Obsessed with providing the best RV ownership experience!

OWNER'S GUIDE

(Version: 2.4.20)

WELCOME TO THE ALLIANCE RV FAMILY!

Congratulations on the purchase of your new Alliance RV. We are honored that you have placed your trust in the Alliance RV Team, and it is our privilege to help you enjoy a great RV ownership experience!

One of the best ways to begin enjoying your Alliance RV experience is by taking time to read and familiarize yourself with the contents of this owner's manual along with the individual component manuals included with your new Alliance RV. Knowing how to properly operate the various systems, appliances, and components will make your first trips even more enjoyable. We would also encourage you to review the general maintenance recommendations, as these will help keep your RV in great working condition for years to come.

Your new Alliance is backed by a Limited Base Warranty and Limited Structural Warranty as outlined on the following pages. While we work to build Alliance RVs to a higher quality standard, if a warranty or service concern arises, our priority is to get you back to camping as promptly as possible. Your Alliance RV Dealer is authorized and trained in servicing the many systems unique to your Alliance RV and is a great "Ally" to assist you in finding a resolution. If for any reason it is not feasible to work with your local Alliance RV dealer, please don't hesitate to reach out to the Alliance Customer Service Team directly. Our ability and willingness to keep open lines of communication and find creative service solutions will help us navigate thru finding the best way to assist your specific circumstance. The Alliance RV Customer Service Team can be reached at:

- Phone: (574) 226-0140
- Email: service@alliancerv.com
- Address: Attn: Customer Service - 301 Benchmark Drive, Elkhart, IN 46516

Thank you again for being a valued member of the Alliance family. The entire Alliance team wishes you safe travels and looks forward to enhancing your RV ownership experience!

Happy camping,

Bill Martin
Vice President of Customer Experience

MY INFO:

Alliance RV Model (ie. Paradigm): _____

Floorplan or Model # (ie. 370FB): _____

VIN (17 Digits):

Dealership Name: _____

Dealership Address: _____

_____

_____

Dealer Phone: _____

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OWNER'S INFORMATION BAG

You will find the manuals and registration cards for individual components in your Alliance RV Fifth Wheel Owner's Information Bag.

It is important that you take time to register and activate each component warranty according to the information and timelines provided. Doing so will help any potential delays in the event your RV requires warranty service. Failure to register these warranties will not dismiss warranty coverage, although it could cause delays. Please contact Alliance Customer Service with any questions.

Alliance RV Customer Service Contact Information:

Phone: (574) 226-0140

Email: service@alliancerv.com

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VEHICLE IDENTIFICATION NUMBER (VIN)

Alliance RV vehicles all have a unique 17-digit VIN. You will find your VIN listed on the Federal Certification label located toward the front of the RV on the off-door side. The following VIN decoder identifies each digit location and its function.

DIGIT LOCATION	FUNCTION	KEY
1st, 2nd and 3rd	WMI (SAE Assigned)	**7M5**
4th	Trailer Type	F = Fifth Weel X = TBD X = TBD
5th	Model Designator	P = Paradigm X = TBD X = TBD X = TBD
6th and 7th	Length of RV	Length of RV (2 digits regardless of length)
8th	Number of Axles	1 = 1 Axle 2 = 2 Axles
9th	Check Digit	Calculated
10th	Model Year	M = 2021 T = 2026 1 = 2031 6 = 2036 N = 2022 V = 2027 2 = 2032 7 = 2037 P = 2023 W = 2028 3 = 2033 8 = 2038 R = 2024 X = 2029 4 = 2034 9 = 2039 S = 2025 Y = 2030 5 = 2035
11th	Plant Location	A = Plant 1 B = Plant 2 C = Plant 3 D = Plant 4
12th thru 17th	Serial Number	Sequential Six Digit Number (001000)

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REPORTING SAFETY DEFECTS

In the United States:

If you believe that your recreational vehicle has a defect which could cause a crash or cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA), and Alliance RV.

If the National Highway Traffic Safety Administration (NHTSA) receives similar complaints, they may open an investigation. If they determine that a safety defect exists in other vehicles, a recall and remedy campaign may be ordered. NHTSA does not become involved in individual cases between you, your dealer or Alliance RV.

To Contact NHTSA:

Website: www.safecar.gov

Address: NHTSA Headquarters

Attn: Administrator
1200 New Jersey Avenue, SE
Washington DC 20590
Toll Free Vehicle Safety Hotline: 888.327.4236
TTY: 800.424.9153

For additional information, please refer to the NHTSA website at www.safecar.gov.

In Canada:

If you believe that your recreational vehicle has a defect which could cause a crash or cause injury or death, you should immediately inform Transportation Canada's Defect Investigations and Recalls Division, and Alliance RV.

To Contact Transportation Canada:

Website: www.tc.gc.ca

Address: Transport Canada

Defect Investigations & Recalls Division
330 Sparks Street
Ottawa ON K1A 0N5
Canada
Toll Free in Canada: 800.333.0510

If calling internationally or from the Gatineau-Ottawa area: 819.994.3328

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SERVICE & WARRANTY

Alliance RV Limited Warranties

Alliance RV, LLC (Alliance RV) provides the following Limited Base and Limited Structural Warranties with this recreational vehicle which sets forth what Alliance RV will cover and what Alliance RV will do if a defect is found to exist. Please read the following warranty details closely before your purchase of the recreational vehicle.

ACCEPTANCE OF WARRANTY: When you request or accept the performance of warranty repairs under the terms of either limited warranty, you are accepting all terms of both limited warranties.

ONE (1) YEAR LIMITED BASE WARRANTY

Alliance RV provides this Limited Base Warranty for the period of One (1) Year. Warranty period starts from the earlier of (a) the date of purchase by the original retail purchaser, or, (b) if the dealer places the vehicle in service prior to retail sale, on the date the recreational vehicle is first placed in such service.

For the warranty period set forth above, this one (1) year Limited Base Warranty covers certain defects in materials and/or workmanship for the recreational vehicle manufactured by Alliance RV, and workmanship provided directly by Alliance RV, arising under normal use and service for the Limited Base Warranty period of the recreational vehicle. Alliance RV reserves the right to use new or remanufactured parts of similar quality to complete any work, and to make parts and design changes without notice to anyone. Alliance RV reserves the right to make changes in the design or material of its products without obligation to incorporate such changes in any product previously manufactured.

This Limited Base Warranty only covers a recreational vehicle sold by an authorized Alliance RV dealer and to the original retail purchaser. Note that recreational vehicles purchased in the US with the specific intent to import to Canada will NOT be covered under this Limited Base Warranty.

Alliance RV makes no warranty whatsoever with respect to the recreational vehicle beyond that contained in this Limited Base Warranty. No other person(s) are authorized by Alliance RV to establish any other obligation or liability for it regarding this recreational vehicle. Alliance RV is not responsible for any promise, representation or warranty made by any dealer or person beyond what is expressly stated in this Limited Base Warranty. No one has authority to amend or modify this Limited Base Warranty.

NOTE: This Limited One (1) Year Base Warranty is separate from the Limited Three (3) Year Structural Warranty on the following page and will expire exactly one year from the warranty period start date as identified above.

LIMITATIONS, EXCLUSIONS AND DISCLAIMER OF IMPLIED WARRANTIES:

THE LIMITED BASE WARRANTY IS PROVIDED EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE OR OTHERWISE, AND IN LIEU OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF ALLIANCE RV. IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, IN ANY, GIVEN BY LAW, WILL BE LIMITED TO AND NOT EXTEND BEYOND THE SCOPE OF COVERAGE AND BEYOND THE DURATION OF THE ABOVE ONE-YEAR LIMITED BASE WARRANTY.

IN NO EVENT SHALL ALLIANCE RV BE RESPONSIBLE OR LIABLE FOR ANY LOSS OF USE, REVENUE, PROFIT, OR FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, EXEMPLARY, OR PUNITIVE DAMAGES OF ANY KIND OR NATURE THAT RESULT FROM ANY DEFECT IN THE RECREATIONAL VEHICLE REGARDLESS OF WHETHER SUCH DAMAGES WERE FORESEEABLE. THE DISCLAIMER OF CONSEQUENTIAL DAMAGES IS NOT DEPENDENT UPON THE LIMITED BASE WARRANTY FULFILLING ITS ESSENTIAL PURPOSE.

NOTE: SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

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SERVICE & WARRANTY (CONTINUED)

THREE (3) YEAR LIMITED STRUCTURAL WARRANTY

Alliance RV provides this Limited Structural Warranty for the period of Three (3) Years. Warranty period starts from the earlier of (a) the date of purchase by the original retail purchaser, or, (b) if the dealer places the vehicle in service prior to retail sale, on the date the recreational vehicle is first placed in such service.

For the warranty period set forth above, this three (3) year Limited Structural Warranty covers certain defects in materials and/or workmanship of the **"structural components"** (as defined below) portions of the recreational vehicle manufactured by Alliance RV, and workmanship provided directly by Alliance RV, arising under normal use and service for the Limited Structural Warranty period of the recreational vehicle. Alliance RV reserves the right to use new or remanufactured parts of similar quality to complete any work, and to make parts and design changes without notice to anyone. Alliance RV reserves the right to make changes in the design or material of its products without obligation to incorporate such changes in any product previously manufactured.

"Structural components" is defined as (i) main steel frame including outriggers and cross members; (ii) laminated side walls and rear wall assembly; (iii) slideroom box assembly including sidewall, end walls, roof and floor; (iv) roof assembly; (v) floor assembly; and (vi) fiberglass cap including paint application (this structural warranty item does not cover damages to the cap such as rock chips, dents, scratches or failure to meet the maintenance requirements as outlined in the Owner's manual).

This Limited Structural Warranty only covers a recreational vehicle sold by an authorized Alliance RV dealer and to the original retail purchaser. Note that recreational vehicles purchased in the US with the specific intent to import to Canada will NOT be covered under this Limited Structural Warranty.

Alliance RV makes no warranty whatsoever with respect to the recreational vehicle beyond that contained in this Limited Structural Warranty. No other person(s) are authorized by Alliance RV to establish any other obligation or liability for it regarding this recreational vehicle. Alliance RV is not responsible for any promise, representation or warranty made by any dealer or person beyond what is expressly stated in this Limited Structural Warranty. No one has authority to amend or modify this Limited Structural Warranty.

NOTE: This Limited Three (3) Year Structural Warranty is separate from the Limited One (1) Year Base Warranty on the previous page and will expire exactly three years from the warranty period start date as identified above.

LIMITATIONS, EXCLUSIONS AND DISCLAIMER OF IMPLIED WARRANTIES:

THE LIMITED STRUCTURAL WARRANTY IS PROVIDED EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE OR OTHERWISE, AND IN LIEU OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF ALLIANCE RV. IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, IN ANY, GIVEN BY LAW, WILL BE LIMITED TO AND NOT EXTEND BEYOND THE SCOPE OF COVERAGE AND BEYOND THE DURATION OF THE ABOVE ONE-YEAR LIMITED BASE WARRANTY.

IN NO EVENT SHALL ALLIANCE RV BE RESPONSIBLE OR LIABLE FOR ANY LOSS OF USE, REVENUE, PROFIT, OR FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, EXEMPLARY, OR PUNITIVE DAMAGES OF ANY KIND OR NATURE THAT RESULT FROM ANY DEFECT IN THE RECREATIONAL VEHICLE REGARDLESS OF WHETHER SUCH DAMAGES WERE FORESEEABLE. THE DISCLAIMER OF CONSEQUENTIAL DAMAGES IS NOT DEPENDENT UPON THE LIMITED BASE WARRANTY FULFILLING ITS ESSENTIAL PURPOSE.

NOTE: SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

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SERVICE & WARRANTY (CONTINUED)

OBTAINING SERVICE

For a defect to be covered under either limited warranty, the repair or replacement must occur at an independent authorized Alliance RV dealer, or Alliance RV designated repair shop or Alliance RV facilities. Alliance RV will remedy defects in materials and workmanship covered under the Limited Base Warranty or Limited Structural Warranty, under normal use and service, caused by Alliance RV in the recreational vehicle itself only.

To obtain warranty service the original retail purchaser must do the following:

1. Within twenty (20) days of discovery of any defect to be covered by this warranty, notify an independent, authorized Alliance RV dealer or Alliance RV. Warranty services can only be obtained through Alliance RV authorized dealers and service representatives.
2. Following notification, the recreational vehicle must be taken to an independent, authorized Alliance RV dealer, or if authorized by Alliance RV, a designated repair shop. Either that dealer or repair shop, or Alliance RV will undertake appropriate corrective repair actions in instances where the defect is covered by this warranty. All costs incurred in transporting this recreational vehicle for warranty service shall be borne by purchaser unless otherwise approved in advance by Alliance RV.

If assistance is needed, you may contact Alliance RV at:

- Email: service@alliancerv.com
- Phone: (574) 226 0140
- Mail: 301 Benchmark Drive, Elkhart, IN 46516 (Attn: Customer Service)

REPAIR REMEDY; EXCLUSIVE REMEDY

Alliance RV's obligation is to address, within industry standards, any covered substantial defect discovered and reported within the warranty period provided: (a) you notify an authorized dealer within 20 days of your discovery of the substantial defect: AND (b) you deliver the recreational vehicle to an authorized dealership or Alliance RV at your cost and expense. If this primary remedy fails to successfully cure any substantial defect after a reasonable number of repair attempts, your sole and exclusive remedy shall be to have Alliance RV pay an independent service shop to perform repairs to the defect. If the defect is still incapable of being repaired, Alliance RV may, at its option, provide you the diminished value damages (the difference in purchase price and actual value of your recreational vehicle on the date of purchase). You must exhaust the primary repair remedy and this back-up remedy, and both these remedies must fail of their essential purpose before initiating any action against Alliance RV.

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SERVICE & WARRANTY (CONTINUED)

WARRANTY EXCLUSIONS

The Limited Base and Limited Structural Warranties noted above will not cover and will not apply to:

- Routine maintenance and adjustments;
- Any deterioration due to normal wear and tear;
- Defects in labor, materials, components or parts not manufactured or performed by Alliance RV;
- Modifications or alterations to the original design after the recreational vehicle leaves possession of Alliance RV;
- Damage caused by unauthorized attachments, modifications or alterations;
- Equipment or accessories installed by any party other than Alliance RV;
- Materials, components, appliances, electronics or parts which are warranted separately by the respective component manufacturer;
- Recreational vehicles used for purposes other than recreational travel and camping (By way of example only business, rental commercial or disaster relief purposes);
- Any recreational vehicle purchased in the United States with specific intent to import vehicle to Canada;
- Any recreational vehicle registered or primarily used outside the United States or Canada;
- Any water leaks or related significant damages that are a result of your failure to properly maintain the exterior seals as required in the Owner's Manual;
- Repairs or replacements made necessary as a result of your failure to follow ordinary maintenance procedures as recommended by Alliance or the manufacturer or dealer of the recreational vehicle;
- Rust or corrosion due to the environment;
- Damage caused by misuse, abuse, neglect, theft, or vandalism;
- Damage caused by improper stowing of equipment, overloading or improper load balancing;
- Damage caused by unprotected electrical hookups or power surges;
- Damage caused by extreme weather conditions such as extreme cold or heat, winds, rain, lightning, hail, ice and flooding;
- Damage caused by unauthorized repair or failure to follow instructions supplied with the recreational vehicle;
- Damage caused by the tow vehicle by the owner, owner's operation or use of the tow vehicle, improper selection or installation of towing hitch on tow vehicle, or damage to the owner's tow vehicle;
- Damage caused by road conditions, applications of salt or de-icing chemicals, gravel, sand, potholes, etc.;

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SERVICE & WARRANTY (CONTINUED)

WARRANTY EXCLUSIONS (CONTINUED)

- Fading, yellowing or aging of exterior materials and components due to exposure of UV or sunlight, or weather;
- Damage caused in-transit to or from a dealer, or to or from the consumer, or by the consumer or another;
- Recreational vehicles not originally purchased through an authorized Alliance RV dealer

EVENTS DISCHARGING ALLIANCE RV FROM OBLIGATION UNDER WARRANTY

Certain things completely discharge Alliance RV from any obligation under these warranties. By way of example, the following shall discharge Alliance RV from any express or implied warranty obligation to repair or replace any defect that results from: misuse or negligent use, abuse, or accident, neglect, unauthorized alteration, failure to provide reasonable and necessary maintenance including reasonable periodic inspections of the recreational vehicle, use of the recreational vehicle for rental, business or commercial use or any other use other than to use the recreational vehicle only for recreational and personal use.

WARRANTY REGISTRATIONS

The selling dealer will assist you in completing and submitting the Alliance RV product warranty registration form. That form must be returned to Alliance RV within ten (10) days of your taking delivery of the recreational vehicle. Failure to file this warranty registration with Alliance RV will not affect your rights under the Limited Base or Limited Structural warranties as long as you can present proof of purchase, but it can cause delays in obtaining the benefits of these Limited Warranties and may inhibit any servicing facility's ability to provide proper repairs and/or part replacement.

As stated above, some components, accessories or equipment are not covered by these Limited Warranties. By way of example, the following have coverage that may be provided by the component manufacturer: tires, batteries, generators, and some appliances & electronics and entertainment equipment. These component manufacturer warranties are separate from this Limited Base Warranty, and in some cases may be longer and/or have specific coverage provisions and requirements. In order to activate these warranties, you may have to complete registration forms, post cards or some other form of notification to the component manufacturer within a specific time period. These forms and documents will be located with the Owner's Materials packet provided with your new vehicle. You must complete and submit them to the respective manufacturer as quickly as possible, and within the time periods required by those warranties.

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SERVICE & WARRANTY (CONTINUED)

CARE AND MAINTENANCE

The owner of the recreational vehicle is responsible to perform proper care and maintenance of the recreational vehicle as outlined in the Alliance RV Owner's Manual and the owner's manuals of the chassis and other component part manufacturers. Failure to maintain the RV as noted in those manuals voids these warranties, and any damage to the RV as a result of your failure to perform such care, is not covered by the warranties set forth above.

LEGAL REMEDIES

ANY ACTION TO ENFORCE ANY PORTION OF THIS LIMITED BASE OR STRUCTURAL WARRANTIES, OR ANY IMPLIED WARRANTY, MUST BE COMMENCED WITHIN NINETY (90) DAYS AFTER THE EXPIRATION OF THE APPLICABLE WARRANTY COVERAGE PERIOD. ANY PERFORMANCE OF REPAIRS WILL NOT SUSPEND THIS LIMITATION PERIOD FROM EXPIRING, UNLESS STATE LAW PROVIDES OTHERWISE. ANY PERFORMANCE OF REPAIRS AFTER THE APPLICABLE WARRANTY COVERAGE PERIOD HAS EXPIRED, OR PERFORMANCE OF REPAIRS REGARDING ANYTHING EXCLUDED FROM COVERAGE UNDER THIS LIMITED WARRANTY SHALL BE CONSIDERED "GOOD WILL" REPAIRS, AND THEY WILL NOT CHANGE THE EXPRESS TERMS OF THIS LIMITED WARRANTY OR EXTEND THE WARRANTY COVERAGE PERIOD.

EXCLUSIVE JURISDICTION FOR DECIDING LEGAL DISPUTES RELATING TO ALLEGED BREACH OF WARRANTY OR REPRESENTATIONS OF ANY NATURE MUST BE FILED IN THE COURTS WITHIN THE STATE OF MANUFACTURE. THE ABOVE LIMITED WARRANTIES WILL BE INTERPRETED AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF INDIANA, WITHOUT GIVING EFFECT TO ANY CHOICE OR CONFLICT OF LAW PROVISION OR RULE (WHETHER OF THE STATE OF INDIANA OR ANY OTHER JURISDICTION) THAT WOULD CAUSE THE APPLICATION OF THE LAWS OF ANY JURISDICTION OTHER THAN THOSE OF THE STATE OF INDIANA. ANY AND ALL CLAIMS, CONTROVERSIES, AND CAUSES OF ACTION ARISING OUT OF OR RELATING TO THE ABOVE LIMITED WARRANTIES, WHETHER SOUNDING IN CONTRACT, TORT OR STATUTE, WILL BE GOVERNED BY THE LAWS OF THE STATE OF INDIANA, INCLUDING ITS STATUTE OF LIMITATIONS, WITHOUT GIVING EFFECT TO ANY CHOICE OR CONFLICT OF LAW PROVISION OR RULE (WHETHER OF THE STATE OF INDIANA OR ANY OTHER JURISDICTION) THAT WOULD CAUSE THE APPLICATION OF THE LAWS OF ANY JURISDICTION OTHER THAN THOSE OF THE STATE OF INDIANA.

THE LIMITED BASE WARRANTY AND LIMITED STRUCTURAL WARRANTY GIVE YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

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SAFETY PRECUATIONS

Throughout this manual, you will find the symbols shown below. This information is provided to help you avoid personal injury or death as well as damage to your RV and other property. Take the time to review all these warnings.

⚠ CAUTION

INDICATES POTENTIAL MINOR TO MODERATE INJURY AND/OR PROPERTY DAMAGE

⚠ WARNING

INDICATES POTENTIAL DEATH OR SERIOUS INJURY

⚠ DANGER

INDICATES POTENTIAL DEATH OR SERIOUS INJURY

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WEIGHT RATINGS, ASSOCIATED LABELS, LOADING AND WEIGHING

Weight Terms

⚠WARNING

PLEASE READ AND UNDERSTAND THE MANY SAFETY LABELS THROUGHOUT YOUR RV, FAILURE TO DO SO COULD RESULT PROPERTY DAMAGE, DEATH OR SERIOUS INJURY

Knowing and understand the following weight terms are a crucial step to overall safety of your RV. By becoming familiar with this information, you will be better equipped in making decisions when using your Alliance RV product.

GAWR = Gross Axle Weight Rating and is the maximum weight the recreational vehicles axle(s) are rated for.

GVWR = Gross Vehicle Weight Rating and is the maximum operating weight the vehicle is rated for when fully loaded.

UVW = Unloaded Vehicle Weight and is the weight of the manufactured completed RV.

CCC = Cargo Carrying Capacity and is the difference between what the RV weighs when there is nothing in it and what it weights when you have loaded it with your personal belongings, also including but not limited to food, water, propane and any upgrades added (ie. *solar power, washer/dryer, additional batteries etc.)*

HITCH WEIGHT = The weight of the trailer that is on the hitch of the tow vehicle when attached.

⚠WARNING

NEVER EXCEED ANY OF THE DESIGNATED WEIGHT RATINGS, DOING SO COULD RESULT IN DEATH OR SERIOUS INJURY

⚠WARNING

FACTORY INSTALLED WEIGHT LABELS ARE SPECIFIC TO YOUR RV, NEVER REMOVE OR MODIFY THESE LABELS. IF YOU HAVE A MISSING LABEL, CONTACT YOUR DEALER OR ALLIANCE RV FOR ASSISTANCE

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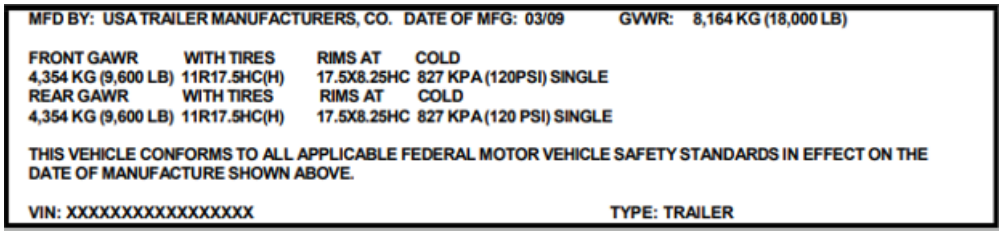
WEIGHT RATINGS, ASSOCIATED LABELS, LOADING AND WEIGHING (CONTINUED)

Federal Certification

This label verifies that your RV is compliant with all Vehicle Safety Standards. You'll find this label near the front of your RV on the off-door side near the cabover.


MFD BY: USA TRAILER MANUFACTURERS, CO. DATE OF MFG: 03/09 GVWR: 8,164 KG (18,000 LB)

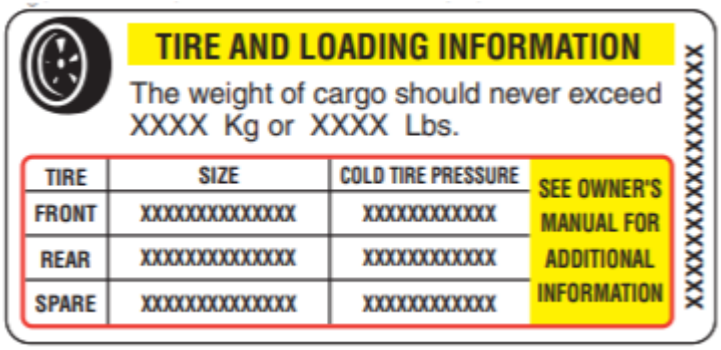
FRONT GAWR WITH TIRES RIMS AT COLD
4,354 KG (9,600 LB) 11R17.5HC(H) 17.5X8.25HC 827 KPA (120PSI) SINGLE
REAR GAWR WITH TIRES RIMS AT COLD
4,354 KG (9,600 LB) 11R17.5HC(H) 17.5X8.25HC 827 KPA (120 PSI) SINGLE

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

VIN: XXXXXXXXXXXXXXXXX TYPE: TRAILER

Tire and Loading Information

This label houses information regarding the correct tire pressure for the vehicle and will also tell you the size of the tires and the CCC of the RV. This label is also located near the front of the RV on the off-door side near the cabover.



Cargo Capacities & Weighing Your RV

Weight and balance of your RV is crucial to your safety. To ensure that you are within all the established weight limits and ratings, you should have your RV weighed.

Always make sure that your RV is loaded evenly from side to side, never exceeding the specified weight ratings established for your RV. Always secure loose items and ensure that all factory provided securements are in place before you travel.

⚠WARNING

A LOAD THAT IS NOT PROPERLY DISTRIBUTED, REGARDLESS OF WEIGHT RATINGS, CAN HAVE AN ADVERSE EFFECT ON THE WAY THE RV PULLS

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WEIGHT RATINGS, ASSOCIATED LABELS, LOADING AND WEIGHING (CONTINUED)

Cargo Capacities & Weighing your RV (Continued)

⚠WARNING

THE TOTAL WEIGHT OF THE RV AND THE TOW VEHICLE TOGETHER SHOULD NEVER EXCEED THE GCWR OF THE TOW VEHICLE.

⚠WARNING

YOU MAY NOT ALWAYS BE ABLE TO USE ALL AVAILABLE STORAGE SPACE WHEN LOADING YOUR RV. JUST BECAUSE IT CAN FIT DOESN'T MEAN THAT YOUR RV IS WITHIN THE ESTABLISHED WEIGHT RATINGS.

NOTE: Full LP gas and Fresh water are considered cargo weight.

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TIRE INFORMATION & SAFETY

Tire Introduction

Your tires are the only part of the RV that has direct contact with the road. Tires directly affect the handling, braking and safety of your RV. Tires must have correct air pressure, tread depth and balance.

Check your tires regularly, this is crucial to your safety. Ideally, tires should be inspected monthly. If you drive over potholes, debris or live in a cold climate or even regularly pull your RV, a more frequent inspection is suggested. The more often you inspect, the easier it is to catch small problems and get them fixed before it becomes a more expensive and potentially time-consuming problem.

Look for this during inspection:

- **Over Inflation** – Too much air causing the tires middle section to contact the road. This will create wear in the center of the tire.
- **Under Inflation** – Too little air pressure causes the outer edges to contact the road. This will create wear on the outside edges of the tire tread.
- **Tread Wear on one Edge of the Tire** – This typically indicates that something is out of alignment.
- **Erratic Tread Wear** – Often called cupping and can mean the wheel is out of balance or an issue with suspension components.

⚠WARNING

ALWAYS KEEP TIRES PROPERLY INFLATED. NOT DOING SO CAN RESULT IN TIRE FAILURE THAT COULD RESULT IN AN ACCIDENT.

Federal law requires tire manufacturers to place standardized information on the sidewall of all tires. This information identifies characteristics of the tire and provides a tire ID number for safety standard certification and in case of a recall.

DOT Tire Identification Number

- This begins with the letters “DOT” and indicate the tire meets all federal standards. The following two digits are the plant code where the tire was manufactured. The last four numbers represent the week and year the tire was built. The other numbers have interchangeable meanings that are used at the tire manufacturers discretion. This # is also important in the event of a tire recall and used for that purpose.

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TIRE INFORMATION & SAFETY (CONTINUED)

Tire Pressure

- Follow the tire manufacturer's inflation guidelines for maximum load capacity; under-inflation is just as dangerous as over-inflation. Proper inflation should be monitored closely. Failure to do so can result in the overheating of a tire causing a blowout. Inflation pressure should be as recommended by the tire manufacturer or as the federal label for the recreational vehicle indicates.
- When you are using your RV, check inflation pressure weekly. Pressure should be checked when the tires are cold. Tires are considered cold when the vehicle has not been moved for a period of 3 hours or more. During travel, tires heat up and pressure increases. Do NOT adjust tires when they are hot.
- Check your tire pressures at least once a month. Tires can lose air suddenly from road hazards. Tires also naturally lose air and it is not always possible to determine under-inflation by visual inspection. Locate the recommended tire pressure, locate the Tire and Loading Information label for accurate settings. If the tire pressure is too high in any of the tires, slowly release air by gently pressing on the tire valve stem with the edge of your tire gauge until you get the correct pressure. If the pressure is too low, note the different between the measured tire pressure and the correct tire pressure. These "missing" pounds of pressure are what you will need to add. At a service station, add the missing pounds of air pressure to each tire that is underinflated. Check all the tires to make sure they have the same air pressure.
- If you have been driving your vehicle and think a tire is underinflated, fill it to the recommended cold inflation pressure indicated on your vehicle's tire information placard or certification label. While your tire may still be slightly underinflated due to the extra pounds of pressure in the warm tire, it is safer to drive with air pressure that's slightly lower than the vehicle manufacturers recommended cold inflation pressure than to drive with a significantly underinflated tire. Since this is a temporary fix, don't forget to recheck and adjust the tire's pressure when you can obtain a cold reading.

⚠WARNING

TIRE PRESSURE SHOULD BE CHECKED AT THE BEGINNING OF A TRIP. ALWAYS FOLLOW ALL INSTRUCTIONS ON THE FEDERAL CERTIFICATION LABEL FOR ESTABLISHED REQUIREMENTS.

