeze Method: Use RV, non-toxic antifreeze only.

NOTE

Never use automotive type antifreeze.

Storage and Winterizing

NOTE:

Sprinter recommends disconnecting the current to all chassis electric consumers using the battery isolator switch if the vehicle sits for periods longer than 2 months. It is located to the right of the accelerator pedal in the driver's foot well. Slide the red release down and pull it off the post. This will save jump starts, battery charge ups, and possible battery damage and replacement. The Sprinter Operator's Manual describes its location, operation, and cautions in detail.

When storing your motorhome, use the same precautions as you would in your own home in regard to 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 water heater and the Fresh Water tank. Instructions for draining the water system are explained in the following paragraphs on winterizing.

Twice a year, or after a long storage period, we suggest you take your unit into your Airstream dealer for a check-up and cleaning of the gas-operated appliances.

The main consideration in winterizing is to guard against freezing damage to the fresh water lines, the waste drain lines, the waste holding tanks, the water heater, and the batteries.

Plan your winterizing ahead and be sure the holding tanks are drained and flushed thoroughly at a proper disposal station. After dumping tanks, add a quart or two of RV, non-toxic antifreeze to one of the holding tanks and start the macerator pump. Run the pump until the RV, non-toxic antifreeze comes out the end of the pump hose. Leave dump valves open. As extra protection, open the toilet valve and add a cup of RV, non-toxic antifreeze to the black tank and pour a cup of RV, non-toxic antifreeze into a sink drain to protect the holding tanks and valves from residual water freezing. (This is very important, as the frozen sewage could seriously damage the tank.)

Maintenance

Motorhome Winterization

1. Level the motorhome 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 valves for the hot and cold water lines, the fresh water tank drain valve, and water heater drain. There are three fresh water line low point drain valves. There is one under the galley accessed by removing the drawer. In the lounge model, there two under the curbside lounge accessed by removing the cup holders. The cup holders lift up and out of the armrest. In the twin bed model there two under the curbside bed accessed by lifting the mattress. The fresh water tank drain valve is located on the front of the tank under the motorhome. The water heater drain valve or plug is located on the water heater and is accessible through the exterior water heater access door. Remove the plug or open the valve and allow water to drain. If a level surface is not available, park the motorhome facing slightly uphill until water draining ceases and then downhill until water draining ceases.
4. Follow the winterizing instructions for your toilet on the preceding page of this manual.
5. While the water is draining from the systems remove, drain, and store the wet bath and the exterior shower hoses and shower heads.
6. After the water has stopped running, apply at least 60 lb of air pressure at the city water inlet. This can be accomplished at a service station if no air compressor is available. Air fittings with regulators can be purchased for the city water inlet. Be sure the toilet flush valve, toilet shut off valve, all drain valves, and all faucets are open and the pump outlet hose is disconnected.
7. Water pump: Remove quick-connect outlet fitting from the pump and turn the pump on briefly to pump out any remaining water from the pump head and lines from the tank. Check the water pump strainer to be sure no water remains. There should be very little water if the tank is drained. Be sure to have a catch pan or a rag under the pump to prevent water from spilling into the motorhome. Leave the fittings disconnected from the pump until the system is ready to be used again. Leave a note on the water pump switch that the plumbing is not connected.
8. Remove the house batteries from your motorhome and store in a cool dry place where there is no danger of freezing. It is very important for optimum life of your battery to check it periodically and to keep it fully charged. This is especially true in winter months, when the temperature may drop below freezing. If the period of storage is for 30 days or less, you may turn off the battery disconnect switch rather than remove the battery. Continue to check and recharge the battery as needed, at least weekly in severe weather.
9. Remove any items (food, cosmetics, etc.) from the interior that might be damaged by freezing, or might damage the motorhome if containers break.

For additional winterizing protection, add RV, non-toxic antifreeze (approved for drinking water systems) to your water lines using the following procedure:

1. Reconnect all lines except the one to the pump inlet port and close all drain valves.
2. Turn the water heater bypass valve to its bypass position. The valve is located on the back of the water heater and accessed through the rear doors under the curbside rear lounge seat on the rear lounge model, and through access hole cut in the roadside twin bed top on the twin bed model.
3. Attach a length of hose to the waterpump inlet port. This piece of hose should be long enough for the free end to be inserted into and reach the bottom of a RV, non-toxic antifreeze container.
4. Check that all interior water faucets are still open.
5. Insert hose length into container containing, RV, non-toxic antifreeze, turn the pump on, and run the water pump until the RV, non-toxic antifreeze solution fills all water lines. Flush toilet.
6. Open exterior shower faucet until RV, non-toxic antifreeze comes out of the hose, shut off the valve, and remove and drain valve/hose assembly.
7. Close water fixtures as the RV, non-toxic antifreeze begins to come out. Shut off the pump when RV, non-toxic antifreeze has been distributed throughout system, and then reopen all faucets to relieve pump pressure.
8. Disconnect the hose length from the pump inlet fitting, and reconnect water system inlet line.

Restoring Service

1. Re-install the fully charged house battery.
2. Close the low point drain valves, holding tank dump valves, water faucets, and fresh water tank drain.
3. Reconnect water pump line.
4. Add water to the fresh water tank.
5. Turn the water pump on.
6. Open and close faucet valves one at a time until water runs clear at all faucets signaling RV, non-toxic antifreeze is flushed out of lines. Go back and recheck water clarity at all faucets.
7. Turn off water pump.
8. Hook up city water, open faucet valves, and recheck water clarity.
9. Replace water heater plug or close drain valve and reset water heater bypass to the "in use" position.
10. Fill water heater.

Drain and Waste System

The drain and waste system of your motorhome includes separate Gray Water and Black Water tanks, remotely operated electric dump valves for each holding tank, a macerator pump, and a high pressure hose with a drip proof valve on an electric reel.

This self contained system enables you to use the toilet, sink, and wet bath until a suitable disposal facility is available.

