












TRIBE
OVERLAND TRAILERS



**TRIBE® TRAILER
OWNERS MANUAL**

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WHAT TRIBE[®]
IS ALL ABOUT

INTRO

Congratulations on your new TRIBE® Trailer. The warnings, cautions and instructions discussed in this manual cannot cover all possible conditions and/or situations that may occur. It is understood that the user of this expedition trailer uses common sense and caution. Please get professional training if you are unaware of how to safely operate this trailer.

For any questions or concerns you can call us directly at 1-866-220-0171, or email us at support@tribetrailers.com.

DEALER RESPONSIBILITY

When you purchase your camper, TRIBE expects the following of the dealer:

Perform a Pre-Delivery Inspection (PDI). The inspection must include the testing of all systems and components installed in your new camper. Your camper must pass the PDI test before it is eligible to be sold to you. TRIBE does not control dealer actions and is not responsible for an incomplete PDI.

- Received a complete tour of your camper's appliances, and features, teaching you how to operate each system.
- Provide you, the owner, access to this Owner's Manual.
- Provide and explain to you the TRIBE One Year Limited Warranty and the Warranty Claim Procedure.
- Register your One Year Limited Warranty online at www.tribetrailers.com. You should receive a confirmation email when the warranty has been activated.
- Provide you with two sets of keys and all remotes needed to operate select appliances and components in your camper.
- Provide you with the complete Owner Package, this should contain all components, user manuals, and other complimentary items from Tribe. This is located within the trailer when shipped from TRIBE.
- Assist you in locating your vin, and serial number, of your new trailer. This is needed to activate the manufacturer's warranty upon purchase.
- Discuss and plan with you what to do in case of service needed on your camper, whether local or abroad. This includes repairs not under warranty.

OWNER RESPONSIBILITY

Before, during, and after the purchasing process of your new camper, TRIBE expects the following of you, the owner:

- Inspected the entire camper for any kind of manufacturing defects. Make sure you have found the trailer acceptable, clean, and completely free of damage.
- You acquired access to this Owner's Manual.
- You were shown how to operate each feature and function of your new camper and are fully aware of the maintenance schedule required to keep your camper in excellent operating order.
- You have agreed to be responsible for properly maintaining your new purchase and performing any needed service in a timely manner.
- You have read and understood all safety messages posted in various locations on the camper, and in this manual. You have agreed that TRIBE is not liable for any warranty coverage, compensation for injury, or loss sustained through the disregarding of safety messages. You are fully responsible, regardless of your awareness.
- With dealer assistance, you have registered your trailer via Tribetrailers.com. To avoid loss of coverage. It is crucial that you activate your trailer's warranty within 1 month of purchase.
- You have had a chance to review, read, and fully understand the TRIBE One Year Limited Warranty and the Warranty Claim Procedure.
- You have responsibly protected yourself and others by acquiring insurance coverage on your

REGISTER YOUR CAMPER FOR WARRANTY

HOW TO REGISTER YOUR VEHICLE

To register your camper please go to our website at <https://tribetrailers.com/>

Once on our home screen please go to the top of the page and navigate to support

From our support tab please click "Register A Vehicle"

You will be taken to our register a vehicle page where you will be able to fill in any information needed for registration.



IMPORT INFORMATION REGARDING REGISTRATION

It is crucial to complete the warranty registration form within one month of your purchase date. Failure to do so may result in the voiding of your trailer's warranty coverage.

In the event that you have overlooked this crucial step, please take immediate action by following these instructions:

Contact us at support@tribetrailers.com with the subject line: "**Warranty Registration Oversight.**"

Provide us with the following information:

Proof of purchase from the dealership where you acquired your trailer.

Complete serial and VIN information of your trailer.

This information is vital for us to verify your purchase and facilitate the necessary steps to ensure your warranty remains valid.

We understand that sometimes oversights occur, and we are here to assist you in rectifying this situation promptly. Our aim is to ensure that you experience the full benefits of your trailer's warranty coverage.

Thank you for your prompt attention to this matter. Should you have any further questions or require additional assistance, please do not hesitate to reach out to our dedicated customer service team.

REPORTING SAFETY DEFECTS

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In The USA:

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

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

To contact NHTSA, you may call the Vehicle Safety Hotline Toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); Go to <http://www.safercar.gov>; Or write to: Administrator, NHTSA, 400 Seventh Street, SW., Washington, DC 20590.

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

IN CANADA:

If you find that your camper has a safety defect that could cause an injury, accident or death, immediately inform Transport Canada and TRIBE Customer Service.

Transport Canada Contact Information: Website: www.tc.gc.ca

Toll-free: 1-800-333-0510 | Address: Transport Canada | International: 1-819-994-3328


Defect Investigations & Recalls Division 330 Sparks Street Ottawa ON K1A 0N5 | Canada
safercar.gov | NHTSA | <http://www.safercar.gov>

DMV REQUIREMENTS

DMV Requirements:

Most States require that the trailer be registered with the DMV (Department of Motor Vehicles). When registering your trailer, you may need an invoice showing the purchase price of the trailer. Be sure to request a full invoice from the dealer when making your purchase or request one after reading this information.

TRIBE Trailers is registered with the SAE. We will issue the trailer a VIN # as well as an MCO/MSO certificate. This must be taken with you to the DMV for registration, or your dealer may do this for you. During registration you will be issued a title, VIN sticker, and license plate. Please note, some states may vary in their compliance procedures, these are simply basic guidelines. This is the manufacturers plate located on the driver side front tongue of the trailer. Truck campers do not require a vin number.

MANUFACTURED BY:				THIS VEHICLE CONFORMS TO ALL APPLICABLE STANDARDS PRESCRIBED UNDER THE U.S. FEDERAL MOTOR VEHICLE SAFETY STANDARDS REGULATIONS IN EFFECT ON THE DATE OF MANUFACTURE INDICATED.			
1-888-447-7895 www.TRIBETRAILERS.com		MANUFACTURE DATE <input type="text"/>		MODEL NO: <input type="text"/>	VEHICLE TYPE: <input type="text"/>		
	GVWR	GAWR	TIRE	RIM	COLD PRESSURE	AXLES	
FR	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
VIN	<input type="text"/>		SERIAL NO	<input type="text"/>			

The plate will include the following Information:

1. Manufacturer Date | 2. Model # | 3. Serial # | 4. Relevant information about the trailer
5. Vin Number for DMV



WARRANTY

TRIBE LIMITED WARRANTY

This Limited Warranty covers defects in material or workmanship in any components of a new TRIBE camper purchased from an authorized TRIBE dealer in the United States or Canada for a period of one year from the date the trailer is first delivered to the original retail purchaser.

LIMITATION OF IMPLIED WARRANTIES

Implied warranties arising under applicable law, if any, including but not limited to implied warranties of merchantability or fitness for a particular purpose, are hereby limited in duration to the term of this Limited Warranty. All other warranties, express or implied, are hereby disclaimed by TRIBE.

DISCLAIMER OF INCIDENTAL AND CONSEQUENTIAL DAMAGES

TRIBE hereby disclaims any and all incidental and consequential damages arising out of or relating to the trailer, including expenses such as transportation to and from vehicle dealerships and TRIBE repair facilities, loss of time, loss of pay, loss of use, inconvenience, commercial loss (including lost profits), towing charges, bus fares, vehicle rental, service call charges, gasoline expenses, incidental charges such as telephone calls and facsimile transmissions, and expenses for lodging. This disclaimer is independent of any failure of the essential purpose of any warranties provided with a trailer and shall survive any determination that a warranty failed of its essential purpose.

REPAIR REMEDY

If within the one (1) year Limited Warranty period a defect in material or workmanship is found to exist that is not excluded from coverage, TRIBE's sole and exclusive obligation shall be to replace the defect. As a limited backup remedy in the event the RV cannot be repaired, to determine in the sole and absolute discretion of TRIBE, after a reasonable opportunity to repair, TRIBE may, at its option, either (1) pay you an amount equal to Tribe's determination of the diminution in value of the RV that was caused by the defect, or (2) provide a similar replacement RV, less a reasonable allowance for the owner's use of the original RV, to be determined by TRIBE.

WARRANTY CLAIM PROCEDURE

Upon discovery of a defect, please contact TRIBE within five business days by registered letter, phone call (330-852-4811), or visit the warranty section of the TRIBE website (tribetrailers.com). Please be prepared to provide the VIN number of the trailer along with your name and best mode of contact (along with hours, if necessary).

OBTAINING WARRANTY SERVICE

If you have not registered your warranty, you will be asked to provide your bill of sale, so that the purchase date can be verified. In order to obtain warranty service under this Limited Warranty, the owner must do all of the following:

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

EXCLUDED FROM COVERAGE

Misuse, abuse, collision, improper repairs, overloading, neglect or lack of maintenance which results in damage. Alteration or installation of equipment, not approved by TRIBE, that results in damage. This includes, but is not limited to electrical, gas, plumbing or structural issues. Normal wear, fading or deterioration of fabrics, flooring, graphics or metal components including weathering, discoloration, surface corrosion of unpainted surfaces or minor blemishes due to normal use. Any product used outside of the intended scope of its customary purpose. Any unregistered product not normally used in the US or Canada. Any product used as a rental unit. Any promises made by any person beyond what is stated in this document. Condensation on any window or other parts or any results of condensation.

STATUTE OF LIMITATION

No action may be brought against TRIBE for breach of this Limited Warranty, any applicable implied warranty, or for any other claim arising out of or relating to a TRIBE trailer, more than thirty (30) days after: (1) expiration of the one year (12) month Limited Warranty period; or (2) expiration of the ten (10) day notice period that follows expiration of the Limited Warranty period, if such notice is given.

CHANGES IN DESIGN

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

LEGAL PROCEDURES

In addition to the provisions of this warranty, the retail purchaser has available the legal remedies provided by the Magnuson-Moss Warranty Act and any applicable State statutes. Implied warranties, including any warranty of merchantability or fitness of a product for a particular purpose, are limited in duration to the term of this written warranty. Some states do not allow limitation on how long such a warranty lasts, so the above limitation may not apply. You may have rights, outside of what this warranty states, which is on a state-by-state basis.

REPLACEMENT PARTS

While most parts of your camper are replaceable, some may not be. This is due to availability of product or supply and demand of the markets and manufacturers outside of TRIBE. Should you need a replacement part, your dealer will be able to get it for you. All OEM (Original Equipment Manufacturer) part replacements must be acquired from your dealer since TRIBE does not support direct part sales. If OEM parts are unavailable, your dealer will try to offer an alternative solution or substitute according to their abilities.

AFTERMARKET ALTERATIONS

Many folks in the TRIBE family love to personalize and make their camper unique through various accessories, additions and aftermarket alterations. TRIBE encourages and enjoys seeing their customers fully enjoy their experience with their products. Important information to know and understand BEFORE you install aftermarket parts and personalize your camper:

1. Important safety items can be damaged by installation of aftermarket parts. Even driving fasteners into a component, depending on where it is, can damage functionality of items that contribute to safety.
2. ALWAYS consult your dealer to discuss the eligibility of installing the aftermarket part and make sure your plan is safe
3. Make sure water sealing is not compromised by the aftermarket part, component, accessory or other equipment you are installing and will not impede function of previously installed components by TRIBE.
4. Any parts and components of the camper affected by and along with the aftermarket part, component, accessory must be carefully evaluated to ensure they function as intended and do not compromise the safety or integrity of the camper.

IMPORTANT NOTES ON AFTERMARKET ALTERATIONS:

Consult your dealer for advice on the eligibility and safety of any aftermarket modifications. Ensure that any alterations do not compromise water sealing or impede the function of existing components.

Evaluate the impact on safety items to prevent any damage that may affect overall safety.

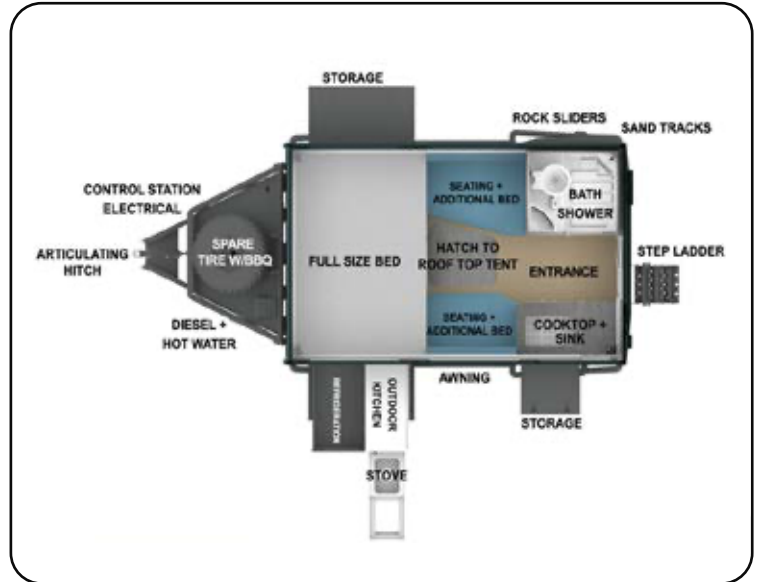
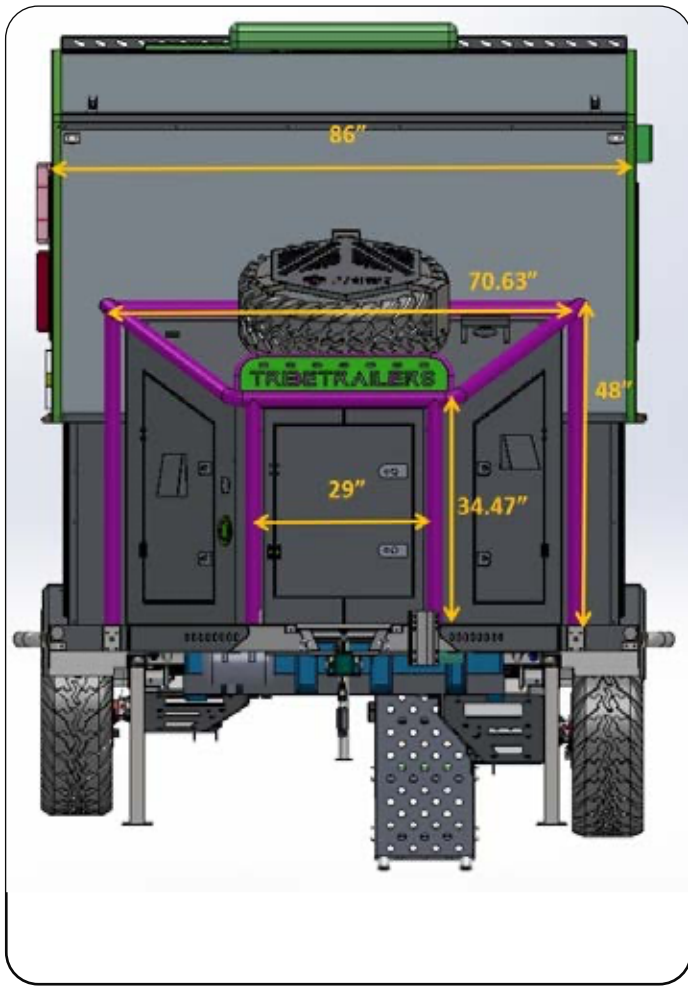
Be aware that certain aftermarket alterations may void certain warranties or coverage.

EXPEDITION 500 SPECIFICATIONS



The TRIBE Expedition 500 trailer features independent suspension with heavy-duty shocks for rough trail riding. Two (2) airbag systems control the height of the trailer for on-road towing to off-road adventuring.