⚠WARNING

NEVER ADJUST TIRE PRESSURE TO A "HOT" OR "WARM" TIRE. ADJUSTMENTS ARE ONLY TO BE MADE AFTER THE TIRE HAS BEEN AT REST FOR 3 OR MORE HOURS.

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TIRE INFORMATION & SAFETY (CONTINUED)

Tire Size

- Alliance RV uses a very robust Load Range G ST235/85R16 tire. Only purchase new tires that are the same size as the vehicle's original tires. Look at the tire information label or the sidewall of the tire you are replacing to find the information. If you have any questions, please contact Alliance RV.

Changing a Tire

- Keep the recreational vehicle attached to the tow vehicle. Block the tire on the opposite side of the recreational vehicle from the tire you are changing.
- Loosen the wheel lug on the tire you are changing before jacking up the vehicle. **(Note: DO NOT remove the lug nuts)**
- Locate the mainframe rail of the trailer (it spans from front-to-back just inside the tires).
- To raise the recreational vehicle, place the jack (hydraulic or screw) under the main frame rail. It must be just ahead of the front tire or just behind the rear tire.

⚠WARNING

NEVER USE THE LEVELING SYSTEM TO CHANGE A TIRE.

NEVER RAISE THE RV BY PLACING A JACK UNDER THE AXLE, AXLE SPRINGS OR ANY ATTACHED PARTS.

⚠WARNING

BE SURE TO REPLACE TIRES WITH A TIRE OF THE SAME SIZE AND SPECIFICATION.

Properly maintained tires improve the stopping, traction and load-carrying capability of the RV. Underinflated tires and overloaded vehicles are a major cause of tire failure. Always maintain your tires as outlined and make sure to NEVER exceed a vehicle's load limits.

Spare Tire Carrier

A cable hoist is used for storing your spare tire under the RV. You'll find the spare tire up against the underbelly of the coach towards the rear of the RV. An access hole in the skirt metal is provided for the spare tire crank handle to be inserted in order to lower or raise the spare tire hoist.

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TIRE INFORMATION & SAFETY (CONTINUED)

Wheel Nut Torque

Always use a calibrated torque wrench to confirm proper torque. Check the lug nut torque on each wheel before departure. Do NOT under torque or over torque under any circumstance. Tighten all lug nuts in the correct order according to your RVs lug pattern.

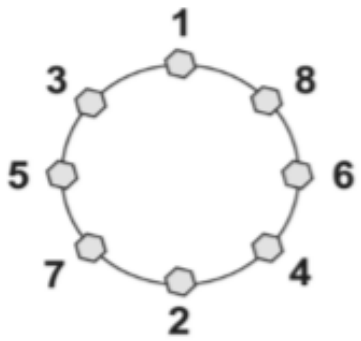
⚠WARNING

ALWAYS TORQUE THE WHEEL LUG NUTS TO THE REQUIRED SPECIFICATIONS.

Wheel Lug Nut Torque Chart

LUG NUT	STUD DIAMETER	RIM SIZE	RIM TYPE	ACCEPTABLE TORQUE RANGE
8	1/2"	16"	Steel/Aluminum	90-120 ft./lbs.
8	5/8"	17.5"	Aluminum	140-160 ft./lbs.

Lug nuts should be torqued in the pattern shown below:



8 Lug Nuts

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TOWING & LEVELING

When pulling an RV, the most obvious thing is shear mass. You'll be taller, wider and much heavier. Allow yourself plenty of room and time to maneuver out of potentially difficult situations.

Being taller, RVs are more susceptible to sway caused by cross winds and turbulence created by other large passing vehicles. Having the correct hitch equipment that is adjusted properly can significantly reduce these effects.

Know the height of your RV. This will help in avoiding overhead obstructions such as tree branches, low building overhangs and low clearance bridges or overpasses.

Know the width of your RV. This is important when negotiating, turns and other obstructions. Extendable side mirrors and/or add on tow mirrors can help.

Know how much your RV weighs and be aware of the weight ratings of the RV. This information is available for your safety. It is critical to never overload your RV. Overloading adversely affect the towing and handling of your RV. Stay within the weight ratings and limits of your RV.

A tow vehicle and RV weigh a lot and can take longer to stop. Increase your following distance and give yourself plenty of room and time to stop.

Practice makes perfect. Get a feel for how the RV tows and handles. Especially if you are new to RVs.

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BRAKE SYSTEMS

Brake Controller

The brake controller should be installed in the tow vehicle to work in conjunction with the RV brakes. Consult with your dealer or brake controller manufacturer to decide what is the right towing combination.

Inspecting Your Brakes

⚠WARNING

FAILURE TO KEEP YOUR BRAKES IN PROPER WORKING CONDITION AS OUTLINED CAN CAUSE PROPERTY DAMAGE, SERIOUS INJURY OR DEATH.

Inspect for leaks and smooth operation. Clean with brake cleaner and flush with brake fluid. Check for cracks, kinks or blockages. Bleed the system to remove all air.

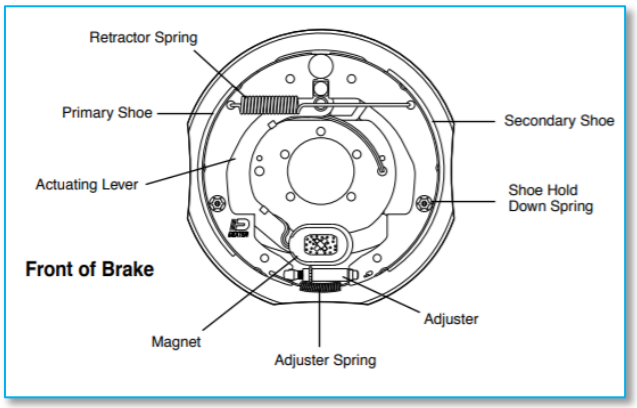
A simple visual inspection of your brake linings will tell you that they are usable. Replacement is necessary if the lining is worn to within 1/16” or less, or if found to be contaminated with grease, oil, or scored or gouged. Hairline heat cracks are normal in bonded linings and should not be cause for concern. When replacement is necessary, it is important to replace both shoes on each brake and both brakes on the same axle. This will help retain the balance of your brakes.

Check all hadware. Check shoe return spring, hold down springs, and adjust springs for stretch or wear and have replaced as required.

After replacment of brakes shoes and linings, the brakes must be re-burnished to seat in the new components. This should be done by applying the brakes 20 to 30 times from an initial speed of 40mph. Slowing the vehicle to 20mph. Allow time for brakes to cool between applications. This procesure allows the brake shoes to seat into the drum surface.

BRAKE SYSTEMS (CONTINUED)

Electric Drum Brakes



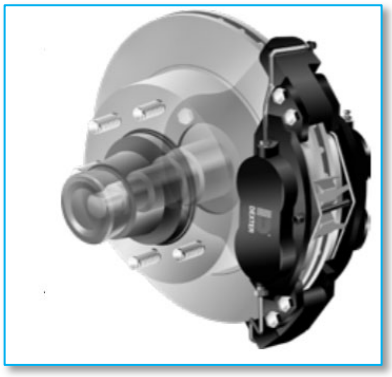
The electric drum brakes on your RV are similar to the drum brakes on an automobile. The basic difference is that your autmotive brakes are actuated by hydraulic pressure while your electric trailer brakes are actuated by an electromagnet.

Electrical current is fed into the system by the controller, it flows through the electromagnets in the brakes. The electromagnets are energized and become magnetically attracted to the rotating armature surface of the drums which moves the actuating levers in the direction that the drums are turning.

This force causes the actuating cam block at the shoe end of the lever to push the primary shoe out against the inside surface of the brake drum. The force generated by the primary shoe acting through the adjuster, moves the secondary shoe out into contact with the brake drum.

Increasing the current flow to the electromagnet causes the magnet to grip the armature surface of the brake more firmly. This results in increasing the pressure against the shoes and brake drums until the desired stop is accomplished.

Hydraulic Disc Brakes (If Equipped)



When equipped, disc brakes have a fixed caliper setup. This setup uses pistons situated on both sides of the rotor. During actuation, hydraulic pressure pushes against the pistons to apply the inboard and outboard brake pads equally to decelerate the spinning rotor. The caliper is fixed and stays stationary during brake actuation and brake adjustment. Brake pad to rotor clearance is maintained as lining wear occurs via the brake piston and internal caliper seal.

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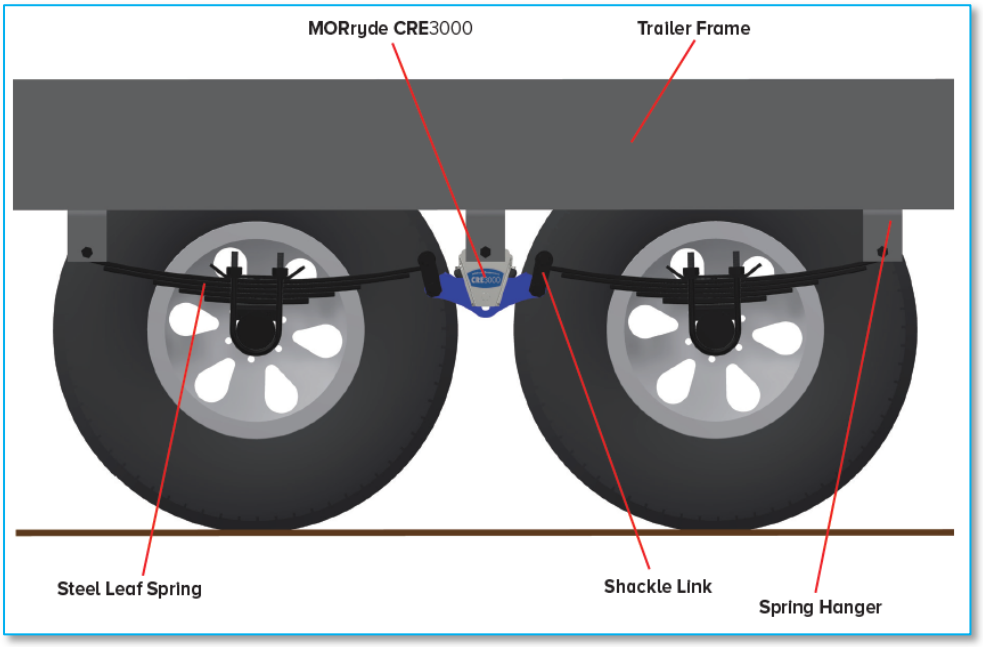
SUSPENSION EQUALIZER SYSTEM

Introduction

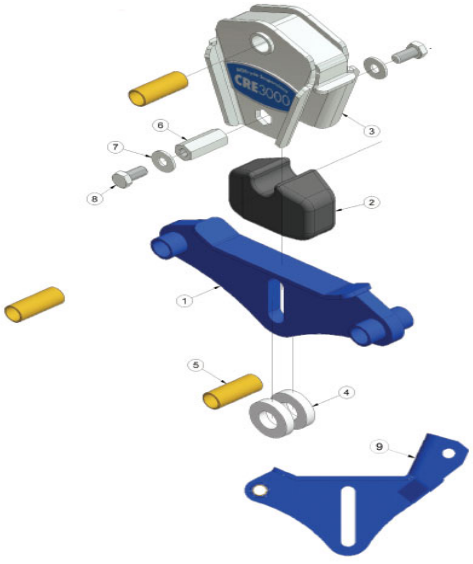
Equipped with dual 7,000 lb Dexter Axles, a MORryde CRE3000 Suspension System and upgraded Wet Bolt Kit w/ heavy duty shackle links, you'll find that this set up will give you smoother towing than a conventional equalizer and leaf springs and better protection of your RV from damaging road shock.

The CRE3000 is located between the tandem axles, replacing the steel equalizer (see below). Designed uniquely to work with your steel leaf spring suspension to improve overall towing performance.



CRE3000 Parts Breakout:

1) Equalizer Beam
2) Rubber Compression Spring
3) Spring Carrier
4) Plastic Glide Pad
5) Bronze Bushing
6) Hex Coupler Nut
7) Washer
8) Bolt
9) Control Beam



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SUSPENSION EQUALIZER SYSTEM (CONTINUED)

CRE3000 Rubber Shear Spring Inspection

The rubber springs should be periodically inspected for deterioration. If the tabs that protrude from either side of the spring carrier are touching the top of the beam arm, the spring rate of the spring has been affected and the equalizer should be replaced. **NOTE:** It is normal to see rubber spring weather checking, which is small surface cracks in the rubber, and does not require replacement. It is also common to see minor tearing or cracking of the rubber around the edges.

CRE3000 with rubber spring in good condition shown at design load

CRE3000 with rubber spring worn out shown at design load

HD Shackle Links and Wet Bolt Kit

The axles and suspension systems are installed with heavy duty shackle links and greaseable “wet” bolts with bronze bushings for enhanced durability and less maintenance.

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BREAKAWAY SWITCH

The breakaway switch is a critical safety component of the RV brake system. You'll find this located on or near the fifth wheel pinbox, if the fifth wheel and the tow vehicle become separated during towing, the line will pull the plunger out and immediately activate the trailers brakes. Always make sure your breakaway switch is in working order. To test your breakaway switch, while the RV is still hitched to the tow vehicle, disconnect the tow plug from the vehicle and then pull the breakaway pin out, only to the first stage, and you should hear the brakes engage.

⚠ CAUTION

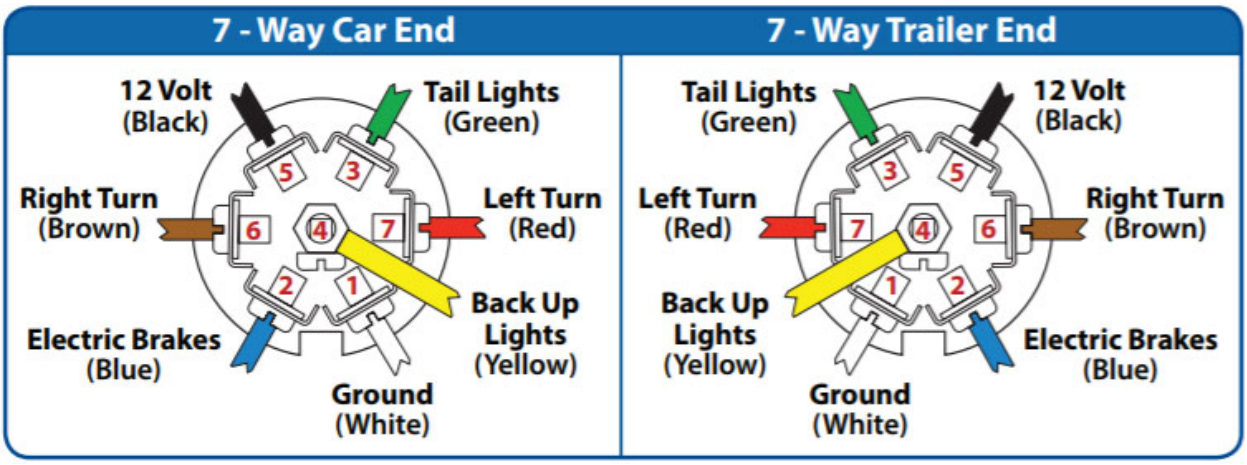
NEITHER THE BREAKAWAY SWITCH NOR THE TRAILER BRAKES SHOULD EVER BE USED AS A PARKING BRAKE.

⚠ CAUTION

ENSURE THAT THERE IS ENOUGH SLACK IN THE BREAKAWAY SWITCH CABLE TO ALLOW FOR TIGHT TURNING RADIUSES.

TOW PLUG

The tow plug (7-way wire harness) is wired to your RV to connect electrical power from the tow vehicle for the RV brakes, taillights, clearance lights, turn signals and brake lights. Wiring to operate your brakes must be the same size in both the tow vehicle and RV. Regularly inspect your tow plug for corrosion and build up, clean as needed. If damage is noticed, have the tow plug repaired by an authorized RV technician.



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PINBOX MAINTENANCE

- Regularly inspect the king pin for excessive wear.
- Inspect the skid plate for a neutral/centered position.
- When the trailer is disconnected from the tow vehicle, an equal gap of approximately 1-1/4" should be between the lip of the skid pad and the rubber compression bumpers. It is normal to be able to slightly move and twist the skid pad assembly with hand force.
- Inspect the retainment rods for excessive wear.
- Inspect the plastic glide pads for excessive wear. The pad should be no less than ¾"
- Periodically check hardware torque values.
- Check and grease bearing(s) once per season. If more grease is needed, add it to the bearing assembly.

⚠WARNING

DO NOT MIX LITHIUM, CALCIUM, SODIUM OR BARIUM COMPLEX GREASES. MIXING OF THESE CAN CREATE A CORROSIVE TOXIC CHEMICAL WITH FUMES THAT CAN RESULT IN SERIOUS HEALTH ISSUES.

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CONNECTING TO THE TOW VEHICLE

Hooking Up

NOTE: During the hitching procedure, the bottom of the trailers pin box should encounter the hitch skid plate ramp.

1. Place blocks against the front and rear of each RV tire.
2. If necessary, lower the tow vehicle's tailgate. **NOTE**: Clearance of the lowered tailgate to the trailer needs to be monitored during hookups, combinations of tow vehicle and trailer have little or no clearance.
3. With the RVs front landing gear, adjust trailer height so the bottom of the trailer's pin box is 1/2" to 1" below the top portion hitch skid plate.

⚠WARNING

DO NOT ATTEMPT TO HITCH THE RV BY USING TRAILERS LANDING GEAR TO LOWER THE KINGPIN ONTO THE HITCH OPENING. THIS COULD RESULT IN THE KINGPIN COMING TO REST ON TOP OF THE SKID PLATE INSTEAD OF WITHIN THE HITCH OPENING, WHICH MAY RESULT IN DEATH OR SERIOUS INJURY.

4. Open the jaw on the 5th wheel head.
5. Back the tow vehicle slowly toward the trailer until the tow vehicle's hitch contacts the bottom of the pin box and the kingpin slides into the receiver.
6. Latch the 5th wheel hitch in the closed position.
7. If space exists between the pin box and hitch, the trailer has not been properly hitched. Do not tow the trailer. Instead, repeat the hitching steps 1-7 until the trailer is properly hitched.
8. Connect the electrical and safety cords.
9. Raise the tailgate of the truck.
10. Do not tow the trailer until a Pull Test has been conducted (covered below).

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CONNECTING TO THE TOW VEHICLE (CONTINUED)

Pull Test

⚠WARNING

FAILURE TO PERFORM A PULL TEST COULD RESULT IN SEVERE PROPERTY DAMAGE, INJURY OR DEATH. FAILURE TO SECURE TOW VEHICLE AND RV FROM MOVEMENT DURING THIS PROCEDURE COULD RESULT IN SEVERE PROPERTY DAMAGE, INJURY OR DEATH.

1. Make sure the trailer wheels are blocked, the trailer landing gear is resting on firm ground to support the trailer and the tow vehicle is in park with the emergency brake engaged.
2. Return to the cab of the tow vehicle, release the emergency brake and apply the trailer brakes.
3. Slowly pull the trailer forward with the tow vehicle. **NOTE:** If properly connected, the brakes and chock blocks will prevent you from moving.
4. After successfully performing the Pull Test, fully raise the landing gear per manufacturer's recommendations.
5. Check and inspect all electrical circuits for proper operation, including clearance lights, turn signals and stop lights.
6. Remove and store all trailer wheel blocks.

When pulling an RV, the most obvious difference is mass. You'll be taller, wider and much heavier. Allow yourself plenty of room and time to maneuver out of potentially difficult situations.

Being taller, RVs are more susceptible to sway caused by cross winds and turbulence created by other large passing vehicles. Having the correct hitch equipment that is adjusted properly can significantly reduce these effects.

Know the height of your RV. This will help in avoiding overhead obstructions such as tree branches, low building overhangs and low clearance bridges or overpasses.

Know the width of your RV. This is important when negotiating, turns and other obstructions. Extendable side mirrors and/or add on tow mirrors can help greatly.

Know how much your RV weighs and be aware of the weight ratings of the RV. This information is available for your safety. It is critical to never overload your RV. Overloading adversely affects the towing and handling of your RV. Stay within the weight ratings and limits of your RV.

A tow vehicle and RV weigh a lot and takes longer to stop. Increase your following distance behind other vehicles. Give yourself plenty of room and time to stop.

CONNECTING TO THE TOW VEHICLE (CONTINUED)

Pull Test (Continued)

⚠WARNING

THE RV BRAKE SYSTEM IS DESIGNED AND RATED FOR THE GVWR OF THE RV, NOT THE GCWR OF THE TOW VEHICLE.

⚠WARNING

WHEN POSSIBLE, ENSURE THAT YOUR HOLDING TANKS ARE EMPTY DURING TRAVEL. FULL HOLDING TANKS CAN ADVERSELY AFFECT THE TOWING OF THE RV.

⚠WARNING

ALWAYS MAKE SURE THE PROPANE IS OFF WHEN TOWING THE RV.

Hitch Receiver

If equipped with a factory hitch receiver, you can tow an additional small trailer behind your RV (if wiring is not included it must be added if a trailer will be towed), such as a boat. Do not use a draw bar longer than 10 inches. The maximum length of the draw bar is from the center of the fastening pin to the center of the ball. The maximum trailer tow rating of the hitch receiver is 3,000 lbs. with a maximum hitch weight of 300 lbs.

The receiver can also be used for a storage rack, bike rack or similar. The cargo weight carrying capacity includes the weight of the cargo carrier and should never exceed 300 lbs.

Laws around double towing and overall towing length vary depending on where you live. Consult the appropriate authority for local towing resections in your area.

⚠WARNING

DO NOT EXCEED THE MAXIMUM LOAD OR HITCH WEIGHT RATING OF ANY HITCH KIT. EXCEEDING MAXIMUM LOAD OR WEIGHT RATINGS CAN CREATE A HAZARDOUS CONDITION THAT MAY RESULT IN POSSIBLE DEATH, SERIOUS PERSONAL INJURY OR SEVER PRODUCT AND/OR PROPERTY DAMAGE, INCLUDING VOIDING OF THE WARRANTY.

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HYDRAULIC LEVELING SYSTEM

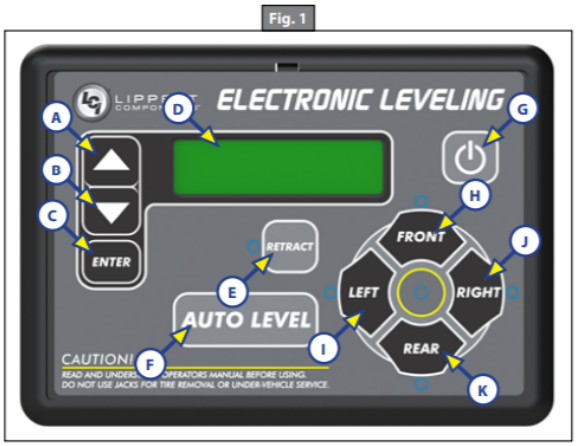
Once you get where you're going, you will need to level your RV. Before you operate the leveling system, make sure that the RV is parked on a level surface and not attached to the tow vehicle. **NOTE**: Never level the RV with anyone inside.

⚠WARNING

WE RECOMMEND THAT A TRAINED PROFESSIONAL CHANGE THE TIRES ON YOUR RV. THE RV SHOULD ALWAYS BE PROPERLY SUPPORTED WITH JACK STANDS. ATTEMPTS TO CHANGE TIRES OR PERFORM OTHER SERVICE WORK BY THE LEVELING SYSTEM ONLY COULD RESULT IN DEATH OR SERIOUS INJURY.

Leveling System Touch Pad

Fig. 1



Callout	Description
A	Up Arrow - Scrolls up through the menu on LCD.
B	Down Arrow - Scrolls down through the menu on LCD.
C	Enter - Activates modes and procedures indicated on LCD.
D	LCD Display - Displays procedures and results.
E	Retract - Places leveling system into retract mode.
F	Auto Level - Places leveling system into auto level mode.
G	Power Button - Turns leveling system on and off.
H	Front Jack Button - Activates tongue jack in standard mode - Activates front jacks in manual mode.
I	Left Jack Button - Activates left jacks in manual mode.
J	Right Jack Button - Activates right jacks in manual mode.
K	Rear Jack Button - Activates rear jacks in manual mode.

⚠WARNING

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

HYDRAULIC LEVELING SYSTEM (CONTINUED)

Jack Operation

The leveling legs can only be extended when the touch pad is in manual mode. Once in manual mode, pressing the “FRONT” button (Fig. 1H) will extend both front legs at the same time. By pushing the button combination of "FRONT" and “LEFT” (Fig. 1I), or "FRONT" and “RIGHT” (Fig. 1J) buttons, the individual front legs can be extended. Pressing the “REAR” button (Fig. 1K) will extend both rear legs at the same time. To extend individual rear legs, press the button combination of “REAR” and “LEFT” (Fig. 1I), or “REAR” and “RIGHT” (Fig. 1J) buttons, depending on which leg needs to be operated. Pressing the "LEFT" button (Fig. 1I) will extend both the left front leg and the left rear leg. Pressing the "RIGHT" button (Fig. 1J) will extend both the right front leg and the right rear leg.

If the touch pad is put in the retract mode, which is indicated by the orange illuminated LED next to the “RETRACT” button (Fig. 1E), the front legs can be retracted together by pushing the “FRONT” button (Fig. 1H). Individual front legs can be retracted by pushing the combination of the "FRONT" and “LEFT” (Fig. 1I), or "FRONT" and “RIGHT” (Fig. 1J) buttons. The rear legs can be retracted together by pushing the “REAR” button (Fig. 1K), or individually by pushing the combination of the “REAR” and “LEFT” (Fig. 1I) or “REAR” and “RIGHT” (Fig. 1J) buttons. Pressing the "LEFT" button (Fig. 1I) will retract both the left front leg and the left rear leg. Pressing the "RIGHT" button (Fig. 1J) will retract both the right front leg and the right rear leg.

NOTE: If the leveling legs will not operate individually using the method described above, but they operation properly when auto level is performed, the twist prevention protection system has locked out the operation to prevent damage to the frame of the travel trailer.

⚠WARNING

Be sure to park the trailer on solid and level ground. Prior to operation, clear all jack landing locations of debris and obstructions. The locations should also be free of surface depressions and moisture. When parking the trailer on extremely soft surfaces, utilize load distribution pads under each jack.

⚠CAUTION

People and pets should be clear of the trailer while the leveling system is operated. Never lift the trailer completely off the ground. Lifting the trailer so the wheels are not touching the ground will create an unstable and unsafe condition.

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HYDRAULIC LEVELING SYSTEM (CONTINUED)

Auto Level

NOTE: Once the auto leveling has been started, it is important that there is no movement in the RV until it has completed the process. Failure to remain still during the leveling cycle could hinder the performance of the leveling system.

Fig. 3

1. After disconnecting from your vehicle, locate the leveling touch pad on the unit (Fig. 3). Typically mounted near the front of the RV in the pass thru compartment.
2. Press the “ON/OFF” button (Fig. 3A) and then press “AUTO LEVEL” (Fig. 3B).

Auto Level Sequence

1. When auto level begins, the front of the RV will seek a position near a level state.
2. The rear legs will then extend and complete the rear leveling sequence.
3. When the rear leveling sequence has been completed, the RV will adjust front to back and side to side.
4. Each leg will perform a final grounding touch.
5. Once this has been completed the screen will read "AUTO LEVEL SUCCESS."
6. The LED screen will then read "READY" and also display current battery voltage. The green LED in the center of the four leveling jack buttons will be illuminated (Fig. 4A).

Fig. 4

NOTE: If the auto level sequence does not perform as outlined, put the system in manual mode and test that the legs operate correctly by pushing the corresponding buttons on the touch pad. If the jack functions are incorrect, check that the correct jack wiring harnesses are plugged into the correct ports on the controller.

HYDRAULIC LEVELING SYSTEM (CONTINUED)

Leveling System Maintenance

⚠WARNING

Failure to follow the instructions provided in this manual may result in death, serious personal injury, severe product or property damage or voiding of the component warranty.

⚠WARNING

The unit should be supported at both front and rear axles with jack stands before working underneath. Failure to do so may result in death, serious personal injury, severe product or property damage or voiding of the component warranty.

⚠CAUTION

Always wear eye protection when performing service or maintenance to the unit. Other safety equipment to consider would be hearing protection, gloves and possibly a full-face shield, depending on the nature of the service.

⚠CAUTION

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

Maintenance Items

- Dexron III or Mercon V Class “A” automatic transmission fluid
- Electrical contact cleaner
- Lint-free cloth
- Zip ties

Maintenance Steps

1. Check the fluid in reservoir every 12 months. If fluid is a clear red color, do not change. If fluid is milky, pink and murky, drain reservoir and add new fluid. Hydraulic fluid should be changed at a minimum every 5 years.
   NOTE: Check the fluid only when all the jacks are fully retracted.
   NOTE: When checking the hydraulic fluid level, fill to within ½” of fill spout.
2. Inspect and clean all power unit electrical connections every 12 months. If corrosion is evident, spray power unit electrical connections with electrical contact cleaner.
3. Remove dirt and road debris from jacks as needed.
4. If jacks are down for extended periods, spray exposed jack rods with a silicone lubricant every 3 months for protection. If the unit is in a salty environment, spray the rods every 4 to 6 weeks.

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HYDRAULIC LEVELING SYSTEM (CONTINUED)

Leveling System Maintenance (Continued)

⚠WARNING

The unit should be supported at both front and rear axles with jack stands before working underneath. Failure to do so may result in death, serious personal injury, sever product or property damage or voiding the component warranty.

NOTE: In colder temperatures the jacks may extend and retract slowly due to the fluid's viscosity, specially formulated fluid for low temperatures may be desired.

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OCCUPANT SAFETY

Alliance RV 5th wheels are equipped with safety systems that work together to help protect the occupants in the event of an emergency. Please read and fully understand all safety functions before using your new RV.

Emergency Exit Windows

While all RV brands are different, the operation of the emergency windows are generally consistent across brands. The design, application, and location of these windows are governed by the RV Industries governing bodies. You will find some helpful safety information below regarding these exit windows. Please take time to familiarize yourself and anyone that will be in the RV with the location and operation of all exit windows in the RV.

THE FOLLOWING LABEL IS ON OR NEAR ALL EMERGENCY EXITS IN THE RV

⚠CAUTION

ENSURE THAT ALL EXIT WINDOWS ARE CLOSED AND LOCKED DURING TRAVEL.