The Macerator Pump

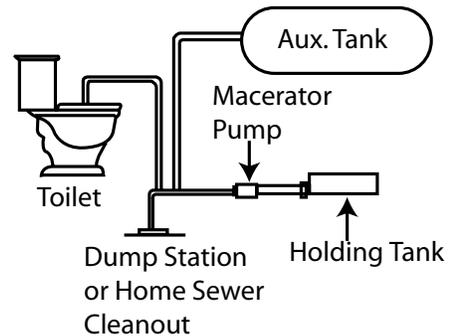
The portable waste pump is the ideal solution for emptying holding tanks on motorhomes and avoiding dump stations. The macerator section grinds waste down to a particle size of 1/8-in. maximum. The waste pump will macerate and pump all waste and tissue normally found in recreational vehicle waste systems.

Macerator Impeller Release Feature



After long periods of non-use, a stuck impeller can be easily broken loose with a screwdriver inserted in the motor shaft slot. Remove the rubber boot, turn the shaft clockwise, and replace the rubber boot.

Macerator Applications



Empty holding tanks when no dump stations are convenient.

Transfer waste from holding tank to an auxiliary tank.

The macerator pump can be used to empty the holding tank into any convenient sewer receiver such as a sewer clean-out at your home.



The waste hose is pressurized when operating the macerator pump. Secure the loose hose end at the disposal facility end with supplied inlet adaptors before turning on pump.

The high-pressure waste hose is stored on an electric hose reel and connected to the Discharge Port Adaptor. It has a threaded, drip-proof valve with a versatile, two-size, threaded adaptor allowing the valve to be connected to 3 sizes of threaded inlets, including an exterior home sewer clean-out. The adaptor snaps

Maintenance

over the valve threads. A rubber ring is also provided to lodge into a non-threaded inlet. If the rubber ring seems loose when used, Airstream recommends using some type of weight to further secure the hose.

Each holding tank, the macerator pump, and macerator pump electric hose reel have individual switches which are located in the roadside Utility Compartment. Pressing a dump valve switch and holding it for 2-3 seconds until it is lit opens a holding tank valve. Each valve switch has a light that illuminates to let you know the valve is opened. Pressing it again for 2-3 seconds closes it. The macerator pump has an ON/OFF toggle switch. The reel has a switch for retracting the hose only, it is deployed manually.

NOTE:

Do not run Macerator pump more than 15 minutes continuously. Do not run the Macerator pump dry for more than 30 seconds. THE MACERATOR WILL NOT HANDLE HARD SOLID OBJECTS, SANITARY NAPKINS OR RAGS. Never put wet strength paper towels, tissues, or sanitary napkins in your holding tank. They will not dissolve and will jam the mechanism of the dump valve and the macerator pump impeller. Colored toilet tissue is slower to dissolve than white. Most RV accessory stores offer tissue designed for RVs that will completely dissolve.

Empty the Black and Gray Water Holding Tanks

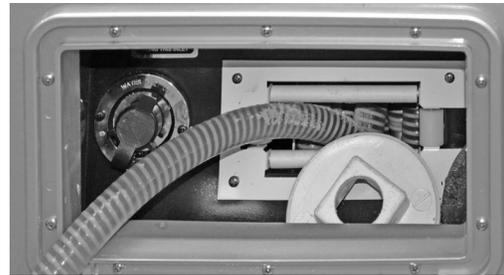
NOTE:

Watch all connections while dumping. Close dump valve immediately, turn off pump, and close hose drip-proof valve if a leak is noticed.

1. Remove the high pressure waste hose by opening the hose reel compartment door and manually pulling out the hose. Secure the hose at the disposal facility inlet using the threaded or rubber adaptor and open the drip proof valve on the end of the hose. **IMPORTANT:** The pressure from the macerator pump may push the hose from the inlet if the hose is not secured properly.
2. Open the Black Water valve. Empty the Black Water tank first and the Gray Water tank second, using the Gray Water to help flush the pump and hose of Black Water sewage.
3. Turn on macerator pump to liquefy and pump out the solids in the tank.
4. When black tank is empty, turn off the pump.

5. Open the Gray Water tank valve and turn on the pump. Run until just before the pump runs dry. Any trickle of gray water left will remain in discharge hose behind drip proof valve and is typical. Remember, running the pump dry for more than 30 seconds could damage the pump.
6. Turn the drip-proof valve off and remove the hose adaptor from the dump station inlet. Retract the hose into the hose reel by pressing the reel switch located in the Utility Compartment. Be sure to guide the hose onto the reel evenly. Close the compartment door.

In case of electric system failure, there is a manual override on the electric dump valves located on each side of the valve. Use a flathead screwdriver or an Allen wrench to turn the override screw clockwise or counterclockwise according to side you access to open and close the valve. The direction is labeled on the 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 Black Water tank first and then the Gray Water tank using the Gray Water to flush the system.

This practice will avoid the accumulation of solids in the tank, which could lead to an unpleasant cleaning job.

Inside the macerator hose reel utility compartment is a water hose connector for the "black tank flush." To use, hook up a garden hose and turn it on full force. Within the tank, a head with multiple holes will spray the interior surface of the tank. Once the tank is about half full, turn the garden hose off and flush the water from the tank using the macerator pump.

Should solids accumulate, fill the tank about half full with water with the black tank flush, and then drive the motorhome 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.

Winterizing Pump

Plan your winterizing and storage ahead, and be sure the holding tanks are drained and flushed thoroughly. This is very important, as the frozen sewage and water could seriously damage the system. After dumping tanks, add a quart or two of RV, non-toxic antifreeze to one of the holding tanks and start the macerator pump. Run the pump until the RV, non-toxic antifreeze comes out the end of the pump hose. Leave dump valves open. As extra protection, open the toilet valve and add a quart of RV, non-toxic antifreeze to the Black Water tank and pour a quart of RV, non-toxic antifreeze into a sink drain to protect the holding tanks, valves, and pump from residual water freezing. Pump to fill the hose completely.