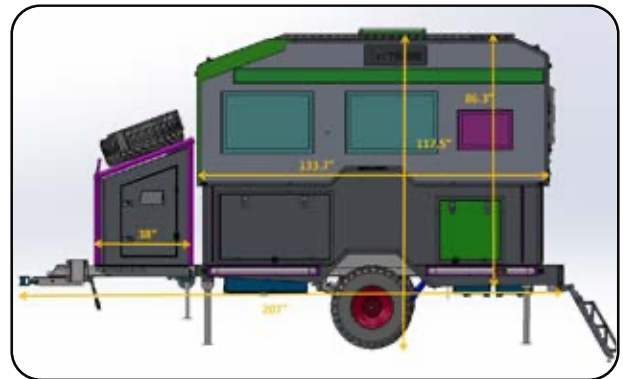
Trailer size (Lift up)	200" x 86" x 114"
Trailer size (Lift down)	200" x 86" x 83"
Box size (Lift up)	133"x 86" x 114"
Box size (Lift down)	133"x 86" x 83"
Toolbox size	22" x 22.5" x 26"
Bed	51" x 78.7"
Mattress size	51" x 78.8" * 3.94"
Tare weight	3660 LBs.
ATM	4100 LBs.
Suspension	Independent suspension with dual air shock absorbers, coil springs
Brakes	12" electric brake plus additional hand brake included, brake away system
Draw-bar	Pointed 360-degree universal hitch
Safety chain	Dual (not single) drawbar safety chains
Chassis	Heavy duty off road galvanized chassis
Rims and tires	265 75/R16 LT tire, 16" aluminum alloy wheel, including spare
Finish	All aluminum sandwich panels lightweight frame
Stabilizer legs	4 x heavy duty lockable and adjustable drop-down, 1x electric leg
Jerry can holder	1 x jerry can holder with 10L jerry can
Gas bottle holder	2 x gas bottle holder
Lights	12V LED light outside, separate switch indoor LED light
Electrical	1 x 200 A/H lithium battery, Overload protection, Cigarette sockets, Water sensor, Voltage meter (DC & AC), 1000w inverter, Solar power control
Kitchen system (indoor)	ARANA American standard gas stove, tempered glass cover
Kitchen system (outdoor)	Integral outdoor kitchen
Water tank	1x 160L clear PE water tank, 1x 70L black PE water tank, 1x 70L grey PE water tank, with 12V electrical pump"
Awning	3000mm 118.11 " electric awning



RECOMMENDED LIST OF SUPPLIES

We recommend that you have a detailed list of supplies that is either stored on the vehicle, or brought with you before every journey. Failure to be prepared can leave you in an unfavorable position. Its always best to be over prepared rather than unprepared. Below is a list of items we strongly advise you to have on every adventure.

- 3/4 Inch or 19mm Tire Iron, Impact driver and socket, or breaker bar.
- Spray bottle with a mixture of soapy water.
- Tire pressure gauge.
- Food and water.
- Multimeter.
- Emergency wiring and connection kit.
- Basic hand tools: Screwdrivers, wrenches, pliers, ETC..
- Spirit level.
- Small Generator: In the Case of Battery failure.
- Emergency stop kit: road flares, cones, reflectors, lights, etc...
- Navigation and communication: A satellite phone that pairs as GPS.



TOWING

WARNING

WARNING: Never tow your Expedition 500 trailer with the body lift raised. Failure to abide by this rule may cause damage to your trailer, and/or potentially cause an accident. In the case of your trailer's lift mechanism not lowering contact a tow truck to receive your trailer and transport it to your nearest RV/Trailer repair shop.

Towing a trailer can be challenging, and there are several common reasons why accidents can occur:

Speeding: Driving at high speeds, especially around curves or in adverse weather conditions, can make it difficult to control the towing vehicle and trailer.

Improper Weight Distribution: Failing to distribute the weight properly between the towing vehicle and trailer can lead to instability and swaying, especially during turns or sudden maneuvers.

Exceeding Weight Limits: Overloading the trailer or towing vehicle beyond their recommended weight capacities can strain the vehicle's braking and suspension systems, making it harder to control.

Inadequate Braking Distance: Towing a heavy trailer requires a longer stopping distance. Drivers who fail to account for this may not be able to stop in time to avoid a collision.

Improper Hitching: Failing to properly attach the trailer to the towing vehicle, or using an incompatible hitch, can lead to detachment while on the road.

Sudden Maneuvers: Abrupt lane changes, sharp turns, or sudden braking can lead to loss of control, especially if the trailer is not properly stabilized.

Lack of Experience: Inexperienced drivers may struggle to maneuver a vehicle with a trailer, leading to mistakes in handling and control.

Wind and Weather Conditions: Strong crosswinds, heavy rain, or snow can affect the stability of the trailer, making it harder to control.

Fatigue or Distraction: Towing requires focus and attention. Fatigued or distracted drivers are more likely to make mistakes or react slowly to changes in road conditions.

Inadequate Towing Equipment: Using old or improperly maintained towing equipment, such as tires, brakes, or suspension, can increase the risk of accidents.

Lack of Maintenance: Neglecting regular maintenance on the towing vehicle or trailer can lead to mechanical failures that increase the risk of accidents.

Poor Visibility: Limited visibility due to blind spots or obstructed mirrors can make it difficult to monitor the trailer and react to potential hazards.

Rushing or Impatience: Trying to rush through a towing journey can lead to hasty decisions and potentially dangerous situations.

7 PIN PLUG

A 7-pin plug, also known as a 7-way connector, is commonly used in towing setups to connect a towing vehicle (e.g., a truck or SUV) to a trailer. It allows for the transmission of various electrical signals between the towing vehicle and the trailer. Here's how a 7-pin plug works:

Ground (White Wire): The white wire is the ground connection. It provides a return path for electrical currents and ensures that any stray electrical energy is safely dissipated into the ground. This helps stabilize the electrical system and prevent electrical shocks.

Tail Lights (Brown Wire): The brown wire connects the towing vehicle's tail lights to the trailer's tail lights. This allows the trailer's rear lights to mirror the actions of the towing vehicle, such as when the headlights or brake lights are turned on.

Left Turn Signal (Yellow Wire): The yellow wire carries the left turn signal signal from the towing vehicle to the trailer. When the driver activates the left turn signal, this wire sends the signal to the trailer's left turn signal lights.

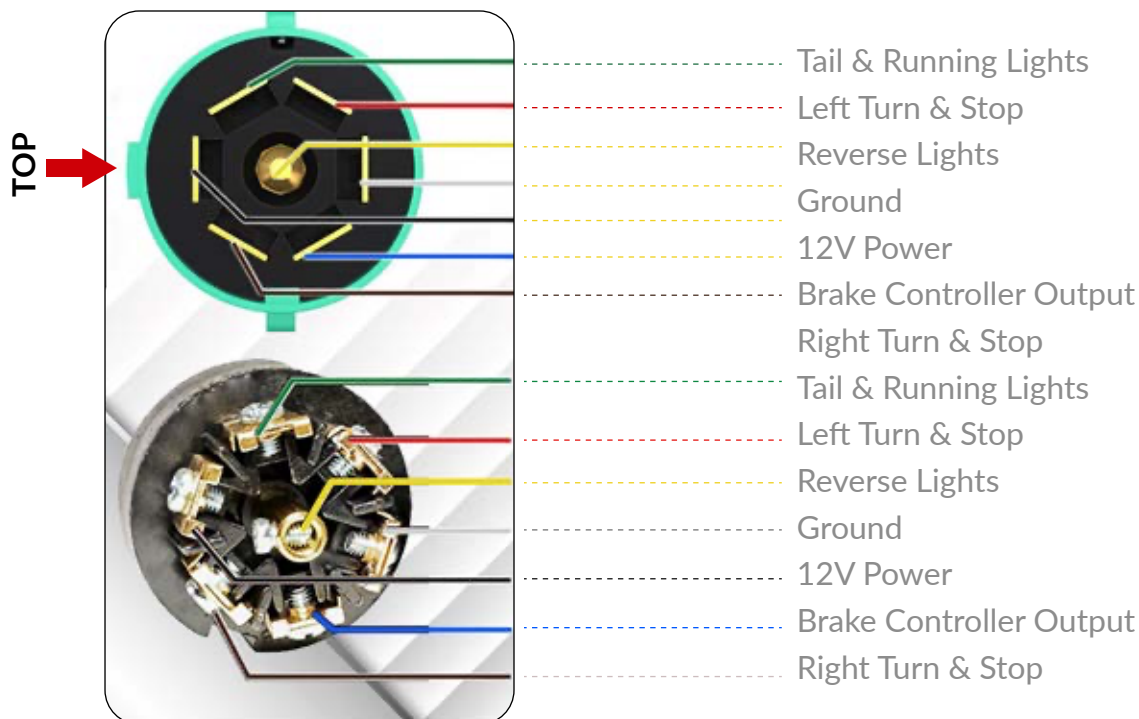
Right Turn Signal (Green Wire): Similar to the yellow wire, the green wire transmits the right turn signal signal from the towing vehicle to the trailer. It controls the right turn signal lights on the trailer.

Brake Lights (Blue Wire): The blue wire is responsible for sending the signal to activate the trailer's brake lights when the driver applies the brakes in the towing vehicle.

Electric Brakes (Black or Red Wire): If the trailer is equipped with electric brakes, this wire provides power to engage the brakes when the towing vehicle's brakes are applied. It is typically a black or red wire.

12V Power (Purple Wire): The purple wire is optional and is used to supply a constant 12-volt power source to accessories on the trailer, such as interior lights, a refrigerator, or a breakaway switch.

7 PIN PLUG SIGNAL DESIGNATION



CONNECTING YOUR HITCH

Caution: Utilizing a tow vehicle with a towing capacity lower than the trailer's load rating may result in loss of control, potentially leading to fatal accidents or severe injuries.

As you gain experience, the process of hitching up your trailer will become easier. The steps for hitching described below are standard.

HITCHING PROCEDURE AND GUIDELINES:

- Begin by raising the hitch coupler using the automatic trailer jack until it clears the tow vehicle.
- Position the tow vehicle in reverse until the provided hitch bracket aligns directly with the trailer poly block.
- Engage the parking brake in the tow vehicle.
- Ensure that the poly block and bracket are aligned with each other so that you can place the pin and lock in place.
- Attach the safety chains in a crisscross pattern to the tow vehicle, making sure they are correctly connected to the trailer. Do not fasten chains to any part of the hitch unless designed for that purpose, and ensure the chains don't drag during towing.
- Connect the breakaway switch. Secure the breakaway switch cable to the tow vehicle's bumper or frame independently of the safety chains, following these guidelines:
 - The cable should extend straight from the switch to the tow vehicle.
 - Place the switch and cable on the same side of the trailer and tow vehicle.
 - Avoid looping the cable over the hitch ball to prevent it from bouncing off during travel.
 - Before towing you can test the breakaway assembly by removing the pin from the switch to confirm the activation of the trailer's electric brakes.

WARNING: NEVER ATTACH THE INCLUDED BREAKAWAY SWITCH LANYARD TO THE HITCH BALL OR ANY PART OF THE HITCH ASSEMBLY.

- The breakaway switch will automatically engage the electric trailer brakes if the safety chains fail.
- Adjust your side mirrors so that you can see the trailer and sides, extensions may be required.
- With the help of someone, inspect all trailer and tow vehicle lights to ensure they are functioning correctly. Signal lights and brakes should sync with the vehicle.

Verify that the trailer brakes are in working order before towing.

HOW TO CONNECT SAFETY CHAINS

Safety chains are a critical component of safe towing. They serve as a backup in case the trailer becomes detached from the towing vehicle. Here's how to properly use safety chains on a trailer:

Ensure Adequate Length: The safety chains should be of sufficient length to allow for turns, but not so long that they drag on the ground.

Cross the Chains: If your trailer has two safety chains, cross them underneath the trailer tongue before attaching them to the towing vehicle. This creates a cradle-like effect that can help prevent the tongue from dropping to the ground if it becomes disconnected.

Attach to Towing Vehicle: Securely attach each end of the safety chain to the appropriate attachment points on the towing vehicle. These attachment points are typically provided on the hitch, and there are usually hooks or loops specifically designated for the safety chains.

Proper Attachment Points: The attachment points should be strong and secure. Avoid attaching safety chains to a hitch ball, as it may not be as reliable in the event of a disconnect.

Cross Over the Coupler: If the trailer has a coupler, loop the safety chains over the top of the coupler and then attach them to the towing vehicle. This further helps to create a cradle effect.

Leave Some Slack: Ensure that there is a bit of slack in the safety chains. They should not be overly tight, but neither should they be so loose that they drag on the ground during turns.

Check for Clearance: Make sure that the safety chains have enough clearance to allow for turns without binding or interfering with any other components of the towing setup.

Regular Inspection: Regularly inspect the safety chains for signs of wear, damage, or weakening. Replace them if you notice any issues.

Adjustment for Uneven Terrain: If you're towing over uneven terrain, you may need to adjust the length of the safety chains to ensure they remain effective.

Practice Safe Towing Habits: Remember that safety chains are a secondary measure. Always make sure that your trailer is properly hitched and that all components are in good working order before hitting the road.

In the event of a trailer disconnect, properly installed safety chains can prevent the trailer from completely separating from the towing vehicle, reducing the risk of a catastrophic accident. Always ensure that your safety chains are in good condition and properly attached before towing.



SAFETY WHILE DRIVING ON DIFFERENT TERRAIN

CORRUGATED & ROUGH ROADS

Corrugations are arguably the most taxing & damaging road conditions for vehicles. Constant vibration can loosen vehicle components and adds stress to vehicles well in excess of normal road driving.

In these conditions take regular breaks to reduce driver fatigue & fatigue to your Unit.

When driving on rougher roads you need to take into consideration the fact you are towing a heavy Unit behind your vehicle & it has added length and weight to your setup.

Shock absorbers can become extremely hot on corrugated roads which can cause damage to seals resulting in shock absorbers fading (reduction in damping effect) and in extreme cases failure of the seal completely.

On rough and corrugated roads, it's important to adjust tire pressures on your car and TRIBE Unit to soften the effect and extend the contact patch of the tire on the road. When driving in these conditions, it is strongly advised you carry a tire pressure gauge/ deflator and a portable compressor to reinflate when back on the highway.

We highly recommend reducing your tire pressure when driving on corrugated terrain.

Please Note: When returning to main roads after being off road make sure to reinflate the tires back to their correct pressures.

When traveling on corrugated roads it is highly recommended to stop and take a break every hour to check the following parts on your Unit:

1. Tires - Check Pressure and condition
2. Wheel Nuts - make sure they have no loosened
3. Trailer is lowered completely and pins are in place
4. Undercarriage- inspect the underside of your trailer insuring no loose parts or nuts.

Corrugated roads also put a lot of strain on the batteries within your Unit. The vibrations in extreme cases can lead to dead cells which will severely hinder your batteries' performance and result in a dramatically lower life span. They can also loosen the terminals which can mean a bad power connection & cause the power to cut out to the Unit.

If traveling on corrugated roads, put the batteries on a thick piece of rubber to lessen the vibrations caused by corrugated roads. This will not completely protect them but will lessen their impact. Also ensure to check the wing nuts before you set up your Unit to ensure their connection is tight

SAND

When driving on sand it is important to lower tire pressure on both the vehicle and TRIBE Unit. By lowering the pressure, you will effectively create a larger footprint for the tire which will reduce how far it sinks in sand.

Sand shape & compaction will vary around the country, so it is necessary to reduce the tire pressures. When driving in these conditions, it is strongly advised you carry a tire pressure gauge/ deflater and a portable compressor to reinflate when back on the highway.

SILT OR DUST

This phenomenon is common on dirt roads. Fine dust can settle in large potholes obscuring them from unsuspecting drivers. It is important to reduce speed in these conditions and drive carefully to avoid the possibility of damage or an accident. It is impossible to prevent bulldust from getting into your Unit. One of the best ways to prevent bulldust from penetrating the seals on your Unit is to apply a thin amount of Vaseline to the main seals on the body & toolbox of the Unit to catch the dust before it can enter. If this practice is used, please remember to clean it away before storing your trailer.

Please Note: TRIBE Units are not dust proof. Any resulting damage from traveling on his terrain is not covered by the Warranty.

RIVER CROSSING

These crossings can be extremely dangerous even in low water levels and should never be attempted in times of even mild flooding. Towing a camper or caravan greatly elevates the risk in this situation and should never be attempted unless you are completely assured it is safe to do so.

If there is any doubt about access in flood prone areas, you should contact the local authorities to find out conditions and dangers before you proceed.

Please Note: TRIBE Units are not waterproof. Any resulting damage due to river crossings is not covered by the Warranty.



ADDITIONAL SAFETY INFORMATION

SAFETY DURING AND EMERGENCY STOP

Please carry a warning device, i.e., Reflective Triangle, to be displayed when necessary.

Pull off the road as far as possible when changing a tire, or in other emergency situations, remembering your Unit is larger than the tow vehicle.

It is advisable that everyone leaves the car and stays well clear when it is parked on the edge of a road or highway.

If in an offroad situation

- Make sure you are in a secure location where the vehicles are stable
- Immediately have all the passengers stay away from the vehicle and trailer
- Before proceeding with any situation always look around, assess the situation and then take action.
- Your safety and your passenger's safety is always your #1 Concern.