Identify and locate all emergency exit windows in the RV, they are easily identifiable by both the “EXIT” sticker and the red hardware used to open them.

Know what to expect in the event of an emergency. Activate the release mechanisms on the exit windows and apply pressure to push or slide them open.

Once you’re familiar with the location and operation, make yourself familiar with the drop between the window and the ground. Depending on the RV, it could be a significant distance.

⚠WARNING

ALWAYS PUT YOUR LEGS OUT FIRST AND ATTEMPT TO LAND ON YOUR FEET IF YOU MUST USE AN EMERGENCY EXIT WINDOW.

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OCCUPANT SAFETY (CONTINUED)

Emergency Exit Windows (CONTINUED)

There are two styles of exit windows, both open differently.

1. **Pull Style Latch:** This style is generally used on larger slider style exit windows. Pull the handle out to slide the window open for escape.

2. **Flip Style Latch:** This style flips up and disengages which allows the window to be pushed out for escape.

Fire Safety

Safety is always important, whether you're at home or on the road. As far as your RV, make sure to keep fire safety a top priority.

****In a fire, Evacuating all occupants from the RV safely MUST be your top priority!****

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OCCUPANT SAFETY (CONTINUED)

Fire Extinguishers

Classified and rated by fire type, A, B and C. These classifications identify the kinds of fires or burning materials they are designed to fight.

A: Trash-Wood-Paper – Effective against fires involving paper, wood, textiles and plastics. The primary checmical used to fight these fires is monoammonium phosphate due to the chemicals ability to smother fires in in these types of materials.

B: Liquids – Effective against flammable liquid fires. These can be fires where cooking liquids, oil, gasoline, kerosene or paint have become ignited. The chemicals used in this type of extinguisher are monoammonium phosphate and sodium bicarbonate which induces a chemical reaction which extinguishes the fire.

C: Electrical Equipment: - Suitable for fires in “live” electrical equipment. Both monoammonium phosphate and sodium bicarbonate are used in this type of extinguisher due to their nonconductive properties.

⚠WARNING

NEVER TEST OR PRACTICE USING A FIRE EXTINGUISHER BY SQUEEZING THE TRIGGER. THESE ARE NON-RECHARGEABLE AND ONCE USED, PRESSURE WILL DECREASE OVER TIME AND WILL NOT BE FULLY FUNCTIONAL IN AN EMERGENCY.

⚠WARNING

WHILE USING A FIRE EXTINGUISHER, ALWAYS KEEP YOUR BACK TOWARD A CLEAR PATH FOR EXIT.

⚠WARNING

DO NOT TURN ELECTRICAL POWER BACK ON AFTER THE USE OF AN EXTINGUISHER.

⚠WARNING

INSPECT EXTINGUISHERS WEEKLY. IF YOUR RV HAS BEEN IN STORAGE, INSPECT BEFORE THE RV IS USED. ALWAYS INSPECT BEFORE A VACATION OR TRIP WITH YOUR RV.

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OCCUPANT SAFETY (CONTINUED)

Fire Extinguishers (Continued)

A common acronym for proper fire extinguisher operation is P.A.S.S.

P – Pull the pin

A – Aim the nozzle (always aim at the base of the fire, not the flames)

S – Squeeze the trigger

S – Sweep from side to side

For additional information on fire extinguisher operation, please refer to the fire extinguishers user's manual.

Smoke & CO/Carbon Monoxide Alarms

Your RV is equipped with a smoke & CO/Carbon Monoxide combination alarm. Understanding the information in this section will prepare you to reach in the event of an emergency

Follow safety rules and prevent hazardous situations:

1) 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 NEVER overload electrical circuits.
5) Keep stove debris free.
6) Never leave anything cooking on the stove unattended.
7) Keep portable heaters and open flames, such as candles, away from flammable materials.
8) Don't let rubbish accumulate.

Refer to the smoke and carbon monoxide alarm owner's manuals for a more in depth understanding of the features, functions and precautions of this safety device.

Keep alarms clean and test them weekly. Immediately replace any alarm that is not functioning properly.

⚠WARNING

- **THIS ALARM WILL NOT OPERATE WITHOUT BATTERIES.**
- **NEVER IGNORE ANY ALARM, FAILURE TO RESPOND COULD RESULT IN SERIOUS INJURY OR DEATH.**
- **TEST ALARMS WEEKLY. IF THE ALARM FAILS TO TEST CORRECTLY, REPLACE THE ALARM IMMEDIATELY.**

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OCCUPANT SAFETY (CONTINUED)

Smoke & CO/Carbon Monoxide Alarm Maintenance

- Test at least once a week. Always test after the RV has been in storage and before a vacation or long trip.
- Clean the alarm at least once a month.

⚠WARNING

- **ALWAYS USE THE EXACT BATTERIES SPECIFIED BY THE ALARM MANUFACTURER.**
- **NEVER USE AN OPEN FLAME OF ANY KIND TO TEST AN ALARM.**
- **DO NOT STAND CLOSE TO THE ALARM WHEN THE HORN IS SOUNDING. EXPOSURE AT CLOSE RANGE CAN BE HARMFUL TO YOUR HEARING. WHEN TESTING, STEP AWAY WHEN THE HORN STARTS TO SOUND.**

If an alarm sounds, identify which alarm is sounding.

CO Alarm - the CO LED will flash red and an audible horn will beep 4 times and then pause, this will happen repeatedly. The smoke LED will remain off. If this alarm sounds, immediately move everyone to a source of fresh air and call your emergency services. Do not go into the RV until the problem is identified and corrected.

Smoke Alarm - the Smoke LED will flash red and an audible horn will beep 3 times and then pause, this will happen repeatedly. The CO LED will remain off. If this alarm sounds, get out of the RV as quickly as possible and call your emergency services. Do not go into the RV until the problem is identified and corrected.

Propane (LP) Alarm

For your safety, your RV is equipped with a combination CO and LP Alarm. This alarm will detect both carbon monoxide and propane gas. Please read and become familiar with the individual users manual for this alarm. This will help prepare you if there is an emergency.

⚠WARNING

- **THIS UNIT MYUS BE REPLACED WITHIN 5 YEARS OF ITS PRODUCTION DATE.**
- **THIS ALARM WILL NOT WORK WITHOUT POWER.**
- **THIS ALARM WILL ONLY INDICATE THE PRESENSE OF GAS AT THE SENSOR. THERE COULD BE GAS ELSEWHERE THAT HAS NOT REACHED THE SENSOR.**
- **THIS ALARM IS DESIGNED TO DETECT CARBON MONOXIDE AND PROPANE GAS. THE ALRM IS NOT DESIGNED TO DETECT SMOKE OR FIRE.**

OCCUPANT SAFETY (CONTINUED)

Propane Alarm (Continued)

If CO is detected, the red CO LED will flash and the alarm will sound with 4 beeps and then a 5 second silence. This indicates that the CO level is over 35pp. If this alarm is activated, immediate action is required.

If the CO alarm sounds:

- Press the TEST/MUTE button to temporarily silence the alarm.
- MOVE to fresh air immediately.
- Make sure that everyone is accounted for.
- Call 911 or the local emergency services available in your area.
- Do not re-enter the RV until the problem has been corrected.

If propane is detected, the RED led will will flash and the alarm will sound with a steady tone and remain on until the area is clear from propane gas. If you hear this alarm, immediate action is requried. Exit the RV immediately and do not return into the RV until the problem has been corrected.

If the popane gas alarm sounds:

- Extinguish all flames and smoking material and turn off all gas appliances.
- Press the TEST/MUTE button to temporarily silence the alarm (DO NOT DISCONNECT POWER).
- Evactuate the RV. Make sure to account for everyone.
- Open doors and windows of the RV.
- Turn off the propane tank valve.
- Determine & Repair the source of the leak.
- Do not re-enter the RV until the issue has been corrected

Under normal circumstances, this alarm should remain silent and have a steady green LED. If the alarm is defective you'll here a beep every 30 seconds and an alternating red and green light. Anything outside of a quiet alarm with the greeen LED requires action.

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OCCUPANT SAFETY (CONTINUED)

Propane (LP) Alarm Maintenance

Test all alarms weekly. Vaccum the dust off of the alarm cover. If cleaning is needed, clean with a water damp cloth. Do NOT spray cleaning agents or waxes directly onto the front panel. This can cause damage to the alarm.

⚠WARNING

THE CO ALARM WILL NOT OPERATE WITHOUT BATTERIES.

⚠WARNING

NEVER ATTEMPT TO REPAIR AN ALARM, IMMEDIATELY HAVE THE ALARM REPLACED.

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EXTENDED RECREATIONAL USE OF THE RV

In some cases you may find yourself in the RV for extended periods of time. Whether that be full time living, a long weekend or an extended stay, you may run into some challenges. We have put together some helpful tips for battling some of these challenges.

Condensation & Mold

The normal living activities of even a few people in an RV can lead to rapid moisture saturation of the air inside the RV as well as accelerated wear and tear. This condensation, if left unaddressed, can lead to mold. A more aggressive maintenace schedule may need to be adopted. Below are some pointers to assist with some of the problems you may face while using the RV for extended periods of time.

- Use a dehumidifer.
- Use exhaust fans when showering and cooking.
- In warmer temperatures, use your air conditioner.
- Crack windows.
- Don't air dry clothes in the RV.
- Implement proper preventative maintenance and overall RV cleanliness.

⚠WARNING

CONDENSATION MAY CAUSE DAMPNESS, MILDEW AND MOLD. IF NOT ADDRESSED IMMEDIATELY, CAN RESULT IN DAMAGE AND POSSIBLY LEAD TO ADDITIONAL MOLD OR MILDEW ISSUES WHICH CAN BE HAZARDOUS TO YOUR HEALTH

Exterior Plumbing

Alliance RVs are equipped with heating pads for the holding tanks and a dedicated heat vent to drop air down into the underbelly. Depending on your needs, it may be necessary for you to take additional protection steps. Keeping your water running and the additional use of heat tape on pipes, hoses, fresh water and sewer lines will all assist in keeping your RV safe from damage during use in freezing temperatures. If your RV will not be used in cold weather, ALWAYS have your RV winterized (covered in the plumbing section of this manual).

Formaldehyde

Formaldehyde is used in many products such as glues, fabrics, paint coatings, and even paper products. Formaldehyde is also released from many smoking, cooking, soaps and many other household products. While most of the formaldehyde used in products in construction is consumed during the manufacturing process, a very small amount remains. This leftover formaldehyde dissipates over time as it works its way out of the product. Proper ventilation by way of the available vents, fans and air conditioning units in your RV is key.

If you have any additional questions, please do not hesitate to contact Alliance RV.

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PROPANE SAFETY

About the Propane System

The propane system provides heat, hot water, fuel for cooking, refrigeration and can be used for other small appliances.

The propane supply for an RV is stored in a DOT cylinder that is positioned vertically upright and mounted outside the living space of an RV. Repair and/or replacement should always be done by certified service technicians.

Make sure your propane system is inspected at least annually by a certified service technician. They are trained to detect incorrect tank pressure, leaks, or other potential hazards and address them properly. Do not connect your propane system to another gas source or attempt to repair any propane related component yourself.

⚠WARNING

IF YOU SMELL PROPANE:

- **EXTINGUISH ANY OPEN FLAMES INCLUDING PILOT LIGHTS AND ALL SMOKING MATERIALS.**
- **SHUT OFF THE PROPANE SUPPLY AT THE LP CONTAINERS.**
- **DO NOT TOUCH ELECTRICAL SWITCHES.**
- **OPEN DOORS AND OTHER VENTS.**
- **LEAVE THE AREA UNTIL THE ODOR CLEARS.**
- **THE PROPANE SYSTEM SHOULD BE CHECKED FOR LEAKS AND THE SOURCE DETECTED AND REPAIRED BEFORE USING THE RV AGAIN.**
- **FAILURE TO COMPLY COULD RESULT IN EXPLOSION RESULTING IN DEATH OR SERIOUS INJURY.**

⚠WARNING

NEVER USE AN OPEN FLAME TO TEST FOR A PROPANE LEAK. DO NOT CHECK FOR LEAKS USING PRODUCTS THAT CONTAIN AMMONIA OR CHLORINE, THESE PRODUCTS CAN CAUSE CRACKS TO FORM ON METAL COMPONENTS IN THE PROPANE SYSTEM. A SOLUTION OF WATER AN MILD SOAP SHOULD BE USED BY SPRAYING THE FITTINGS AND CONNECTION POINTS DOWN AND WATCHING FOR BUBBLES.

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PROPANE SAFETY (CONTINUED)

⚠WARNING

- **DOT PROPANE TANKS MUST BE TRANSPORTED AND STORED IN AN UPRIGHT POSITION SO THE PRESSURE RELIEF VALVE CAN FUNCTION PROPERLY. LAYING A TANK ON ITS SIDE MAY CREATE A VERY DANGEROUS SITUATION.**
- **THE LP PIGTAIL HOSE MUST BE INSTALLED IN A MANNER TO AVOID TENSION OR STRESS AT EITHER END OF THE HOSE. KEEP THE PIGTAIL AWAY FROM SHARP EDGES, RIGID CORNERS, WALLS, AND DOORS.**
- **BEFORE ENTERING A PROPANE FUEL SERVICE STATION MAKE SURE ALL PILOT LIGHTS ARE EXTINGUISHED. SHUT THE GAS TO ALL APPLIANCES OFF BY TURNING OFF THE PROPANE AT THE GAS SHUT OFF VALVE(S). ALWAYS SHUT OFF ANY ENGINE BEFORE REFUELING. DO NOT SMOKE AND NEVER OPERATE IGNITION SOURCES WHILE REFUELING.**

Traveling with Propane

Turning the propane off when traveling is always safer, it reduces the risk of a gas leak from a line or connection working loose. Some states have laws against traveling with the propane on. Make sure you are familiar with those laws and regulations in the area you are traveling.

⚠WARNING

MAKE SURE ALL PROPANE TANK FASTENERS ARE SECURED BEFORE TRAVELING

LP Regulator

To regulate the propane pressure, an RV is equipped with a two-stage regulator with automatic changeover. With the first stage of the regulator, the fuel coming from the tank is reduced by venting from the high pressure the LP is compressed under for storage and takes it down to 10 to 15 psi. In the second stage, the pressure is reduced again by further venting down to 11” water column which is the pressure safe for the appliances that the propane system powers. Always make sure that the vents are clean and unobstructed.

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PROPANE SAFETY (CONTINUED)

LP Regulator (Continued)

This regulator allows for removal of empty cylinders for refill without interrupting propane supply and will automatically switch from the supplying tank to the reserve tank when empty.

⚠WARNING

PROPANE CONNECTIONS SHOULD BE CHECKED PERIODICALLY AS VIBRATIONS FROM TRAVEL MAY CAUSE THEM TO LOOSEN. FAILURE TO CHECK THESE CONNECTIONS COULD LEAD TO A PROPANE LEAK. A LEAK CAN CAUSE A FIRE OR EXPLOSION.

Propane System Maintenance

Routinely visually inspect your propane cylinders, mounting hardware, supply lines and connection points for wear, rust, kinks or damage. The propane system should be serviced by a qualified technician immediately upon an issue being identified. Never paint propane cylinders, valves or mounting hardware.

Your RVs propane system should be inspected by a certified professional at least once a year. Never attempt to repair any propane related component yourself. Always make sure your RVs fire extinguisher, CO, gas and smoke detectors are in working order. Do this by regularly testing your alarms and safety items. An alarm or extinguisher that is not working should be replaced immediately.

PROPANE SAFETY (CONTINUED)

Propane System Maintenance (Continued)

⚠WARNING

- **NEVER ATTEMPT TO REPAIR ANY PROPANE RELATED COMPONENT.**
- **ENSURE THAT ALL ALARMS, DETECTORS AND EXTINGUISHERS ARE IN GOOD WORKING ORDER.**

Filling Your Propane Tanks

Your Alliance RV uses DOT cylinders. These cylinders can be removed and taken to a propane dealer for refilling. A propane tank can only be filled to 80% of their total capacity. The remaining 20% is for expansion that takes place when subjected to heat. If a tank is filled to 80% when it is cold outside, that same tank may be at 90% on a much warmer day. Always ensure that the tank is filled to the required limit only.

⚠WARNING

NEVER FILL A PROPANE TANK OVER 80% OF ITS CAPACITY. AN OVERFILLED TANK COULD ALLOW LIQUID PROPANE TO ENTER THE SYSTEM WHICH IS DESIGNED FOR VAPOR AND CREATE A VERY HAZARDOUS CONDITION.

Installing Propane Cylinders

Anytime a propane tank is removed for servicing or filling and re-installed on the RV, ensure that the fittings are all tight and the main shutoffs on the LP tanks are in the off position and that the strap that secures the tank is in place. A quick visual inspection of the LP system should be performed any time tanks are removed.

Cooking with Propane Gas

In an RV most stovetops and ovens run on propane. A properly ventilated RV is very important when cooking. Open a window or roof vent and turn your range hood fan on. Never use your stove or oven for space heat and never use outdoor fuel-burning equipment inside the RV.

⚠WARNING

- **DO NOT ATTEMPT TO USE WATER TO PUT OUR A GREASE FIRE. WATER CAN SPREAD SOME TYPES OF FIRE AN ELECTROCUTION IS POSSIBLE WITH AN ELECTRICAL FIRE.**
- **NEVER ALLOW GREASE TO COLLECT ON OR AROUND THE STOVE. CLEAN SPILLS UP IMMEDIATELY.**
- **IN AN RV, THE AMOUNT OF OXYGEN SUPPLY IS LIMITED DUE TO ITS SIZE. PROPER VENTILATION DURING COOKING WILL HELP AVOID DANGEROUS SITUATIONS.**

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SLIDEOUTS

Slideout Safety Information

⚠WARNING

FAILURE TO ADHERE WITH THE FOLLOWING INFORMATION MAY RESULT IN DEATH, SERIOUS INJURY, RV OR OTHER PROPERTY DAMAGE.

All slideout systems are intended solely for opening and closing the slideout room and should never be used for any other purpose. Before operating your slideout, please keep these things in mind:

- Your location should be clear of obstructions that may cause damage when the slideout room is operated.
- Be sure that everyone is clear of the RV prior to the slideout room actuation.
- Keep parts away from slideout mechanisms during use. Severe injury or death may result.
- Park your RV on solid and level ground.

⚠CAUTION

ALWAYS ENSURE THE SLIDEOUT PATH IS CLEAR DURING OPERATION. KEEP CLEAR OF SLIDE RAILS WHEN THE ROOM IS IN MOTION. THE GEAR ASSEMBLY MAY PINCH OR CATCH ON LOOSE CLOTHING AND CAUSE PERSONAL INJURY.

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SLIDEOUTS (CONTINUED)

Hydraulic Slideout System

Alliance RV utilizes a hydraulic through frame slideout for the main floor slideouts. This system is a rack and pinion guided and utilizes a hydraulic cylinder to move the room. The cylinder rod is driven in a forward and backward motion in order to move the slideout room in and out.

We recommend that the moving parts be kept clean. They can be washed with mild soap and water. No grease or lubrication is necessary. All slideouts are operated at the central monitor panel shown below. This panel will be found relatively close to the entry door of the RV in a cabinet designed to house this panel. The location will vary depending on floor plan of your RV.

Operating Your Hydraulic Slideout System

Extending Your Hydraulic Slideout

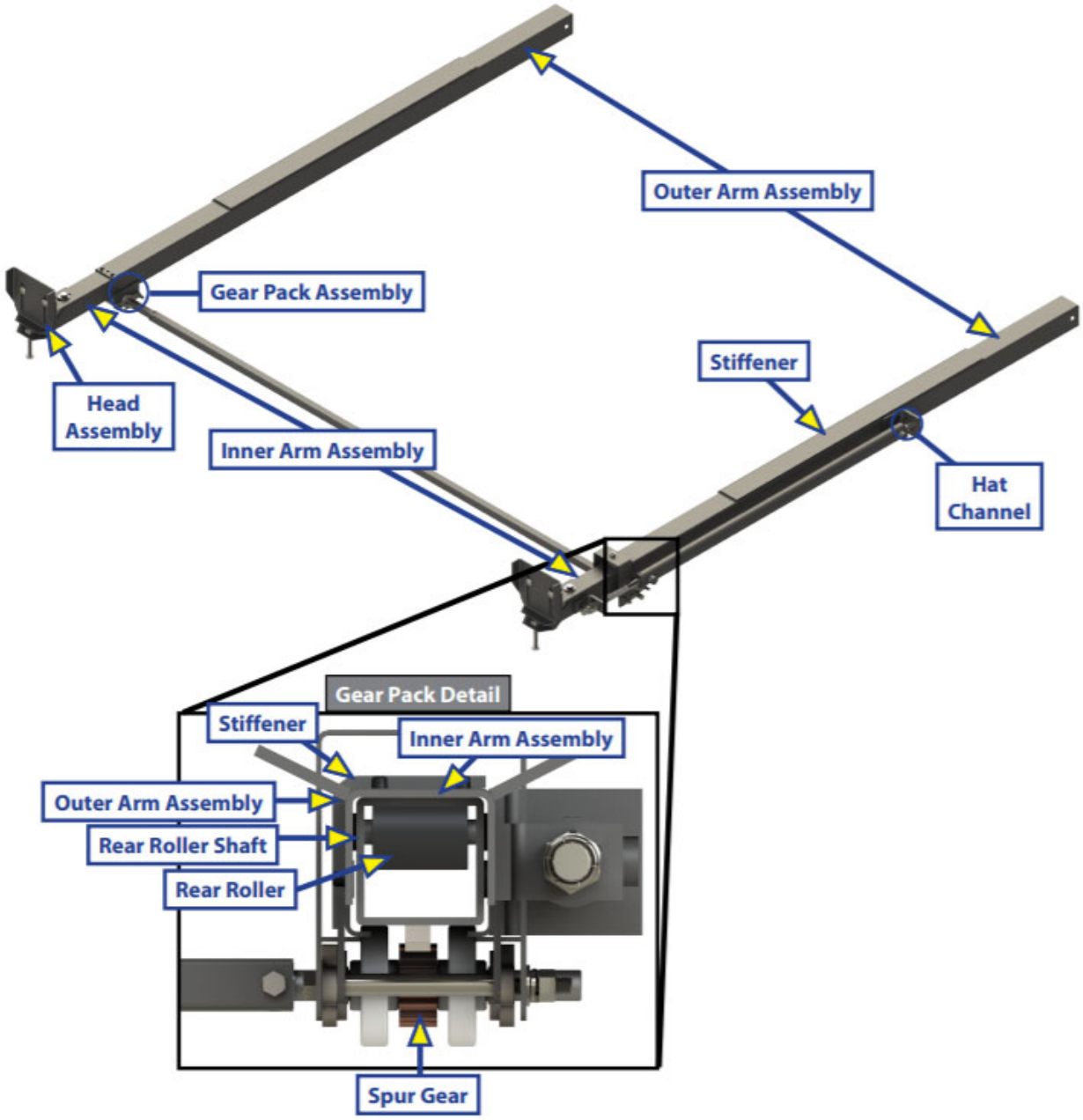
1. Level the RV.
2. Verify the battery is fully charged.
3. Press and hold the rooms switch in the “OUT” position until room is fully extended and stops moving.
4. Release the switch, this will lock the room into the “OUT” position *(**NOTE:** Only hold switch until the room stops extending).*

Retracting Your Hydraulic Slideout

1. Verify the battery is fully charged.
2. Press and hold the rooms switch in the “IN” position until the room is fully retracted and stops moving.
3. Release the switch, this will lock the room in the “IN” position. *(**Note:** Only hold the switch until the room stops retracting).*

SLIDEOUTS (CONTINUED)

Hydraulic Slideout System Overview



Hydraulic Slideout Maintenance

This system is designed to be nearly maintenance free, however, it is ideal to run slideouts once or twice a month to keep seals and internal moving parts lubricated. While doing so, always check for any visible signs of damage. **NOTE:** When the RV is in storage or not being used for extended periods of time, keep slideout rooms in the closed or retracted position.

SLIDEOUTS (CONTINUED)

Hydraulic Slideout Maintenance (Continued)

The slideouts need a full battery for operation. The battery should be maintained in accordance with the battery manufacturers recommendations. Always check the terminals and other connections at the battery, the control switch, and the system for corrosion, and loose or damaged terminals. Check motor leads under the trailer chassis, these connections are subject to damage from road debris.

Your slideout hydraulics will come prefilled, primed and ready to operate from the factory. A type “A” Automatic Transmission is used in the hydraulic slideouts. Dexron III or Mercon 5 or a blend of both is recommended.

In colder temperatures the jacks may extend and retract slowly due to the fluid’s viscosity. For cold weather operation, fluid specially formulated for low temperatures may be desired.

To fill your slideout hydraulics:

1. Remove the fill cap.
2. Pour fluid into the fill opening.
    a. **Note:** Do not allow any contamination into reservoir during the fill process.
    b. **Note:** Standard reservoir holds approximately 2 quarts of fluid.
3. Fill to within ½” of top.
4. Replace fill cap when finished.

Note: The system is self-purging, by cycling the system 2-3 times, any air in the system will be forced back to the reservoir and out of the fill cap.

SLIDEOUTS (CONTINUED)

Adjusting Your Hydraulic Slideouts

NOTE: We recommend that slideouts are adjusted by a certified RV technician.

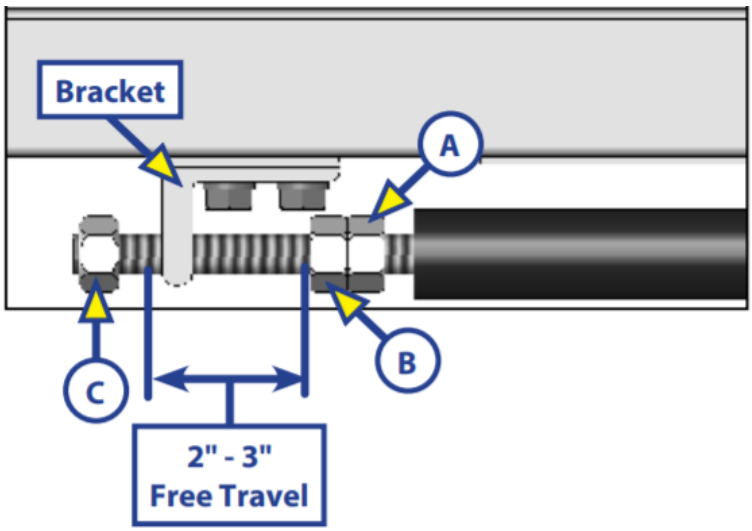
NOTE: Small adjustments, and then running the room in after each adjustment until proper seal is achieved, is ideal.

- **Adjusting in the "IN" Position**
  1. Locate the cylinder coming through the frame.
  2. Run the slideout room partially out.
  3. Hold the jam nut in place with wrench (A).
  4. Adjust nut (C) towards the bracket if the room does not seal.
  5. Adjust the (C) nut away from the bracket if the room is too tight.

  Note: Small adjustments, and then running the room in after each adjustment until proper seal is achieved is ideal.

- **Adjusting in the "OUT" Position**
  1. Locate the cylinder coming through the frame.
  2. Run the slideout room completely out.
  3. Check the inside fascia and seal positioning.
  4. Bring the room partially in.
  5. Loosen and back off jam nut (A) from nut (B) to give nut (B) room for adjustment.
  6. Adjust nut (B) away from the bracket if the room extends too far. Adjust nut (B) towards the bracket if the room does not seal.
  7. Tighten jam nut (A) to nut (B).

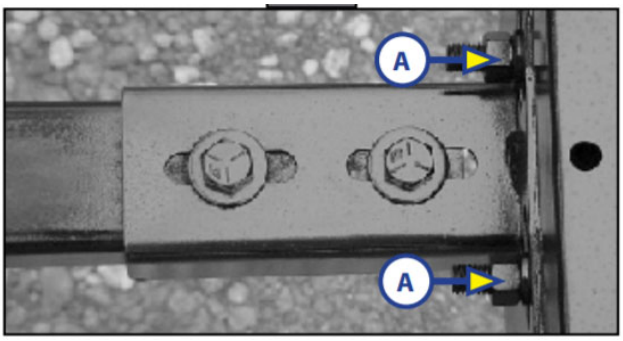
  NOTE: 2 to 3 inches of free travel is normal



SLIDEOUTS (CONTINUED)

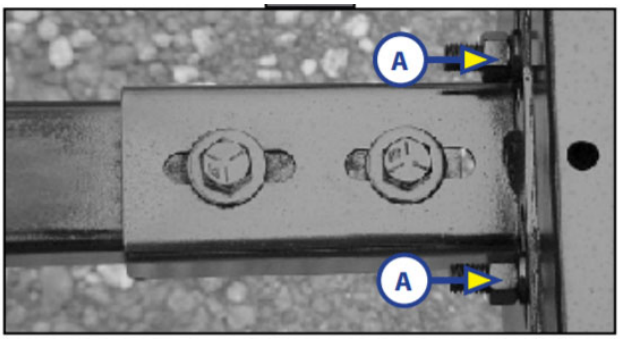
Adjusting Your Hydraulic Slideouts (Continued)

- **Adjusting the Room Horizontally**
  1. Loosen carriage bolts (A) on each bracket located at the end of each guide rail.

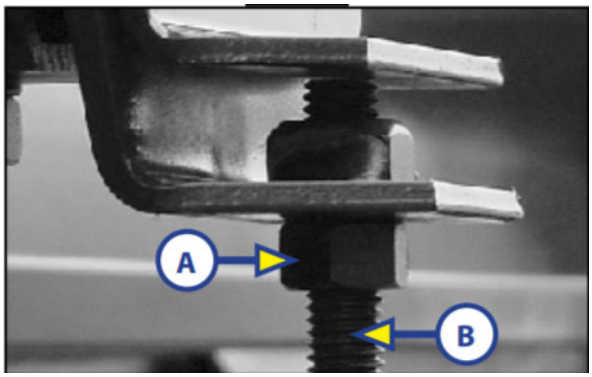


  2. The room will then be ready to be positioned by pushing on the exterior slideout main wall or by prying with a pry bar inserted into the opening between the room and coach. **NOTE**: Use caution when using prying device so seals do not become damaged.

- **Adjusting the Room Vertically**
  1. Loosen 2 carriage bolts (A) on each bracket located at the end of each guide tube.