Heated Tanks

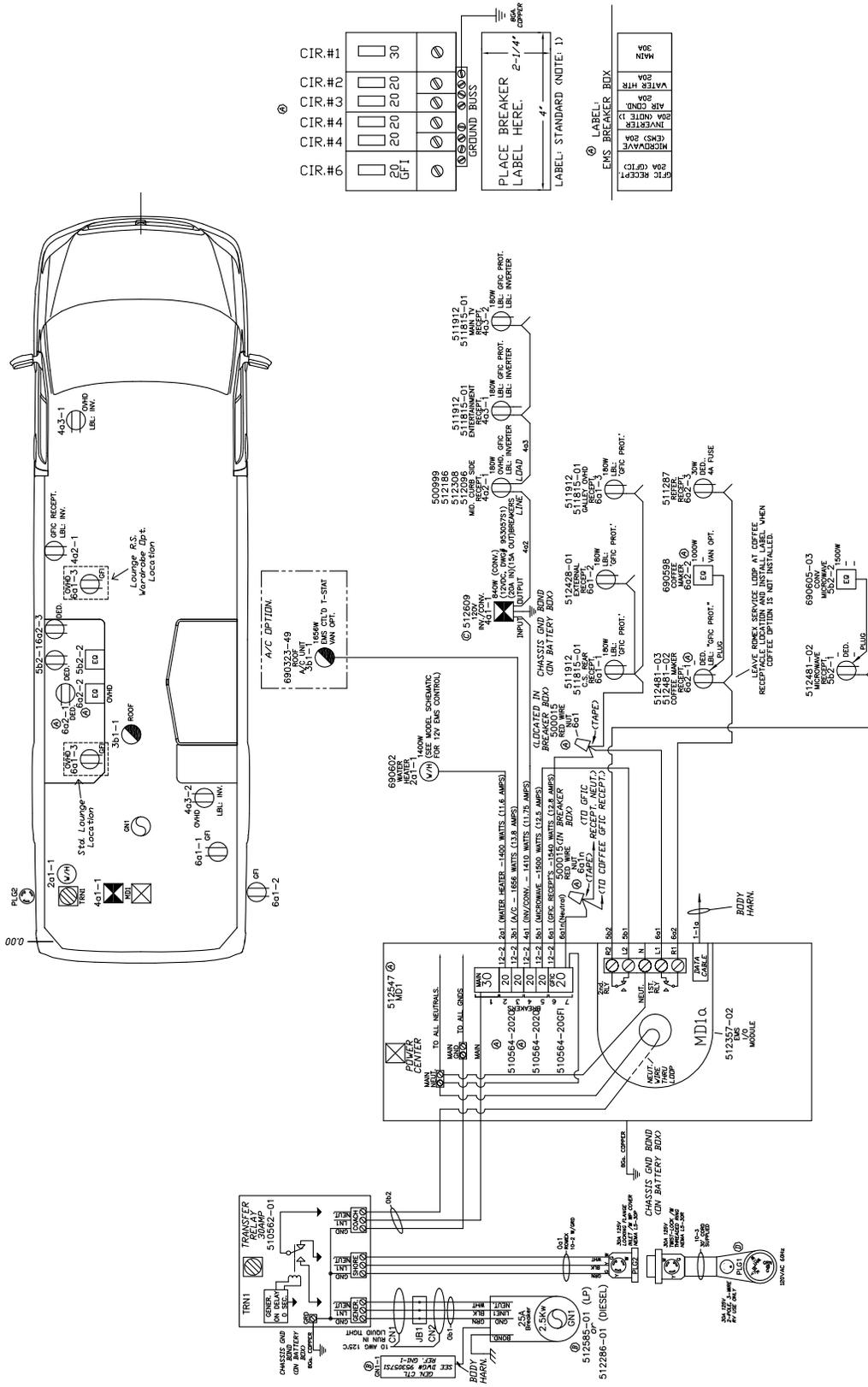
The Interstate motorhome has 12-volt heat pads installed with the fresh water and Gray Water holding tanks. The black tank is installed above the floor where heat from the furnace will keep it from freezing. The heat pads lighted switch is located on the forward shower wall just inside the sliding cargo door. The switch illuminates when the pads are activated. The heat turns on at 44°F and off at 64°F. The heating pads consume 6-10 amps of battery power per hour depending on environmental conditions. To conserve/charge batteries, use a 120-volt source (generator, shoreline) to operate the inverter/charger. To conserve battery power or fuel in a remote location, RV, non-toxic antifreeze may be used to protect the tanks in freezing conditions. Plan ahead. In extreme cold weather, the heating pads may not suffice in keeping the tanks from freezing. Be safe and winterize.

NOTE:

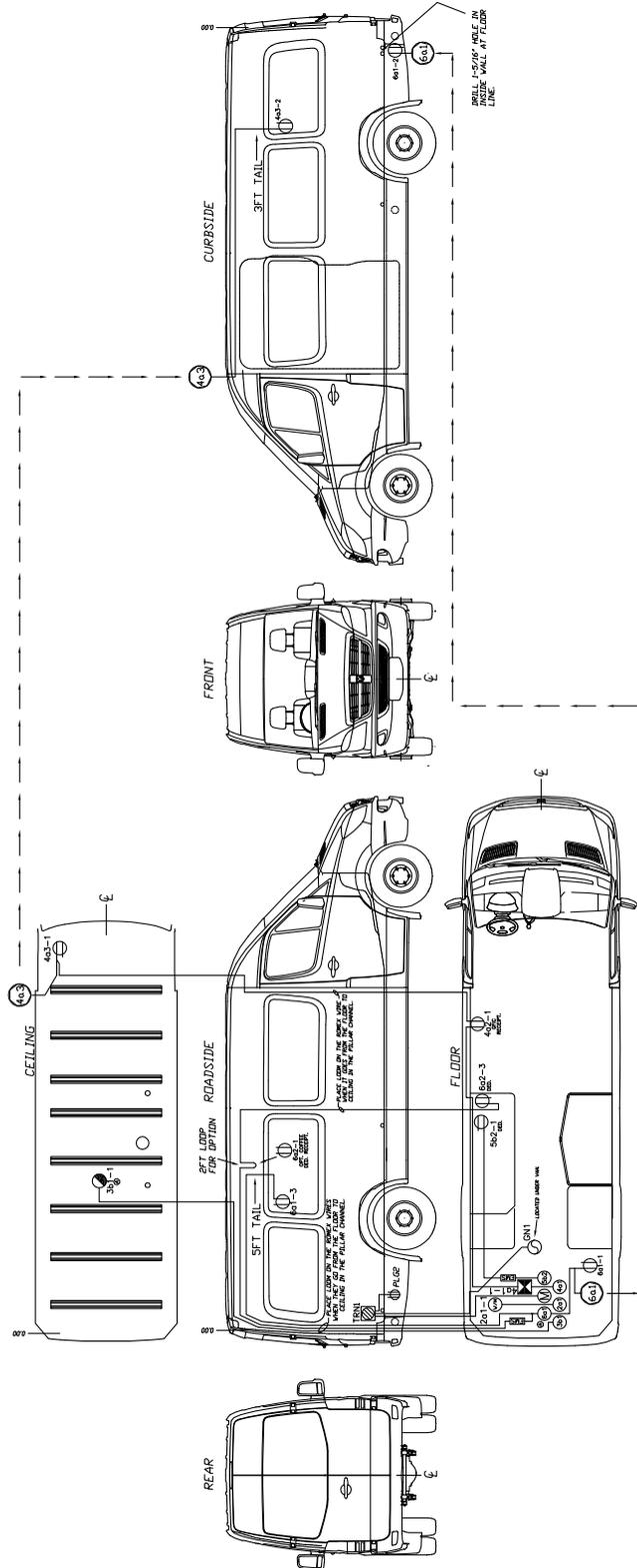
In very cold weather, winterizing the motorhome is recommending to prevent damage to the waste systems. Use common sense and winterize as needed.

Maintenance

30-Amp 110-Volt Schematic USA



110-Volt Location Route



Maintenance

12-Volt Standard Parts List

(Grand Tour Series)

D+Aa	* 512301	BUZZER,DUAL TDNE WARNING	1 EA
30A	* 512450 (KIT)	STEP, SGL SLIDE, ELEC, CTL BOX	1 EA
30A-1	* SEE 30A	STEP, SGL SLIDE, ELEC, COACH STEP	1 EA
(M4d-2, M4a1, 30A-2)	* REF 512794	SW. ASS'Y BLK (DISC, TNK HTR, STEP)	REF EA
30A-3	* 512450 (KIT)	DOOR SWITCH	1 EA
30A-4, 30B, 7A-2, 7B-2	* 510844-01	RELAY BOSCH 0 332 209 151	4 EA
1-1	* 512357-01	DISPLAY, 120VAc EMS, 30AMP	1 EA
(2A, 2Aa, 2C, 2D)	* 512795	SW. ASS'Y BLK(CEIL,DIM,AISLE,PATIO)	1 EA
2A-1 thru -8, 3A-1 thru -3	* 512718	SPOT LIGHT w/FROSTED LENS, L.E.D.,	11 EA
2Ab	* 512721	SW. DIMMER MODULE #A1-DIM-04	1 EA
(3D, 4A, 3C, 3A)	* 512796	SW. ASS'Y BLK (BATH, IND ,PUMP , GAL)	1 EA
3D-1 thru -2	* 512376	LT w/SS TRIM RING, SURF. MNT, LED	2 EA
2C-1 thru -3	* 512377	Courtesy Light w/SS Bezel, L.E.D.	3 EA
2D-1	* 512793	LIGHT, PATIO LED 12VDC (CHROME)	1 EA
2E	* 512709	SWITCH-SLIDE DIMMER BLK	1 EA
2E-1	* 512740	LIGHT, LED FLEX TAPE 112" W/ 180°	1 EA
3B	* 690417-05	SWITCH-DUAL WATER HEATER #9123	1 EA
3B-1	* 690602	WATER HTR 6GAL W/ELEC & CONN	1 EA
3C-1	* 602177-01	PUMP, WATER 2.9GPM, 12VDC, FLDJET	1 EA
4-1	* 512398	AMPLIFIER ANT. TV (WHT) WINEGARD	1 EA
4-3	* 512563	PWR S., DC/DC 12Vdc to 5Vdc	1 EA
4-4	* 512803	LIGHT-READING LED W/SNG SWITCH	1 EA
4-5	* 512791	CHARGER, USB 2.1A MAX. 2-PORT	1 EA
4A-1 thru 4A-3	* 512394	POWER CONNECTOR PIGTAIL	3 EA
4A-1 thru 4A-3	* 512310	LIGHT, LED ROPE 3/8"DIA, 1' SPACING	15 FT
4A-1 thru 4A-3	* 512310-01	LIGHT, LED ROPE 3/8"DIA, CAP	3 FT
5-1	* 382058	VENT, SMOKE EXHAUST ONLY MAXXAIR	1 EA
5-2	* 690266-04	VENTILATOR, POWER	1 EA
5-4, 5-5	* 512603	LIGHT-READING	2 EA
690616	* 690395-04	FURNACE 16K BTU	1 EA
5A-1	* 690323-44	T-STAT, WALL MOUNT CCC DOMETIC	1 EA
5A-2	* 690323-49	DOMETIC A/C. W/LOAD SHED 13500 BTU	1 EA
6-1	* 690665-01	FREEZER-3.1CF NOVA KOOL (RH)	1 EA
6-2	* 690667-01	REFER-3.1CF NOVA KOOL (RH)	1 EA
6-3	* 511309-01	DETECTOR LPG	1 EA
6-3a	* SEE 6-3	IAMP INLINE	1 EA
6-4	* 512525	CO DETECTOR DUAL 12VDC w/9V BAT.	1 EA
6A	* 512434	SWITCH ON/OFF LP VALVE	1 EA
6A	* 386147	DECAL-ON/OFF LP REMOTE FILL	1 EA
6A-1	* REF. 602188	L.P.G. VALVE	REF EA
6B	* 512284-01	MONITOR, TANK, LPG, VOLT	1 EA
6Ba-1	* REF. 602188	L.P.G. TANK W/ GAGE	REF EA
6Bb-1, 6Bc-1	* 512284-02	TANK SENSOR (EXTENDED HOODS)	2 EA
6Bd-1	* 512284-03	TANK SENSOR (NO HOODS)	1 EA
7-1	* REF. 952924	12V RECEPT. INCLUDE W/ TVa1b-1	REF EA
7-2	* REF 511822	SUB WOODFER-POWERED 6.5' WEDGE	REF EA
7A, 7B	* 512410	CABLE/SWITCH WATERPROOF (BARKER)	2 EA
7A-1, 7B-1	* 512411	VALVE-ELEC.WASTE (BARKER)	2 EA
7Aaa	* 510839	6A05 DIODE INCLUDED W/ BODY HARN.	REF EA
9A	* 602205-01	SWITCH, WASTE, MACERATOR, MOM. PB	1 EA
9A-1	* 602176-01	PUMP, WASTE, MACERATOR, SELF-PRIM	1 EA
10A	* 512323	WASTE HOSE REEL KIT W/ SW	1 EA
10A-1	* SEE 10A	SWITCH INCLUDED WITH KIT	REF EA
15-1	* 512299	MONITOR, REARVIEW MIRROR +12VDC	1 EA
15-1a, PT1	* 512477-01	POSI-TAP, 20-22GA. 600V	2 EA
(15-2, 15-2a, 15-2b)	* 511948	CAMERA-REAR VIEW COLOR PIONEER	1 EA
15-2a	* SEE ABOVE	IAMP INLINE FUSE	1 EA
15-3	* 511645	'Y' ADAPTER MALE TO 2-FEMALE RCA	1 EA
15-3a	* 512056	BARREL COUPLER RCA GOLD F/F	1 EA
(30B-1, 30B-2, 30B-3)	* 704007-TAB	AWNING, FIAMMA, KIT (SW, AWN, CTL)	1 EA
-	* 512788 (Newest)	HARNES, CEILING,	1 EA
-	* 512789 (Newest)	HARNES, BODY, INTERIOR	1 EA
-	* 500773-03	FUSE, 3AMP, 12VDC, TYPE ATC	1 EA
-	* 500773-05	FUSE, 5AMP, 12VDC, TYPE ATC	1 EA
-	* 500773-07	FUSE, 7.5AMP, 12VDC, TYPE ATC	1 EA
-	* 500773-10	FUSE, 10AMP, 12VDC, TYPE ATC	1 EA
-	* 500773-15	FUSE, 15AMP, 12VDC, TYPE ATC	4 EA
-	* 500773-20	FUSE, 20AMP, 12VDC, TYPE ATC	1 EA