BAD WEATHER

While camping you may encounter bad weather, if bad weather is forecast and if equipped, take down the awnings completely & pack it away to avoid any damage, weather damage is not covered by TRIBE's warranty.

DO NOT attempt to setup any awnings in extreme conditions or when strong winds are present as damage will occur and is not covered by the warranty.

SECURING YOUR UNIT

Once the perfect location has been found, it is highly recommended to use suitable wheel chocks to help secure the Unit & prevent it from moving in the event of any brake failure. Wheel clamps or chocks can both deliver this security & can be found at most vehicle goods stores.

Below are some tips regarding the security of your Unit, more can be found in the storage section of this manual also.

SPEED

In ideal road conditions, the maximum recommended speed for safely towing a trailer is 60 mph, depending on weather conditions. Your trailer is more likely to sway under higher speeds, thus increasing the possibility for loss of control. Your tires can also overheat, increasing the possibility of a blowout.

Trailer Dynamics

When towing a trailer, you will meet:

- Increased Turning Radius. This means you must make wider turns to keep from hitting curbs, vehicles, and anything else on your inside corner.
- Increased Stopping Distances. To compensate for increased stopping distances, while following another vehicle on the highway, stay one rig length away from the vehicle in front of you for every 10 mph of your speed.

- Different Vehicle Handling Dynamics. Your trailer will be more sensitive to steering in windy conditions. Larger vehicles passing will have a greater effect on the control and handling of the vehicle.
- Slower Acceleration. You will need a longer distance to pass, due to slower acceleration and increased length.

DRIVING PRACTICES

Safe driving practices and habits

- Slippery conditions. Slippery road surfaces will be more dangerous when driving a vehicle with a trailer, compared to driving without a trailer.
- Rainy Weather. While rain may seem harmless, the dangers of hydroplaning increase if you do not reduce your speed. Turn on your emergency flashing lights to help others on the road to see you better, especially in heavy rain where visibility is reduced.
- Black Ice. In rainy weather when temperatures drop to 32° or lower, black ice is possible and will show up on bridges first. Reduce your speed to reduce the risk of losing control.
- Trailer Sway. This is caused by excessive steering, wind gusts, roadway edges, the trailer's reaction to the force created by passing trucks and buses, or improper loading of cargo in the trailer-a frequent problem. When encountering trailer sway under high speeds, back off the accelerator and “ride it out” by steering as little as possible to stay on the road. Use small “trim-like” steering adjustments. Do not attempt to quickly steer out of the sway. This is dangerous and can result in loss of control. If your vehicle is equipped with hand control of the electric trailer brakes, gently apply the trailer brakes alone to straighten out any sway. This works because it puts pressure between two vehicle and trailer where the sway is happening.
- Check rear view mirrors every 2-3 seconds to observe trailer behavior and accompanying traffic.
- Always check your rear view mirrors before changing lanes and always use turn signals.
- Use lower gears when driving down steep or long grades. The engine and transmission should not serve as a brake but rather to maintain a lower speed. Use brakes to gently reduce speed then rely on your engine to maintain the speed. Do not use your brakes, as they may overheat and become ineffective.
- Always be aware of your trailer height, especially when approaching bridges, roofed areas and trees. It is helpful to know your exact clearance height and check the height dimension on each bridge before passing underneath.
- Obey all traffic rules. They are for your safety.
- Wear your seatbelt.
- Be alert and courteous to fellow drivers.
- Look out for motorcycles, bicycles, and pedestrians.
- Always use your running lights to increase your visibility to other traffic.
- Never drive under the influence of alcohol, drugs or any kind of medication that will affect your reflexes, comprehension and alertness.
- Never drive when you are tired. If you begin to fight sleep, switch drivers or, if you are alone, find a place to sleep until you are rested enough to go on. It is more important to arrive safe than on time.
- Never use cruise control on wet, icy roads, winding roads or when traversing mountainous territory.
- Be aware of your travel trailer's departure angle when entering or exiting driveways, parking lots, campgrounds or any other terrain where you must cross a ramp angle.
- Refer to the TRIBE website for specifications on your trailer.

TOW VEHICLE

- Using a tow vehicle with under-rated towing and loading capacities to tow a trailer can cause serious stability problems.
- Additionally, the strain put on the engine, structural frame and drive train of the vehicle may lead to serious maintenance problems. The maximum towing and payload capacities of your towing vehicle must never be exceeded.
- Refer to your tow vehicle's Owner's Manual for the towing capacity of your tow vehicle, in terms of maximum Gross Trailer Weight (GTW), maximum Gross Combined Weight Rating (GCWR) and Payload Capacity.

HITCH & COUPLER

For safety, it is extremely important for a trailer to be securely coupled to the trailer hitch. Before you tow your trailer confirm that:

- The hitch on your tow vehicle is proper for your trailer with the correct towing and load capacity.
- The Articulating poly block on the trailer is designed specifically for your hitch receiver



AWNING

Locate the Rocker Switch:

The rocker switch for operating the awning is located on the front of your trailer. It will be clearly marked.

Understanding the Rocker Switch:

The rocker switch has two positions: up and down.
Pushing the switch UP will extend the awning.
Pushing the switch DOWN will retract the awning.

Extending the Awning:

To extend the awning, stand in front of the rocker switch.
Gently push the switch DOWN and hold it until the awning reaches the desired length.
Release the switch once the awning is fully extended.

Retracting the Awning:

To retract the awning, stand in front of the rocker switch.
Gently push the switch UP and hold it until the awning is fully retracted.
Release the switch once the awning is completely closed.

Avoid Over-Extending or Over-Retracting:

It is crucial not to overextend or overretract the awning. Doing so can damage the electronic components of the awning.
Take care to stop the movement once the awning reaches its fully extended or retracted position.

Checking for Obstructions:

Before extending or retracting the awning, visually inspect the area to ensure there are no obstructions that could interfere with its movement.

Maintenance and Care:

Regularly clean the awning fabric with a mild soap and water solution to remove dirt and debris. Inspect the awning's mechanical components for any signs of wear or damage. Lubricate moving parts as recommended by the manufacturer.

Using in Inclement Weather:

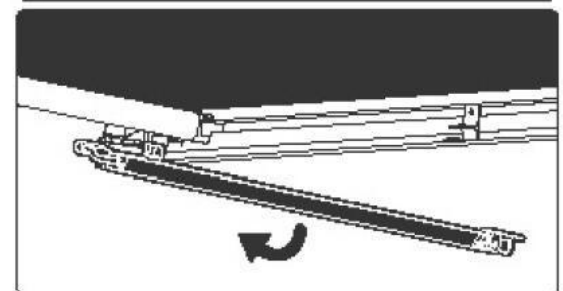
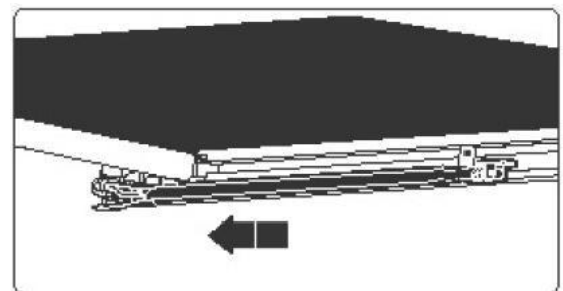
Avoid using the awning in strong winds, heavy rain, or during storms. It is advisable to retract the awning in such conditions.



ADDITIONAL SAFETY INFORMATION

How to lower support legs:

1. Open your awning to your desired length.
2. Pull your awning leg, located on the inside of your awnings front lip, towards you.
3. Rotate the leg clock wise allowing the leg to drop towards the ground.
4. Loosen the hand screw on the support leg.
5. Drop the inner leg to the ground then re-tighten the hand screw.
6. Once the leg is touching the ground, make sure that the foot of the leg is flat with the holes facing the ground.
7. To prevent the awning from being damaged by unexpected winds, use the supplied ground nails to secure the feet at the bottom of the support rod to the ground



Weather Considerations:

Awnings are designed for sun protection. Avoid use in heavy rain, snow, or strong winds to prevent damage. (C11)

Light Rain Use:

In light rain, adjust the support rod to tilt the awning for efficient water drainage. Failure to do so may risk awning damage. (C11)

Closing Procedure:

Ensure the canopy is fully integrated into the box when closing the awning. (C12)

Before storage, ensure the awning is clean and dry. If water enters the box, dry the awning within 12 hours. Use weak alkaline detergent for cleaning. Contact the seller for damaged fabric. (C12)

Support Leg Position:

When stowing the awning, press the support leg against the front wall for proper closure. Misalignment may hinder closure. (C13)

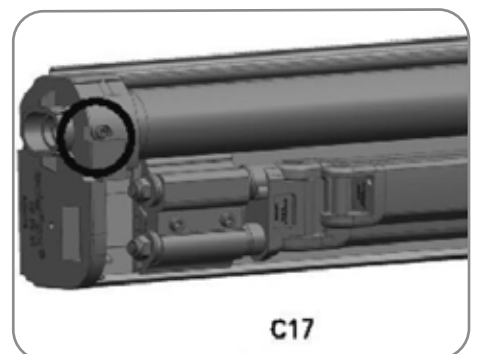
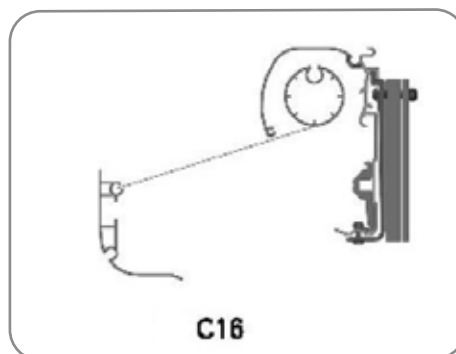
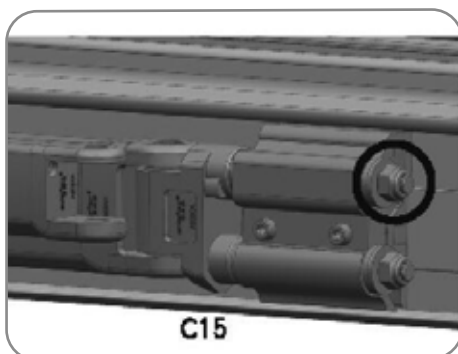
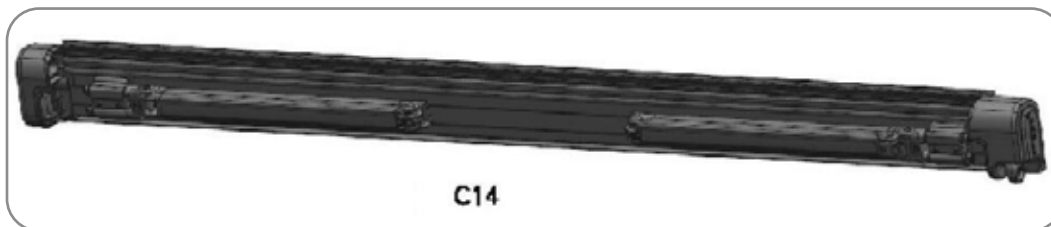
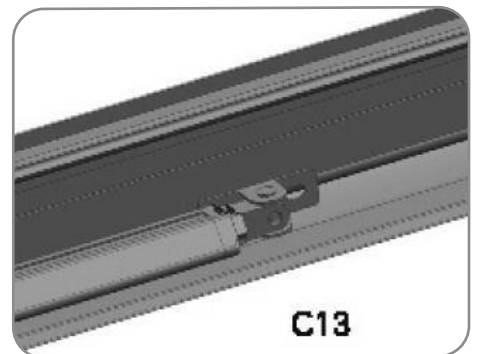
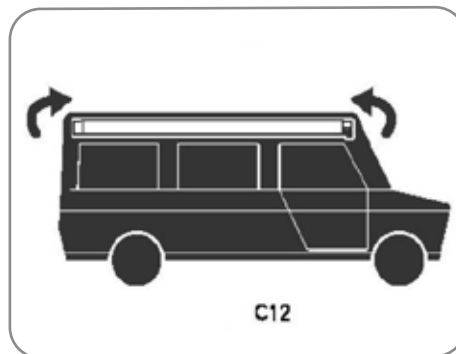
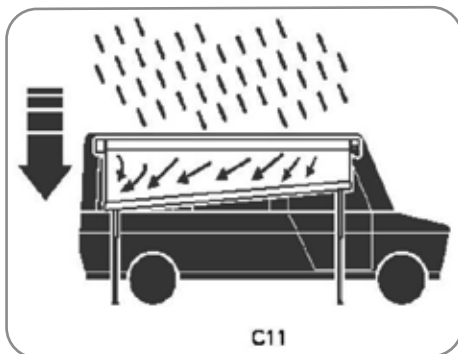
Maintenance and Abnormalities:

After rigorous factory tests, some abnormalities may occur with use. Address the following situations:

Sagging arm: Fine-tune the upper side nut on the base of the main crank arm for a level awning in its natural open position. (C14, C15)

Front pass doesn't enter the box:

Adjust the tightening of the adjustment screw in the driven end cover to balance the front pass entry into the box. (C14, C17)



REFRIGERATOR OR FREEZER

Using a Portable Fridge, Freezer, or Fridge-Freezer Combo with Your Expedition 500 Camping Trailer

Thank you for choosing Tribe Trailers and our Expedition 500 camping trailer. This section will guide you on how to effectively utilize a portable fridge, freezer, or fridge-freezer combo with your trailer.

1. Accessing the Compartment:

The Expedition 500 comes with a dedicated compartment integrated into the outdoor kitchen area for housing a portable fridge, freezer, or fridge-freezer combo. To access this compartment, simply pull out the outdoor kitchen using the slide rail system provided.



2. Powering Your Fridge-Freezer:

Inside the compartment, you'll find a 12-volt female plug located behind the drawer. This plug allows you to connect and power your fridge or freezer directly from the trailer's battery system.



3. Procuring Your Fridge-Freezer:

Please note that the fridge, freezer, or fridge-freezer combo is not included as a standard feature of the Expedition 500. You will need to purchase one separately to suit your preferences, budget, and specific camping needs.

There are several reputable brands available in the market, offering a range of options. We recommend selecting one that aligns with your requirements.

4. Interior Access Option:

If you find it more convenient, you can also access your fridge-freezer from inside the trailer. Under the bed, you will find lightweight aluminum slats that can be easily removed in sections.

This provides an alternative access point for your fridge-freezer without having to go through the outdoor kitchen.



The DOMETIC included Fridge is a 12-volt power source. Before connecting, double-check that the trailer's battery system is adequately charged to power the fridge or freezer during your camping trip. By following these steps, you'll be able to seamlessly integrate a portable fridge, freezer, or fridge-freezer combo into your Expedition 500 camping experience.

HOOD FAN

Your Trailer is equipped with a SeaFlo In-Line Blower, this is working as your indoor kitchen hood fan.

BEFORE STARTING ENGINE

1. Check engine compartment for gasoline or vapors.
2. Operate blower at least five minutes.

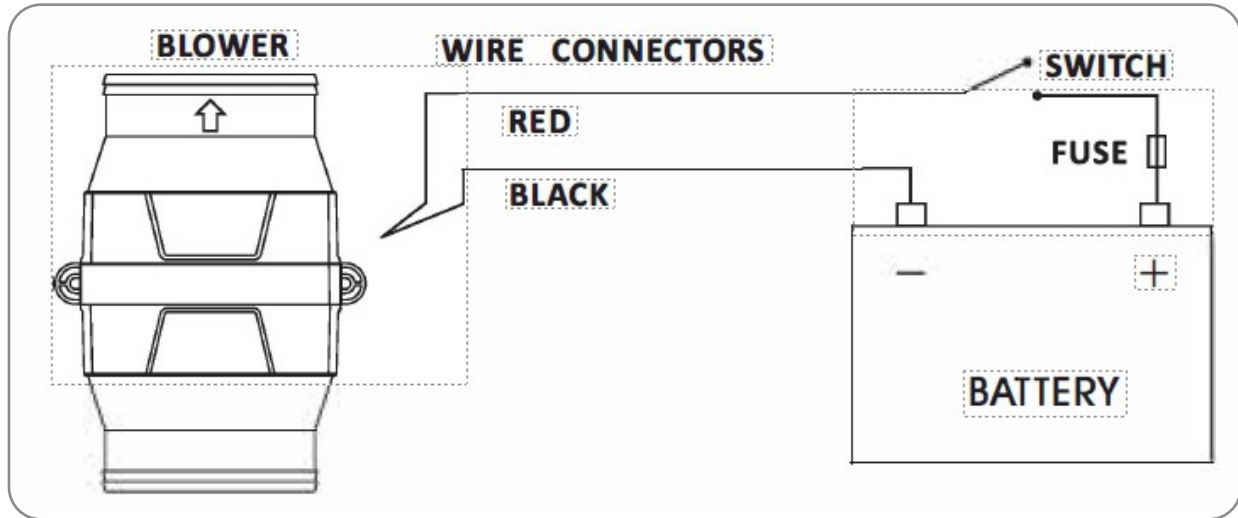
How to operate fan

1. make sure that the fan switch (photo 1) is in the on position
2. using the switch pad turn on the vent fan (photo 2)
3. when you have determined that the fan is working as needed turn the fan off via switch pad.