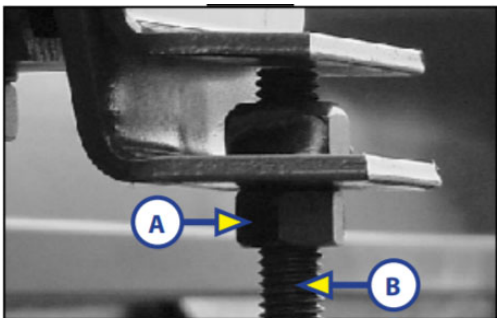
  2. Loosen jam nut (A).



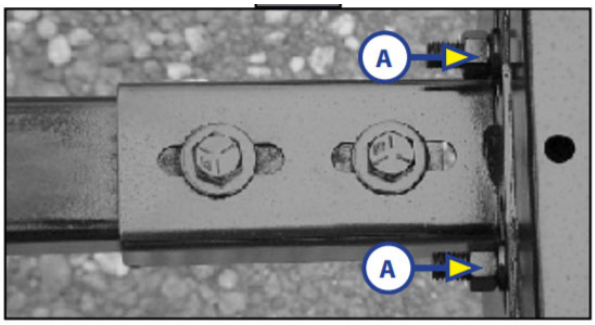
SLIDEOUTS (CONTINUED)

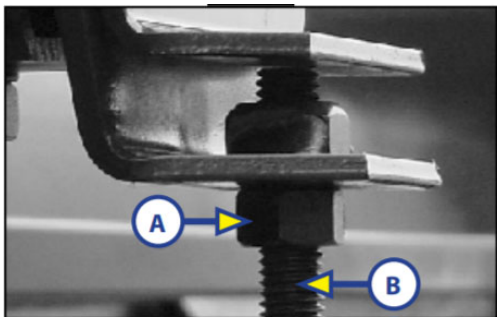
Adjusting Your Hydraulic Slideouts (Continued)

3. For vertical adjustment turn vertical adjustment bolt (B) up or down to set room height.

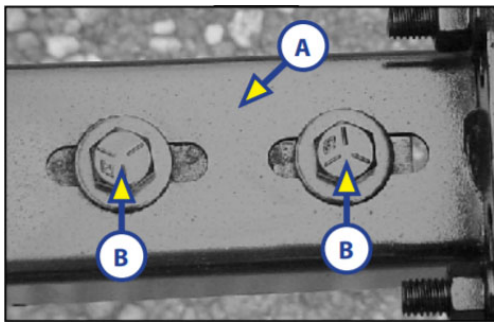


4. Once room height is located, tighten carriage bolts (A) and jam nut (A).





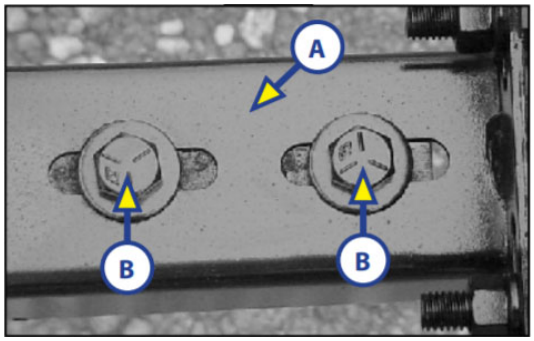
- **Synchronizing Room Travel**
  This can be adjusted with the specially designed synchronizing bracket mounted on the passive slide tube. The passive slide tube is the one that is not powered. The active slide tube has the cylinder attached to it. If one side of the room fails to seal adjust as follows:
  1. Run the slideout approximately halfway out.
  2. Measure the active side from the "T"-molding on the slideout main wall to the outside wall of the RV.
  3. Measure the passive side in the same way.
  4. Loosen bolts (B) on top of the passive slide tube (A).



SLIDEOUTS (CONTINUED)

Adjusting Your Hydraulic Slideouts (Continued)

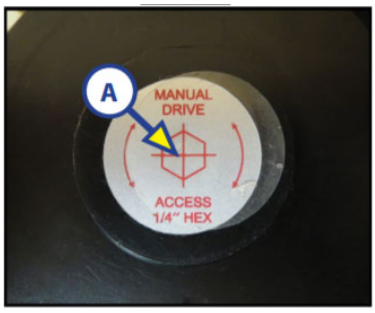
5. Push or pull room (on passive side) to align the passive side with the active side.
6. Tighten bolts (B) to secure the passive sides position.



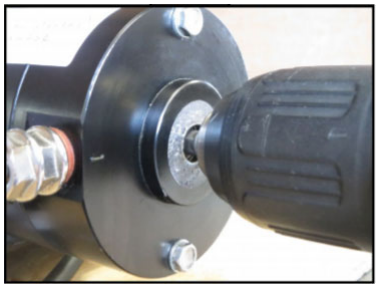
7. Bring the room in and run as normal.

- **Manual Hydraulic Slideout Operation**
  The slideout can be run with an electric or cordless drill.

1. Remove protective label (A).



2. Using a standard hex bit and drill, insert the bit into coupler found under the protective label.



3. Run the drill counterclockwise to move the slideout out and clockwise to bring the slideout in.

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SLIDEOUTS (CONTINUED)

Electric Slideout System

We're utilizing the electric slideout system in the upstairs portion of the RV, typically a bedroom slideout. All slideouts are operated at the central monitor panel shown below. This panel will be found relatively close to the entry door of the RV in a cabinet designed to house this panel. The slideout system should never be used for anything other purpose other than extending and retracting the slideout room itself. To use the system for any reason other than what it is designed for may result in death, serious injury or damage to the coach.

Operating Your Hydraulic Slideout System

Extending Your Electric Slideout

1. Level the RV.
2. Verify the battery is fully charged.
3. Press and hold the rooms switch in the "OUT" position until room is fully extended and stops moving.
4. Release the switch, this will lock the room in the "OUT" position.

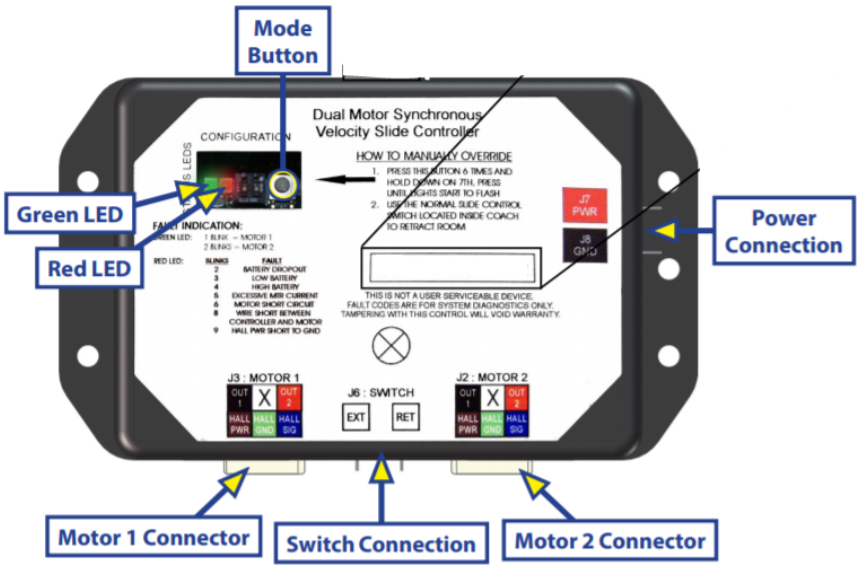
Retracting Your Electric Slideout

1. Verify the battery is fully charged.
2. Press and hold the rooms switch in the "IN" position until the room is fully retracted and stops moving.
3. Release the switch, this will lock the room in the "IN" position.

NOTE: It is important to continue to press the slideout switch for a few seconds after the room is fully extended until the motor shuts off. The control will sense the room has stopped and shut the motor off automatically.

SLIDEOUTS (CONTINUED)

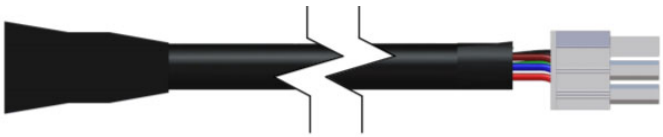
Electric Slideout Controller Overview



- **Status LEDs**: 2 LEDs, 1 green and 1 red, are provided to indicate current controller status and faults.
- **Mode Button**: Used to engage the electronic manual override.
- **Power Connection**: 12V DC input. Unit will operate from 8V DC to 18V DC.
- **Switch Connection**: Spade connection for the switch wiring.
- **Motor 1 Connector**: Power and encoder input for motor 1.
- **Motor 2 Connector**: Power and encoder input for motor 2.

Electric Slideout Controller Connections

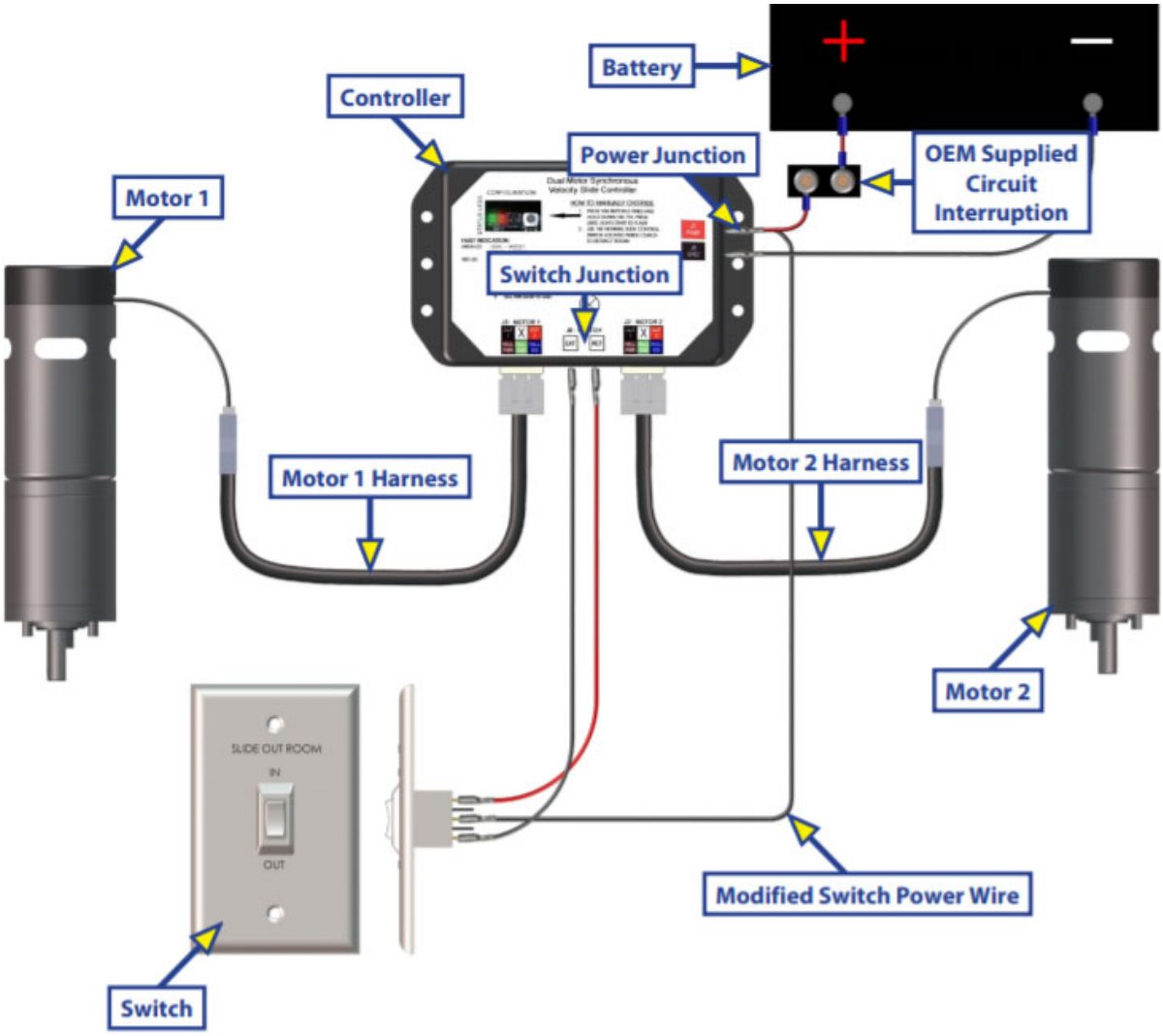
- **Connections & Motor Harness**



NOTE: Motor harnesses have Molex connectors at the controller and a molded connector at the motor end (2 images shown above). Wire colors match with color codes on the control board. It does not matter which motor is 1 or 2.

SLIDEOUTS (CONTINUED)

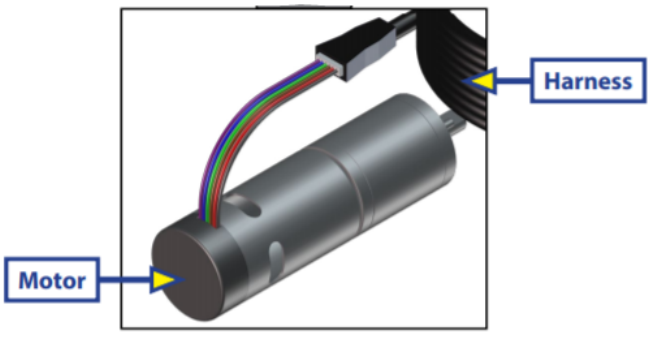
Electric Slideout System Overview



Electric Slideout Motor and Harnesses

Check for proper connections between the motors and harnesses._Visually inspect the exposed harnesses to ensure they are not pinched or damaged.

Note: Ribs on motor connector lineup with notch inside of female connector on the wiring harness. Color codes on wires also match (black to black, red to red, etc.)



SLIDEOUTS (CONTINUED)

Adjusting / Resynchronizing the Electric Slideout Motors

1. Run the slideout room all the way out.
   NOTE: Keep the switch pressed until the motors shut down on their own.
2. Bring the slideout back in 1-2 inches.
3. Repeat steps 1 and 2 until both motors shut down at the same time.
   NOTE: It can take 3 or more attempts to successfully re-sync the room.
4. Run the slideout all the way out.
   NOTE: Keep the switch pressed until the motors shut down on their own. Fully retract the slideout again. When both motors shut down at the same time at full extension and full retraction, the room is properly synced. If they do not shut down at the same time, repeat the process until they do.

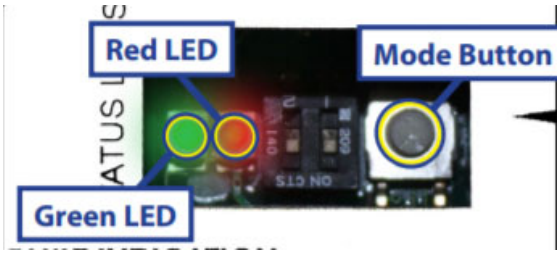
Electric Slideout Troubleshooting

The electric slideout requires a minimum of a 30-amp circuit breaker. Check the 12-volt distribution center for blown circuit breakers and replace any if necessary. If the circuit breaker blows immediately upon replacement, there is a problem with the wiring to slideout controller.

Check outside the RV for obstructions. Check inside the RV for any obstructions. Also, check for smaller objects that may be wedged under the floor or in the sides of unit. Remove any obstructions that exist.

Check the sides of the slide room for any dirt or debris. Small dirt clumps or metal shavings can cause the spur gear to bind up and stop the slideout from moving. Use an air compressor or a dry brush to remove any dirt or debris from the rack before attempting to use the slideout again.

During operation when an error occurs, the board will use the LEDs to indicate where the problem exists (shown below).



FAULT INDICATION

GREEN LED:	1 BLINK = MOTOR 1
	2 BLINKS = MOTOR 2

	BLINKS	**FAULT**
RED LED:	2	Battery Dropout
	3	Low Battery
	4	High Battery
	5	Excessive Motor Current
	6	Motor Short Circuit
	8	Wire Short Between Controller and Motor
	9	Hall Power Short to Ground

SLIDEOUTS (CONTINUED)

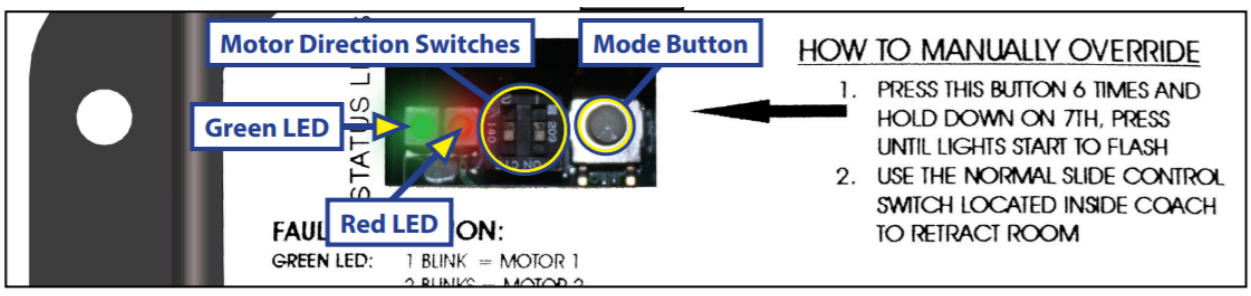
Electric Slideout Troubleshooting (Continued)

For motor specific faults the green LED will blink 1 time for motor 1, and 2 times for motor 2. The red LED will blink 2 to 9 times depending on the error code. When an error code is present, the board needs to be reset. Energizing the slideout switch resets the board. Energize the slideout switch again for normal operation.

Error Code	Name	Description
2	Battery Drop Out	Battery capacity low enough to drop below 6 volts while running or short in switch wiring
3	Low Battery	Voltage below 8 volts at start of cycle
4	High Battery	Voltage greater than 18 volts
5	Excessive Motor Current	High amperage, also indicated by 1 side of slide continually stalling
6	Motor Short Circuit	Motor or wiring to motor has shorted out
8	Wire Short Between Controller and Motor	Encoder is not providing a signal. This is usually a wiring problem.
9	Hall Power Short to Ground	Power to encoder has been shorted to ground. This is usually a wiring problem.

Electric Slideout Electronic Manual Override

1. Press the mode button on the controller six times and hold on the seventh for five seconds to enter electronic manual override mode.
2. Use the slideout switch to move both motors in or out. **Note**: Over-current and short circuit detection are still enabled. Electronic manual override provides 12-volt directly to both motors.
3. To exit this mode, push and hold the mode button until the LEDs begin to blink simultaneously. Exiting the override mode resets the motor positions which will require you to have to re-sync the motors. **Note**: During this override procedure the motors are not synced. Visually watch the room, if one side is moving noticeably slower than the other (or not at all) then immediately stop and use the **Motor Disengagement Procedure** covered below.



SLIDEOUTS (CONTINUED)

Electric Motor Disengagement Procedure

1. Remove retention screws from the motor, located near the top of each vertical column on the outside of the coach.
2. Locate motor.
3. Pull the motor up until disengaged. A flathead screwdriver can be used to pry the motor up.
4. Reinstall motor retention screw to hold motor in place or remove the motor.

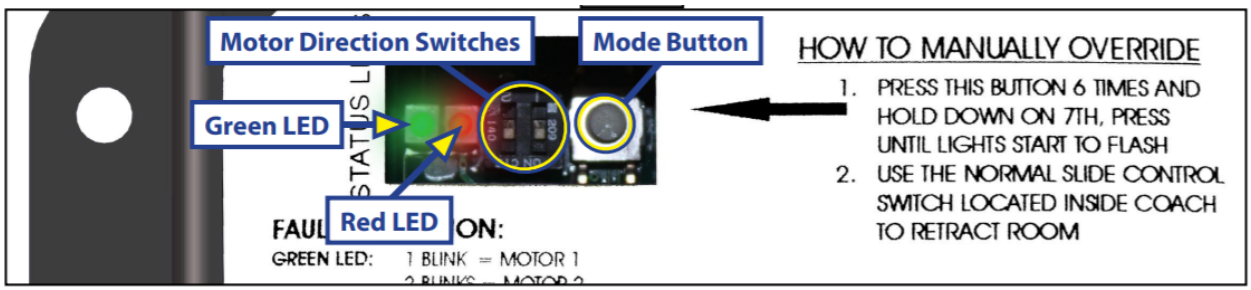
Electric Slideout Low Voltage

The slideout controller can operate the room with as little as 8-volts. However, at these lower voltages the amperage requirement is greater. Check voltage at the controller. If the battery is low, it needs to be charged or the unit should be plugged into shore power (or generator), if equipped.

Electric Slideout Motor Direction Switches

The motor direction switches are used to change the direction of the individual motors. When running the slideout room in or out and one side goes in and the other side goes out, then there is a problem in the wiring. The motor direction switches can be used to correct this problem. The left switch controls motor 2 and the right switch controls motor 1. If motor 1 is going in the wrong direction, then change switch 1's position. If motor 2 is going in the wrong direction, change switch 2's position.

The motor direction switches can also be used to change the direction of the slideout switch. If the room extends when the slideout switch is moved to the in position, its direction can be reversed by moving both switch 1 and switch 2 to their opposite positions. This feature can be used if it is more convenient to change the motor direction switches than to rewire the slideout switch.



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SLIDEOUTS (CONTINUED)

Electric Slideout Maintenance

Keep the gear racks and seals clean and free of debris. They can be washed with mild soap and water. **NOTE**: No grease or lubrication is necessary, and in some situations can be detrimental.

After servicing the slide-out system in any way, be sure to check the following:

- Slide-out stops are installed and adjusted properly.
- Head assemblies are installed and adjusted properly.
- System is mounted properly.
- Cross shafts are mounted properly and clear all other components.
- Gear packs function properly.
- Manual override is accessible.
- Outside seals compress when slide-out is retracted.
- Inside seals compress when slide-out is extended.
- Slide-out extends and retracts smoothly.
- Both sides of slide-out are synchronized.
- Any dirt or debris is cleaned from the interior or exterior of the coach.

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ELECTRICAL

Electrical Overview

Your RV has a 12-volt electrical system and a 120-volt system. The 12-volt system is powered by battery and powers items such the water heater, furnace, and refrigerators, as well as most of the lights. Water pumps, carbon monoxide detectors and a number of other items will also be powered by the 12-volt system. You'll also find that Alliance RV has conveniently color coded and numbered 12-volt wiring system.

The 120-volt system is powered by an electrical source via your power cord, a generator and in some cases, an inverter (which converts 12 volt to assist in powering the 120 volt system), and typically powers kitchen appliances, TVs, and other electrical appliances.

Alliance RV is compliant with industry standards applicable at the time the RV is manufactured. Do not make unauthorized changes.

⚠WARNING

CHANGES OR ADDITIONS MADE AFTER DELIVERY MAY RESULT IN HAZARDOUS CONDITIONS. ALWAYS HAVE A PROFESSIONAL WORK ON YOUR RV.

Modifications the RVs electrical system should only be performed by qualified technicians and should never be made without approval from Alliance RV. Should a modification be made, those changes MUST comply with current safety and code requirements.

⚠WARNING

USE CATION WHEN USING METAL TOOLS. IF A TOOL CONTACTS A BATTERY TERMINAL OR METAL CONNECTED TO IT, A SHORT CIRCUIT COULD OCCUR AND CAUSE INJURY.

Before working on the electrical system:

- Make sure the inverter (if equipped), is turned off before disconnecting batteries.
- Disconnect the power cord.
- Turn off the generator (if equipped) and disable the auto start function (if equipped).
- Turn off the battery disconnect switch.
- Turn off the 120-volt AC main circuit breaker.
- Disconnect the negative 12-volt DC battery terminal from the battery.

ELECTRICAL (CONTINUED)

Power Control Center

The INTELI-POWER series converter will supply "clean" power from input voltages that range from 105 - 130VAC.

The INTELI-POWER series of converters are primarily designed for use with a battery; however, the output of the INTELI-POWER converters is a regulated, filtered DC voltage that can power sensitive electronics without the need for a battery or other filtering.

At normal input voltages (105 – 130VAC) the full load rated capacity is available. At input voltages less than 105 VAC the converter may not supply full rated output capacity.

PD4500 Series - The full rated load is available for load, battery charging or both. When functioning as a regulated battery charger the converter has a nominal voltage output of 13.6 VDC. The system is designed to sense voltage on the battery and automatically selects one of three operating modes (normal, boost and storage) to provide the correct charge level to the batteries.

ELECTRICAL (CONTINUED)

Power Control Center (Continued)

- **NORMAL MODE**: Output voltage set at approximately 13.6 VDC.
- **BOOST MODE:** If the converter senses that the battery voltage has dropped below a preset level the output voltage is increased to approximately 14.4 VDC to rapidly recharge the battery.
- **STORAGE MODE:** When there has been no significant battery usage for 30 hours the output voltage is reduced to 13.2 VDC for minimal water usage. When in storage mode, the output voltage will periodically increase to 14.4 VDC to help prevent sulfating of the battery plates.

⚠WARNING

IT IS IMPORTANT THAT THE FLUID LEVELS OF ANY CONNECTED BATTERY(S) BE CHECKED ON A REGULAR BASIS. ALL BATTERIES WILL "GAS" AND LOSE SOME FLUID WHEN CONTINUOUSLY CONNECTED TO ANY CHARGING SOURCE.

Typical Appliance Loads

	AVERAGE POWER REQUIRED	
APPLIANCE	WATTS	AMPS
Air Compressor (1hp)	900 - 1800	7.5 - 15
Air Conditioner	1,200 - 2,400	10 - 20
Battery Charger	Up to 3,000	6 - 28
Blender	450 - 700	3.3 - 5.8
Broiler	1,400 - 1,700	11.6 - 14
Vacuum	1,000 - 1,440	8.3 - 12
Stereo	85	.7
Coffee Pot	900 - 1200	7.5 - 10
Computer	60 - 270	.5 - 2.25
Laptop	20 - 50	.16 - .41
Converter	500 - 1,000	4 - 8
Curling Iron	20 - 50	.16 - .41
Dishwasher	1,200 - 2,400	10 - 20
Drill	250 - 1,000	2 - 8
Electric Blanket	60 - 100	.5 - .8
Fan	10 - 175	.08 - 1.45
Flat Iron	40 - 80	.3 - .6
Electric Skillet	1,000 - 1,350	8 - 11.25
Game Console	19 - 200	.16 - 1.6
Hair Dryer	1,200 - 1,875	10 - 15.6
Iron	1,000 - 1,800	8 - 15
Light Bulbs	13 - 100	.1 - .8
Microwave	750 - 1,100	6.25 - 9.2

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ELECTRICAL (CONTINUED)

Power Control Center Safety Features

REVERSE BATTERY PROTECTION CIRCUIT – If a battery is accidentally hooked up backwards, the converter will be protected. Easily accessible ATC type fuses will blow when a battery is connected in reverse. Correct battery wiring and replace fuses with the same type and rating.

THE DC SECTION – The DC panel features up to 18 fused positions rated for up to 30 amps, depending on model, for accessories including ten low-to-full current rated branches. These can be used for lower current devices such as smoke and CO detectors. Each branch has an optional LED to indicate a blow branch fuse.

⚠WARNING

DISCONNECT ALL POWER TO THE CONVERTER PRIOR TO CHECKING OR CHANGING FUSES.

⚠WARNING

FOR CONTINUED PROTECTION AGAINST RISK OF FIRE OR ELECTRICAL SHOCK, REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE. CONSULT A LICENSED ELECTRICAL OR RV TECHNICIAN FOR ANY NEEDED ASSISTANCE.

Power Control Center Specifications

MODEL	PD4560(LI)	PD4575(LI)	PD4590(LI)
AC Section	240/120 VAC 50 Amps Maximum*		
	120 VAC 50 Amp Maximum* - 12 Branch Circuits		
DC Section	12 VDC 100 Amp Max. - 18 Branch Circuits		
Converter Section	Input: 105-130VAC 50/60 Hz 1,000 Watts Output: 13.6-14.6 VDC (14.6 VDC) 60 Amps Weight: 8 lbs.	Input: 105-130VAC 50/60 Hz 1,250 Watts Output: 13.6-14.6 VDC (14.6 VDC) 75 Amps Weight: 8.5 lbs.	Input: 105-130VAC 50/60 Hz 1,550 Watts Output: 13.6-14.6 VDC (14.6 VDC) 90 Amps Weight: 10 lbs.