(REF) = Indicates that the part numbers also appears on another drawing BOM and is just referenced here.

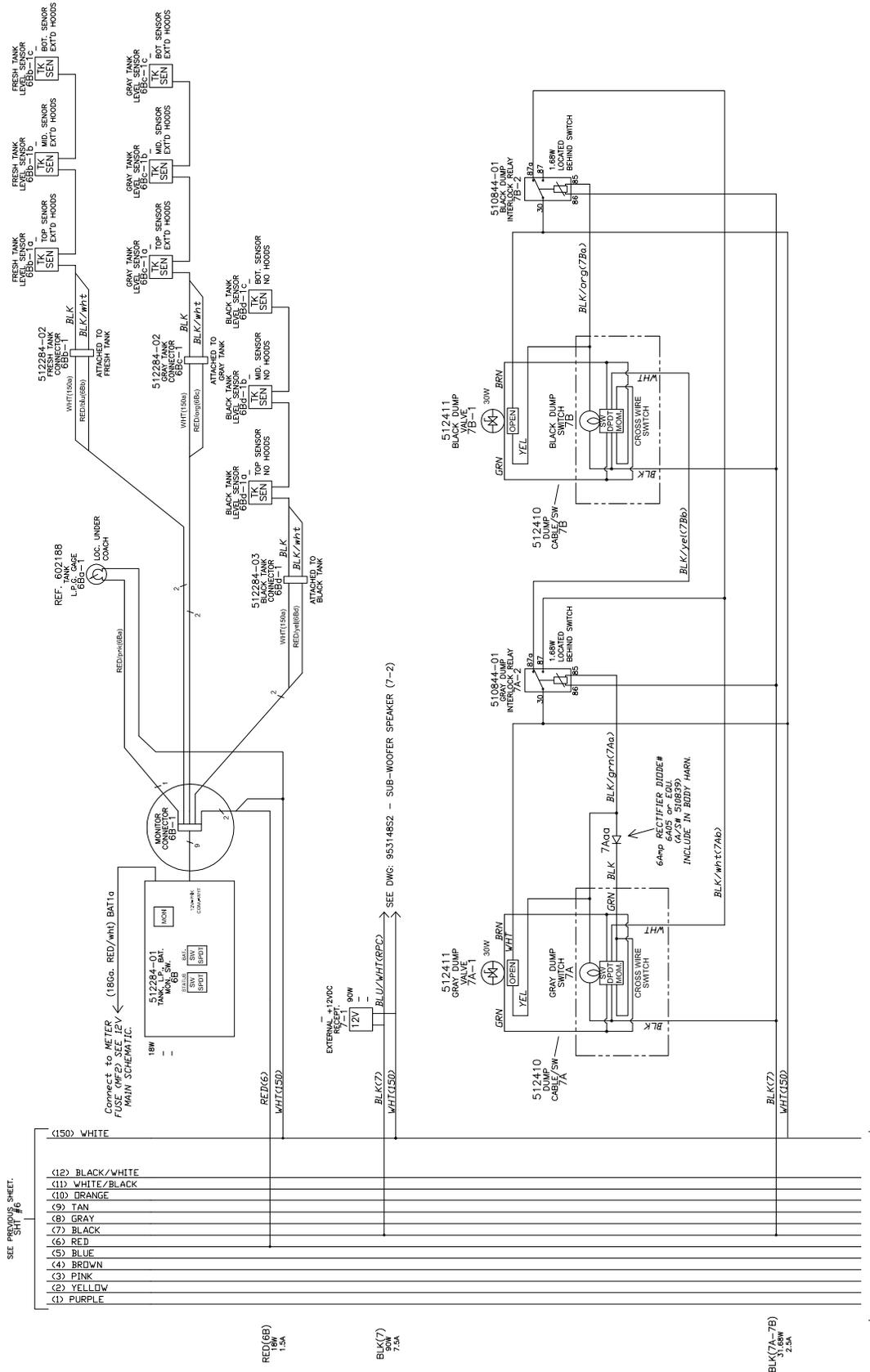
WARDROBE OPTION:

4-2	* 512736	LIGHT, L.E.D., W/SWITCH, 9-CHIP, SGL	1 EA
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SAND PEARL OPTION:

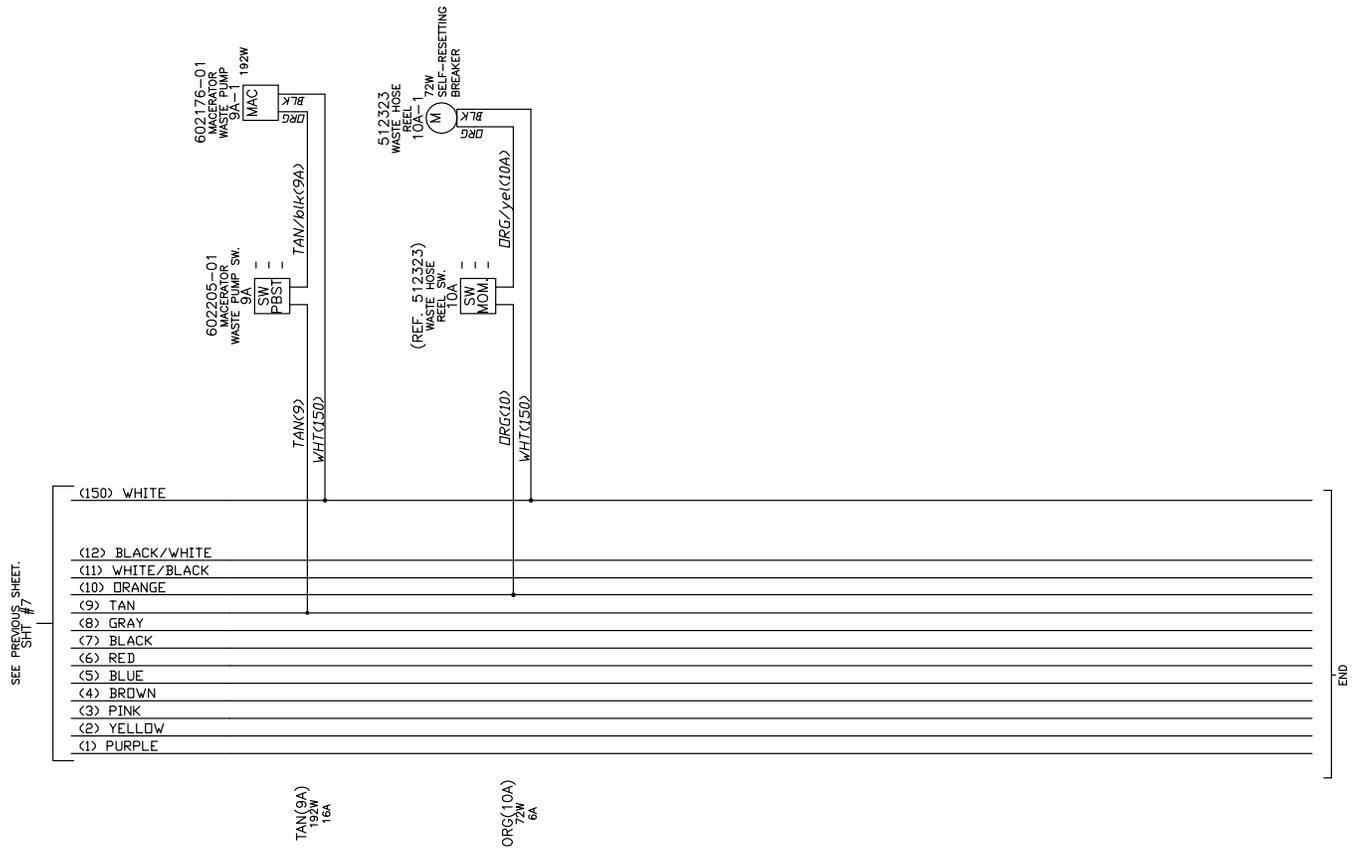
2A-1 thru -10	* 99900-948	LIGHT-LED FLUSH MGT. #69929-NI	10 EA
2A-1 thru -10	* 511695	SPOTLIGHT-BRUSHED NICKEL	-10 EA

12-Volt Model Schematic
(Grand Tour Series)