Wiring Instructions

1. Connect the positive(+) red wire and negative(-) black wire crimp type connectors. Waterproof the connectors with sealant.
2. The bilge blower wires must be protected with the same fuse amp (please see the ventilation parameter) installed in the positive(+) line.
3. An on-off switch with the same fuse amp rating should be installed in the positive line.
4. Minimum lead wire size should be 16 AWG (gauge).



OPERATING WARNING

- Gasoline vapors can explode.
- Do not operate blower while refueling.
- To prevent personal injury, always disconnect one of the main battery leads when installing or servicing this product.
- Always use a fuse with amperage rating specified for the blower model. Failure to do so may result in serious personal injury or fire hazard.

SPECIFICATIONS

Model	Voltage (v)	Air Flow (CFM)	Amp Draw (A)	Fuse (A)	Intake Pipe Dia (mm)
SFIB1-130-01	12	130.0	2.5	5.0	3"/80
SFIB2-130-01	24	130.0	1.3	3.0	3"/80
SFIB1-270-02	12	270.0	6.0	10.0	4"/105
SFIB2-270-02	24	270.0	3.0	5.0	4"/105

SOLAR CONTROLLER

Safety instructions

1. As this controller deals with voltages that exceed the top limit for human safety, do not operate it before reading this manual carefully and completing safety operation training.
2. The controller has no internal components that need maintenance or service, thus do not attempt to disassemble or repair the controller.
3. Install the controller indoors, and avoid component exposure and water intrusion.
4. During operation, the radiator may reach a very high temperature, therefore install the controller at a place with good ventilation conditions.
5. It's recommended that a fuse or breaker be installed outside the controller.
6. Before installing and wiring the controller, make sure to disconnect the photovoltaic array and the fuse or breaker close to the battery terminals.
7. After installation, check if all connections are solid and reliable so as to avoid loose connections that may give rise to dangers caused by heat accumulation.



WARNING

Means the operation in question is dangerous, and you should get properly prepared before proceeding.



NOTICE

Means the operation in question may cause damage.



TIPS

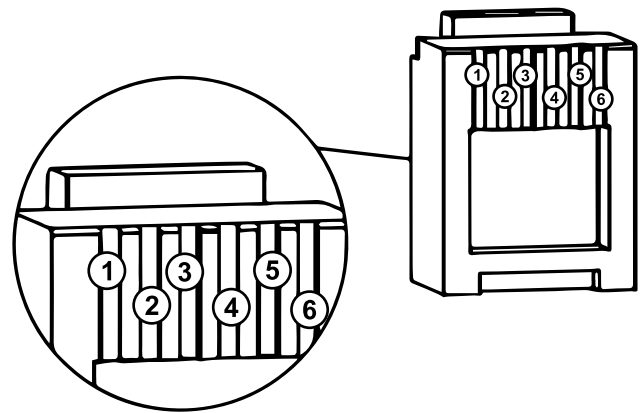
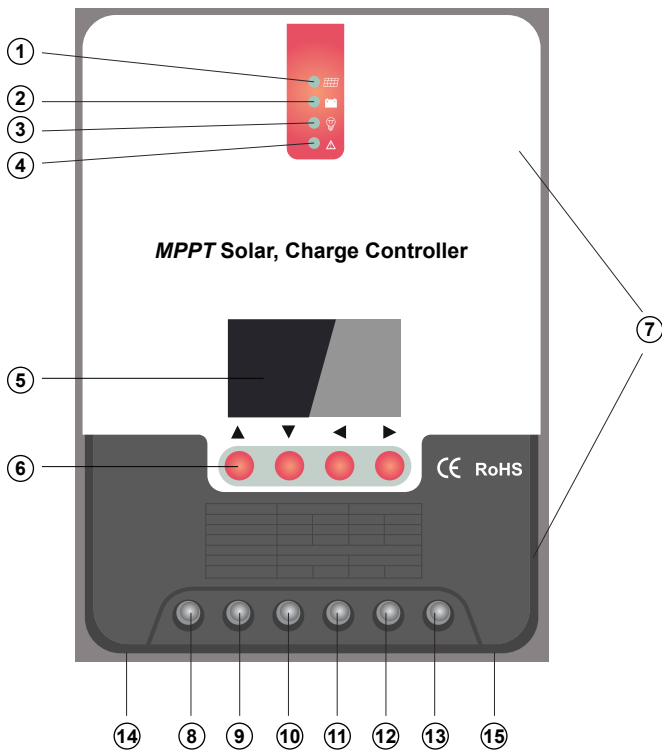
Means advice or instruction for the operator.

Product Overview

- This product can keep monitoring the solar panel's generating power and tracking the highest voltage and current values (VI) in real time, enabling the system to charge the battery to maximum power. It's designed to be used in offgrid solar photovoltaic systems to coordinate operation of the solar panel, battery and load, functioning as the core control unit in off-grid photovoltaic systems.
- This product features an LCD screen which can dynamically display the operating status, operating parameters, controller logs, control parameters, etc. Users can conveniently check parameters by the keys, and modify control parameters to cater to different system requirements.
- The controller utilizes standard Modbus communication protocol, making it easy for users to check and modify system parameters on their own. Besides, by providing free monitoring software, we give users the maximum convenience to satisfy their varied needs for remote monitoring.
- With comprehensive electronic fault self-detecting functions and powerful electronic protection functions built inside the controller, component damage caused by installation errors or system failures can be avoided to the greatest extent possible.



1.3 Exterior and Interfaces



No.	Definition
1	Transmitting terminal TX
2	Receiving terminal RX
3	Power supply grounding /Signal grounding
4	Power supply grounding /Signal grounding
5	Power supply positive
6	Power supply positive

No.	Definition
1	Charging indicator
2	Battery indicator
3	Load indicator
4	Abnormality indicator
5	LCD screen
6	Operating keys
7	Installation hole
8	Solar panel "+" interface

No.	Definition
9	Solar panel "-" interface
10	Battery 11 + 11 interface
11	Battery 11 - 11 interface
12	Load 11 + 11 interface
13	Load 11 - 11 interface
14	External temperature sampling interface
15	RS232 communication interface

Charging Stages

As one of the charging stages, MPPT can not be used alone, but has to be used together with boost charging, floating charging, equalizing charging, etc. to complete charging the battery. A complete charging process includes: fastcharging, sustaining charging and floating charging. The charging curve is as shown below:

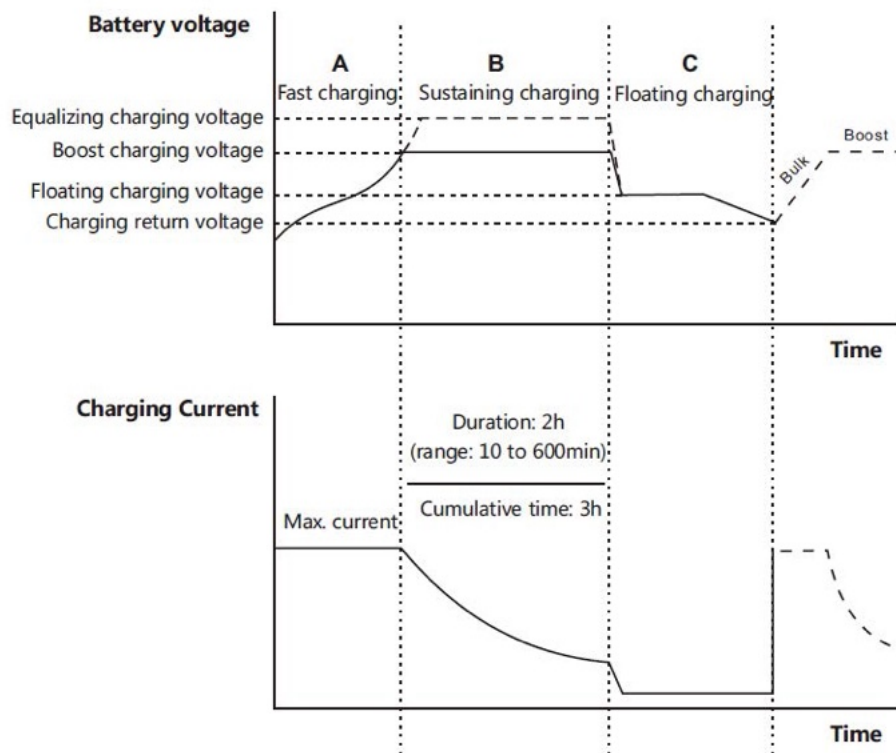


Fig. 1-5 Battery charging stages diagram

a) Fast charging

At the fast charging stage, as the battery voltage has not reached the set value of full voltage (i.e. equalizing/ boost voltage) yet, the controller will perform MPPT charging on the battery with the maximum solar power. When the battery voltage reaches the preset value, constant voltage charging will begin.

b) Sustaining charging

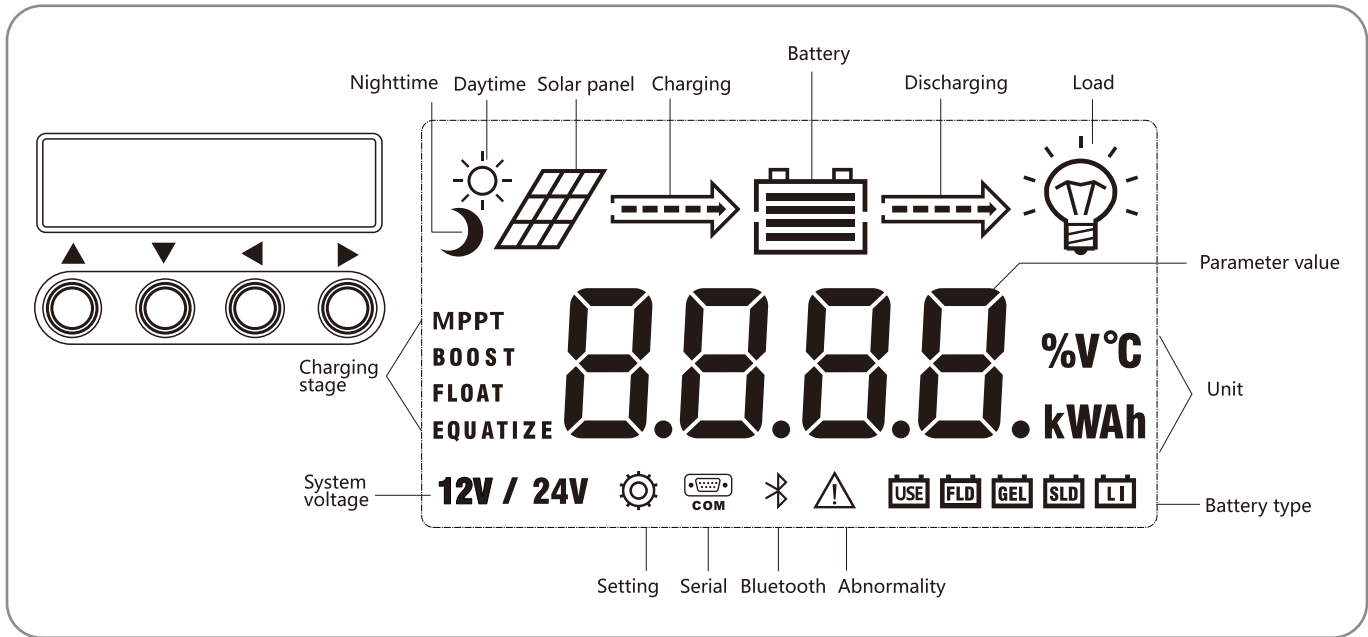
When the battery voltage reaches the set value of sustaining voltage, the controller will switch to constant voltage charging. In this process, no MPPT charging will be performed, and meanwhile the charging current will also gradually decrease. The sustaining charging stage itself consists of two sub-stages, i.e. equalizing charging and boost charging, the two of which are not carried out in a repeated manner, with the former getting activated once every 30 days.

C) Boost charging

By default, boost charging generally lasts for 2h, but users can adjust preset values of duration and boost voltage point according to the actual needs. When the duration reaches the set value, the system will then switch to floating charging.

3.2 Key Operations

▲ Up	Page up; increase the parameter value in setting
▼ Down	Page down; decrease the parameter value in setting
◀ Return	Return to previous menu (exit without saving)
▶ Set	Enter into sub-menu; set/ save Turn on/ off loads (in manual mode)



3.3 LCD Startup and Main Interface

➤ ERROR indicator:

Indicator state	Abnormality indication
Off	System operating normally
Steady on	System malfunctioning

➤ PV array indicator:

No.	Graph	Indicator state	Charging state
①	BULK	Steady on	MPPT charging
②	ACCEPTANCE	Slow flashing (a cycle of 2s with on and off each lasting for 1s)	Boost charging
③	FLOAT	Single flashing (a cycle of 2s with on and off lasting respectively for 0.1s and 1.9s)	Floating charging
④	EQUALIZE	Quick flashing (a cycle of 0.2s with on and off each lasting for 0.1s)	Equalizing charging
⑤	CURRENT-LIMITED	Double flashing (a cycle of 2s with on for 0.1s, off for 0.1s, on again for 0.1s, and off again for 1.7s)	Current-limited charging
⑥		Off	No charging

3. Product Operation and Displ

3.1 LED Indicators

	PV array indicator	Indicating the controller's current charging mode.
	BAT indicator	Indicating the battery's current state.
	LOAD indicator	Indicating the loads' On/ Off and state.
	ERROR indicator	Indicating whether the controller is functioning normally.

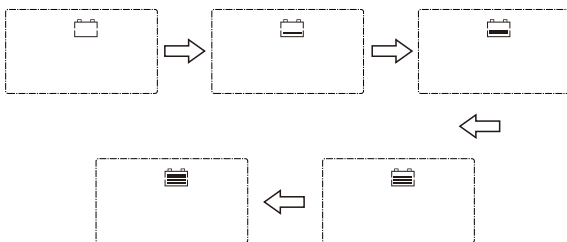
➤ BAT indicator:

Indicator state	Battery state
Steady on	Normal battery voltage
Slow flashing (a cycle of 2s with on and off each lasting for 1s)	Battery over-discharged
Quick flashing (a cycle of 0.2s with on and off each lasting for 0.1s)	Battery over-voltage

➤ LOAD indicator:

Indicator state	Load state
Off	Load turned off
Quick flashing (a cycle of 0.2s with on and off each lasting for 0.1s)	Load overloaded/ short-circuited
Steady on	Load functioning normally

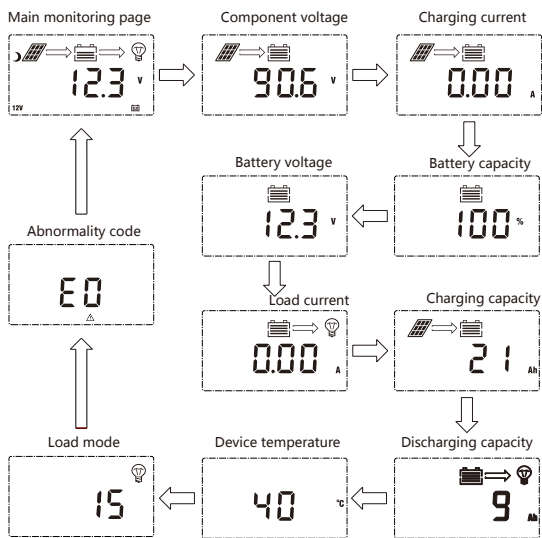
3.3.1 Startup interface



During startup, the 4 indicators will first flash successively, and after self-inspection, the LCD screen starts and displays the battery's voltage level which will be either a fixed voltage selected by the user or a voltage automatically recognized.