** Maximum continuous loads on main or branch circuits not to exceed 80% of the circuit breaker ratings*

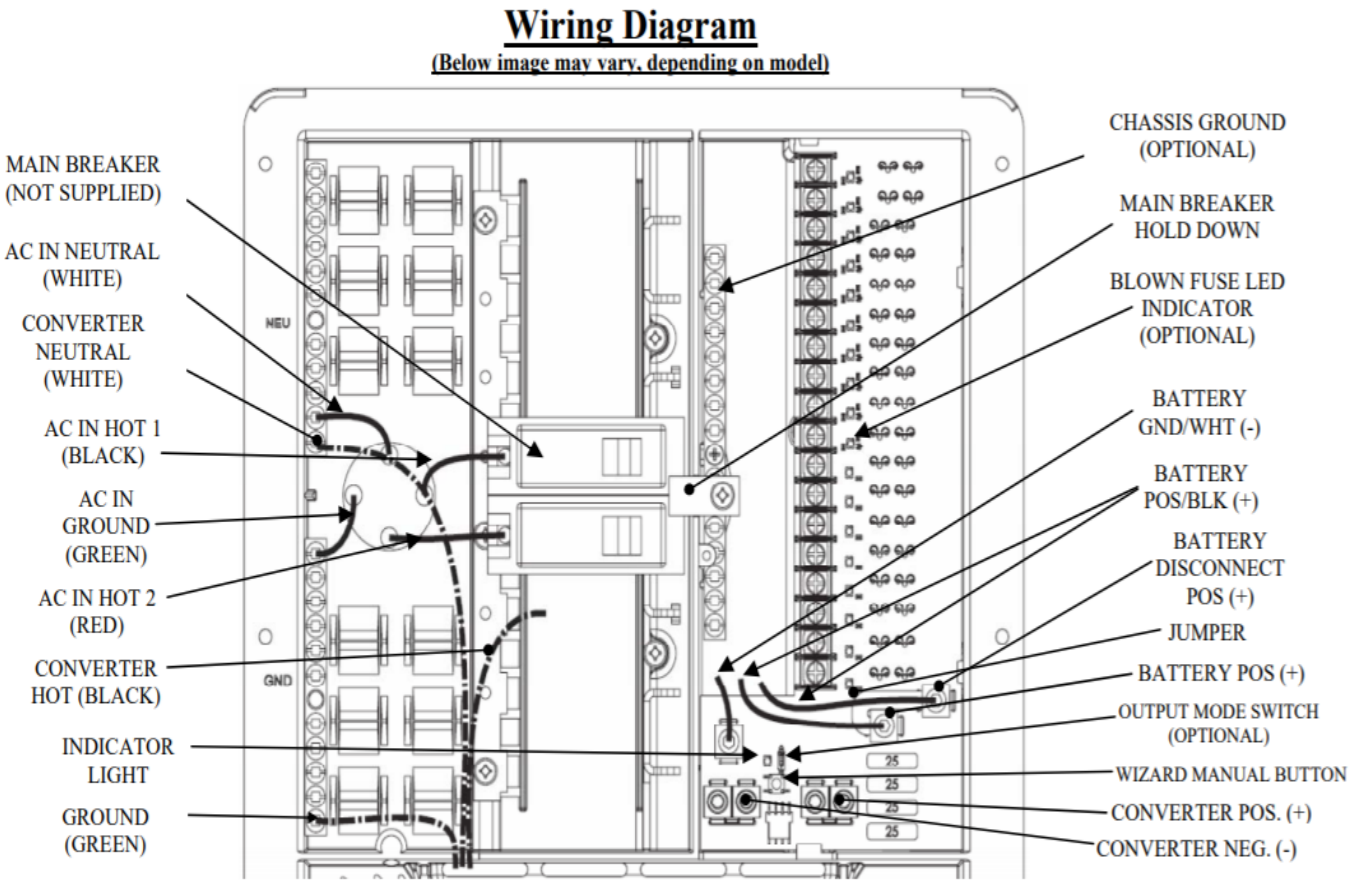
ELECTRICAL (CONTINUED)

Power Control Center Troubleshooting

PROBLEM	POSSIBLE CAUSE(S)	ACTION
No Output	Proper AC power not connected	Connect power supply Check AC distribution panel for proper operation
	Reverse battery fuses blown	Check for reverse battery connection Replace fuses with same type and rating
	Short circuit	Trace circuits for possible fault
	Unit has shutdown due to overheating	Check air flow Allow unit to cool
	Unit has shutdown due to over voltage	Check input voltage Correct input voltage
Low Output	Compartment gets too hot	Check air flow to the converter Improve ventilation to the compartment
	Excessive load for converter	Reduce load requirements Install larger converter
	Input voltage not between 105-130 Volts AC	Correct nput supply voltage
	Bad battery cells	Replace battery
Intermittent or no output on generator, works on shore power	Unit has shutdown due to over voltage	Add another load to the generator, this may reduce the spikes to an acceptable level.
	Some generators exhibit excessive voltage spikes on the AC power output, this may cause the over voltage protection to shut the unit down.	Contact generator manufacturer for possible defect in the generator
	Reverse battery fuses blown	Check battery polarity Replace fuses
	No battery connection	Check wiring to battery Check inline fuse

ELECTRICAL (CONTINUED)

Power Control Center Wiring Diagram



Consult a licensed electrician or RV technician for installation assistance

Inverter Overview

The PD1200 Series Inverter is a 120 VAC, 60 Hz, pure sine wave inverter with integrated transfer switch. It has been robustly designed with safety and protection features for installation in recreational and commercial vehicles. With a built-in transfer switch this inverter can switch seamlessly between inverter power and external shore power without any power interruptions. It has been UL certified in both the US and Canada so you can feel comfortable knowing that your inverter is safe.

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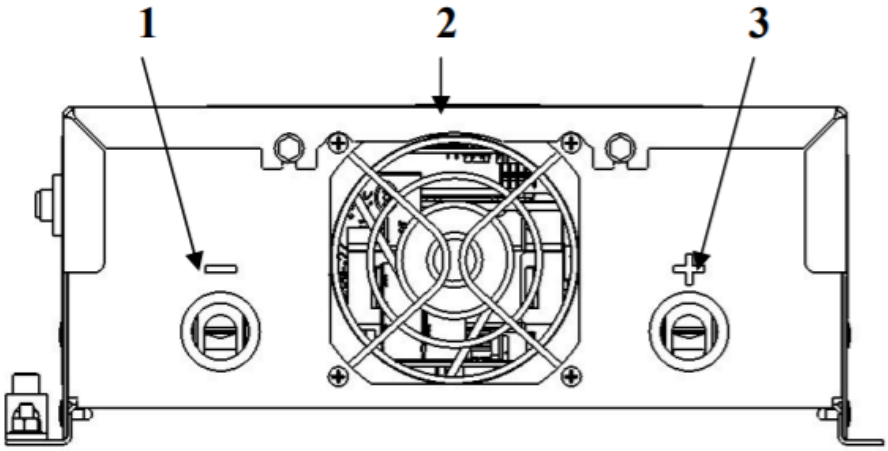
ELECTRICAL (CONTINUED)

Inverter Overview (Continued)

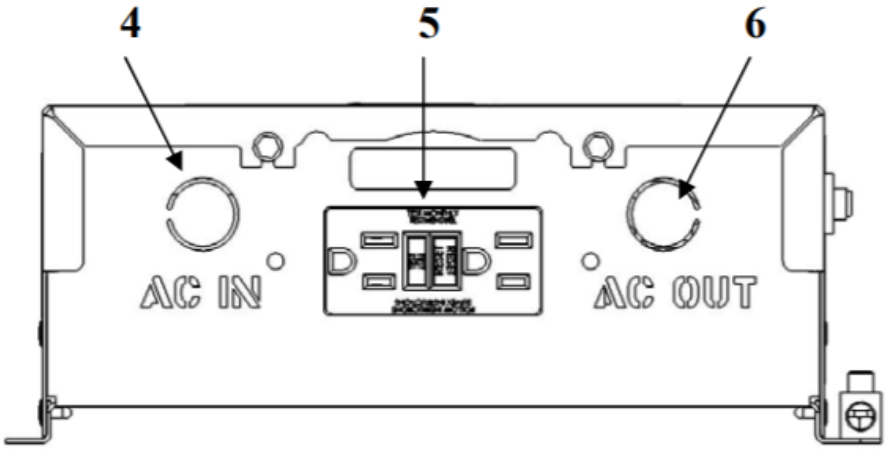
DC End View

1) DC input port (negative): Used to connect to battery (-)
2) Ventilation input: This should be free from any blockages
3) DC input port (positive): Used to connect to battery (+)



AC End View

4) AC input knockout: Knockout to be removed when connecting transfer switch to external AC Power
5) GFCI output (optional): Optional AC output selected at time of purchase. NOT FIELD REMOVABLE
6) AC output knockout: Knockout to be removed when connecting to hardwired AC output

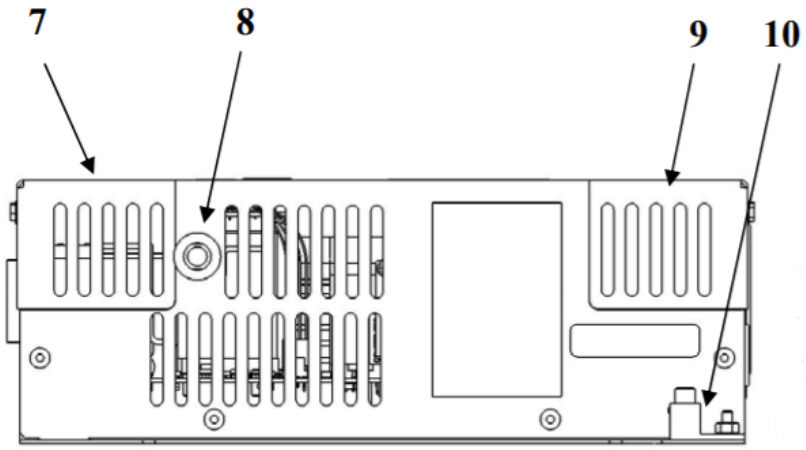


ELECTRICAL (CONTINUED)

Inverter Overview (Continued)

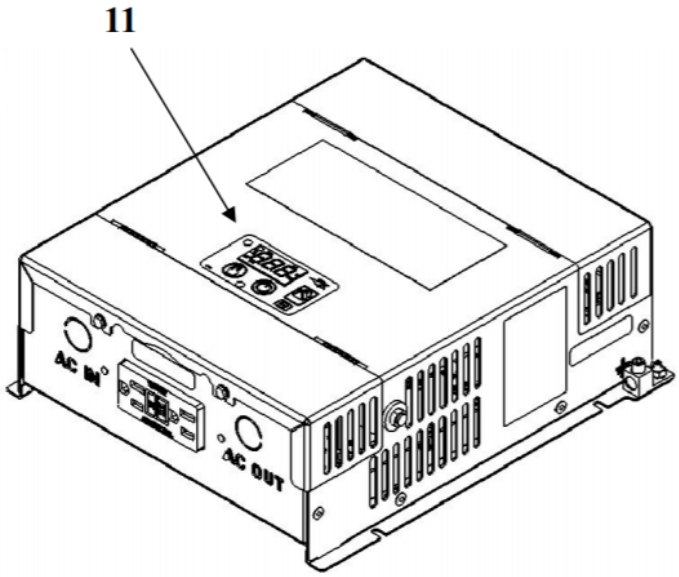
Side view

7) AC access panel.
8) 15A output circuit breaker: Protects equipment from excessive power draw when connected to AC input power. When inverter is supplying power, internal circuitry limits output power to specified limits.
9) DC access panel: Remove access panel to wire install DC wiring
10) Equipment ground lug: Connect case to earth ground to ensure proper, safe operation



Isometric view

11) On-board display: Display monitors all relevant parameters of the inverter



ELECTRICAL (CONTINUED)

Inverter Overview (Continued)

Key features

Pure sine wave output – The output of the PD1200 Series inverter is a 120 VAC, 60 Hz, pure sine wave. Unlike a modified sine wave, a pure sine wave is ideally suited to drive all types of loads including refrigerators, motors, power tools, and common household electronics.

Integrated automatic transfer switch

Built into the PD1200 Series Inverter is an automatic transfer switch that engages whenever power is detected at the AC input port. In recreational vehicles this is often used to switch over to shore or generator power when it is available, reserving the battery power for later use. The transfer switch transition times are fast enough that transitioning from one source to another will not impede operation for most electrical loads.

Ease of install

Built into the PD1200 Series Inverter is an automatic transfer switch that engages whenever power is detected at the AC input port. In recreational vehicles this is often used to switch over to shore or generator power when it is available, reserving the battery power for later use. The transfer switch transition times are fast enough that transitioning from one source to another will not impede operation for most electrical loads.

2x peak power rating

When starting inductive loads like compressors (found in common household refrigerators) there is a large surge in power draw during the initial startup. To supply this initial startup power the PD1200 Series Inverter has been designed to supply a peak power that is 2X its rated power.

Automatic restart after DC disconnect

The PD1200 Series Inverter will detect when the battery input connections have been removed. When the DC disconnect switch is reengaged the inverter will automatically restart. Similar to a DC disconnect switch, this automatic restart also kicks in when the user replaces the batteries. To avoid an automatic restart, simply turn off the inverter prior to disconnecting the batteries.

Under/over voltage protection

To protect both the inverter and the battery bank the PD1200 Series Inverter has been designed with integral under voltage and over voltage protection. These voltage limits are designed to operate with a Lead Acid battery bank without damaging the batteries. The inverter may also be used with a 12V lithium ion battery pack (LiFePO4) with a properly configured BMS. See Specifications on page 16 for voltage limits.

ELECTRICAL (CONTINUED)

Inverter Overview (Continued)

Reverse battery protection

Reverse battery protection has been added to the inverter to protect the equipment in the event that the positive and negative terminals of the battery are incorrectly connected to the inverter. Unlike some other inverters on the market, there is not a time delay associated with the reverse battery protection. In the event that the inverter is reverse wired it will not turn on.

Over-load protection

In order to protect the inverter from over-load conditions the power draw is continually measured, and should it exceed the rated output power, the inverter will automatically shut down and display the error code corresponding to an over-load error. This is a required feature in all UL safety certified inverters. For additional protection the PD1200 Series inverter includes a 15A circuit breaker on the output to limit power that is passed through from the AC Input.

Short circuit protection

In any power system, a sustained short circuit can cause hazardous conditions potentially resulting in over-heating and fire. To avoid these conditions the inverter has been designed with short circuit protection. It will detect any large current spikes caused by a short circuit and shutdown immediately to avoid damaging the inverter and output wiring.

Over temperature protection

A required feature for all UL safety certified inverters, over temperature protection is designed into every PD1200 Series inverter. When the internal temperature of the inverter gets too high due to poor ventilation or high ambient temperature the inverter will shut down. The output will automatically turn back on when the internal temperature returns to safe operating temperatures.

Thermally controlled variable speed fan

Using technology that is found in all Progressive Dynamics Converters, the PD1200 Series Inverter employs a thermally controlled variable speed fan. This fan will only turn on when the inverter is operating at a warmer than normal temperatures. Furthermore, when it does turn on, the speed of the fan is smoothly controlled to only run as fast as necessary to keep the inverter within safe operating temperatures. This is designed to minimize disruptive audible noise.

ELECTRICAL (CONTINUED)

Inverter Overview (Continued)

Neutral Bonding

In an RV the neutral should be tied to ground at the source of the power. To safely accomplish this, the PD1200 Series inverter ties the neutral to ground only if the inverter is supplying the power. When the transfer switch is engaged to pass AC Input power, the ground connection is passed from AC input to AC output with the assumption that the neutral is properly grounded wherever the power is being generated (generator or campground electrical post).

⚠WARNING

- **INVERTER SHOULD ONLY BE INSTALLED BY AN ELECTRICIAN OR A CERTIFIED RV TECH.**
- **INVERTER SHOULD BE MOUNTED IN A DRY, WELL VENTILATED SPACE WITH ADEQUATE AIR FLOW.**
- **FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.**

⚠WARNING

- **DO NOT CONNECT ANY AC SOURCE TO THE AC OUTPUT WIRING OF THE INVERTER. CONNECTING AN AC SOURCE TO THE AC OUTPUT OF THE INVERTER WILL RESULT IN A HAZARDOUS CONDITION.**
- **ANY DIRECTLY WIRED AC INPUT AND AC OUTPUT WIRING MUST BE PROTECTED WITH PROPER SIZED CIRCUIT PROTECTION.**
- **FAILURE TO FOLLOW THESE INSTRUCTIONS MAY DAMAGE THE UNIT AND/OR EQUIPMENT.**

Inverter Display Features

- **Power Button**: Press to turn on; hold to turn off
- **Select Button**: Cycles between display states: Input Voltage, Output Voltage, Output Power, Sleep, Error Code (if applicable)
- **Power Indicator**: Lights up green when the inverter is on
- **Fault Indicator**: Flashes red when an error has occurred

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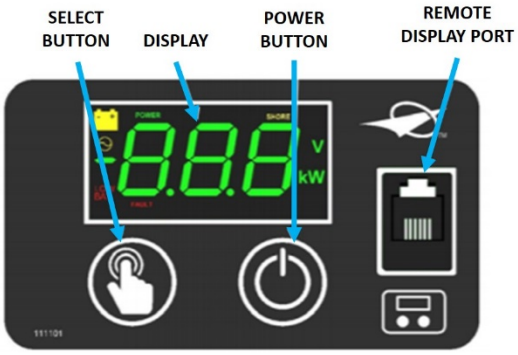
ELECTRICAL (CONTINUED)

Inverter Display Features (Continued)

- **Shore Indicator**: Lights up yellow when AC input is detected
- **Low Bat Warning Indicator**: Lights up red when the battery is nearing the end of its charge
- **Sleep**: Lights automatically dim after 30 seconds
- **Remote Display Port**: For externally mounted display



⚠WARNING

- **MAKE SURE WIRING IS DISCONNECTED FROM ALL ELECTRICAL SOURCES BEFORE HANDLING. ALL WIRING MUST BE DONE IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL WIRING CODES.**

- **DO NOT DISASSEMBLE THE INVERTER. IT DOES NOT CONTAIN SERVICEABLE PARTS. ATTEMPTING TO SERVICE THE UNIT YOURSELF COULD RESULT IN ELECTRICAL SHOCK OR BURN.**

Inverter Error Codes

- E-1: Low battery voltage – the input voltage has dropped beneath 10.5 volts for several seconds. The PDI1200 series inverter will automatically restart when the input voltage reaches 12.0 volts.
- E-2: High battery voltage shutdown – the input voltage has surpassed 15.5 volts. The PDI series inverter will automatically restart when the input voltage falls below 15.0 volts.
- E-3: AC output overload shutdown – the output power has surpassed the continuous power limit or the peak power limit. The PDI1200 series inverter will not automatically restart, a manual start is necessary.

ELECTRICAL (CONTINUED)

Inverter Error Codes (Continued)

- E-4: Over temperature shutdown – the internal temp of the inverter has exceeded its safe operating limit. The PDI1200 series inverter will automatically restart when internal temperatures return to safe operating conditions.
- E-5: Internal error – an internal error has been detected. The PDI1200 series inverter will not automatically restart. A manual restart is necessary.

Inverter Troubleshooting

Inverter is flashing a fault light – A fault has been detected. 30 seconds after the fault condition is detected the display enters sleep mode. Press the select button to view the error code. Press the select button again to view the battery voltage. Proceed to the correct troubleshooting action below.

- E-1 is displayed – The input voltage fell below 10.5 volts DC. Inverter will automatically restart when DC input voltage is increases to 12 volts DC.
    - Recharge the batteries to at least 12 volts DC
    - Ensure all DC input connections are tightened

- The inverter is turning on and off, E-1 is displayed when it is off – Likely the batteries are nearly fully discharged. When a heavy load is being drawn from a battery the battery voltage will drop causing an under-voltage error. With the inverter turned off the battery voltage will slowly drift back up because there is no load on the batteries. If the battery voltage drifts back up to 12 volts, the inverter will turn back on. This cycle may repeat several times. This will be seen more often when batteries are nearing the end of their life cycle.
    - Re charge batteries to 12 volts
    - Ensure all DC input connections are tight
    - Make sure DC input wire size and length are correct
    - Replace batteries

- Battery is fully charged but the inverter displays E-1 immediately after it is turned on – The batteries may be fully charged, but if the battery voltage is not properly connected to the DC input terminals of the inverter, a low battery fault may be falsely triggered.
    - Make sure all DC input connections are tight
    - Make sure the DC input wire size and length are correct

- E-2 is displayed – The input voltage has exceeded 15.5 volts. The inverter will automatically restart when the input voltage is decreased to 15 volts.
    - Turn off the inverter by holding down the power button. Locate the DC source and verify it is properly connected for 12-volt operation

ELECTRICAL (CONTINUED)

Inverter Troubleshooting (Continued)

- E-3 is displayed – An overload condition has been detected, this can be excessive power or a peak power that exceeds 2x rate power. A manual restart is required after the overload issue has been resolved.
    - Check output wiring for a short
    - Determine what loads are connected to the output of the inverter. Remove any unnecessary loads until power is below maximum rated power
    - Determine peak power draw from inductive loads (refrigerators and other motor drive loads). If total peak power draw exceeds 2x rate power loads remove loads until peak power is below 2x rate power

- E-4 is displayed – An over temperature condition has occurred. The inverter will automatically restart when the internal temp falls to a safe operating level.
    - Ensure that debris hasn't fallen into the fan opening and hindering its operation
    - Ensure that the inverter has adequate air flow. If surrounded by any stored items, remove them and make sure to keep the area clear in the future
    - Lower the ambient air temperature to room temperature

- The inverter is turning on and off and E-4 is displayed when off – An over temperature condition has occurred. The inverter will automatically restart when the internal temp falls to a safe operating level.
    - Ensure that debris hasn't fallen into the fan opening and hindering its operation
    - Ensure the inverter has adequate airflow. If surrounded by any stored items, remove them and make sure to keep the area clear in the future
    - Lower the ambient air temperature

- E-5 is displayed – During startup the inverter draws a small amount of current to charge the input capacitors. If that current exceeds a normal range the inverter will shut down and report the error.
    - Ensure that all DC input connections are tightened properly
    - Verify that all DC input wire is the proper size and length

- The inverter is off and nothing happens when the power button is pressed – It is likely that the DC input power is not being properly applied to the DC input terminals.
    - Ensure all DC input connections are properly tightened
    - Ensure that all external DC
    - Disconnect switches are in the on position
    - Make sure the DC input wires are connected to positive and negative terminals correctly and not reversed

ELECTRICAL (CONTINUED)

Inverter Troubleshooting (Continued)

- If using the remote display model, make sure that it is connected to the inverter using the provided cable

- The inverter has turned off for seemingly no reason – An interruption in the communication between the display and the inverter has taken place.
  - Check to make sure that the equipment ground wire is properly secured to the ground lug
- The inverter is making a buzzing noise – A buzzing sound may sometimes be present during large surges in output power. This will most commonly take place when a refrigerator compressor is starting up, this is normal and will not last more than 2 seconds.

Inverter Specifications

- Physical Dimensions
  - Length – 11.6”
  - Width – 10.6”
  - Height – 4.0”
  - Weight – 7lbs

- Transfer Switch
  - Transfer voltage – 100 volts AC
  - Transfer time - < 50msec
  - Pass Through Ampacity – 15 AAC

- AC Output
  - Output voltage – 120 volts AC
  - Continuous output power – 1000 W
  - Peak output power – 2000 W
  - Frequency – 60 Hz
  - Waveform – Pure Sine Wave
  - Peak Efficiency – 90%

- DC Input
  - Undervoltage shutdown – 10.5 volts DC
  - Undervoltage restart – 12 volts DC
  - Overvoltage shutdown – 15.5 volts DC
  - Overvoltage restart – 15 volts DC
  - Nominal voltage – 12 volts DC
  - Nominal current @ max load – 100 ADC

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ELECTRICAL (CONTINUED)

Power Cord

A heavy-duty power cord with a 4-prong grounding plug is used to plug the RV into an external 120V source.

Never connect the power cord to a power source:

- That is not wired to the National Electric Code standard for 50 amp 120V/240V.
- With non-functioning ground circuits.
- That has reverse polarity.
- That shows outward signs of heat damage.

Do not:

- Use a cheater plug, adapter or extension cord.
- Adapt the power cord to plug into a connector which it was not designed.

⚠WARNING

DOING SO MAY RESULT IN PROPERTY DAMAGE OR SERIOUS INJURY. YOU CAN POTENTIALLY DAMAGE YOUR RVs ELECTRICAL SYSTEM WHICH COULD RESULT IN SEVERE OR EVEN FATAL INJURY.

To connect your power cord:

- Turn the main 120V circuit breaker off.
- Extend the power cord it's entire length.
- Plug the power cord in. Be sure that all the power cord prongs are properly plugged in.
- You are now safe to return turn the 120V circuit breaker back on.

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ELECTRICAL (CONTINUED)

Power Cord (Continued)

- **DO NOT** plug your RV 50-amp shore cord into any receptacle that is not wired to National Electric Code for 50 amp 120/240V configuration. Doing so will supply the RV with the incorrect electrical power causing extensive damage to the electrical system and 120-volt components which would not be warrantable.
- **DO NOT** disconnect the 50-amp male plug connection by pulling up on the cord. This will cause a loss of neutral and 240 volts AC will be supplied to the electrical system and 120-volt components causing extensive damage which would not be warrantable. Always pull straight out on the head of the cord so all 4 prongs disengage the receptacle simultaneously.
- **DO NOT** plug in or unplug the shore cord while under load. Make sure all 120-volt components are turned off prior to connecting or disconnecting the shore cord or damage to the 120-volt systems may result. Turn off the breakers at the power center first before connecting or disconnecting the shore cord to prevent damage.

⚠WARNING

- **FAILURE TO PLUG YOUR 50 AMP POWER CORD INTO A RECEPTACLE THAT IS NOT WIRED TO THE NATIONAL ELECTRIC CODE FOR 50 AMP 120/140V CONFIGURATION COULD LEAD TO AN INCREASED RISK OF PROPERY DAMAGE, SERIOUS INJURY OR DEATH.**

- **IT IS IMPORTANT TO INSPECT THE POWER CORD FREQUENTLY FOR DAMAGE. IF DAMAGE IS FOUND, HAVE THE CORD REPLACED IMMEDIATELY**

⚠WARNING

EXPOSURE TO VOLTAGES HIGHER OR LOWER THAN A NOMINAL 120-VOLTS, WILL DAMAGE OR SHORTEN THE SERVICE LIFE OF THE ELECTRICAL SYSTEM AND APPLIANCES. THE 50 AMP 120-VOLT 60HZ AC ELECTRICAL SYSTEM CAN BE POWERED BY AN OUTSIDE 120/240-VOLT 60HZ UTILITY SERVICE LIKE THOSE COMMONLY FOUND IN CAMPGROUNDS OR BY 120/240-VOLT 60HZ GENERATOR POWER

⚠WARNING

- **MAKE CERTAIN THE EXTERNAL POWER SOURCE YOU CONNECT THE POWER CORD TO IS A PROPERLY WIRED 50 AMP NEMA 14-50 RV RECEPTACLE AND NOT 240 VOLT AC. PLUG INTO 50-AMP SERVICE ONLY**
- **CIRCUIT BREAKERS AND FUSES WILL NOT OFFER COMPLETE PROTECTION OF THE ELECTRICAL SYSTEM IN THE EVENT OF POWER SURGE OR VOLTAGE SPIKE**

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ELECTRICAL (CONTINUED)

120-Volt Circuit Breakers

Your 120V circuit breakers are in the main power control center. These circuit breakers act just like those in a household in that they protect all the 120V wiring and components. You'll find the individual circuits labeled to identify which each breaker is for.

To reset a breaker, simply flip the switch to the off position then immediately back to the on position. If the breaker immediately trips again, contact your dealer or Alliance RV for assistance.

Circuit breakers can wear out so an annual check to ensure operation is good may be needed. Only replace circuit breakers with those of the same specified type, voltage, and current rating. NEVER replace a circuit breaker with one listed at a higher amperage rating.

⚠WARNING

- **CIRCUIT BREAKERS AND FUSES WILL NOT OFFER COMPLETE PROTECTION OF THE ELECTRICAL SYSTEM IN THE EVENT OF POWER SURGE OR VOLTAGE SPIKE**

- **REPLACEMENT CIRCUIT BREAKERS MUST BE OF THE SAME VOLTAGE, AMPERAGE RATING AND TYPE. NEVER USE A HIGHER RATED REPLACEMENT CIRCUIT BREAKER, DOING SO MAY CAUSE A FIRE BY OVERHEATING THE RV WIRING**

At the beginning of camping season, inspect the circuit breakers and replace as needed. Test by turning each circuit breaker off and back on, circuit breakers are wearable parts and must be replaced as needed as part of your RV maintenance.

12 Volt Fuse Panel

You'll find the 12-volt fuse panel in the main power control center (mentioned above). When replacing fuses, please follow these safety precautions:

- Disconnect the power cord.
- Turn the inverter off.
- Disconnect batteries.

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ELECTRICAL (CONTINUED)

GFCI (Ground Fault Circuit Interrupter)

A ground fault circuit interrupter is a type of circuit breaker that shuts off electric power when it senses an imbalance between the outgoing and incoming current. A GFCI is specifically designed to protect a person from electrical shock by reacting to an imbalance that can be as small as 4 or 5 milliamps, when detected, in less than one tenth of a second the circuit is tripped and shuts off.

The GFCI circuit should be tested at least monthly.

- Push the TEST button. This action should force the RESET button on the recep (engaging the interruption of power).
- To reset the GFCI to working order, push the RESET button.
- If the RESET button cannot be depressed, your 120-volt electrical will require service – contact your servicing dealer immediately.

Battery (Not Provided by Alliance RV)

When you are not plugged into electricity (dry camping), the battery supplies power to the 12-volt system in the RV. The battery in this scenario will eventually die unless other steps are taken with generator and/or solar power (see the appropriate section of this manual for more details.)

When plugged in, the converter in your RV reduces some of the 120-volt incoming power down to 12 volts in order to supply power to the 12-volt system in the RV.

The converter will sense voltage on the battery and automatically selects one of three operating modes (normal, boost and storage) to provide the correct charge level to the batteries.

BOOST MODE: If the converter senses that the battery voltage has dropped below a preset level the output voltage is increased to approximately 14.4 VDC to rapidly recharge the battery.

NORMAL MODE: Output voltage set at approximately 13.6 VDC.

STORAGE MODE: When there has been no significant battery usage for 30 hours the output voltage is reduced to 13.2 VDC for minimal water usage. When in storage mode, the output voltage will periodically increase to 14.4 VDC to help prevent sulfating of the battery plates.

See the converter section of this manual for more information on how it will interact with your battery.

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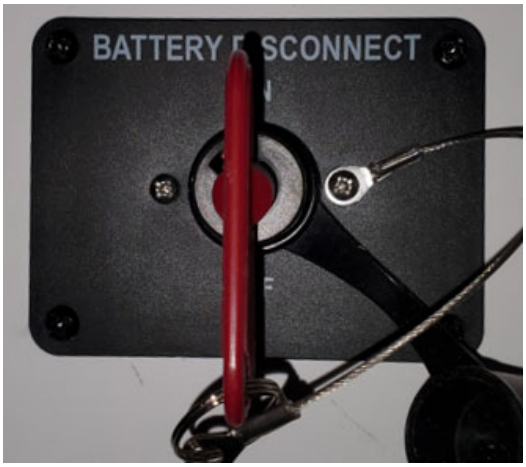
ELECTRICAL (CONTINUED)

Battery Disconnect Switch

Used to shut off all 12-volt power that supplies RV. When the switch is activated the batteries are disconnected/isolated and no longer supply 12-volt power to the RV.

You will find the battery disconnect switch in the pass thru storage compartment of the 5th wheel and are typically mounted above docking station.

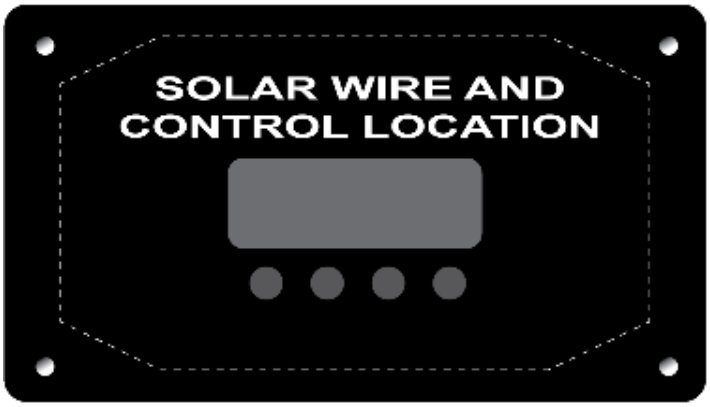
To operate the switch, simply turn the lever to the ON or OFF position. As shown below, a lanyard is attached to prevent the removeable lever from being misplaced.