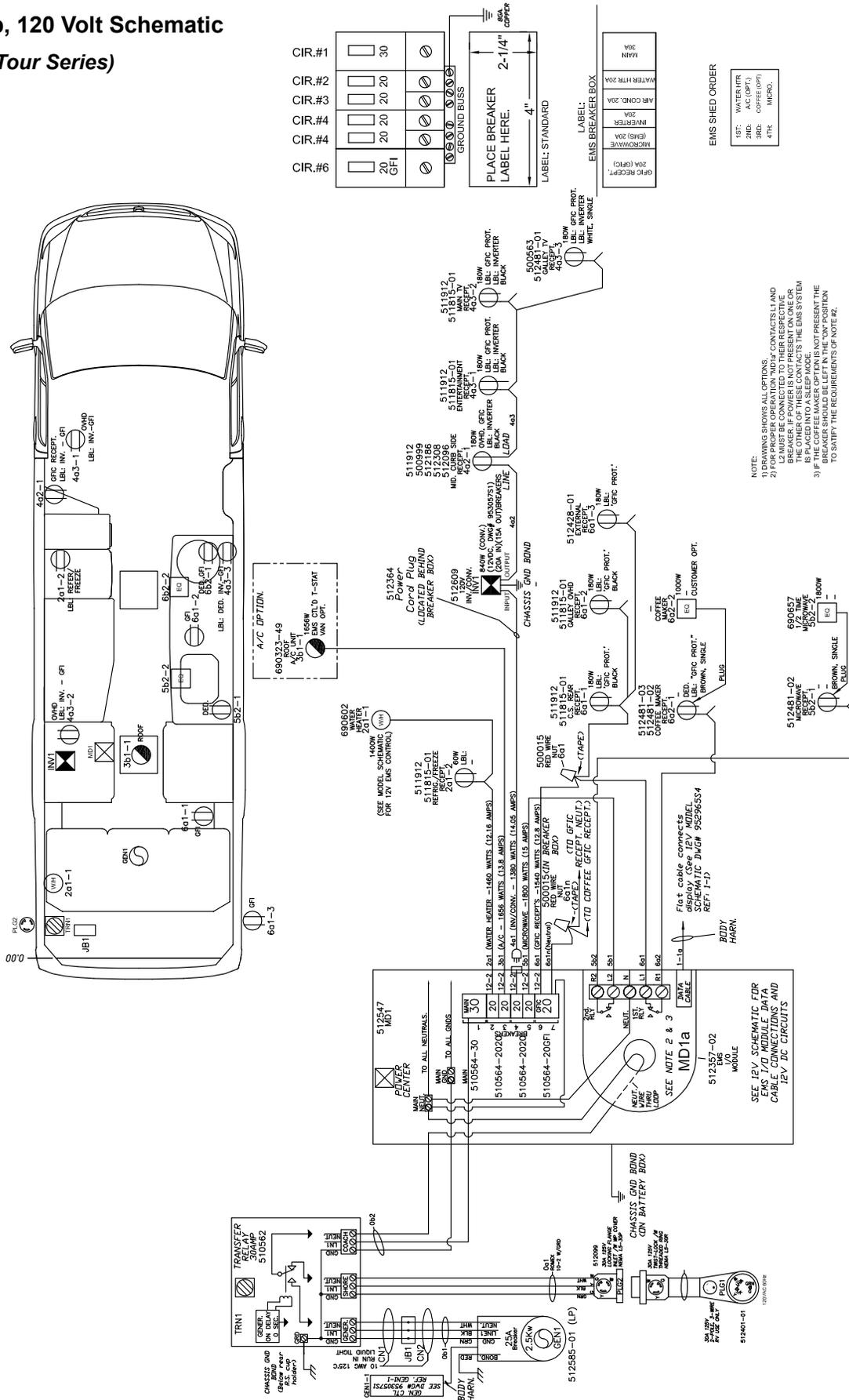


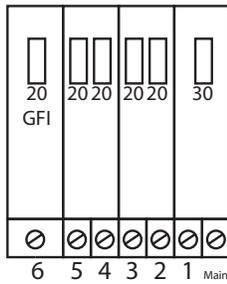
Maintenance

12-Volt Schematic (Grand Tour Series)



30-Amp, 120 Volt Schematic
(Grand Tour Series)





Standard 30-Amp Circuit Breaker Layout:

- Circuit 1. 20 amp, roof air conditioner (option)
 - Circuit 2. 20 amp, water heater
 - Circuit 3. 15 amp, coffee maker (option)
 - Circuit 4. 20 amp, goes through inverter to refrigerator receptacle, middle roadside receptacle, entertainment center receptacles, and main TV.
 - Circuit 5. 20 amp, microwave
 - Circuit 6. 15 amp, GFCI, rear, exterior, and galley receptacles.
- Breaker label content may vary. CSA includes 15-amp breakers.

Solar Panel Standard

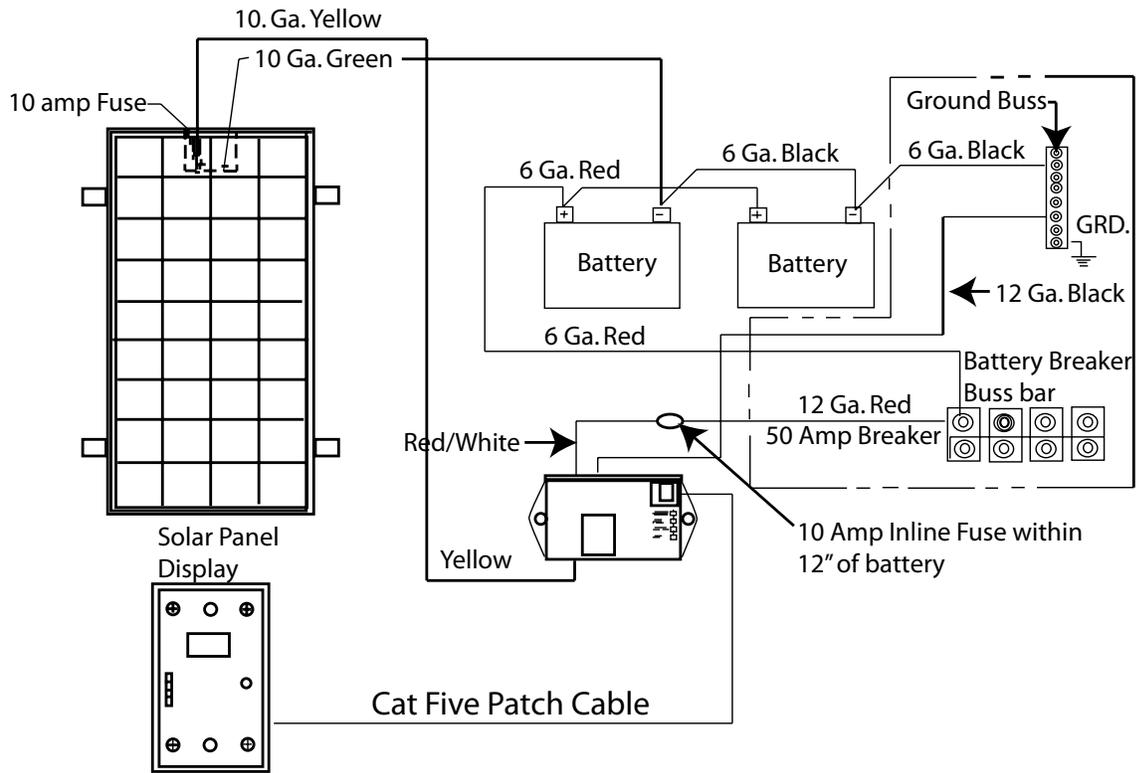
This system is installed on your motorhome. A manual on the use of the system is included with the Airstream Owner’s Blue Delivery Case.