No.	Mode	Descriptions
0	Sole light control (nighttime on and daytime off)	When no sunlight is present, the solar panel voltage is lower than the light control on voltage, and after a time delay, the controller will switch on the load; when sunlight emerges, the solar panel voltage will become higher than the light control off voltage, and after a time delay, the controller will switch off the load.
1~14	Light control + time control 1 to 14 hours	When no sunlight is present, the solar panel voltage is lower than the light control on voltage, and after a time delay, the controller will switch on the load. The load will be switched off after working for a preset period of time.
15	Manual mode	In this mode, the user can switch the load on or off by the keys, no matter whether it's day or night. This mode is designed for some specially purposed loads, and also used in the debugging process.
16	Debugging mode	Used for system debugging. With light signals, the load is shut off; without light signals, the load is switched on. This mode enables fast check of the correctness of system installation during installation debugging.
17	Normal on mode	The energized load keeps outputting, and this mode is suitable for loads which need 24-hour power supply.

3.3.2 Main interface



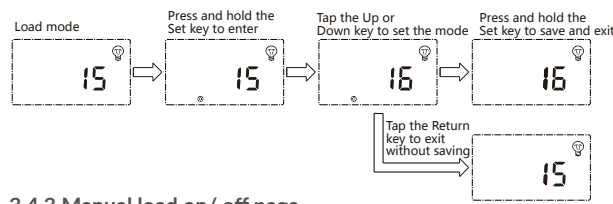
3.4 Load Mode Setting Interface

3.4.1 Load modes introduction

This controller has 5 load operating modes which will be described below:

3.4.2 Load mode adjustment

Users can adjust the load mode as needed on their own, and the default mode is debugging mode (see "load modes introduction"). The method for adjusting load modes is as follows:

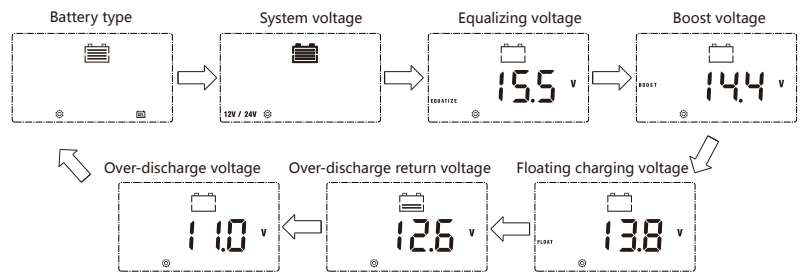


3.4.3 Manual load on/ off page

Manual operation is effective only when the load mode is manual mode (15), and tap the Set key to switch on/ off the load under any main interface.

3.5 System Parameter Settings

Under any interface other than load modes, press and hold the Set key to enter into the parameter setting interface.



When the controller temperature exceeds the set value, it will decrease the charging power or halt charging. See the following diagram:

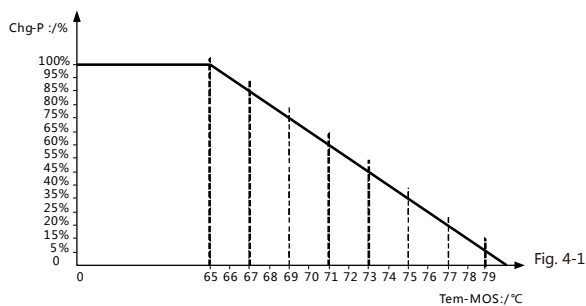


Fig. 4-1

3.5 System Parameter Settings

No.	Error display	Description	LED indicationk
1	E0	No abnormality	ERROR indicator off
2	E1	Battery over-discharge	BAT indicator flashing slowly ERROR indicator steady on
3	E2	System over-voltage	BAT indicator flashing quickly ERROR indicator steady on
4	E3	Battery under-voltage warning	ERROR indicator steady on
5	E4	Load short circuit	LOAD indicator flashing quickly ERROR indicator steady on
6	E5	Load overloaded	LOAD indicator flashing quickly ERROR indicator steady on
7	E6	Over-temperature inside controller	ERROR indicator steady on
9	E8	Photovoltaic component overloaded	ERROR indicator steady on
11	E10	Photovoltaic component over-voltage	ERROR indicator steady on
12	E13	Photovoltaic component reversely connected	ERROR indicator steady on

4.2 System Maintenance

- In order to always keep the controller's performance at its optimum level, we recommend that the following items be checked twice a year.
- Make sure the airflow around the controller is not blocked and clear away any dirt or debris on the radiator.
- Check if any exposed wire gets its insulation undermined due to exposure to sunlight, friction with other adjacent objects, dry rot, damage by insects or rodents, etc. Repair or replace those affected when necessary.
- Verify that indicators function in line with device operations. Note any faults or displayed errors and take corrective measures if necessary.
- Check all wiring terminals for any sign of corrosion, insulation damage, overheat, combustion/ discoloration, and tighten the terminal screws firmly.
- Check if there are any dirt, nesting insects or corrosion, and clean as required.
- If the lightning arrester has lost its efficacy, replace it with a new one timely to prevent the controller and even other devices owned by the user from being damaged by lightning.

⚠ Warning: risk of electric shock! Before carrying out the above checkings or operations, always make sure all power supplies of the controller have been cut off!

After entering into the setting interface, tap the Set key to switch the menu for setting, and tap the Up or Down key to increase or decrease the parameter value in the menu. Then tap the Return key to exit (without saving parameter setting), or press and hold the Set key to save setting and exit.

⚠ Note: after system voltage setting, power supply has to be switch off and then on again, otherwise the system may work under an abnormal system voltage.

The controller enables users to customize the parameters according to the actual conditions, but parameter setting must be done under the guidance of a professional person, or else faulty parameter settings may render the system not able to function normally. For details about parameter settings, see table 3

Parameter setting cross-reference table				
No.	Displayed item	Description	Parameter range	Default setting
1	TYPE OF BAT	Battery type	User/flooded/Sealed/Gel/Li	Sealed
2	VOLT OF SYS	System voltage	12V/24V	AUTO
3	EQUALIZ CHG	Equalizing charging voltage	9.0~17.0V	14.6V
4	BOOST CHG	Boost charging voltage	9.0~17.0V	14.4V
5	FLOAT CHG	Floating charging voltage	9.0~17.0V	13.8V
6	LOW VOL RECT	Over-discharge recovery voltage	9.0~17.0V	12.6V
7	LOW VOL DISC	Over-discharge voltage	9.0~17.0V	11.0V

Table 3

4. Product Protection Function and System Maintenance

4.1 Protection Functions

- **Waterproof**
Waterproof level: IP32
- **Input power limiting protection**
When the solar panel power exceeds the rated power, the controller will limit the solar panel power under the rated power so as to prevent excessively large currents from damaging the controller and enter into current-limited charging.
- **Battery reverse connection protection**
If the battery is reversely connected, the system will simply not operate so as to protect the controller from being burned.

- **Photovoltaic input side too high voltage protection**
If the voltage on the photovoltaic array input side is too high, the controller will automatically cut off photovoltaic input.
- **Photovoltaic input side short-circuit protection**
If the photovoltaic input side gets short-circuited, the controller will halt charging, and when the short circuit issue gets cleared, charging will automatically resume.
- **Photovoltaic input reverse-connection protection**
When the photovoltaic array is reversely connected, the controller will not break down, and when the connection problem gets solved, normal operation will resume.
- **Load overpower protection**
When the load power exceeds the rated value, the load will enter into delay protection.
- **Load short-circuit protection**
When the load is short-circuited, the controller can implement protection in a quick and timely manner, and will try to switch on the load again after a time delay. This protection can be carried out up to 5 times a day. Users can also manually address the short circuit problem when finding the load is short-circuited via the abnormality codes on the system data analysis page.
- **Reverse charging protection at night**
This protection function can effectively prevent the battery from discharging through the solar panel at night.
- **TVS lightning protection.**
- **Over-temperature protection.**

5. Product Specification Parameters

5.1 Electric Parameters

Parameter	Value		
	ML2420	ML2430	ML2440
Model	ML2420	ML2430	ML2440
System voltage	12V/24VAuto		
No-load loss	0.7 W to 1.2W		
Battery voltage	9V to 35V		
Max. solar input voltage	100V (25°C) 90V (-25°C)		
Max. power point voltage range	Battery Voltage+2V to 75V		
Rated charging current	20A	30A	40A
Rated load current	20A		
Max. capacitive load capacity	10000uF		
Max. photovoltaic system input power	260W/12V 520W/24V	400W/12V 800W/24V	550W/12V 1100W/24V
Conversion efficiency	≤98%		
MPPT tracking efficiency	>99%		
Temperature compensation factor	-3mv/°C/2V (default)		
Operating temperature	-35°C to +45°C		
Protection degree	IP32		
Weight	1.4Kg	2Kg	2Kg
Communication method	RS232		
Altitude	≤ 3000m		
Product dimensions	210*151*59.5mm	238*173*72.5mm	238*173*72.5mm

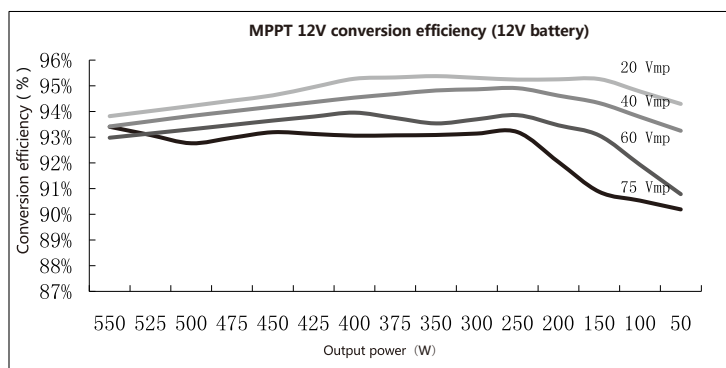
5.2 Battery Type Default Parameters (parameters set in monitor software)

Parameters cross-reference table for different types of batteries					
Voltage to set Battery type	Sealed lead-acid battery	Gel lead-acid battery	Open lead-acid battery	Li battery	User (self-customized)
Over-voltage cut-off voltage	16.0V	16.0V	16.0V	---	9~17V
Equalizing voltage	14.6V	---	14.8V	---	9~17V
Boost voltage	14.4V	14.2V	14.6V	14.4V	9~17V
Floating charging voltage	13.8V	13.8V	13.8V	---	9~17V
Boost return voltage	13.2V	13.2V	13.2V	---	9~17V
Low-voltage cut-off return voltage	12.6V	12.6V	12.6V	12.6V	9~17V
Under-voltage warning voltage	12.0V	12.0V	12.0V	---	9~17V
Low-voltage cut-off voltage	11.1V	11.1V	11.1V	11.1V	9~17V
Discharging limit voltage	10.6V	10.6V	10.6V	---	9~17V
Over-discharge time delay	5s	5s	5s	---	1~30s
Equalizing charging duration	120 minutes	---	120 minutes	---	0~600 minutes
Equalizing charging interval	30 days	0 days	30 days	---	0~250D (0 means the equalizing charging function is disabled)
Boost charging duration	120 minutes	120 minutes	120minutes	---	10~600 minutes

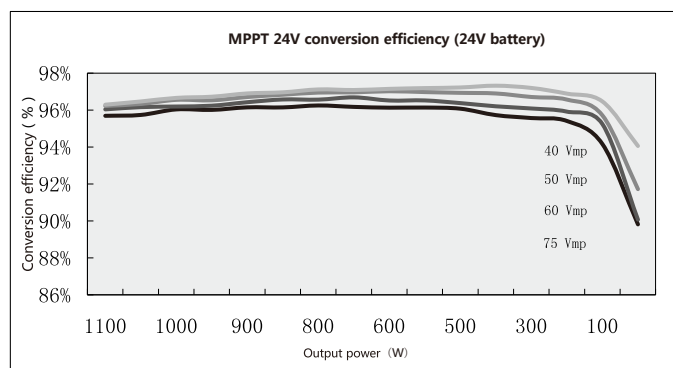
When selecting User, the battery type is to be self-customized, and in this case, the default system voltage parameters are consistent with those of the sealed lead-acid battery. When modifying battery charging and discharging parameters, the following rule must be followed:

6. Conversion Efficiency Curve

6.1 12V System Conversion Efficiency



6.1 24V System Conversion Efficiency



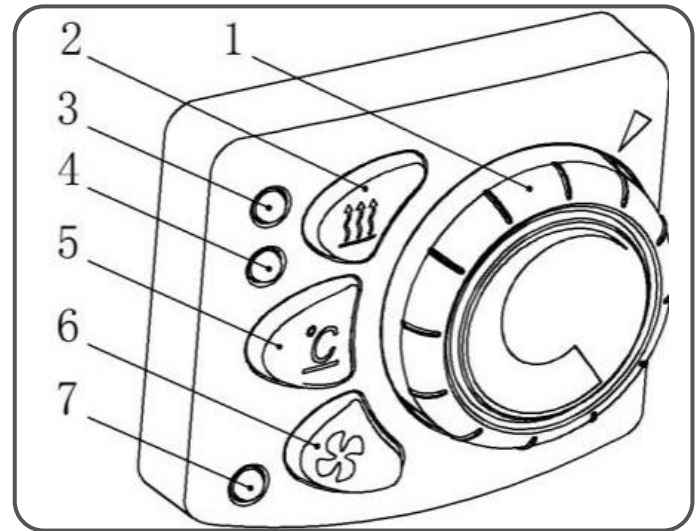
Diesel Heater

How To Use The Diesel Heater

Warning: During the first use of your diesel heater there may be air trapped inside. This can cause a loud popping noise to come from your diesel heater. If this does not dissipate after multiple uses please contact Tribe.

1. Fill your diesel tank with diesel
2. Turn your heater on via the top button (2) located on your control dial, the red light will appear (3) indicating that your heater is on
3. Once you feel air start to come out of the black vent located by your feet, you can control the temperature of your heater by pressing the second button on the controller (5). Once you press this button a yellow light will turn on (4) indicating that you can use the control knob (1) to either turn the temperature of the heater up or down.
4. If you would like to control the heaters intensity, you will first need to hit the 2nd button again (5) turning off the yellow indicator light (4). Once the indicator light is off you can press the third button (6), a green light will appear (7) indicating that you can now control the intensity via the control knob (1).

5.2 Battery Type Default Parameters (parameters set in monitor software)



Diesel tank

Warning: If you are planning to travel through a water crossing, ensure that the exhaust port of the Diesel heater is sealed. Failure to do so could cause damage to your diesel heater.

To switch to a different mode, press the corresponding unlit light.

When the heater is running, you can adjust the heating power and air temperature by turning the switch. In constant power mode, the room temperature or the temperature of the incoming heated air is continuously monitored.

In constant temperature mode, if the temperature exceeds the set value on the control, the heater will enter intermittent mode. In this mode, the fan will run for about 3 minutes to cool down before restarting.

To turn off the heater, press the button with the corresponding indicator light. The indicator light will go out, and the fuel pump will stop. The fan will continue to run and cool down for approximately 3 minutes during the shutdown process.

For safety reasons, if the heater fails to ignite within 90 seconds after the fuel pump starts, it will make another attempt. If it still doesn't ignite after an additional 90 seconds of pumping fuel, the heater will shut down. The fuel supply will be cut off, and the fan will continue to run for about 3 minutes.

If the flame extinguishes on its own during operation, the heater will restart. If the heater fails to ignite within 90 seconds after the fuel pump starts, or if it ignites and then goes out within 15 minutes, the heater will shut down. The fuel supply will be cut off, and the fan will run for about 3 minutes. This situation can be resolved by briefly turning the heater off and on again. Avoid repeating this process more than twice.

In case of overheating, the combined sensor (flame sensor/overheating sensor) will trigger, cutting off the fuel supply and shutting down the heater. Once the cause of the overheating has been addressed, you can restart the heater by turning it off and on again.

If the voltage falls below or rises above the specified limits, the heater will shut off after 20 seconds. The heater will not start if the glow plug is faulty or if there is an interruption in the electrical connection to the dosing pump.

If the combined sensor (flame sensor/overheating sensor) is faulty or if there is an electrical interruption, the heater will start and then shut down during the startup phase.

The fan motor's speed is continuously monitored. If the fan motor fails to start or if the speed deviates by more than 10%, the heater will shut off after 30 seconds.

When the heater is turned off, the glow plug will remain on for 40 seconds (after-glow) while the fan continues to run to clear any combustion residues.