Solar Prep

Alliance RVs are all solar prepped. The basic solar prep includes a pre-installed CEP (cable entry plate) mounted on the roof of the RV. The wiring from the CEP will run to a convenient location in the RV in which a solar charge controller can be installed inline.

NOTE: This will be identified by a label. This label could be in various locations in the RV. If you cannot locate this entry point, please give us a call!



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ELECTRICAL (CONTINUED)

Solar Prep (Continued)

The wiring from the cable entry point will then continue from the pre-determined controller location to the battery compartment and tie DIRECTLY into the battery. The solar prep is now ready for a solar panel and solar controller. By adding a panel and controller, you will not have a solar charge going directly to your auxiliary battery that will support your 12 volt system. Please contact Alliance RV or your dealer for details on the controller and panel.

With the addition of an inverter (we recommend an inverter with a built in transfer switch) and some additional wiring, the solar power you'll be receiving can also positively impact your 120 volt system. Consult with your RV dealer for more detail.

NOTE: Our solar prep and solar option are low voltage systems. For more details or any questions, please contact your Alliance RV dealer or Alliance RV.

Solar Option

Alliance RVs solar option is the complete RV power package. An economical and powerful way to have most of the comforts you need wherever your dry camp. The system features all the components that will allow convenient access to AC or solar power through your breaker panel, and the ability to charge batteries from both shore and solar power. This system is easily expandable into a full-time system and is lithium battery compatible. For additional details, please contact your Alliance RV dealer or Alliance RV.

Generator Prep (If Equipped)

With Generator Prep, you'll find that your RV will include the basic wiring and structures needed to install an aftermarket generator. A mounting base, a vapor isolating shroud, an electrical transfer switch and the associated wiring are in place. We recommend you work with your dealer and/or Alliance RV if you decide to add a generator to your RV.

Generator (If Equipped)

RV generators supply power when you're away from electrical hookups. These can be permanently installed and are designed to provide power for air conditioners, lighting and appliances. Alliance RV offers a generator prep and full generator options with our 5th wheels.

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ELECTRICAL (CONTINUED)

Generator (Continued)

⚠WARNING

THOROUGHLY READ THE OPERATORS MANUAL BEFORE OPERATING THE GENERATOR. IT CONTAINS IMPORTANT INSTRUCTIONS THAT SHOULD BE FOLLOWED DURING OPERATION AND MAINTENANCE. SAFE OPERATION AND TOP PERFORMANCE CAN ONLY BE ACHIEVED WHEN EQUIPMENT IS PROPERLY OPERATED AND MAINTAINED.

⚠WARNING

OPERATION OF EQUIPMENT IS UNSAFE WHEN MENTALLY OR PHYSICALLY FATIGUED. DO NOT OPERATE EQUIPMENT IN THIS CONDITION, OR AFTER CONSUMING ANY ALCOHOL OR DRUG.

MAINTAINING OR INSTALLING A GENERATOR SET CAN CAUSE SEVER PERSONALLY INJURY. WEAR PERSONAL PROTECTIVE EQUIPMENT SUCH AS SAFETY GLASSES, PROTECTIVE GLOVES, STEEL-TOED BOOTS AND PROTECTIVE CLOTHING WHEN WORKING ON EQUIPMENT.

NEVER OPERATE THE GENERATOR WITH THE COVER OR SERVICE DOOR REMOVED, IT MAY RESULT IN SEVERE PERSONALLY INJURY OR EQUIPMENT DAMAGE.

STARTING FLUIDS, SUCH AS ETHER, CAN CAUSE EXPLOSION AND GENERATOR SET ENGINE DAMAGE. DO NOT USE.

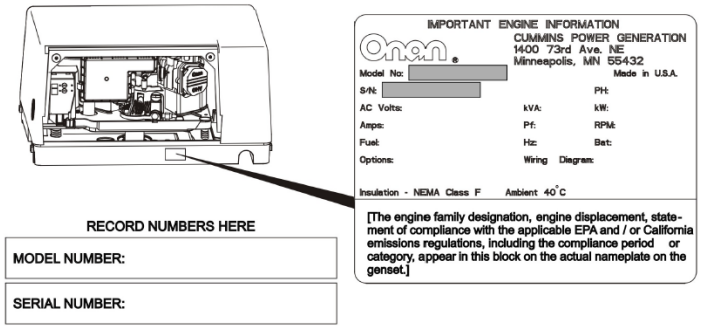
GENERATOR VOLTAGE IS DEADLY, AN IMPROPERLY CONNECTED GENERATOR ELECTRICAL OUTPUT CONNECTIONS CAN CAUSE EQUIPMENT DAMAGE, SEVERE PERSONAL INJURY, OR DEATH. ELECTRICAL CONNECTIONS MUST BE MADE BY A TRAINED AND EXPERIENCED ELECTRICIAN IN ACCORDANCE WITH APPLICABLE CODES.

ENGINE EXHAUST/CARBON MONOXIDE IS DEADLY, SUBSTANCES IN THESE GASES HAVE BEEN IDENTIFIED BY SOME STATE AND FEDERAL AGENCIES TO CAUSE CANCER OR REPRODUCTIVE TOXICITY. DO NOT BREATHE IN OR COME INTO CONTACT WITH EXHAUST GASSES.

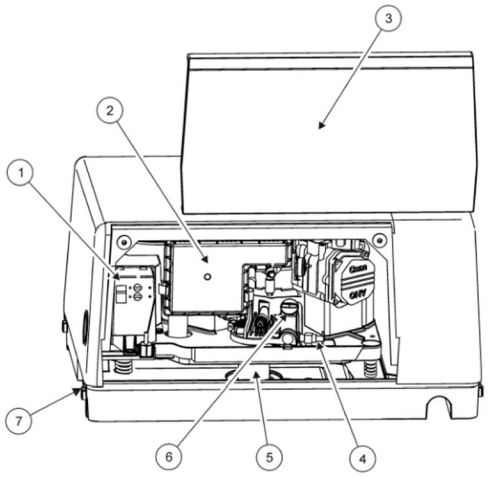
ELECTRICAL (CONTINUED)

Generator (Continued)

Your generator has a nameplate that contains the model and serial numbers. This information will be needed for any service needs.



Key Component Locations



1. Control Panel
2. Air Filter Cover
3. Removable Access Cover
4. Oil Drain Valve
5. Oil Filter
6. Oil Fill Cap and Dipstick
7. Fuel Filter

Starting the Generator

1. Visually inspect for fuel and/or exhaust leaks. Do NOT start the generator until any fuel or exhaust leak is repaired.
2. Position and hold the control switch to START until the generator starts. The status indicator on the switch flashes while cranking. It will stay on continuously when the generator set is running.

ELECTRICAL (CONTINUED)

Starting the Generator (Continued)

3. If the generator fails to start, cranking will stop in approximately 30 seconds. The status indicator will blink, indicating an over crank fault. Wait 5 seconds for the control to reset before trying again. After 5 tries, let the starter motor cool down for 30 seconds before trying again.
4. For top performance and engine life, especially in colder weather, let the engine warm up for 2 minutes before you put a load on the generator.

Stopping the Generator

1. Turn off your air conditioners and any other large appliances.
2. Run the generator for 2 minutes to allow for cool down.
3. Press the control switch into the STOP position.

The Load on the Generator

The power rating on the generator nameplate determines how much electrical load (motors, fans, heaters, air conditioners and other appliances) the generator can power. If the sum of the loads exceeds the generator set power rating, the generator will shut down or its line circuit breakers will trip.

To avoid shutdowns due to generator overload, use the electrical ratings from each appliance to compare the sum of the electrical load likely to be used at the same time to the generator rating.

Appliance load and generator power are measured in terms of watts or kilowatts. 1 kilowatt = 1000 watts.

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ELECTRICAL (CONTINUED)

Typical Appliance Loads:

	AVERAGE POWER REQUIRED	
APPLIANCE	**WATTS**	**AMPS**
Air Compressor (1hp)	900 - 1800	7.5 - 15
Air Conditioner	1,200 - 2,400	10 - 20
Battery Charger	Up to 3,000	6 - 28
Blender	450 - 700	3.3 - 5.8
Broiler	1,400 - 1,700	11.6 - 14
Vacuum	1,000 - 1,440	8.3 - 12
Stereo	85	.7
Coffee Pot	900 - 1200	7.5 - 10
Computer	60 - 270	.5 - 2.25
Laptop	20 - 50	.16 - .41
Converter	500 - 1,000	4 - 8
Curling Iron	20 - 50	.16 - .41
Dishwasher	1,200 - 2,400	10 - 20
Drill	250 - 1,000	2 - 8
Electric Blanket	60 - 100	.5 - .8
Fan	10 - 175	.08 - 1.45
Flat Iron	40 - 80	.3 - .6
Electric Skillet	1,000 - 1,350	8 - 11.25
Game Console	19 - 200	.16 - 1.6
Hair Dryer	1,200 - 1,875	10 - 15.6
Iron	1,000 - 1,800	8 - 15
Light Bulbs	13 - 100	.1 - .8
Microwave	750 - 1,100	6.25 - 9.2

Exercising your Generator

Your Generator should be exercised at least 2 hours a month if use is infrequent. Run your generator at approximately ½ rated power. A single 2-hour exercise period is better than several shorter periods.

This action helps drives off moisture, lubricates the engine, replaces stale fuel in fuel inlets and removes oxides from electrical contacts and generator slip rings. The result is better starting, longer engine life and greater reliability.

ELECTRICAL (CONTINUED)

Resetting Line Circuit Breakers

If a generator set line circuit breaker or a circuit breaker in the power distribution panel trips, either a short has occurred or too many loads were connected.

If a circuit breaker trips, disconnect or turn off as many electrical loads as possible and reset the circuit breaker. If the circuit breaker trips right away, either the appliance (or electrical load) has a short or the circuit breaker is faulty. You should immediately schedule service for repair.

If the circuit breaker does not trip right away, reconnect loads one-by-one making sure not to overload the generator or cause a breaker to trip.

Generator Precautions

- Make sure never to block air flor to and from the generator
- Make sure engine oil viscosity is appropriate for the ambient temperature (see section 5.5)
- Keep your generator clean – do not let dirt and debris accumulate inside the generator compartment.
- Ensure that regular maintenance is performed (see section 5.1 on page 33 of the generator owner's manual)

Generator Maintenance

Maintenance Required	FREQUENCY					
	Every Day or Every 8 Hours	After First 20 Hours	Every Month	Every 50 Hours	Every 150 Hours	Every 500 Hours
General Inspection	X					
Check Engine Oil Level	X					
Clean and Check Battery			X			
Clean Spark Arrester				X		
Change Engine Oil and Oil Filter		X			X	
Replace Air Filter Element					X	
Clean Engine Cooling Fins						X
Replace Spark Plug(s)						X
Replace Fuel Filter						X
Adjust Valve Lash						X

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TV & STEREO

TV Antenna

Your RV is equipped with a Winegard Air 360+. The unit is internet ready and can be upgraded easily with the Winegard Gateway for 4G LTE & WiFi capabilities. A low-profile dome that requires no aiming or pointing to pick signals up. Be sure to read the full manual for your antenna for all features and functionality.

An initial channel scan must be run. Ensure that the antenna power supply is in the on position and the green light is illuminated. A scan will find any new channels that have been added in your area. A scan should be run when you travel and land in a new location. Follow the channel scan instructions for your TV when running a new scan.

- Rated up to 55 miles (compared to 35 miles for most competition)
- Filters out weak/unfunctional tv signals
- Computer printed not hand pressed antenna (this ensures consistency)
- Large antennas (Two 4G antennas, WiFi extenders with the longest reach in the industry)
- Swappable SIM card, certified with AT&T and Verizon.
- Flexibility of use
- Ethernet port availability
- Functional up to 100 feet around your RV
- Unlimited users (tested over 250 users on one single device)

Booster Switch

Alliance RV has hidden the booster switch behind the monitor panel and tied a switch to the booster plate for ease when switching between AUX/SAT and TV. Power indicator light is green when power is on.

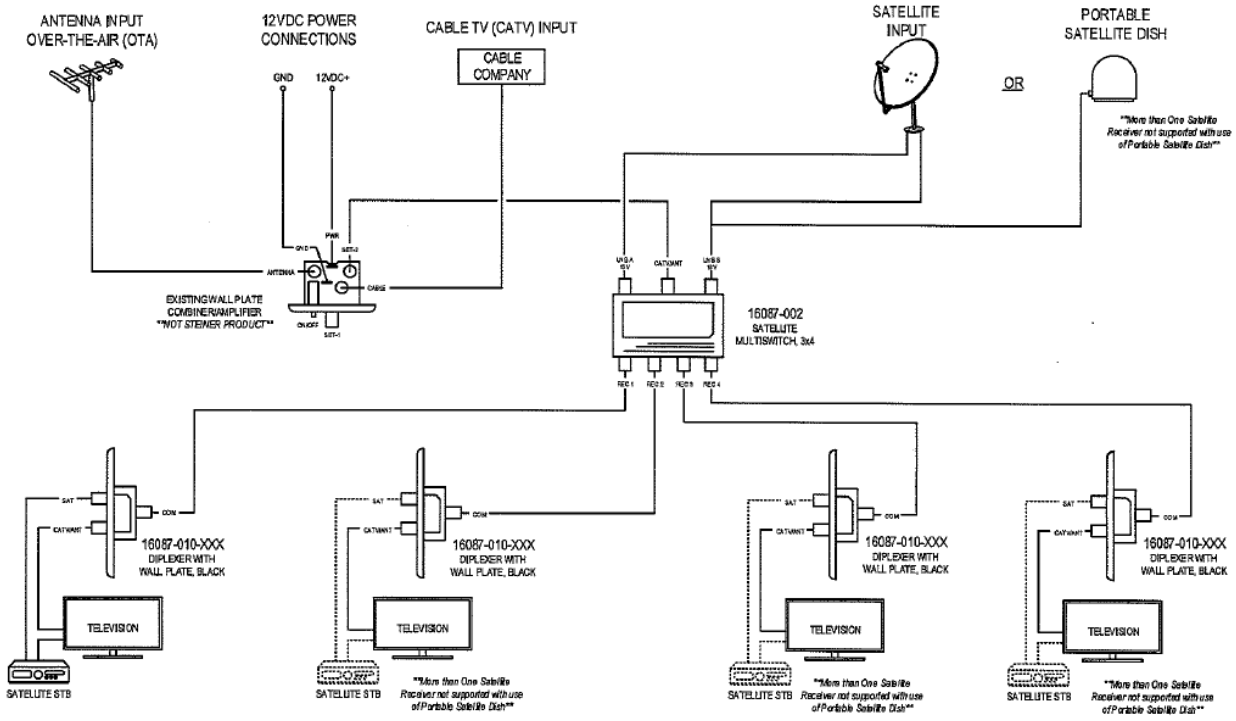
NOTE: For information on connecting to the to the AV system, see the plumbing section regarding the Nautilus P4 Centralized Docking Station.

TV & STEREO (CONTINUED)

ALL TV

ALL TV is an effort to simplify the overall configuration and wiring for the AV system in your RV. We've taken steps to eliminate connection points, wall plates and the overall burden of work when trying to switch from one AV source to another.

ALLTV Wiring Diagram



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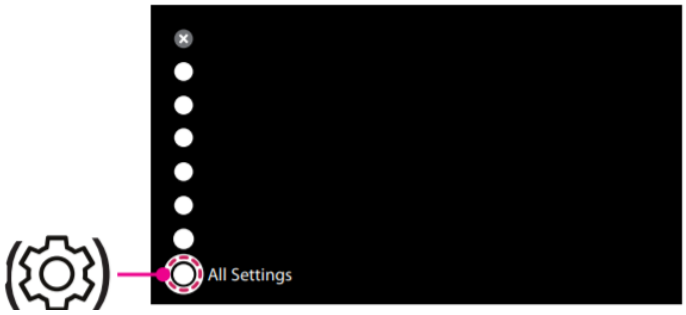
TV & STEREO (CONTINUED)

Televisions

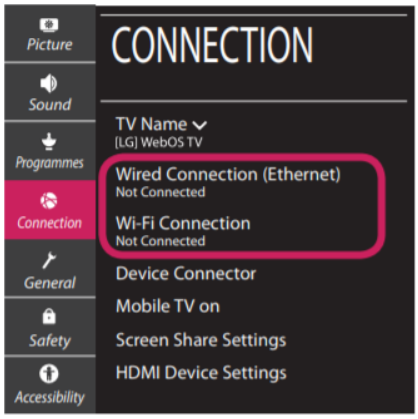
We've equipped our fifth wheels with smart TVs. The information below will get you started with your smart TVs. Please refer to your TV manuals for a full set of operational instructions.

Quick Setup.

1) Press the Settings button on the remote to access the settings menu. Highlight the All Settings icon and select by pressing the OK button.



2) Select the Connection tab to identify the type of connection.



3) The TV will automatically try to connect to the network available (wired network first). When you select the WiFi connection, the network list available will be displayed. Choose the network you wish to connect to.

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TV & STEREO (CONTINUED)

Televisions (Continued)

4) If connection is successful, you will see Connected to the Internet.

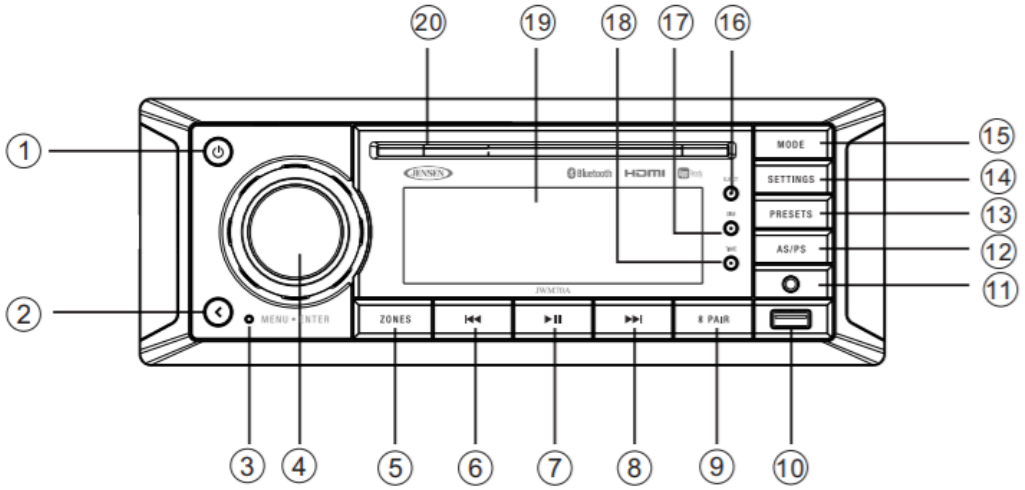
Stereo

You'll find the feature rich JWM70A stereo in your Alliance RV Paradigm 5th Wheel. Those features include:

- Digital AM/FM tuner with 30 presets, 12 of the AM and remaining 18 for the FM channels
- Bluetooth ready with A2DP/AVRCP streaming audio
- APP ready
- Pre-set equalizer (user; flat; pop; classical; rock)
- Electronic bass, treble, balance and fade controls
- DVD/CD-R/RW and MP3 compatible
- HDMI vide output with JCOM link
- HDMI ARC
- Time/Alarm clock
- White LED backlit LCD
- Front auxiliary audio input
- Rear audio RCA inputs/outputs
- USB playback of MP3/WMA Files
- 3 Zone / 8 speaker output
- Independent zone volume control
- Wireless remote control included

TV & STEREO (CONTINUED)

Basic Operation of your Stereo



- Power
  - Power button (1)
- Zones Volume Control
  - Press the zones button (5) to enter the zone menu. While in the zone menu, press zones, enter (4), or the << or >> buttons (6, 8) to change the active zone. **NOTE**: Zone A also controls the output of the rear line level audio out.
  - Rotate the volume/enter knob (4) clockwise to increase or counterclockwise to decrease volume.
  - While in the zone menu, press and hold the enter knob (4) button to mute the audio for the active zone you're in. Press and hold again to restore the audio to the previous volume level.
- Pause / Mute
  - During radio / front aux / rear aux / HDMI ARC mode, press the play/pause button (7) to mute the audio output for all zones. Press again to restore audio at the previously set volume level.
  - During USB / DVD / BT mode, press the play/pause button (7) to pause playback. Press again to resume.
- Mode
  - Press the mode button (15), the LCD will display "mode" and access mode selection.
  - Press the mode button, << or >> buttons (6, 8), or rotate the vol/enter knob (4) to cycle through the available modes and choose the desired mode (AM, FM, front aux, rear aux, HDMI ARC, disc and USB.
  - Press the enter knob (4) to select.

TV & STEREO (CONTINUED)

Basic Operation of your Stereo (Continued)

- Audio Menu Settings
  - Press the settings button (14) to access the audio menu.
  - Press the << or >> buttons (6, 8), or settings button repeatedly to navigate through the audio menu selections.
  - Once the desired menu item (bass; treble; balance; fade; loudness; equalization) appears on the display, adjust the option by rotating the vol/enter knob (4) either direction within 5 seconds.
  - Press the back button (2) to confirm your selection and exit the audio menu. **NOTE:** The stereo will exit the audio menu after 5 seconds of inactivity.
- System Menu Settings
  - Press and hold the settings button (14) for 2 seconds to access the system menu.
  - Press the << or >> buttons (6, 8) or settings button repeatedly to navigate through the system menu items.
  - Once the desired menu item (Bluetooth device; beep; region; Bluetooth; preset volume; reset) appears on the display, adjust the option by rotating the vol/enter knob (4) either direction within 5 seconds.
  - Press the back button (2) to confirm your selection and exit the audio menu. The unit will automatically exit the menu after 5 seconds of inactivity.
- Auxiliary Input
  - When an exterior audio device is connected to the unit, press the mode button (15) repeatedly until you see front / rear aux mode. To connect device, insert a standard 3.5mm audio cord into the input (11) on the front of the unit (there are auxiliary in RCA jacks on the rear of the unit)
- USB Interface
  - You can connect a USB device directly to the USB input (10) on the front of the stereo for playback of compatible files. (refer to “Auxiliary Input) covered above to select this mode. **NOTE**: Will not support Apple device playback.
- Dimming control
  - Press the dim button (17) on the front panel to turn the dimmer on, press again to turn the dimmer off.
  - Press and hold the dim button to access the dimmer level menu.
  - Rorate the volume knob to increase or decrease the dimmer level.
  - Press back (2) to confirm your selection.
- Time Menu Settings
  - Press the time button (18) to access the time menu settings.
  - Press the << or >> buttons or time button repeatedly to navigate the time menu.

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TV & STEREO (CONTINUED)

Basic Operation of your Stereo (Continued)

- Once the desired time menu item appears (sleep timer; alarm on/off; alarm set; clock set) on the display, adjust the selection by rotating the volume/enter knob.

See your stereo manual for full details on this stereo.

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MONITOR PANEL

This system allows monitoring of fresh water, gray water, black water and battery levels. All functions are controlled from computer grade tact switches for easy operation. Power control of the water heater, water pump, tank heaters, some of the RVs lights, awnings and slideouts are also done from the central monitor panel shown below.

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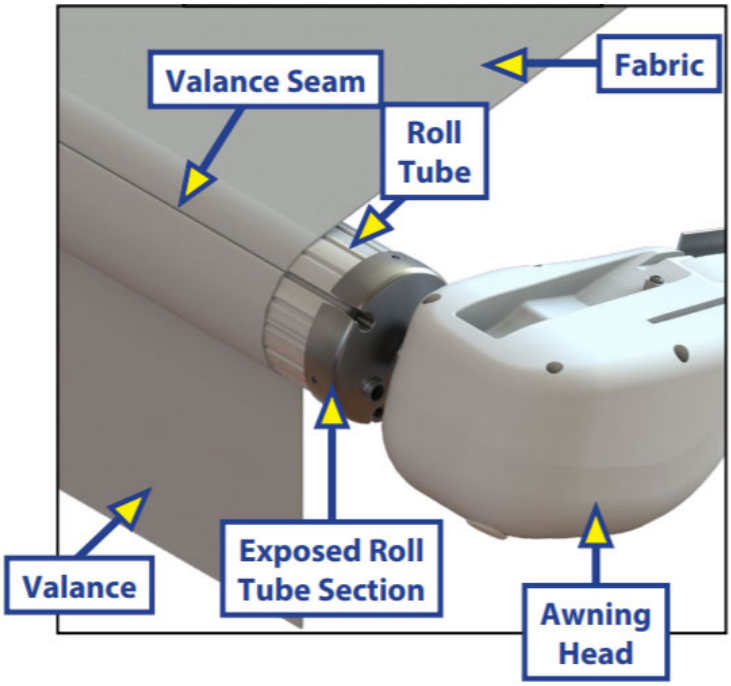
AWNINGS

Your Alliance RV comes standard with a power awning and in some cases, depending on the floor plan, may have two power awnings installed from the factory.

Awning Operation

Extending the Awning

1. First verify that the battery is fully charge and connected to the electrical system.
2. Press and hold the awning extend button in the monitor panel.
    - **NOTE**: Extension is considered complete when the fabric is completely unrolled, the valance sean is visible and a section of the awning tube is exposed.



    - **NOTE**: The fabric should always be above the tube. However, if the extend switch is engaged too long or it is accidentally hit, the awning will roll up backwards. To correct the orientation of the fabric, press the retract button to extend it to its correct position and normal operation can resume.
    - **NOTE**: Tying down the roller tube once the awing is extended will not all the free floating support arms to work as designed and can cause damage to the awning or RV

Retracting the Awning

1. Always check the battery first to ensure it's charged and tied into the electrical system.
    - **NOTE**: The awning can be retracted wihtout resetting the pitch.
2. Press and hold the retract button until the awning is retracted completely.

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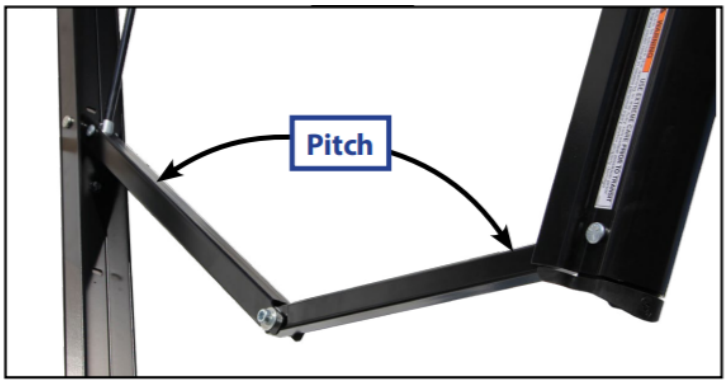
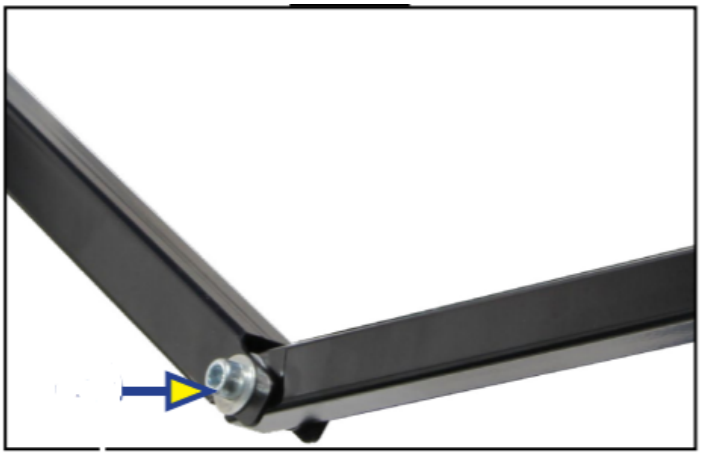
AWNINGS (CONTINUED)

Adjusting the Awning Pitch

- Pitch can be set by adjusting the articulating arm to tip one side of the awning in order to allow water runoff.
    - **NOTE**: The awning will pitch by itself to purge discard the pooling of excess water.
- Extend the awning.
- Choose the side of the awning for optimum shade or conenient water runoff. Pull down on the joint of the atriculating arm until desired pitch is set to allow for water runoff. Never push the jointes of the atriculating arms up. This will put tension on the gas strut, which can cause the strut to break.



- **NOTE**: If the articulating arm does not hold position, it can be tightened by adjusting the bolt in the center of the articualating arm.



⚠CAUTION

During incidents of high wind, eavy rain or extended time awy from the RV, be sure to retract the awning completeldy to prevent damage to the wawning and the RV.

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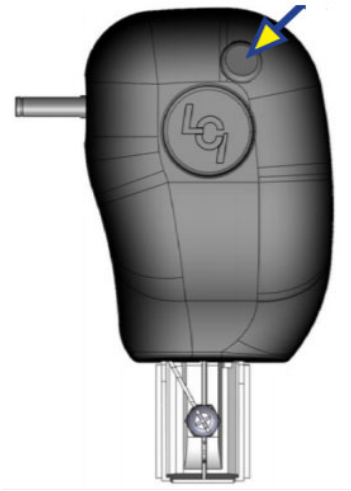
AWNINGS (CONTINUED)

Manual Override

If you lose power or experience motor falilure, the awning can be extended and rertracted manually. This override can also be used if you're dry camping or camping without a battery.