1. A YELLOW (like the sun) positive lead runs from the solar panel to a breaker in the battery breaker buss bar under the curbside side dinette seat, third position. This bar is connected to the house battery. A GREEN (like the earth) negative lead runs from the solar panel to the chassis ground.
2. A Cat-5 patch cord for the solar panel display runs from the solar panel to the charge controller located under the curbside dinette seat.

The charge controller senses the actual battery charge and regulates the charging to prevent over charging. The system requires the 12-volt feed from the battery to operate.

Please see the solar panel manual for further information.

Maintenance



FAQs and Answers

Electrical

- 1. *When I hit my 12-volt remote kill switch, at the sliding door, it does not turn on the 12-volt inside.***

Answer: There could be two issues here. The first is that the batteries are below 8 VDC. If this is the case, there is not enough power to activate the switch. The second issue is that the remote is in the disabled position at the manual knob under the lounge. (Refer to Section 5 - Interior, for more information.)

- 2. *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 Onans Owner's manual for more information)

- 3. *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.

- 4. *What size batteries are in my Airstream Interstate?***

Answer: Interstate models have Lifeline GLP-24 series.

- 5. *My generator will not run properly while I am showing I have ¼ tank of LPG; 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.

- 6. *What is the battery disconnect switch function?***

Answer: The switch is used to cut power when the Interstate is not being used or put into storage to preserve battery charge. It disengages or engages the 12-volt power supply from the house batteries to everything but the LPG detector, CO detector, tank heaters, power lounge, and Magnum inverter.

- 7. *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.

- 8. *What is my 1000-watt Magnum inverter powering?***

Answer: It is powering both the front and rear TVs and the BLU-RAY DVD player. There is an additional outlet behind the driver's seat as well. This plug is designed for no more than 1000 watts combined power, and is intended for charging things such as laptops and phones, and TV usage. Plugging in items such as vacuums, hairdryers, etc. may harm the system.

- 9. *I have an alarm going off at my sliding door.***

Answer: Make sure your step and awnings are completely closed. If either of these are not properly closed, and the engine is running, it will cause the alarm to sound.

Plumbing

- 1. *Do I need a water regulator?***

Answer: No, your Airstream is equipped with a built in regulator rated for 65 psi.

- 2. *How do I get fresh water into my Interstate?***

Answer: You can use the on board 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.

- 3. *What is the difference between a Gray Water tank and the Black Water tank?***

Answer: The Gray Water tank holds water from shower and sink drains. The Black Water tank holds sewer water from the toilet.

- 4. *Can I run the macerator pump if there is no water going through it?***

Answer: No, it will burn the macerator up if it is run dry for more the 10-30 seconds. Also, you should not run it more than 15 minutes continuously.

Maintenance

5. *How do I use my Black Water tank flush?*

Answer: First, empty your Black Water tank, and then close your Black Water tank valve. Hook up your hose to the external hookup, run water through for a couple minutes, and then open the valve. Turn macerator pump on to empty the tank. Do this a couple times until the tank is clear. (Do not run macerator pump if tank is empty.)

6. *My Gray Water valve will not open while I have the Black Water valve open.*

Answer: True, you can only have one valve open at a time.

Audio-Video

1. *My TV reception is poor. What can I check?*

Answer: Verify if your antenna booster is set to proper selection (On- for antenna and Off- for cable satellite). You should also make sure connections are tight on your TV.

2. *Will my TVs and DVD operate while traveling down the highway?*

Answer: Yes, if you have your inverter turned on, the front and rear TVs will operate.

3. *Will the rear TV at the lounge play through the head phone jacks?*

Answer: No, only the front TV will play through the jacks if the speaker switch is turned off behind it.

4. *Does the TV play through the Kenwood dash stereo?*

Answer: No, the TV's audio is not connected to the dash radio.

Chassis

1. *Where is my spare tire located and how do I lower it?*

Answer: The spare tire is located under the rear of the Interstate. The crank access is in the rear storage compartment under the lounge. The wrench and socket are located in the Mercedes tool kit at passenger area.

2. *How do I jack the Interstate up to change a tire?*

Answer: Please refer to the Mercedes owner's manual.

3. *Where can I find my Interstate's serial number?*

Answer: A label is attached on the roadside D 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 power on and set the thermostat between 3 and 4. 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. Setting the thermostat to a higher setting, e.g. 7, will not decrease the time required for the unit to cool down to its normal operating temperature. AC/DC units cool at the same rate on DC as on AC. Normal refrigerator operating temperatures are 34°F to 40°F.

2. *The heat pump in my motorhome doesn't seem to be providing any heat; yesterday it worked great.*

Answer: The heat pump is designed to knock the chill off your motorhome. It functions when outside temperature is 45°F or greater by removing heat from the outside air. If the temperature is below 45°F, it will not provide heat.

3. *My air conditioner freezes up. What is the problem?*

Answer: In high humidity conditions, Dometic 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.

Maintenance

1. *Can I have my awning out with heavy winds?*

Answer: No this may cause damage if it is too windy. However, the awning does have a built in sensor that will automatically retract the awning.

2. *I want to clean the exterior of my Airstream. What do you suggest?*

Answer: Airstream recommends washing the Interstate using a mild, auto detergent, safe for clear coated surfaces. 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.

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 **AIRSTREAM**