Note

If there is excessive residual heat in the heat exchanger from the previous use of the heater, the fan will start first, blowing cold air. Once the residual heat has dissipated, the heater will kick in. After approximately 65 seconds, the fuel supply will begin, and the fuel/air mixture in the combustion chamber will ignite. When the combined sensor (flame sensor) detects the flame, the glow plug will be turned off after 60 seconds. The heater is now in standard operation.

Troubleshooting

Circuit issues can arise from various factors, such as connector corrosion, poor connector contact, incorrect wire connections, wire or fuse corrosion, and battery pole corrosion and looseness. It's important for users to inspect and address these issues to ensure proper maintenance.

The heater's troubles can be indicated by the green LED on the control switch. In a trouble state, the indicator light will flash in a circular pattern, with each cycle consisting of a 2-second pause followed by a few instances of slow flashes lasting 0.5 seconds each. Between two long pauses, the number of slow flashes indicates the type of trouble.

During operation, the heater may experience difficulty starting or may shut down after starting. This can lead to a locked state. In such a situation, press the illuminated button. The operational indicator will go out. Turn off the heater and leave it in this state for at least 5 seconds, then restart the heater.

For the following issues, users can take the following measures:

If the heater fails to power on and the indicator light doesn't illuminate, the cause may be a fuse circuit break or incorrect wire connections.

If the heater runs without starting the heating process after being powered on, it suggests that the inlet air temperature (or the ambient temperature around the external temperature sensor) is higher than the set heating temperature, also known as a "hot start." In this case, turn the control switch knob clockwise to set a higher temperature.

When the LED flashes once, refer to the methods listed in the table below for troubleshooting solutions.

Times of LED flashes	Troubleshooting methods
1	a. Check whether the fuel pipe is blocked or whether the fuel in the tank is sufficient. b. Check whether the exhaust pipe is blocked. c. Check whether fuel mass is appropriate.
2	A,B,C same as above d. Replace the fuel pump
3	a. Abnormal voltage, if the voltage is very low, then the battery should be charged.
4	a. Temperature may be too high, use ventilation mode b. Or replace controller.
6	a. Replace controller
7	a. Check whether fuel pump lead connection is properly connected b. Replace fuel pump; Replace controller.
8	a. Check the fan wheel for any damages b Replace fan motor assembly. c Replace controller.
9	a. Clean the carbon deposition of glow plug. b. Replace glow plug. c Replace controller.
10	a Check whether air inlet and outlet are blocked. b Check that junction box cover tightly. c Check whether inlet air and exhaust air short circuit.
11	a Check overheat sensor (normal temperature resistance is about $1k\ \Omega$). b Replace overheat sensor.
12	a Check control switch connection. b Replace control switch.
13	a Need to clean up the carbon deposition and maintenance work.



Seasonal Maintenance

Before the start of each heating season, it is advised to have qualified professionals conduct maintenance. The details are as follows:

- Inspect the air inlet and outlet for any signs of pollution or foreign objects.
- Clean the exterior of the heater.
- Check for corrosion or loose connections in the electrical contacts.
- Examine the air inlet and exhaust pipes for any obstructions or damage.
- Verify if there are any fuel pipe leaks.

Extended Periods of Non-Use

If the heater will not be in operation for an extended period, it's recommended to run it at least once every four weeks for a minimum of 10 minutes. This helps prevent mechanical parts from malfunctioning.

Keep the air inlet port and outlet vent clear of obstructions to ensure smooth airflow and prevent overheating.

When switching to a lower-temperature fuel, run the heater for a minimum of 15 minutes to allow the new fuel to fill the fuel pipe and pump.

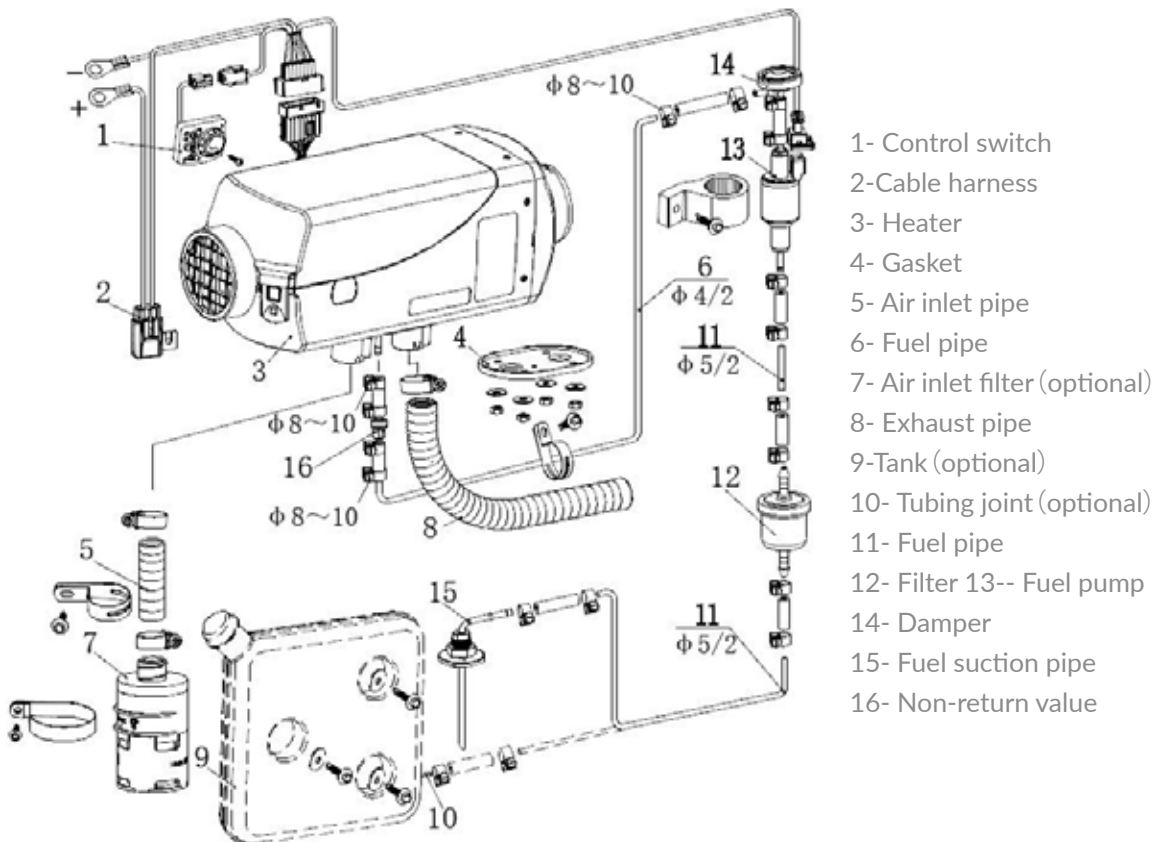
Service Life

The heat exchanger of the heater has a maximum operational lifespan of 10 years. Once it reaches this limit, it must be replaced with a qualified unit. This replacement work should be carried out by the heater manufacturer or its authorized representative. Additionally, the overheating sensor must also be replaced at this time. If the exhaust pipe for waste gas discharge is located in a passenger area, it should be replaced with a qualified one after 10 years of use.

Other Important Considerations

The ambient temperature during transport and storage of the heater should be within the range of -40°C to 85°C to prevent any damage.

Only authorized customer service stations are permitted to perform repairs and installations for the heater. It is strictly advised against attempting self-repairs or using non-manufacturer parts or components to ensure safety.



AIR CONDITIONER

Important:

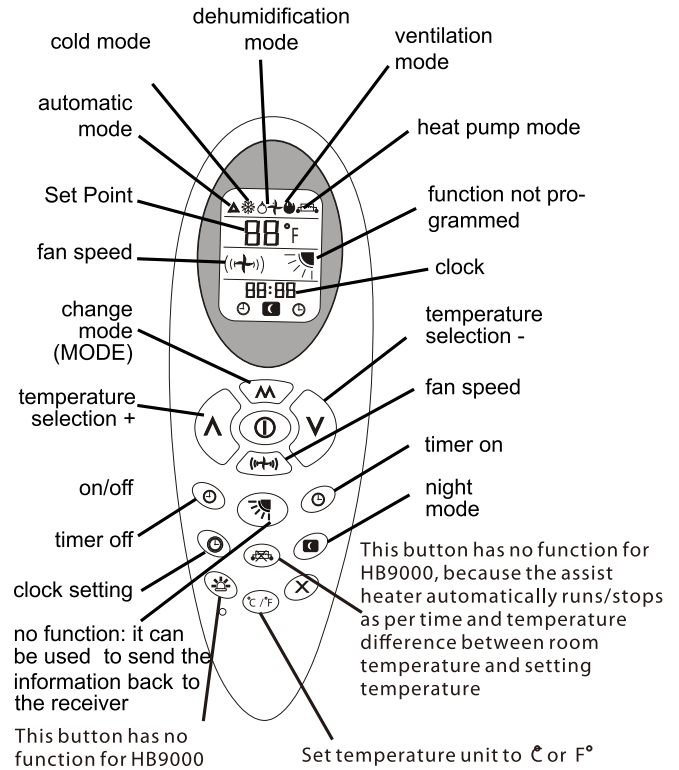
Before starting your air conditioner insure that the Inverter switch located on the inside passenger side wall of the trailer is turned on. this switch controls an inverter dedicated specifically for the air conditioner. The air conditioner will not work without this switch engaged.



1.5. Description of the controls

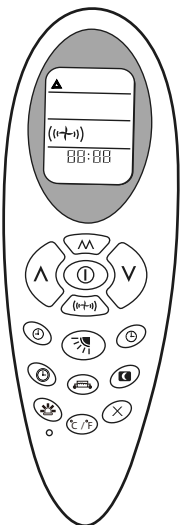
Selecting functional status

At the time of switching on, the system waits for a few minutes before operating the compressor. Press the "MODE" button to move between the possible states (automatic, cold, dehumidification, ventilation, heat pump) and wait two seconds on the selected state for this to be confirmed by the system with an audible warning (the buzzer is inside the machine). Always point the remote control towards the wall pad to send all the signals.



General information 1

Automatic mode



1		Press the on/off button to switch on the machine.
2		Press the change mode button to select automatic mode ¹ .
3		The temperature selection buttons are disabled.
4		Press the fan speed button to select low, medium or high speed or automatic speed ² .
5		Press the on/off button to switch off the machine. This mode stays in memory for switching on the next time.

note¹: In this mode the machine manages the compressor, heat pump and fan speed entirely automatically by comparing the set temperature with the internal temperature according to table A.

note²: automatic speed the correct ventilation is set according to the difference in temperature between the set point and the ambient temperature.

TABLE A

Internal temperature	T ≤ 68°F	68°F < T < 77°F	T ≥ 77°F
Operating mode	Heat pump o ventilation	Dehumidification o ventilation	Cold
Set point	68°F	72°F	77°F

Cold mode



1		Press the on/off button to switch on the machine.
2		Press the change mode button to select cold mode.
3		Press the selection buttons to set the ambient temperature on the desired value between 64°F and 86°F.
4		Press the fan speed button to select low, medium or high speed or automatic speed ² .
5		Press the on/off button to switch off the machine. This mode stays in memory for switching on the next time.

Dehumidification mode



1		Press the on/off button to switch on the machine.
2		Press the change mode button to select dehumidification mode.
3		Press the selection buttons to set the ambient temperature on the desired value between 64°F and 86°F.
4		The fan speed selection button is disabled.
5		Press the on/off button to switch off the machine. This mode stays in memory for switching on the next time.

Ventilation mode



1		Press the on/off button to switch on the machine.
2		Press the change mode button to select ventilation mode.
3		Press the selection buttons to set the ambient temperature on the desired value between 64°F and 86°F.
4		Press the fan speed button to select low, medium or high speed or automatic speed ² .
5		Press the on/off button to switch off the machine. This mode stays in memory for switching on the next time.

Heat pump mode



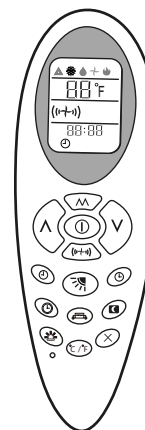
1		Press the on/off button to switch on the machine.
2		Press the change mode button to select heat pump mode.
3		Press the selection buttons to set the ambient temperature on the desired value between 64°F and 86°F.
4		Press the fan speed button to select low, medium or high speed or automatic speed ² .
5		Press the on/off button to switch off the machine. This mode stays in memory for switching on the next time.

Night mode



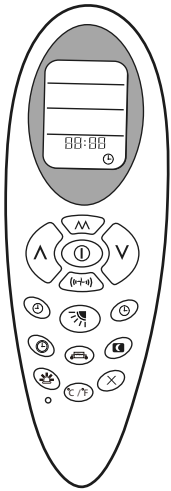
1		Press the on/off button to switch on the machine.
2		Press the change mode button to select the desired mode from all the ones available.
3		Press the night mode button to turn this function on and off.
4		Press the selection buttons to set the ambient temperature on the desired value between 64°F and 86°F.
5		This mode sets the ventilation on low speed therefore it is not possible to switch onto the other available options.
6		Press the on/off button to switch off the machine. This mode stays in memory for switching on the next time.

Timer off mode



1		Press the on/off button to switch on the machine.
2		Press the change mode button to select the desired mode from all the ones available.
3		Press the selection buttons to set the ambient temperature on the desired value between 64°F and 86°F.
4		Press the fan speed button to select low, medium or high speed or automatic speed ² .
5		Press the timer off button to set the time when the machine must switch off ³ .
6		Press the selection buttons to change the time when the machine must switch off.
7		Press the timer off button to confirm the data entered.
8		Pressing the timer off button a third time si disables this function.

⌘ Timer on mode



- | | | |
|----------|--|--|
| 1 | | The machine must be off. |
| 2 | | Press the timer on button to set the time when the machine must switch on ⁴ . |
| 3 | | Press the selection buttons to change the time when the machine must switch on. |
| 4 | | Press the timer on button to confirm the data entered ⁵ . |
| 5 | | Pressing the timer on button a third time disables this function. |

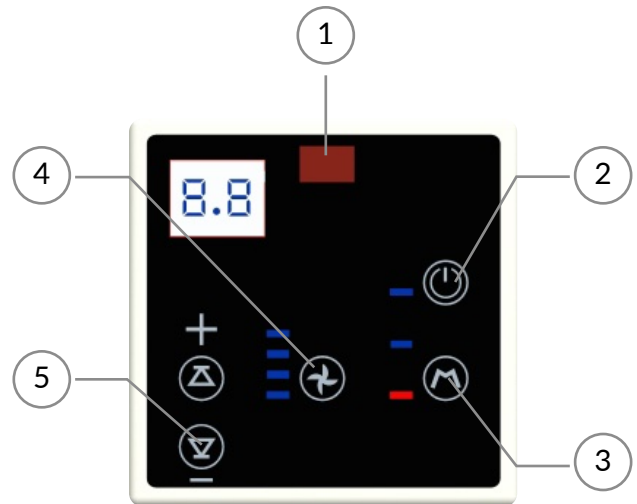
note³: When you press the button the first time the symbol on the display flashes to signal you are programming a switch-off; pressing it a second time saves the data and the icon stays on steady to signal activation of the timer off function; pressing it a third time turns off the timer off mode.

note⁴: When you press the button the first time the symbol on the display flashes to signal you are programming a switch-on; pressing it a second time saves the data and the icon stays on steady to signal activation of the timer on function; pressing it a third time turns off the timer on mode.

note⁵: At the set time the machine will start in automatic mode.

Wall Remote

1. Signal receiver
2. Press the ON/OFF button to switch ON or OFF the air conditioner, it will run in memory mode.
3. Press the MODE button to select cooling or heating mode.
4. Press the FAN button to select fan speed.
5. Press the UP or DOWN button to select the desired temperature.



WALL PAD

⌘ 3.1. Trouble, causes, remedies

CAUSE	SOLUTION																
	the temperature is lower than 64°F	the temperature is higher than 86°F	check the Set Point temperature	Defective thermal protection	The Mode button is not in the right position	damaged electric heating element	low gas charge	damaged compressor	dirty heat exchange coils	defective internal fan	obstructed air filter	defective external fans	clogged condensation drain holes	damaged 4-way valve	no power arrives	voltage too low (less than 103 V)	defective electric condenser
the machine does not cool	⌘		⌘	🍃	⌘		🍃	🍃	🍃			🍃					
the machine does not heat		⌘	⌘	🍃	⌘	🍃	🍃	🍃	🍃					🍃			
air no longer circulates inside the vehicle									🍃	🍃	⌘						
water seeps into the vehicle													⌘				
the machine will not start				🍃				🍃							⌘		🍃
the machine stops working				🍃				🍃	🍃		⌘	🍃					🍃

⌘ 3.2. Special maintenance

For better efficiency it is advisable to have your dealer/workshop perform special cleaning before using:

1. heat exchange coils;
2. condensation drain holes.