1. Remove the rubber grommet form the drive head assembly, this will expose the override nut on the motor.



2. Using a 7/16" socket and a drill, turn the oerride nut counterclockwise to retract the awning.

3. When the awning is completely retracted, remove the drill and replace the rubber grommet.

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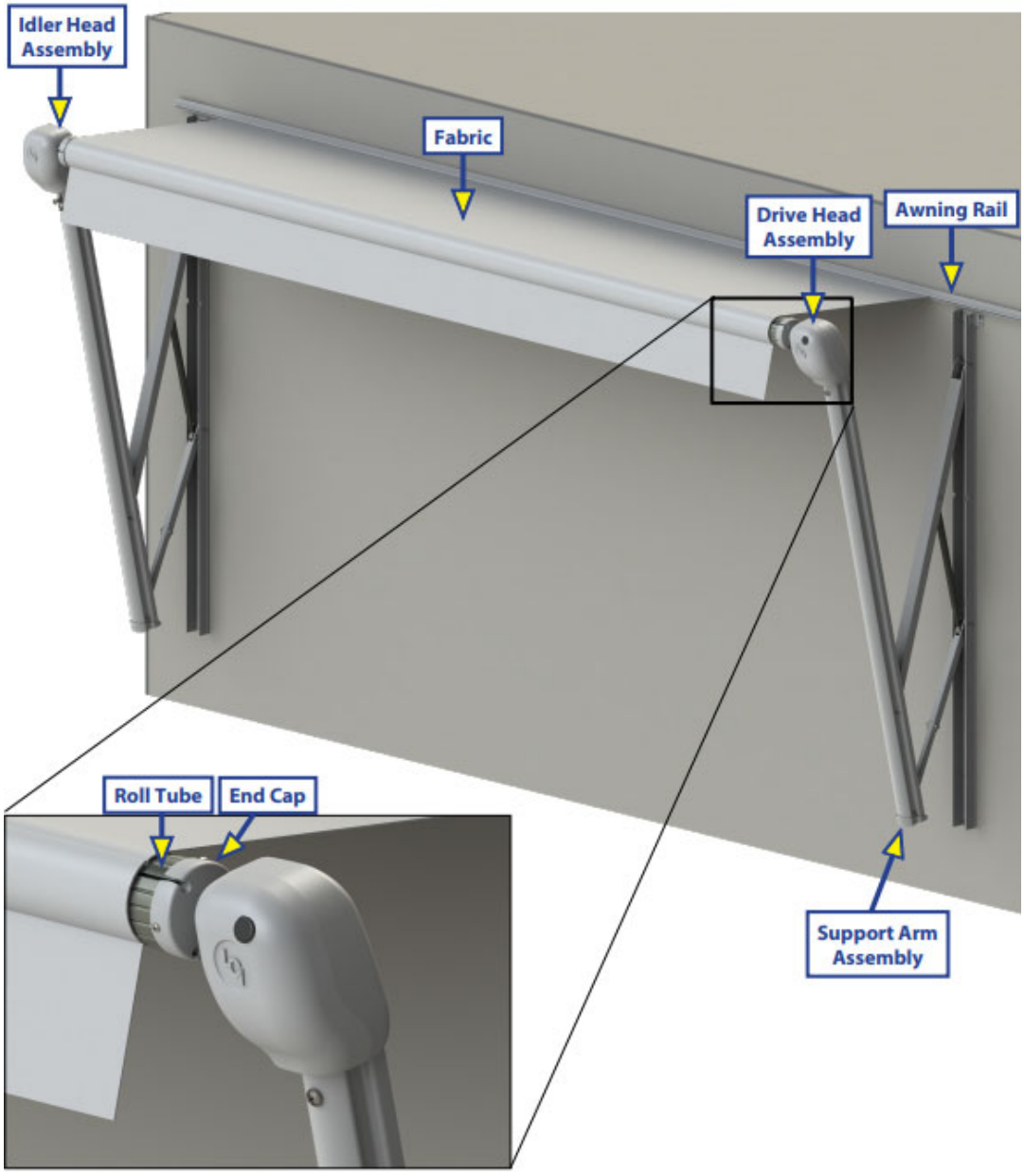
AWNINGS (CONTINUED)

Awning Component Breakdown



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AWNINGS (CONTINUED)

Slideout Toppers

Alliance RV has prepped their fifth wheels with a slide topper prep kit to allow for easy installation of a Solera Slideout Topper at a later date. For assistance with parts and or questions regarding the slideout topper prep kits, please contact your Alliance Dealer or Alliance RV.

- The top left and right hand corners, just beneath the slideout fascia, you'll find the bracket (shown below) installed.

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HEATING, COOLING & VENTILATION

Air Conditioning

Alliance RV main living quarters (downstairs) will utilize two “direct cool” Coleman air conditioners. These units are mounted on the exterior roof of the RV with a combination shroud mounted on the inside ceiling of the RV. We’ve opted for most of the RV to be cooled with these direct cool units as they are significantly more efficient than your typical ducted system.

The front/upper deck of the RV will utilize a ducted Coleman air conditioner system. Due to the nature of the design in the front/upper deck containing multiple rooms and areas that can be isolated with doors, a ducted system is utilized.

Each air conditioner will be operated by its own individual thermostat.

Furnace

Every Alliance RV will be heated with an SF-Q series Suburban furnace that provides 42,000 BTU’s. An exterior access door allows for ease of service. The furnace is operated with the Airxcel thermostat that is tied to the main air conditioner unit. The main air conditioner unit is the control that operates the central air conditioner in the RV.

HEATING, COOLING & VENTILATION (CONTINUED)

Operating the Furnace

⚠WARNING

DO NOT OPERATE THE FURNACE WHILE VEHICLE IS IN MOTION OR BEING TOWED

NOTE: During initial firing of this furnace, a burn-off of excess paint and oils remaining from manufacturing process may cause "smoking" for 5 – 10 minutes

1. Stop! Read the furnace user's manual supplied with the furnace.
2. Turn the manual valve (if equipped) or the valve at the outside propane tank to the "OFF" position. Do not force
3. Set the thermostat above room temperature to begin blower operation. A slight delay will occur before the blower comes on. Allow blower to run for 5 minutes for combustion chamber purge cycle. If blower does not come on or stops before ignition cycle, go to shut down and contact your dealer.
4. After 5 minutes, move thermostat lever below room temperature. Blower will remain on. Wait approximately 2 minutes for blower to go off.
5. Open manual shut-off valve (if equipped) or the valve at the outside propane tank. Correct operating characteristics depend on the valve being positioned fully open. Never attempt to operate with a valve partially closed. **NOTE:** This furnace is equipped with a valve shut-off switch. If the furnace is started with shut-off switch in "OFF" position, the furnace motor will run for 30 seconds, then shut off. During this sequence no gas will flow to the burner and the furnace will lock out requiring the user to cycle either the thermostat or unit power to reset the furnace. Ensure the shut-off switch is in the "ON" position for proper operation.
6. Set the thermostat to desired setting. If set above room temperature, blower will come on.
7. Allow 30 seconds for main burner to light after blower comes on. This furnace is equipped with an ignition device which automatically lights the burner. Do Not try to light the burner by hand.
8. If the burner does not light, repeat steps 1 thru 8.
9. If after three 3 attempts with no ignition, go to shut down and contact your dealer. Do not continue to cycle the furnace. **NOTE:** If the furnace locks out, the blower will go off in 5 minutes and remain off until it is reset by reactivating the thermostat.

HEATING, COOLING & VENTILATION (CONTINUED)

Operating the Furnace (Continued)

To Turn the Furnace Off

1. Set the thermostat to lowest setting, then turn the thermostat to the “OFF” position.
2. Turn the manual shut off valve (if equipped) to the “OFF” position.

Thermostat

The display indicates the mode and the room temperature. When the mode button is pressed once, the thermostat will wake. When the mode button is pressed again, the mode will change. Press the up or down button to wake the thermostat, the set temperature will display, and the mode will flash. Press the up or down button again to change the set temperature. The thermostat will go back to sleep after 5 seconds of no activity.

There is a three-minute anti-short cycle for cooling. After the cooling system has been de-energized, the system will not energize again for three minutes, this is to protect the compressor on the ac unit. You can bypass the anti-short cycle function by changing the mode to off.

NOTE: Operating your cooling system when the outdoor temp is below 50 deg Fahrenheit can cause damage to your cooling equipment.

NOTE: Hold the mode button down for 5 seconds to change from Fahrenheit to Celsius.

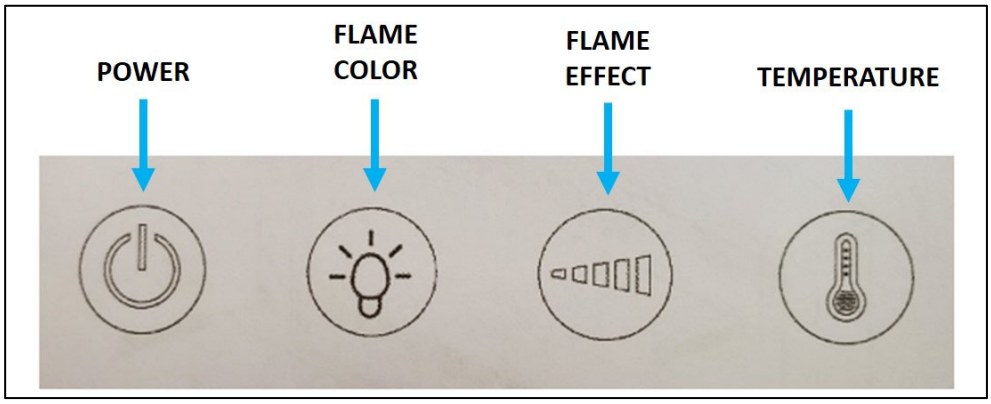
HEATING, COOLING & VENTILATION (CONTINUED)

Fireplace

Your RV is equipped with an electric fireplace with a BTU rating of 5100. You'll be able to use this to help knock the chill off on cold days, this fireplace is not intended to heat your entire RV nor will it do so.

You can operate the fireplace at the control panel on the fireplace itself or wit the remote.

Control Panel



- Power button – Press this button to turn the fireplace on. The unit will beep. Press again to turn the fireplace off.
  NOTE: The fan will continue to run for 60 seconds without heat.

- Flame Color – Press this button to change the flame color. The unit will beep – press once for orange, press twice for an orange'ish blue, press three times for blue

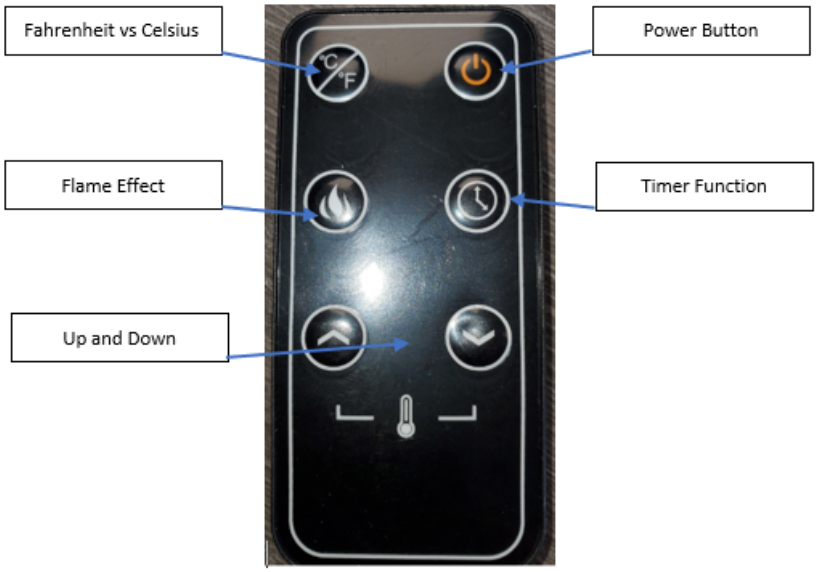
- Flame Effect – Press this button to change the flame effect. The unit will beep. Press again to decrease the flame intensity. There are 6 light settings for your selection. The flame optics will go lower under the sequence of 6,5,4,3,2,1. Pressing the button again will stop the flame effect.

- Temperature – Press this button to set the temperature. The unit will beep. Press to set the desired temperature. When desired ambient temp is reached, the heater will automatically stop heating. When the ambient temperature drops below the set point, the heater will resume heating.

HEATING, COOLING & VENTILATION (CONTINUED)

Fireplace (Continued)

Remote Control



- Fahrenheit Vs. Celsius – Press this button to toggle between the two temperature scales.

- Flame Effect - Press this button to change the flame effect. The unit will beep. Press again to decrease the flame intensity. There are 6 light settings for your selection. The flame optics will go lower under the sequence of 6,5,4,3,2,1. Pressing the button again will stop the flame effect.

- Up and Down – Press these buttons to set the desired temperature.

- Power Button – Turn the unit on and off with this button.

- Time Function – Press this button for timer function. The letters “0H” to “8H” will appear on the LED screen. “OH” means there is no set running time and the heater will run continuously. The letters “1H” thru “8H” mean the number of hours that the heater will operate before shutting off.

NOTE: The battery in the remote is a CR2025 battery.

HEATING, COOLING & VENTILATION (CONTINUED)

Ventilation

MAXXAIR fans are located in the kitchen and master bathroom areas. These high-powered fans are an industry staple that operates very easily. These fans are crucial in your RVs ventilation and assisting with minimizing condensation, especially in extended use and extreme temperature situations. Your MAXXAIR fans will be controlled by remote wall mounted controls. There is a manual override for opening and closing of the lid on the unit at the ceiling.

OPERATION OF 4 KEY WALL CONTROL		
FAN ON 1-2-3-4	Turns the fan motor ON at the last selected speed and OPENS the Vent Lid.	*When Fan is running, cycles through four (4) fan Speeds. Once HIGH Speed is reached, the fan motor cycles back to LOW Speed.*
FAN OFF	Turns the Fan Motor OFF and CLOSES the Vent Lid	
VENT OPEN	OPENS the Vent Lid	*Fan motor remains in previous state*
VENT CLOSE	CLOSES the Vent Lid	*Fan motor remains in previous state. If fan motor is ON, the MAXXFAN enters Ceiling Fan Mode*

Range Hood

The microwave situated above your stove has a built-in fan. This will be covered in the Appliances section to follow.

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APPLIANCES

Refrigerator

You'll find one of two types of refrigerators in your RV, the standard gas absorption (RV) type and an optional residential refrigerator.

Gas Absorption (RV) Refrigerator

An 18 cubic foot refrigerator, specifically designed for an RV, and can stand up to life in a trailer. A very quiet, efficient and easy to use refrigerator with a lot of room. Be sure to read the owner's manual specific to this product.

⚠WARNING

- **STORAGE OF FLAMMABLE MATERIALS BEHIND OR AROUND THE REFRIGERATOR CREATES A FIRE HAZZARD. DO NOT USE THE AREA BEHIND THE REFRIGERATOR TO STORE ANYTHING, ESPECIALLY FLAMMABLE MATERIALS**

- **INCORRECT ADJUSTMENT, CHANGE OR MAINTENANCE OF THIS REFRIGERATOR CAN CAUSE PERSONAL INJURY OR DEATH. ALWAYS USE AN AUTHORIZED TECHNICIAN FOR NEEDED WORK**

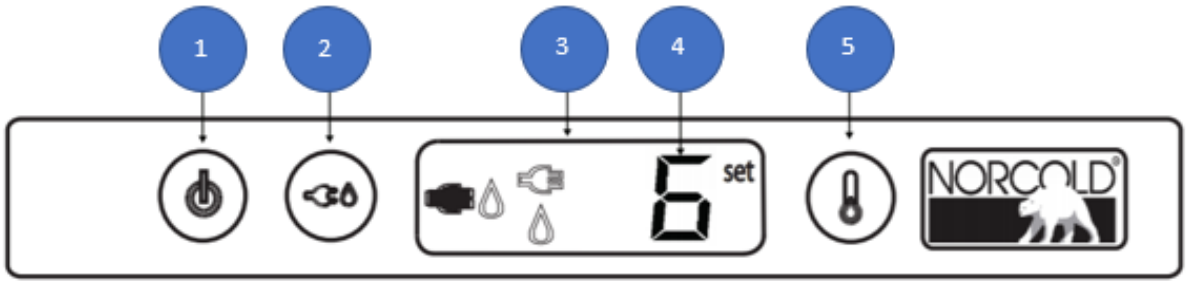
- **THE REFRIGERATOR COOLING SYSTEM IS UNDER PRESSURE. NEVER TRY TO REPAIR OR RECHARGE A DEFECTIVE COOLING SYSTEM. BREATHING OF SOME OF THE COMPOUNDS IN REFRIGERATOR COOLING CAN CAUSE CANCER**

- **REGULARLY CHECK THE REFRIGERATOR VENT AREAS AND PATHWAYS BETWEEN THE VENTS TO ENSURE THEY ARE FREE FROM ANY FLAMMABLE MATERIAL OR BLOCKAGE. ALWAYS CHECK THESE AREAS AFTER ANY PERIODS OF STORAGE OR EXTENDED PERIODS OF TIME IN WHICH THE RV ISN'T USED**

APPLIANCES (CONTINUED)

Gas Absorption (RV) Refrigerator Operation

Start the refrigerator and let it cool for eight hours before loading it with food.



- Power (1) – Turns the refrigerator off and on
- Mode (2) – Changes the modes of operation of the refrigerator
    - Push and hold the mode button to scroll through the available modes of the refrigerator, when the desired mode indicator mode comes on, release the button
    - Push and release the mode button over and over to manually scroll through the modes.
    - In Auto mode, the refrigerator controls automatically select the most efficient energy source that is available.
    - In Manual AC mode, the refrigerator cools using only AC electric power as the power source.
    - In Manual Gas mode, the refrigerator cools using only propane gas as the power source.
- Temperature Set (5) – Scrolls through the temperature settings
    - Push and hold the button to scroll through the selections, release the button once the desired selection shows.
    - Push and release the button to change the temperature settings manually.
        - 1 is the warmest setting and 9 is the coldest setting

NOTE: In the illustration above, 3 = displays the mode, 4 displays the temperature setting.

When you operate the refrigerator on propane gas at altitudes higher than 5,500 feet above sea level, you may experience reduced performance and burner outages. To avoid these possible problems, it is recommended that you operate the refrigerator on AC at altitudes higher than 500 feet above sea level.

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APPLIANCES (CONTINUED)

Gas Absorption (RV) Refrigerator Maintenance

Properly caring for your refrigerator will give you years of trouble-free service, checking these few things periodically should be priority.

- Keep the food compartment and freezer clean
- Make sure the doors seal correctly
- Be aware of any performance changes that are not caused by overloading, weather or gas control changes
- Make sure the air flow in the lower intake vent and the upper exhaust vent is not blocked or impeded in any way
- Make sure the area behind the refrigerator is clear, never store anything behind the refrigerator

APPLIANCES (CONTINUED)

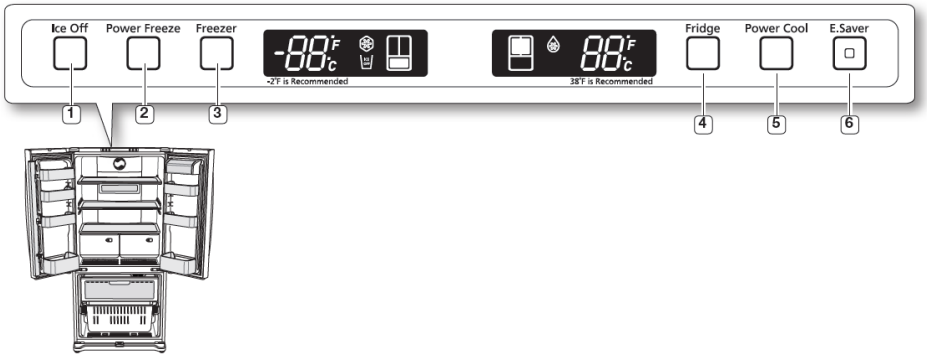
Residential Refrigerator

An optional residential refrigerator is available in this Alliance 5th wheel. If equipped, this RV will have an inverter installed that will be converting 12 volt battery power to 110 volt power for assistance with powering the refrigerator and allowing it to be operated when not on shore power. Please refer to your residential refrigerators user's manual for full details on this appliance.

⚠WARNING

FAILURE TO READ AND UNDERSTAND THE USER'S MANUAL AND ALL IT'S WARNINGS AND CAUTIONS COULD RESULT IN PROPERTY DAMAGE, DEATH OR SERIOUS INJURY

Residential Refrigerator Control Panel



- Ice Off Button (if equipped) (1) – When pressed, ice will not be produced
- Power Freeze Button (2) – Press this button to freeze food quickly (power freeze will lose 2 and a half hours)
- Freezer Button (3) – Freezer temperature set button. You can set the freezer temp between 8 and -8 degrees Fahrenheit; the default setting is -2
- Fridge Button (4) – This button sets the temperature of the refrigerator. This temperature is changed in 2 degree intervals and can be set between 46 and 34 degrees Fahrenheit; the default setting is 38
- Power Cool Button (5) – Using this function will cool the food in the fridge quickly. When 25 degrees is reached, or after 2 and a half hours, the power cool function will automatically shut off
- E. Saver Button (6) – The energy saver button is for improved efficiency, if water drops appear on the doors, turn this function on

APPLIANCES (CONTINUED)

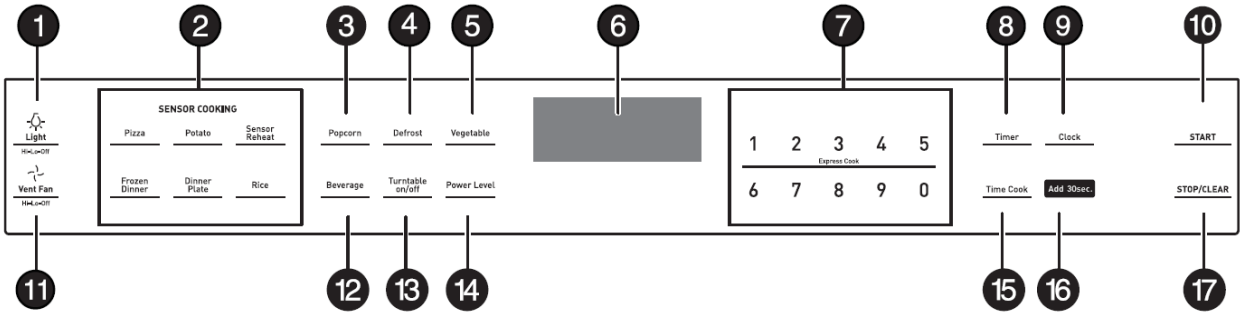
Microwave

For your safety, the warnings and cautions outlined in this section must be followed to minimize the risk of fire or explosion or to prevent property damage, death or personal injury.

⚠WARNING

- **NEVER ATTEMPT TO OPERATE THIS MICROWAVE WITH THE DOOR OPEN, THIS CAN RESULT IN HARMFUL EXPOSURE TO MICROWAVE ENERGY, NEVER TAMPER WITH THE SAFETY INTERLOCKS**
- **DO NOT PLAY ANY OBJECT BETWEEN THE MICROWAVE FRONT FACE AND THE DOOR OR ALLOW SOIL OR CLEANER RESIDUE TO ACCUMULATE ON SEALING SURFACES.**
- **NEVER OPERATE A DAMAGED MICROWAVE**
- **NEVER ADJUST OR REPAIR A MICROWAVE YOURSELF**

Microwave Control Panel

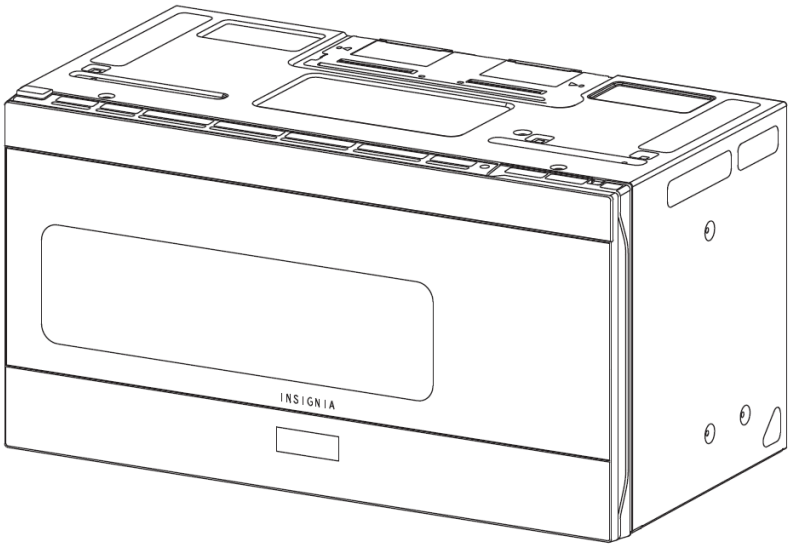


#	ITEM	DESCRIPTION
1	Light	Press to turn on/off the light underneath your microwave.
2	Sensor Cooking	Detects humidity released by your cooking food and adjusts the cooking time based on the type and amount of food cooking.
3	Popcorn	Press to cook popcorn.
4	Defrost	Press to defrost frozen food.
5	Vegetable	Press to cook vegetables.
6	Display	In standby mode, displays the time. In cooking mode, displays cooking time, weight and other information.
7	Number Pad	Press to enter cook time, defrost time, clock time and other information.
8	Timer	Press this button, then enter the time you want to count down.
9	Clock	Press to set or check the clock.
10	Start	In standby mode, press this button to begin cooking.
11	Vent Fan	Press to turn on/off your vent fan and remove odors from cooking.
12	Beverage	Press to heat a beverage.
13	Turntable On/Off	Press to turn your turntable on or off.
14	Power Level	Press to change your microwave's power level (1-10).
15	Time Cook	Press to enter a cooking time.
16	Add 30 Sec.	While cooking, press this button to add 30 seconds to your cooking time.
17	Stop/Clear	Press to stop the cooking process. Press again to cancel the cooking operation.

APPLIANCES (CONTINUED)

Microwave (Continued)

Your OTR (Over-the-Range) microwave is equipped with a vent fan and a light underneath the microwave. The fan works as a range hood to filter out smoke and other odors from cooking. Use your range hood anytime you cook, this will help maintain the air quality in your RV. Be sure to read your microwave user's manual for additional information.



Range/Cooktop

Your freestanding residential style gas range represents the newest in RV range design and is designed for reliable and trouble free performance.

Some important safety precautions to keep in mind.

⚠WARNING

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE

⚠WARNING

IF YOU SMELL GAS:

1. **EXTINGUISH ANY OPEN FLAME**
2. **DO NOT TRY TO LIGHT ANY APPLIANCE**
3. **DO NOT TOUCH ANY ELECTRICAL SWITCH**
4. **IMMEDIATELY CALL YOUR LOCAL EMERGENCY SERVICES**

APPLIANCES (CONTINUED)

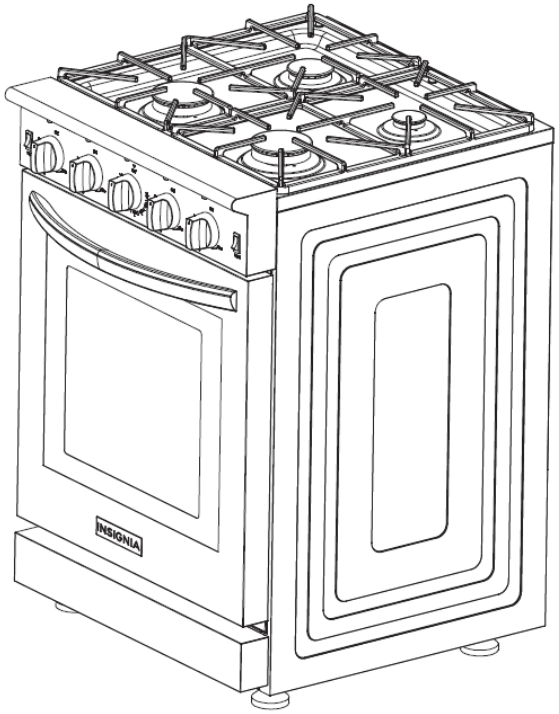
Range/Cooktop (Continued)

⚠WARNING

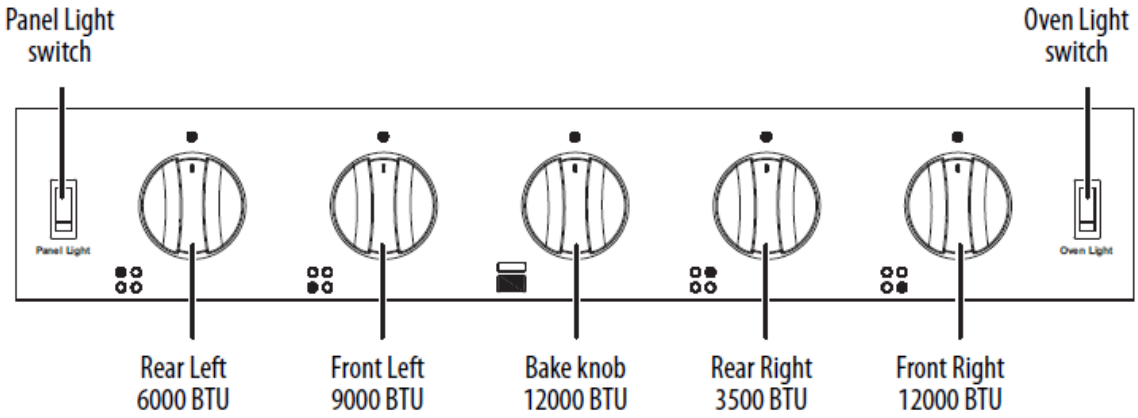
READ ALL INSTRUCTIONS IN THE RANGE OWNERS MANUAL BEFORE USING THIS APPLIANCE

⚠WARNING

NEVER USE THE RANGE AS A SOURCE OF HEAT



Range/Cooktop Control Panel



APPLIANCES (CONTINUED)

Range/Cooktop (Continued)

Before Using Your Range

Remove all packaging materials and wipe the surfaces of your range with a damp cloth or sponge. When you turn on a burner or the oven for the first time, smoke and odors may be present. This is normal, make sure the room is well ventilated.

Cooking - Stove top

1. While pressing in on the burner control knob, turn it counterclockwise to the large flame symbol. A spark will generate to ignite the gas.
2. After the gas is ignited, release the knob.
3. Torn the knob to adjust the flame up or down.
4. When cooking is complete, turn the knob to the off position.

⚠WARNING

DO NOT PRESS A BURNER KNOB FOR LONGER THAN 15 SECONDS IF THE GAS DOES NOT IGNITE. RELEASE THE KNOB AND WAIT FOR ONE MINUTE, THEN REPEAT

⚠WARNING

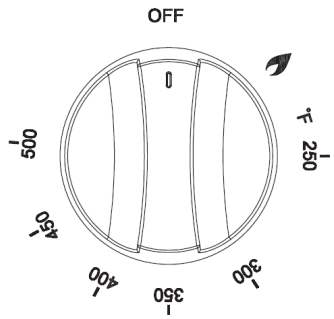
WHEN USING THE OVEN, SAND AWAY WHEN OPENING THE OVEN DOOR, ESCAPING HOT AIR OR STEAM CAN BURN YOUR HANDS, FACE OR EYES.