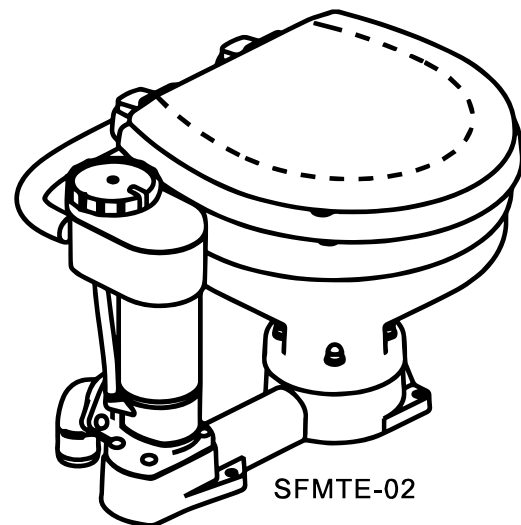
⌘ 3.3. Decommissioning and recycling

For scrapping and recycling, observe the national law. Please contact your environmental authorities or authorized boards.

TOILET SEAFLO

ELECTRIC CONVERSION MARINE TOILET

Important Notice: Do not run the pump without water for more than ten seconds, as it may damage the pump impeller.



To flush the toilet, follow these steps:

1. Turn the large flush control knob clockwise to the flush position.
2. In this position, the flush pump will provide rinse water to the bowl, while the waste pump simultaneously macerates and discharges the waste.
3. Hold it in the flush position long enough to completely evacuate all waste.

To remove liquid from the bowl to prevent splashing while in motion, do the following:

1. Turn the flush control knob counterclockwise to the drain position.
2. In this position, the flush pump will lower the liquid level to the bottom of the china bowl, and incoming rinse water will be minimized.

If the toilet bowl is empty, you can add a small amount of water before use by turning the flush control knob to the flush position.

Please note that the waste pump is designed to handle waste and toilet tissue (both household and Marine/RV water-soluble types are acceptable), but it cannot handle sanitary napkins, tampons, or hard solid objects.

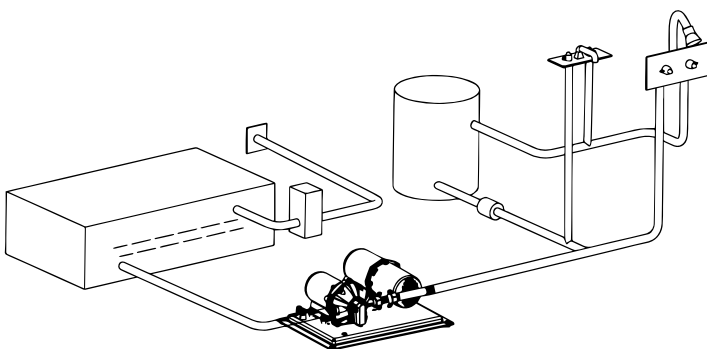
WATER PUMP

3.0GPM/5.5GPM pump with
Integrated accumulator tank

Installation Manual

Operation Instructions

1. Check the water level in the tank insuring that water is present.
2. Open your inside kitchen faucet.
3. Switch on the pump via your trailer control panel, and wait until the flow from the faucet becomes steady. Close the faucet after.
-The pump should automatically shut off soon after the faucet is closed.
4. The pump is now set for automatic operation. It will start when a faucet is opened and stop when it's closed.



- If the pump will not be used for an extended period, turn off your pump via the water pump button, and release any built-up pressure by opening the faucets until water no longer flows.
- For initial operation, it's recommended to run the pump for 2 minutes to flush fresh water through the system.



WATER LEVEL INDICATOR



WATER PUMP SWITCH

HOT WATER HEATER

Preparing your hot water heater

- Insure that there are batteries inside of your hot water heater.
- Open your water and gas valves.
- Turn on the water pump.



Ignition

Upon opening the water valve, when the water pressure exceeds .025 MPa, the ignition process is triggered automatically. In the case of a newly installed water heater, there may be air in the gas pipe, preventing ignition during the initial attempt. To resolve this, repeat the on-and-off process until the water heater is successfully ignited.

Controls

To control water temperature- Adjust the "GAS" knob until proper temperature is reached

To control water pressure- Adjust the "WATER" knob until desired pressure is reached

If your water does not seem to be getting hot enough, lower your water pressure allowing the heater to work more efficiently.

Please turn off hot water heater when not in use!

To turn off the hot water heater, please close both the water in, and gas valve to the heater.

PROTECTIVE FUNCTION	What will happen	What to do
Water pressure too high	If water pressure is over 0.8Mpa, the water-out valve will release water and lower the pressure	Increase the valve pressure limit according to local water supply pressure
20-minute automatic shut off	After 20 minutes', water heater will shut off automatically	Restart the water heater
Water pressure too low	If water pressure is below 0.025Mpa, the water heater cannot ignite	Increase water pressure
Low battery	Over prolonged use the water heaters batteries will deplete. this will cause the water heater to be unable to ignite.	Change battery
Over heat protection	Water heater automatically shuts off when water temperature is above 77° C - 170.6 F	adjust water heater to a cooler temperature or allow water to cool inside tank

Water heater shall be checked by professional personnel for every 6~12 months, contents for check are:

1. Sealing of fuel lines and route system; sealing of water lines and route system;
2. Clean filtration net on water spout to avoid blockage;
3. Functions of all operation parts;
4. Flame combustion;
5. Carbon accumulation on heat exchanger;
6. Air admitting and release system in room where water heater is installed.
7. Gas decompressor
8. Carbon accumulation and oxidation coat on ignition and induction needles.
9. The flexibility of water and gas linkage;
10. Get rid of accumulated dirt and dust on shell of water heater by cloth. Do not use chemical or volatile scour that may cause shell discolouring.
11. Clean accumulated dusts and carbon inside vent-pipe and heat exchanger periodically to ensure the smooth passage of smoke. Note: Remove vent-pipe, clean it, and clean up heat exchanger with brush. During the course, do not drop dirt or dusts into fire hole of burner, or parts of electrical. Be careful to not loosen or break any parts of the heater. When re assembling vent pipe, make sure to keep tight sealing of joints.

Maintenance and repair guide to common malfunctions

Causes		Malfunction	Malfunction										Solutions		
			A	B	C	D	E	F	G	H	I	J			
Improper Operation		Overall fuel gas valve is unopened	●												Open overall valve of gas supply
		Water supply valve is unopened	●												Open valve of water supply
		Improper regulation method of water temperature				●									Enlarge gas volume, reduce water volume
						●								Reduce gas volume, enlarge water supply	
		Electrical leakage protective switch is not restored	●												Restoration of electric leakage protective switch
	Improper position of water switch	●												Turn water knob to hot water point	
Surroundings		Air exiting inside fuel gas pipe	●	●											Repeat opening and closing hot water valve for several times
		Inadequate fresh air supply				●									Improve ventilation and ensure air supply
	Fuel gas pressure	Too high	●	●			●			●					Regulate pressure relief valve, reduce overall gas supply
		Too low			●	●					●				Check if gas rubber pipe twists or not
	Water pressure	Too high				●									Reduce water supply
		Too low	●	●		●					●	●			Utilize when water pressure recovers to normal
	Inadequate supply of fuel gas	Gas valve is half opened				●									Open gas valve completely
		Too long pipe				●									Shorten rubber pipe
		Too small through diameter of joints				●									Displace joints of rubber pipe
		Improper choice of specification of pressure relief valve					●								Water heater with a content of over 8 liters shall adopt a pressure relief valve (LPG) of 1.2m ³ /h
		Simultaneous consumption of fuel gas by several users					●								Stop other users' using fuel gas
		Blockage of water route	●				●								Clean filtration net on water admitting orifice
		Blockage of shower	●				●								Clean shower device
		Blockage of vent pipe								●					Clean flue pipe
		Inadequate battery voltage	●	●	●										Displace batteries
	Too low water temperature					●								Reduce water volume	
Safety protection		Exorbitant air pressure protective device	●	●											Utilize when air pressure recovers to normal
		Electrical leakage protective device works	●	●											Ask for professional personnel to repair it
		Heat protective switch works			●										
		20-minute timing protective device works				●									Reopen hot water valve
Other causes													●	Ask for professional personnel to repair it	

A.Ignition failure B.Blasting combustion C.Flameout during operation D.Too low temperature E.Too high temperature F.Sparks from fire peep hole G.Removed flame and renegade fire H.Returned fire I.Flameout at point of large water volume J.Other malfunctions

WARNING

Using a gas water heater comes with important warnings and concerns that should be kept in mind. Firstly, ensure proper ventilation in the installation area to prevent the buildup of potentially harmful gases. Additionally, gas leaks can pose a serious safety risk, so it's crucial to regularly check for any unusual odors or hissing sounds near the unit. If a gas odor is detected, immediately turn off the gas supply and ventilate the area. Moreover, a malfunctioning water heater may lead to issues like inadequate heating or leaks. In such cases, it is recommended to shut off the gas and water supply, and contact a qualified technician for repairs. Regular maintenance and periodic inspections are essential for safe and efficient operation

AIR COMPRESSOR

How to turn on air compressor:

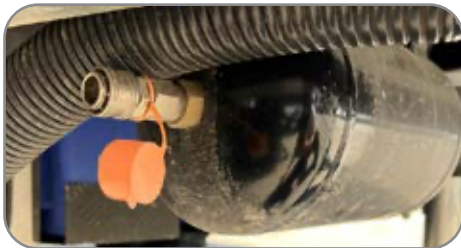
1. Switch the on board air compressor rocker switch to the up position, this will turn on the air compressor.
2. Wait until you hear the air compressor turn off, this will happen when the external tank has completely pressurized.

Note: the air compressor will continue to pressurize the external tank during use, there is no need to wait until tank has pressurized again. If you do find loss of air pressure please allow tank to pressurize completely before continuing use.



How to connect external accessories to air tank.

1. Locate the external air tanks female quick connect port
2. Plug in your compatible quick connection accessories
3. To unplug accessories push back the the sleeve around the female quick connection port, this will allow you to unplug your accessory.



5 Testing & Troubleshooting

5.1 Leak Testing

- With the vehicle parked and the engine off, turn the compressor on and wait until the air system is fully charged.
- The compressor should not come on again for a period of at least 15min. Air system recharging within that time period would indicate that a leak is present in the system.
- If a leak is found to be present, spray a soap and water mixture onto all air fittings in the system while the compressor is fully charged. Bubbles should appear at any leak points.
- Check that leaky fittings have been adequately tightened.
- If leaking persists then disassemble fittings, clean threads, and reapply thread sealant/tape.

Testing & Troubleshooting

5.3 Electrical Fault Diagnosis

The following describes an effective procedure for tracing an electrical fault in a CKMT A 12 or CKMTA24 compressor which has been wired using a genuine ARB wiring loom (refer to the diagram in Figure 9.). All steps must be performed in the order listed here for an accurate assessment.

NOTE

Before attempting to troubleshoot a malfunctioning compressor, always make sure that the compressor manifold, air tanks and connected accessories have been de-pressurized, all connections have been made according to the wiring diagram, the vehicle's ignition is in the ACC power position, and that the ISOLATING SWITCH has been turned 'ON'.

NOTE

The 'MOTOR VOLTAGE' referred to below should be approximately 12V in the case of the CKMTA12 and 24V in the case of the CKMTA24. Otherwise '12V' refers to approximately 12V regardless of compressor model as the 24V compressor runs on a 12V control circuit.

NOTE

Battery number references (e.g., [#11]) are for 24V system wiring purposes.

STEP#

1 Using a multimeter, check the voltage at the battery terminals to make sure the battery is working and Did each is fully charged. battery measure at least Check each individual 12V battery in a 24V system. 12.5 volts?

YES Proceed to STEP 2.

NO Insufficient battery voltage. Recharge or replace the battery.

2 Disconnect the compressor motors from the wiring loom at the connector plugs. Run a new wire directly from the negative(-) terminal of the battery [#1] to the BLK-WHT wire of the one compressor motor. Momentarily connect a wire from the positive terminal of the battery [#2] to the RED wire of the same compressor motor. Repeat for the second motor.
Did the compressor activate when the wires were connected?

YES Remove the extra wires and reconnect the compressor motors. Proceed to STEP 3.

NO Internal compressor motor problem. Contact HF for assistance.

3 Remove the fuses from the fuse holders in the compressor wiring loom. Using a multimeter, check the continuity resistance across the 2 contacts of the fuses.
Did the resistance measure less than 1 Ohm?

YES Proceed to STEP 4.

NO Blown fuse. Replace with a new fuse of same type. Insert new fuse with caution in case a wiring short was responsible for the fuse blowing.

4 Using a multimeter, check for MOTOR VOLT AGE between a chassis ground and each of the two contacts in each of the Maxi-blade fuse holders.
Was MOTOR VOLT AGE detected at one of the two contacts?

YES Reconnect the fuse into the fuse holder. Proceed to STEP 5.

NO Wiring fault between the positive(+) battery terminal and the fuse holder. Check the wire connection at the battery terminal and/or replace the wiring and/or fuse holder.

5 [24V COMPRESSOR AND WIRING ONLY] Using a multimeter, check for 12V between a chassis ground and each of the two contacts in the mini-blade fuse holder.

Was 12V detected at one of the two contacts?

YES Reconnect the fuse into the holder. Proceed to STEP 6.

NO Wiring fault between the negative(-) terminal of the battery [#2] and the fuse holder, Check the wire connection at the battery terminal and/or replace the wiring and /or fuse holder.

6 Remove the compressor cover as shown in Section 2.2. Using a multimeter, check for MOTOR VOLT AGE between a chassis ground and the RED wire at each of the relay blocks i.e., the wire leadin directl from the fuse.

Was MOTOR VOLATGE DETECTED?

YES Proceed to STEP 7.

NO Wiring fault between the fuse and the relay. Replace wiring and/or fuse holder.

7 Using a multimeter, check for approximately 12V between the negative(-) terminal of the battery [#2] and the RED-YEL wire connected to terminal #2 of the compressor isolatin switch. i.e., the wire leadin from the vehicle's ACC ower.

Was 12V detected?

YES Proceed to STEP 8.

NO Wire has not been connected correctly or accessory power has not been turned on. Attach RED-YEL wire to live ACC power.

8 Using a multimeter, check for approximately 12V between the negative(-) terminal of the battery [#2] and the RED wire connected to terminal #3 of the compressor isolating switch. Test while s ade terminals are still connected.

Was 12V detected?

YES Proceed to STEP 9.

NO Switch fault or switch not turned 'ON'. Replace switch or toggle switch to 'ON' position.

9 Using a multimeter, check for approximately 12V between the negative(-) terminal of the battery [#2] and the PUR wire connected to the pressure switch attached to the compressor manifold.

Was 12V detected?

YES Proceed to STEP 10.

NO Wiring fault between the isolating switch and the pressure switch. Replace wiring.

10 Using a multimeter, check for approximately 12V between the negative (-) terminal of the battery [#2] and the YEL wire connected to the pressure switch attached to the com ressor manifold. Test while s ade terminals are still connected.

Was 12V detected?

YES Proceed to STEP 11.

NO Pressure switch fault or tank not de-pressurized. Replace pressure switch or drain tank.

11 Using a multimeter, check for approximately 12V between the negative(-) terminal of the battery [#2] and the YEL wire at each of the relay blocks. (i.e., the wire leading directly from the pressure switch)

Was 12V detected?

YES Proceed to STEP 12.

NO Wiring fault between pressure switch and relay block. Replace wiring.

12 Disconnect the relay from the relay block. Using a multimeter, check the continuity between the BLK wire at the relay block and the negative(-) terminal of the batter #2.
Did the resistance measure less than 1 Ohm?

YES Reconnect the relay to the relay block. Proceed to STEP 13.

NO Wiring fault in the ground wire between the battery and the relay block. Replace wiring.

13 Using a multimeter, check for M OTOR VOLTAGE between the negative(-) terminal of the battery [#1] and the RED-WHT wire connected to the relay block and while the relay is still connected. Pierce the RED-WHT wire with the multimeter probe to make connection if necessary.

Was MOTOR VOLT AGE detected?

YES Proceed to STEP 14.

NO Relay fault. Replace with a new 12V - 40A relay of the same type.