Cooking – Oven

⚠WARNING

NEVER TRY TO LIGHT THE OVEN WITH A MATCH OR LIGHTER

1. Close the oven door.
2. While pressing in on the control knob, turn it counterclockwise to the large flame symbol. Your Range will generate a spark and ignite the gas.
3. Keep the knob depressed for another 5 to 10 seconds.
4. Look for a flame through the holes in the bottom of the oven to make sure that the gas has ignited.
5. Release the knob, then turn it to select a temperature setting.
6. When cooking is complete, turn the knob to the off position.



⚠WARNING

DO NOT PRESS THE OVEN CONTROL KNOB FOR LONGER THAN 60 SECONDS IF THE GAS DOES NOT IGNITE. RELEASE THE KNOB AND WAIT FOR ONE MINUTE

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PLUMBING AND UTILITIES

Centralized Docking Station

Alliance RV uses the Nautilus P4 Water Management System. With this system you'll have the ability to perform the following functions from a centralized and easy to access location:

1. Power fill your fresh water tank for dry camping.
2. Use your pump to supply water to fixtures from fresh water tank
3. Use your pump to siphon fill or sanitize your fresh water tank from a bucket
4. Connect to city water at the camping site to supply water to fixtures
5. Winterize your plumbing lines and fixtures
6. Bypass hot water heater when winterizing to avoid water heater damage
7. Rinse black tank to help control odors and prevent sewage buildup
8. Rinse off items outside unit with a hot/cold faucet
9. Connect up to three (3) coax lines with satellite, cable and auxiliary

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PLUMBING AND UTILITIES (CONTINUED)

Centralized Docking Station (Continued)

Docking Station Handle Position and Valve Routing

NAUTILUS P4

USER INSTRUCTIONS

Nautilus P4 Handle Position and Valve Routing Information

WHITE HANDLE: Receives water from water inlet on front of panel

Sideways - water goes to pump inlet 

Down – water goes into blue handled diverter 

BLUE HANDLE: Receives water from the white handle valve/water inlet on front of panel

Sideways - water goes to fixtures (cold) 

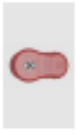
Down – water will go to or come from fresh water tank 

GREEN HANDLE: Is an on/off flow through valve that feeds pump from fresh water tank

Sideways - water will not flow through valve 

Up – water will go to or come from fresh water tank 

RED HANDLE: Receives water from cold water supply line

Sideways - water goes to hot water fixtures without going through hot water heater 

Up – water goes to hot water heater 

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PLUMBING AND UTILITIES (CONTINUED)

Centralized Docking Station (Continued)

Cable and Satellite Connection

1. For cable TV connection, connect the threaded coax from the source to the **"CABLE"** connection.

2. For satellite TV connection, connect the threaded coax from the satellite dish to the **"SAT"** connection.

3. Consult your Owner's Manual to see if the **"AUX"** connection has an application.

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PLUMBING AND UTILITIES (CONTINUED)

Centralized Docking Station (Continued)

Filling the Fresh Water Tank – Power Fill

1. Connect garden hose to inlet labeled "**CITY WATER**."
2. Turn handles to **PowerFILL Tank** position as shown.

- **BLUE** diverter handle should be facing down.
- **WHITE** diverter handle should be facing down.
- **RED** diverter handle should be facing up.
- **GREEN** diverter handle should be facing left.

3. Connect other end of hose to water supply source.

4. Turn water supply on at source. Fresh water tank should begin to fill.

NOTE: Consult your Owner's Manual for tank capacity. D**O NOT OVERFILL TANK!**

5. When desired level in fresh water tank is reached, turn water off at source.
6. Disconnect garden hose from inlet on Nautilus panel.

PLUMBING AND UTILITIES (CONTINUED)

Centralized Docking Station (Continued)

Fill and/or Sanitize the Fresh Water Tank with the Pump

1. Connect garden hose to inlet labeled **"CITY WATER."**

2. Turn handles to "**SANITIZE**" position as shown.

- **BLUE** diverter handle should be facing down.
- **WHITE** diverter handle should be facing right.
- **RED** diverter handle should be facing up.
- **GREEN** diverter handle should be facing left.

3. Place other end of hose in container holding water or sanitizing solution.

4. Push **"PUMP"** switch to turn pump on.

NOTE: LED indicator light below the pump switch will be lit if pump has power.

NOTE: For sanitizing, a solution of 1 gallon of water and one quarter cup of household bleach should be prepared for every fifteen gallons of holding tank capacity.

PLUMBING AND UTILITIES (CONTINUED)

Centralized Docking Station (Continued)

Fill and/or Sanitize the Fresh Water Tank with the Pump (Continued)

5. Pump should be running and fresh water tank should begin to fill.

NOTE: Consult your Owner's Manual for tank capacity. **DO NOT OVERFILL TANK!**

6. When desired level in fresh water tank is reached, push **"PUMP"** switch to turn pump off.

NOTE: LED indicator light below the pump switch will not be lit.

7. Disconnect garden hose from inlet on Nautilus panel.

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PLUMBING AND UTILITIES (CONTINUED)

Centralized Docking Station (Continued)

Using the Fresh water Tank for Dry Camping

1. Make sure fresh water tank has necessary supply of water.

2. Turn handles to "**DRY CAMPING**" position as shown.

- **BLUE** diverter handle should be facing left.
- **WHITE** diverter handle should be facing down.
- **RED** diverter handle should be facing up
- **GREEN** diverter handle should be facing up

3. Push **"PUMP"** switch to turn pump on.

NOTE: LED indicator light below the pump switch will be lit if pump has power.

4. Water should be available to all fixtures.

NOTE: The pump will run when a plumbing fixture is open.

5. Make sure pump is turned off when not in use.

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PLUMBING AND UTILITIES (CONTINUED)

Centralized Docking Station (Continued)

Connecting to City Water

1. Connect garden to hose to inlet **"CITY WATER."**

2. Turn handles to "**CITY WATER**" position.

- **BLUE** diverter handle should be facing left.
- WHITE diverter handle should be facing down.
- **RED** diverter handle should be facing up.
- **GREEN** diverter handle should be facing left.

3. Connect other end of hose to water supply source.

4. Open faucet at water supply source. Water should be available to all fixtures.

NOTE: Refer to OEM Owner's Manual for safe operating pressures.

Over pressurizing water lines may cause damage to plumbing lines and fixtures.

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PLUMBING AND UTILITIES (CONTINUED)

Centralized Docking Station (Continued)

Winterizing

1. Turn handles to "**POWERFILL**" position as shown.

- **BLUE** diverter handle should be facing down.
- WHITE diverter handle should be facing down.
- **RED** diverter handle should be facing up.
- **GREEN** diverter handle should be facing left.

2. Open low point drain(s) on RV to remove water in plumbing lines. Open both a hot and cold faucet to help drainage process.

3. Open drain plug on hot water heater to drain water if unit is equipped with hot water holding tank.

NOTE: Contact your dealer or manufacturer for exact location of low point drains and hot water heater.

4. Once most water has been drained from plumbing lines, turn **RED**, **BLUE**, **GREEN** and WHITE handles so they are at a 45 degree angle as shown.

PLUMBING AND UTILITIES (CONTINUED)

Centralized Docking Station (Continued)

Winterizing (Continued)

5. Using "**CITY WATER**" inlet or low point drain, blow out plumbing lines (40 PSI max) with handles still at 45 degree angle as shown. This will ensure any trapped water in plumbing harness is removed.

6. Close drains on hot water tank & low point drains.

7. Turn handles to "**WINTERIZE**" position as shown.

- **BLUE** diverter handle should be facing left.
- **WHITE** diverter handle should be facing right.
- **RED** diverter handle should be facing right.
- **GREEN** diverter handle should be facing left.

8. Connect a short section of garden hose to inlet labeled **"CITY WATER."**

PLUMBING AND UTILITIES (CONTINUED)

Centralized Docking Station (Continued)

Winterizing (Continued)

9. Place other end of garden hose in container holding approved winterizing solution.

NOTE: A short or cut off section of garden hose should help the pump to prime easier.

10. Push **"PUMP"** switch to turn pump on.

NOTE: LED indicator light below the pump switch will be lit if pump has power.

11. Pump should be running and winterizing solution should begin to flow through pump into plumbing lines and fixtures.

NOTE: The pump will run when a plumbing fixture is open.

12. Open one plumbing fixture, keeping it open until winterization solution appears, then close.

13. Follow above procedure until all inside & outside plumbing fixtures have been winterized hot & cold sides of plumbing fixtures.

Important! Make sure to run winterizing solution through hot & cold lines on exterior shower.

14. Push **"PUMP"** switch to turn off pump.

NOTE: LED indicator light below the pump switch will not be lit.

15. Disconnect garden hose from **"CITY WATER"** inlet.

NOTE: It is normal for some winterizing solution to be present as hose is being disconnected.

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PLUMBING AND UTILITIES (CONTINUED)

Rinsing Holding Tanks / Tank Flush

1. Connect flexible sewer hose to 4" dump outlet on unit.

2. Open black waste holding tank valve and leave open to allow black tank to drain.

3. Attach a garden hose to inlet labeled **"TANK FLUSH."**

4. Connect other end of hose to water supply source.

PLUMBING AND UTILITIES (CONTINUED)

Rinsing Holding Tanks / Tank Flush (Continued)

5. Fully open faucet at water supply source (40 psi minimum). Flush tank until water appears clear in 4" discharge hose.

6. Completely close faucet at water supply source.
7. Disconnect garden hose from water source.
8. Disconnect garden hose from "**TANK FLUSH**" inlet

9. Close black waste holding tank valve.

NOTE:

To help ensure debris does not clog tank sprayer orifices, use "TANK FLUSH" every time waste holding tank is emptied.

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PLUMBING AND UTILITIES (CONTINUED)

Fresh Water System

Your RVs fresh water system is made up of two inputs, a portable fresh water holding tank with a pressure demand 12 volt water pump and a city water connection that provides water to the system and bypasses the fresh water holding tank and the water pump to supply your fresh water from an already pressurized source. All holding tanks are equipped with electric heating pads that are controlled in the central monitor panel.

- The portable water system consists of a fresh water holding tank which is filled at the docking station (covered above). The tank is emptied/drained at a "low point" drain on the exterior beneath the fresh water holding tank. Always be sure to drain your fresh water tank between uses, and during storage in the winter, this will prevent any stagnation that can cause water to smell and/or taste bad.
- The water pump. When not hooked up to an external water supply, the RVs fresh water tank is utilized. The water is pumped from the fresh water tank by the water pump. When the power is switched on, the pump works automatically whenever a faucet is on. The water pump is self-priming and when the system pressure drops below 55psi, the water pump will energize and re-pressurize the system to that 55psi.
- This tank is equipped with a safety overflow drain. This drain will come straight out of the underbelly of the RV beneath the fresh water tank. This drain should never be plugged or obstructed. Keeping this line open for safety overflow will prevent damage that can occur from overfilling your fresh water tank.
- The city water system is powered by a water hose connected to the docking station (covered above). When connected and turned on, the system will automatically pressurize. It is always a good idea to bleed the system by turning on a hot water faucet until the water runs smoothly and there is no air present.

NOTE: High water pressure can damage your water system. Due to pressure inconsistencies in potential water sources, an RV water pressure regulator can be used between the hose and the connection point to ensure an always consistent water pressure coming into the RV. A safe setting is 45psi.

Not regulating water pressure and allowing water pressure that is too high to be connected to the RV can cause irreversible damage to your RVs fresh water system

PLUMBING AND UTILITIES (CONTINUED)

Fresh Water System (Continued)

Draining your fresh water system (required for winterization, covered in the centralized docking station portion of this manual, when the RV is not being used and/or is being stored in the cold or winter months), all tanks should be emptied. This will prevent damage from freezing. Every RV has low point drains in which the fresh water system can be evacuated. These low point drains will be located on the off-door side of the RV near the water heater directly beneath the RV and coming out of the underbelly. These are shut off valves that can be opened and closed with a thumb turn.

Waste Water System

The waste system contains holding tanks. The quantity of tanks along with location is dictated by the floor plan of the RV. All tanks are equipped with electric heating pads that can be controlled in the monitor panel.

- Black tanks hold toilet waste. There are some things to note with black tanks. Black tanks typically will need a digester/deodorant (talk with your RV dealer for recommendations). Black tanks require RV toilet paper. RV toilet paper breaks down quicker and is specifically designed for this type of waste water system. You'll find that this toilet paper breaks down more quickly and allows the waste water to flor more easily during the dumping process. A black tanks monitoring electronics can be adversely affected by debris handing up on the reading probes. For this case, we have installed a tank flush for your black tank(s) to assist in keeping the probe indicators clean so that you have accurate readings on the tank's levels.

- Gray tanks, an integral part of the waste water system. Gray tanks hold your sink and shower waste water. Gray tanks require less maintenance due to the difference in waste produce making its way into the tank. It may be ideal to dump black tanks first and then your gray tanks, the gray tank running thru the main dump will help in keep the pipeline cleaner.

Toilet

Alliance RV uses the best in class 310 series Dometic RV toilet. Each toilet is 100% factory tested to assure watertight seal in the toilet bowl before it even leaves Dometic. After installation by Alliance RV, the entire waste system is flood tested for leaks by filling the system with water to the rim of the bowl.

To use the toilet, first add water to the toilet by pressing the flush pedal only partially down. Water will flow into the bowl while the flush ball remains closed. If the flush ball moves, let up

PLUMBING AND UTILITIES (CONTINUED)

Toilet (Continued)

slightly on the pedal until the ball closes. Adding water to the empty bowl acts as a trap and helps prevent holding tank odors from entering the RV. Adding water is always recommended prior to flushing solids and/or toilet paper.

To flush the toilet, press the pedal down until it contacts the floor. Release the pedal after the flush is complete. When flushing liquids, quick press of the pedal for 1 to 2 seconds will do. When flushing solids, the pedal should be pressed until the contents are rinsed from the bowl. Never flush longer than needed as this will cause holding tank capacity to be used up and require more frequent black tank dumps. A small amount of water should collect in the bowl after a flush, this will create an airtight seal. Further instructions and information can be found in the toilet owners/users manuals.

Dumping Your Waste Tanks

Your RV is equipped with cable termination valves. Most of these valves are going to be routed to the centralized docking station convenience center for ease of pulling. However, in some occasions, dictated by floor plan, you may find a gate valve pull handles located on the off-door side frame rail of the RV.

PLUMBING AND UTILITIES (CONTINUED)

Monitoring Your Water Systems

This panel monitors the fill levels of the fresh water, grey water and black water tanks. You will also operate the heaters on the holding tanks here and as well as the power to the fresh water pump (you'll also find a water pump switch in the exterior docking station) and the water heater. These switches will illuminate while in the on position.

When an individual button is pressed (box 2), the lights above the switch (box 1) illuminate to reveal the level of the selection pushed. For the battery level indicator, the individual letters mean the following:

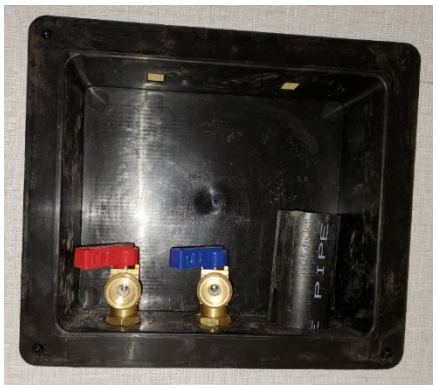
- L = Low at 6.0 volts
- F = Fair at 11.6 volts
- G = Good at 12.1 volts
- C = Charge at 12.7 volts

The water pump is operated with the water pump switch (box 4) as well as the gas and electric options for the water heater (box 5). The gas water heater switch enables propane operation of the water heater while the electric switch enables electric operation of the water heater. Both switches being on will allow for a quicker hot water recovery. The water heater can be operated in electric or gas only by turning one of the individual switches on.

Note: The holding tank heaters will also be operated from the monitor panel (box 3).

PLUMBING AND UTILITIES (CONTINUED)

Washer / Dryer Prep



Alliance RV 5th wheels come standard with a washer / dryer prep. This prep is in the front closet area of the 5th wheel. You will find both hot and cold water connection points. Should a washer and dryer be your desire, please consult with your dealership or Alliance RV for our installation recommendations. Otherwise you will find functional cabinet space in that area.

Dishwasher Prep

Every Alliance Paradigm comes prepped for dishwasher, typically found in the island, a simple change to the cabinets must be performed. Dishwasher prep provides a place to tie the drain into as well as pre-wired for electrical. Please call your dealer or Alliance RV for additional information on how to install a dishwasher in your RV.

Water Heater

A Suburban SW12DEL with a 12-gallon capacity supplies your RV with hot water. This water heater has a porcelain lined steel tank to fight against corrosion and foam insulation around the tank for added insulation and protection. This unit has a large diameter drain and replaceable anode rode. The anode rod is attached to the drain plug for easy replacement. This water heater features direct spark ignition and an electric element to recover an additional 6 gallons/hour when camping.

Direct spark, or electronic, ignitions feature a remote switch inside the RV (you'll find this switch on your RV's monitor panel inside the RV.

PLUMBING AND UTILITIES (CONTINUED)

Water Heater (Continued)

When the RV is not in use or is being stored, the water heater must be drained. This will prevent damage to the water heaters lining and protect the water heater in the cold.

1. Turn the water heater off (power and gas should be disabled)
2. Turn the water pump off
3. Open all faucets and plumbing fixtures
4. Remove the drain plug from the tank (take care as this is also the anode rod on water heaters in Alliance RV product
5. Open the pressure relief valve

⚠WARNING

YOU MUST READ THE USERS MANUAL FOR THIS WATER HEATER

For full winterization instructions, see the centralized docking station section of this manual.

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FURNITURE

You'll find a range of styles and sizes of furniture in your RV, below is some information on the different types of furniture you may see in your RV.

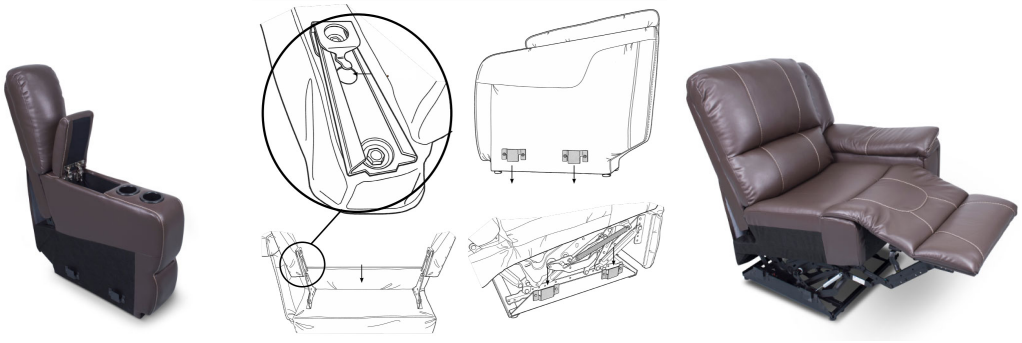
⚠WARNING

MOVING PARTS CAN PINCH, CRUSH OR CUT. KEEP CLEAR AND USE CAUTION

Theatre Seating

A modular seating system that features electric controls and smoothly operating recliners which is assembled and installed by the factory for ease of use.

Every furniture component locks into place with each adjacent piece.

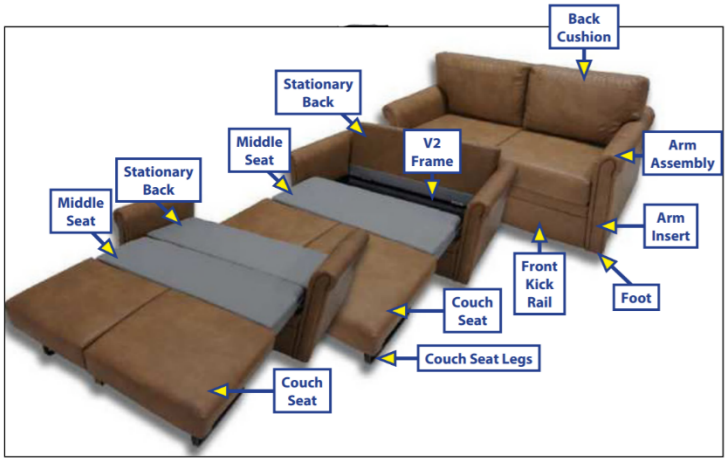


Sofa Seating

Two and three cushion sofas that fold out for additional sleeping.

To operate:

1. Remove the back cushions
2. Fold out the couch seat to expose the middle seat
3. Fold out the couch seat legs and set upright
4. Fold down the stationary back
5. User back cushions as headrest or pillows



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FURNITURE CONTINUED

A polyurethane fabric constructed and designed for all home furniture. Polyurethanes should be cleaned with a mild water based shampoo or soap. More stubborn stains can be cleaned with a mild, non-alcohol based cleaning fluid. Rinse with clean water afterward. For non-liquid stains such as mustard, remove any excess before cleaning. All stains and spills must be attended to promptly.

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CARE & MAINTENANCE

Exterior

An RV comes with a variety of surfaces that need to be cleaned and maintained, from the roof membrane to awning fabrics and beyond. Regular cleaning and maintenance of these different components is needed and will help keep the RV in the best possible condition both cosmetically and functionally.

Keep your roof clean. Use Dicor roof cleaners (RP-RC320S spray or RP-RC160Cj concentrate) or standard products such as 409, Fantastik or mild detergents are sufficient. Do NOT use harsh abrasives or products containing solvents. For stubborn spots, a rag dampened with mineral spirits is recommended. DO NOT SOAK (never apply mineral spirits directly to the roof)

When washing, start from the top and work your way down, try to stay out of direct sunlight. Start by rinsing the roof membrane with clean water to remove any loose dirt or debris. Then, using a medium bristle brush along with a mild detergent / soap and a few gallons of water, scrub the entire roof and then rinse thoroughly, a rubber squeegee may be used to direct water off the roof. A semi-annual inspection of the roof is suggested. Check the membrane for damage and check the lap sealant used at all termination areas (front, rear and side seams as well as roof attachments). The lap sealant has a limited life span, depending on the geographic region and conditions, and should be repair or replaced as needed.

NOTE: do not use cleaning solutions that contain solvents or abrasive pads.

Sidewalls and the front and rear skin or cap should be washed and waxed to protect and restore. Never take your RV through an automatic car wash and avoid using highly abrasive cleaning pads or high-pressure sprayers, the finish and decals/labels on your RV can be damaged by using such products. A soft bristled brush and a mild soap / detergent, if cleaned properly and frequently, will meet your needs. A normal automotive wax should be utilized when waxing your RV, we recommend a good wax two to three times a year, at minimum.

Exposure to salt can result in damage to exterior paints, finishes and other components, it is highly corrosive and should be cleaned off as frequently as possible. The more your RV is exposed to snow, rain, road salt, chemicals and saltwater, the more severe corrosion can be, therefore, a stricter cleaning and maintenance schedule may be needed.

Periodically inspect the pinbox, chassis, landing gear, axles, wheels, and suspension components for spot rust. When/if you find spot rust, use a wire brush to clean the spot and touch the finish up as needed with a rustproof enamel paint. The more quickly you take care of this, the less damage it can cause and lead to bigger issues.

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CARE & MAINTENANCE (CONTINUED)

Exterior (Continued)

Your RV is sealed all around to prevent water intrusion and damage to the RV. These seals and sealants (clear and colored) are crucial to your RV's protection from the outside environment. These seals and sealants should be inspected regularly and touched up and/or resealed as needed, we recommend a visual inspection every 3 months. Make sure to check the roof, slideouts, the corner, termination and beltline trims and moldings on the exterior of the RV. For questions on required seals and sealants, please contact your dealer and Alliance RV. **NOTE:** your slideouts utilize wipe, cap and bulb seals to protect the room from the outside elements. Due to the nature of a slideout room, these seals are not 100% watertight and should be checked very regularly for any visual signs of damage and addressed immediately when found. Spraying your slideout seals with a silicone spray for lubrication and conditioning will help keep the slideout seals and gaskets malleable, flexible, in good working condition. The rate of the breakdown and deterioration of the seals, sealants and gaskets on your RV is directly tied to the outside environment and the needed maintenance, cleaning and touch up of these crucial components.

Interior

Keep your RV clean and well-kept during regular usage and always be sure to thoroughly clean after extended uses, long trips and before you store your RV. Sweep and mop floors as required, clean the kitchen and bathroom as you would in your own house. For appliances, sinks, countertops, toilets, showers and flooring, you'll want to use your regular household cleaners (always refer to the owner's manual of the individual component for additional information). Make sure that the RV is ventilated well when doing this, clean air is needed for your safety.

Strip your bedding down and clean as required, be sure to follow the care instructions on these soft goods. When wiping down cabinets, walls, ceilings and other surfaces, use a mild soap / detergent and warm water in order to not cause damage to these surfaces.

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CARE & MAINTENANCE

Maintenance Schedule

MAINTENANCE REQUIRED	FREQUENCY						
	BEFORE USE	AFTER USE	MONTHLY	3 MONTH	6 MONTHS	YEARLY / BEFORE STORAGE	REFER TO COMPONENT OWNERS MANUAL
Heating, Cooling & Ventilation (AC, Furnace, Vents)				Inspect & Clean			Yes
Axles	Inspect						Yes
Brakes	Test			Adjust			Yes
Entry Steps			Lubricate				
Landing Gear					Clean & Lubricate		Yes
Pinbox & Hitch Equipment	Inspect		Lubricate				
Safety Chains	Inspect						
Slideouts		Clean Roof	Run "In / Out"				
Tires	Inspect						Yes
Battery	Inspect						Yes
Electrical Cords / Receptacles	Inspect						
Generator / Generator Exhaust	Inspect						Yes
Exterior Finish (Roofs, Walls, Slideouts, Chassis)				Wash	Wax		
Exterior Moldings & Trims					Inspect		
Locks and Latches			Lubricate				
Roof Seams and Attachment Points					Inspect		
Seals					Inspect		
Fresh Water System		Drain				Sanitize / Winterize	
Waste System		Dump / Flush				Drain	
Water Heater		Drain				Flush / Winterize	Yes
Propane (LP) System						Test for Leaks	
Alarms / Detectors (Smoke, CO/LP)	Test						Yes

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VENDOR WARRANTY AND CONTACT INFORMATION

Below you will find a listed supplier, related warranty information and warranty / tech support contact information should you need it. Some of this information may change without notice. Alliance RV will make all efforts to keep this manual as up to date as possible. **This is a summary of the component manufacturers warranty only. For details on individual component warranties, see their warranty information.**

COMPONENT	BRAND	WEBSITE	CONTACT #	EMAIL	MANUFACTURER WARRANTY
Generator	Onan	www.cumminspower.com	(800) 888-6626	ask.powergen@cummins.com	3-Year Limited
Microwave	Insignia	www.insigniaproducts.com	(877) 467-4289	www.insigniaproducts.com/email-us	1-Year Limited
Oven / Cooktops	Insignia	www.insigniaproducts.com	(877) 467-4289	www.insigniaproducts.com/email-us	1-Year Limited
Gas Absorption Refrigerator	Norcold / Thetford	www.thetford.com	(800) 543-1219	info@thetford.com	1-Year Limited
Residential Refrigerator	Samsung	www.samsung.com/us/support	(800) 726-7864	service@alliancerv.com	1-Year Limited
Water Heater	Suburban	www.airxcel.com	(423) 775-2131	rvpsupport@airxcel.com	2-Year Limited
Axles	Dexter Axle	www.dexteraxle.com	(574) 295-7888	warranty@dexteraxle.com	1-Year Limited (Grease & Oil Seals) 2-Year Limited (Electric/Hydraulic Brake Actuators) 5-Year Warranty (Axles and Suspension System)
Chassis / Frame	Lippert Components	www.lci1.com	(574) 537-8900	customerservice@lci1.com	1-Year Limited
Suspension System	MORryde	www.morryde.com	(574) 293-1581	warranty@morryde.com	1-Year Limited
Tires	Lionshead	www.lionsheadtireandwheel.com	(574) 533-6169	bscott@lionsheadtireandwheel.com	1-Year Guarantee / 5-Year Limited
Converter	Progressive Dynamics	www.progressivedyn.com	(269) 781-4241	sales@progressivedyn.com	1-Year Limited
Interter	Progressive Dynamics	www.progressivedyn.com	(269) 781-4241	sales@progressivedyn.com	2-Year Limited
Stereo	ASA Electronics	www.asaelectronics.com	(800) 688-3135	info@asaelectronics.com	1-Year Limited
TV	LG	www.lg.com	(800) 243-0000	www.lg.com/us/support/email-appointment	1-Year Limited
TV Antenna	Winegard	www.winegard.com	(800) 288-8094	www.winegard.com/support/contact-us	2-Year Limited
Awnings	Lippert Components	www.lci1.com	(574) 537-8900	customerservice@lci1.com	1-Year Limited
Roof Vents / Fans	MaxxAir	www.airxcel.com	(423) 775-2131	rvpsupport@airxcel.com	2-Year Limited
Furniture	Lippert Components	www.lci1.com	(574) 537-8900	customerservice@lci1.com	1-Year Limited
Mattress	Lippert Components	www.lci1.com	(574) 537-8900	customerservice@lci1.com	1-Year Limited
Air Conditioner	Coleman	www.airxcel.com	(423) 775-2131	rvpsupport@airxcel.com	2-Year Limited
Fireplace	LaVanture	www.lavanture.com	(800) 348-7625	service@alliancerv.com	1-Year Limited
Furnace	Suburban	www.airxcel.com	(423) 775-2131	rvpsupport@airxcel.com	2-Year Limited
Roof Membrane	Dicor	www.dicor.com	(574) 264-2699	dmetzger@dicor.com	15-Year Limited
Leveling System	Lippert Components	www.lci1.com	(574) 537-8900	customerservice@lci1.com	1-Year Limited
Slideout Systems (Electric)	Lippert Components	www.lci1.com	(574) 537-8900	customerservice@lci1.com	1-Year Limited
Slideout Systems (Hydraulic)	Lippert Components	www.lci1.com	(574) 537-8900	customerservice@lci1.com	1-Year Limited

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CONTACT ALLIANCE RV IF YOU HAVE TWO FAILED SERVICE ATTEMPTS (OR IF YOU'RE UNSATISFIED)

EMAIL: service@alliancerv.com

PHONE: (574) 226-0140