14 Disconnect the compressor motors from the wiring loom at the connector plug. Using a multimeter, check for MOTOR VOLTAGE between the negative(-) terminal of the batter #1 and the RED-WHT wire on the loom side of the lu .

Was MOTOR VOLT AGE detected?

YES Proceed to STEP 15.

NO Wiring fault between the relay and the compressor motor connector. Replace wiring.

15 Using a multimeter, check the continuity {resistance} between the each of the BLKWHT wire on the loom side of the plug (not on the compressor side) and the negative - terminal of the batter #1

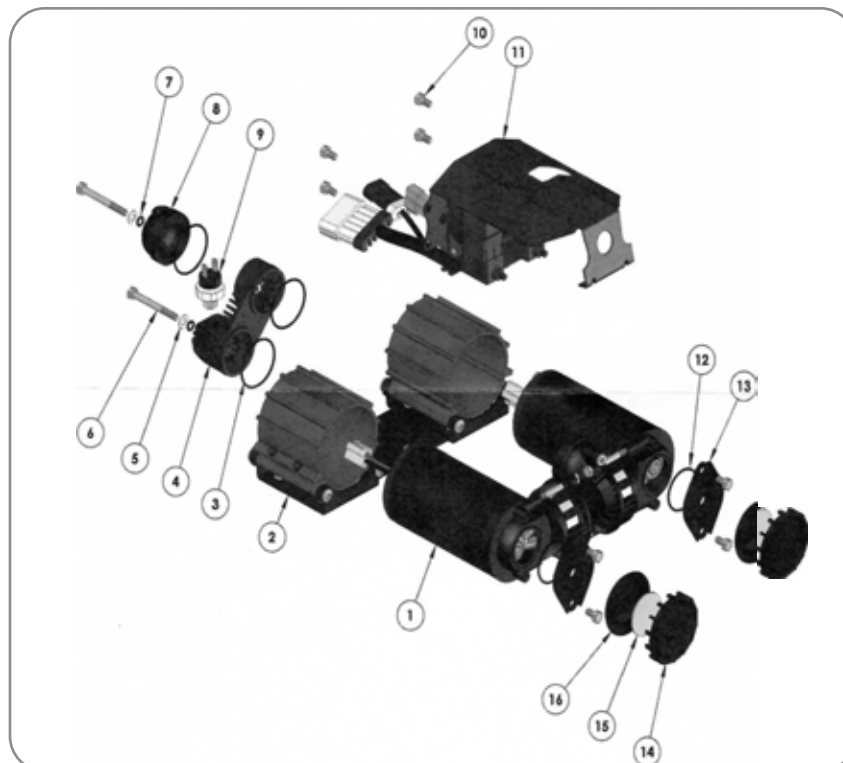
Did the resistance measure less than 1 Ohm?

YES Intermittent wiring fault or internal compressor problem. Contact HF

NO Wiring fault in the ground wire between the battery [#1] and the compressor motor. Replace wiring.

6 Parts List

CKMA12 & CKMA24 Air Compressor - Exploded Parts Diagram



ELECTRIC TRAILER JACK

How to lower front jack:

Position the Trailer: Ensure that the trailer is on a flat, stable surface and properly aligned with your towing vehicle.

Safety Precautions: Engage the parking brake on your towing vehicle. If your trailer has wheels, consider using wheel chocks to prevent any accidental rolling.

Drop The Foot Of The Jack: Locate the foot of the jack underneath the front tongue of the trailer. Pull the pin found at the base of the jacks foot and lower the jack to its lowest position then re-insert the pin.

Extend the Electric Jack: Locate the rocker switch on the front of your trailer and push that switch to the down position.



Monitor Height: As the jack extends, keep an eye on the height to ensure it's lifting evenly. If the trailer starts to lift unevenly, stop immediately and check for any obstructions or issues.

IMPORTANT:

Please always make sure that the trailer is properly connected to your tow vehicle and stabilizer legs are in the down position before going underneath the trailer. Working underneath the trailer could result in bodily harm, or in extreme cases death.

FILLING YOUR WATER TANK

How to fill your water tank

1. Begin by obtaining your trailer's water key and locating the water fill cap on the passenger side of the front box.
2. Open the water fill cap. We recommend using a garden hose as your water source.
3. Insert the garden hose into the water fill slot, leaving a small gap between the cap and the hose to prevent unintentional pressurization of the tank.
4. Start filling the water tank slowly, gradually increasing the pressure to avoid any spills.

- Note that your fresh water tank has a capacity of 160 liters or 42.2 gallons. Different spigots have varying Gallons per Minute rates. It's ideal to have a second person monitor the water gauge inside the trailer or listen for cues indicating it's nearing full capacity.
- Once the tank is filled, securely screw on the cap and remove the key. Ensure the water cap is locked and properly positioned.



Water fill cap



Water Gauge



CLEANING YOUR WATER TANK

Prepare the Tank:

- Make sure your trailer is parked on a level surface.
- Turn off the water supply and the water pump.

Drain the Tank:

Open all the faucets (both hot and cold) and let the water drain completely from the tank. This will help remove any loose debris.

Purchase a cleaning solution

Purchase a (Specialized RV Tank Cleaner): Follow the manufacturer's instructions for mixing and using the cleaner.

Pour the Solution into the Tank:

Using a funnel or a clean container, pour the cleaning solution into the tank.

Fill the Tank with Water:

Fill the tank to its capacity with clean water. This helps distribute the cleaning solution throughout the tank.

Agitate the Solution:

Drive the trailer around for a short distance to let the cleaning solution slosh around in the tank. This will help ensure that the solution reaches all parts of the tank.

Let it Sit:

Allow the cleaning solution to sit in the tank for at least 12-24 hours. This will give it time to effectively clean and disinfect.

Flush the Tank:

Open all faucets (both hot and cold) and let the water run until you no longer smell cleaner. This will indicate that the tank has been thoroughly flushed.

Drain the Tank Again:

Completely drain the tank by opening the drain valve.

Rinse the Tank:

Refill the tank with fresh water and then drain it again to ensure any remaining cleaning solution is completely removed.

Check for Cleanliness:

use one of the faucets to fill a clear cup with water. Look for any signs of residue, debris, or discoloration. If you see any, repeat the cleaning process.

Refill the Tank:

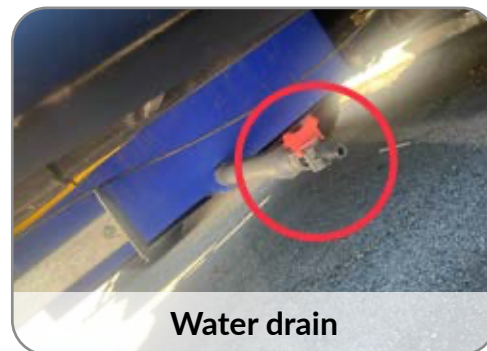
Once you're satisfied that the tank is clean, fill it with fresh water for use.

Additional Tips:

It's a good idea to clean your water tank at least once or twice a year, or more frequently if you notice any issues with water quality.

Always use gloves and work in a well-ventilated area when handling cleaning solutions.

Make sure you're using safe and appropriate materials for a plastic tank. Remember, regular maintenance and cleaning of your trailer's water tank is crucial for ensuring clean and safe water.



Water drain

WINTERIZING YOUR TRAILER

Materials Needed:

RV antifreeze (non-toxic, specially designed for RVs)

Water pump converter kit (if not already installed)

Basic hand tools (screwdrivers, pliers, etc.)

Wrench

Compressed air source (optional)

RV cover (optional)

Steps:

Gather Necessary Supplies:

Make sure you have all the materials listed above before you begin the winterization process.

Empty Holding Tanks:

Completely empty both the black (sewage) and gray (sink/shower) water tanks at an approved dump station.

Clean Tanks and Lines:

Use an RV tank cleaner to clean out the tanks. Follow the manufacturer's instructions.

Bypass the Water Heater:

Locate the water heater and bypass valves (if your trailer is equipped with them). This prevents antifreeze from entering the water heater. If your trailer doesn't have bypass valves, you'll need to drain the water heater.

Drain Water Lines:

Open all the faucets (both hot and cold) in your trailer, including any outdoor showers or attachments. Also, flush the toilet to empty the water from the lines.

Drain the Water Heater:

If you don't have bypass valves, you'll need to drain the water heater. This is usually done by opening the drain valve located near the bottom of the water heater.

Pump RV Antifreeze into the System:

Connect a hose to the water pump inlet and place the other end into a container of RV antifreeze. Turn on the water pump. Starting with the faucets furthest from the pump, open each faucet (hot and cold) until you see the antifreeze coming out. Repeat for all faucets, including showers and toilets. Don't forget any outdoor fixtures.

Flush the Toilet:

Make sure to flush enough antifreeze through the toilet to fill both the flush tank and the bowl.

Pour Antifreeze Down Drains:

Pour a small amount of antifreeze down each drain in your trailer (sinks, shower, and toilet) to ensure that the drain traps are protected.

Check for Proper Coverage:

Make sure that all water-bearing components of your trailer have been filled with antifreeze. This includes the water pump, water lines, faucets, toilet, and drains.

Turn Off the Water Pump:

Once all lines have been filled with antifreeze, turn off the water pump.

Check Seals and Gaskets:

Inspect all seals and gaskets around windows, doors, and storage compartments. Make any necessary repairs to ensure a tight seal.

Cover Your Trailer (Optional):

If possible, cover your trailer with an RV cover to provide an extra layer of protection.

Store Your Trailer Properly:

Park your trailer in a safe, level area. Make sure the tires are properly inflated and consider using wheel chocks to prevent movement.

DUMPING YOUR TRAILER

Gather Supplies:

RV sewer hose kit

Gloves

Sewer hose support (optional but recommended)

Dump station fee (if applicable)

Choose a Dump Station:

Find a designated RV dump station or a campground with dumping facilities. Avoid dumping in non-designated areas, as this is not only illegal but also harmful to the environment.

Prepare Your Trailer:

Put on a pair of disposable gloves to protect your hands from any potential contact with waste.

Locate the Tanks:

Identify the black water tank valve and the grey water tank valve on your trailer. They are located on the driver side of your trailer.



Location of black and gray water dump valve

Position Your Trailer:

Park your trailer in a way that allows the sewer hose to reach the dump station inlet without kinking or stretching too much.

Connect the Sewer Hose:

Attach one end of the sewer hose to the dump station inlet and the other end to your trailer's sewer outlet. Ensure that the connections are secure.

Open the Valves:

Open the black water tank valve first (Black handle). Allow it to drain completely. This tank contains waste from the toilet and is typically thicker and darker in color.

Flush with Grey Water (Optional but Recommended):

Once the black tank is emptied, open the gray water tank valve (gray Handle). This tank contains waste from sinks and showers, which helps to rinse the sewer hose and prevent any residual odors.



Monitor the Process:

Keep an eye on the tanks as they empty. When you no longer hear water flowing, it's a sign that the tanks are empty.

Close Valves:

Close the gray water tank valve first, followed by the black water tank valve. This helps prevent any cross-contamination.

Rinse the Hose and Tanks:

Use a hose or a dedicated rinse wand (if available) to clean out the sewer hose. Many dump stations have a hose for this purpose.

Disconnect the Hose:

Remove the sewer hose from both the dump station inlet and your trailer's sewer outlet. Rinse the hose again if possible.

PLEASE DISPOSE OF YOUR GLOVES IN A PROPER WASTE

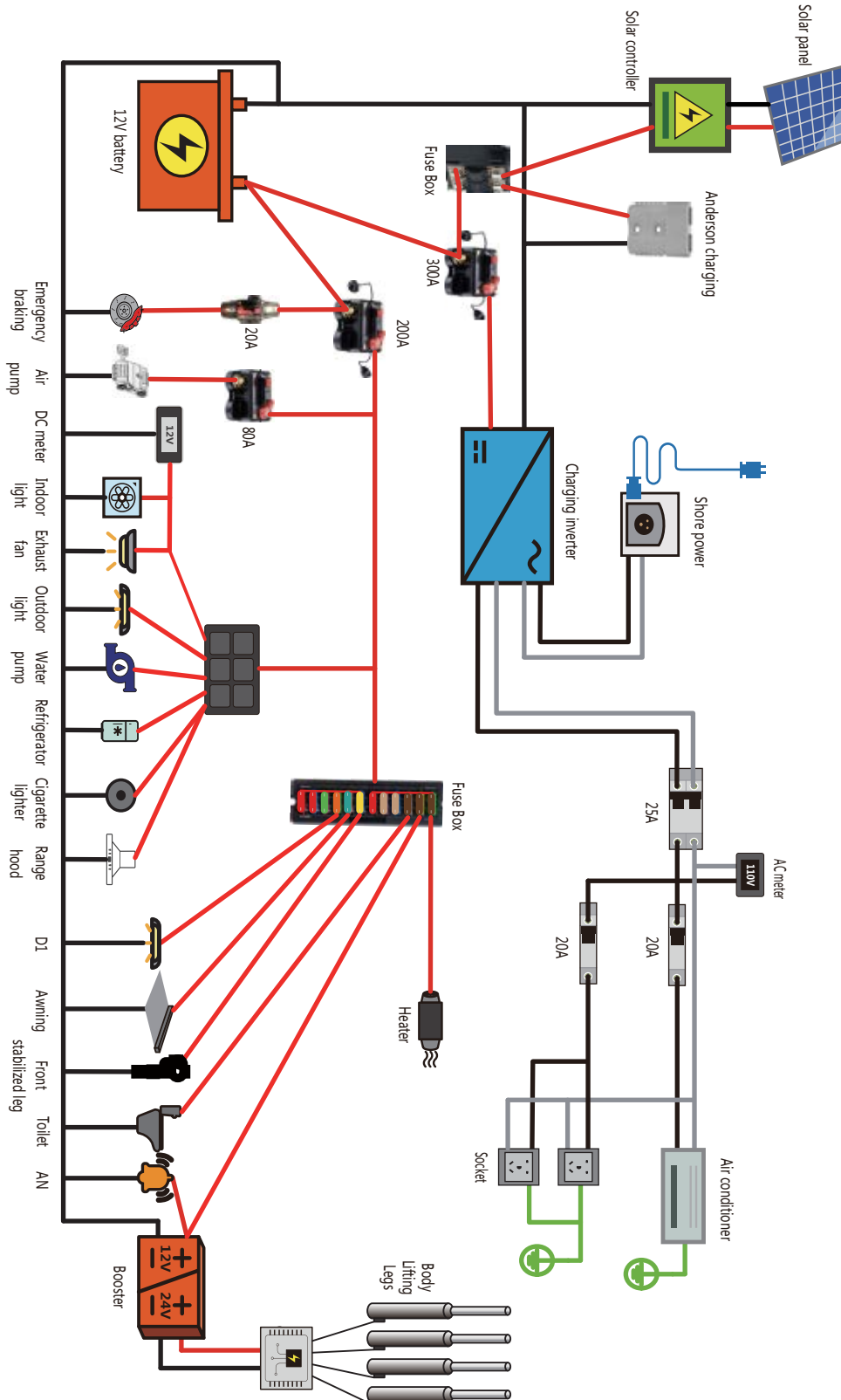


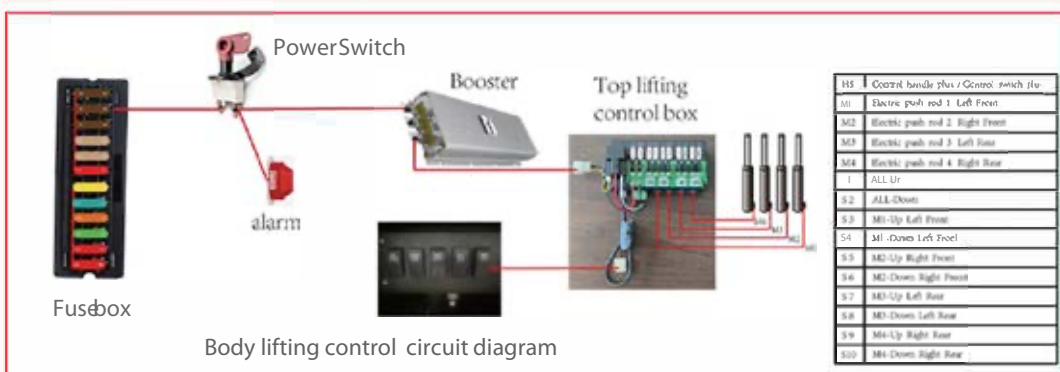
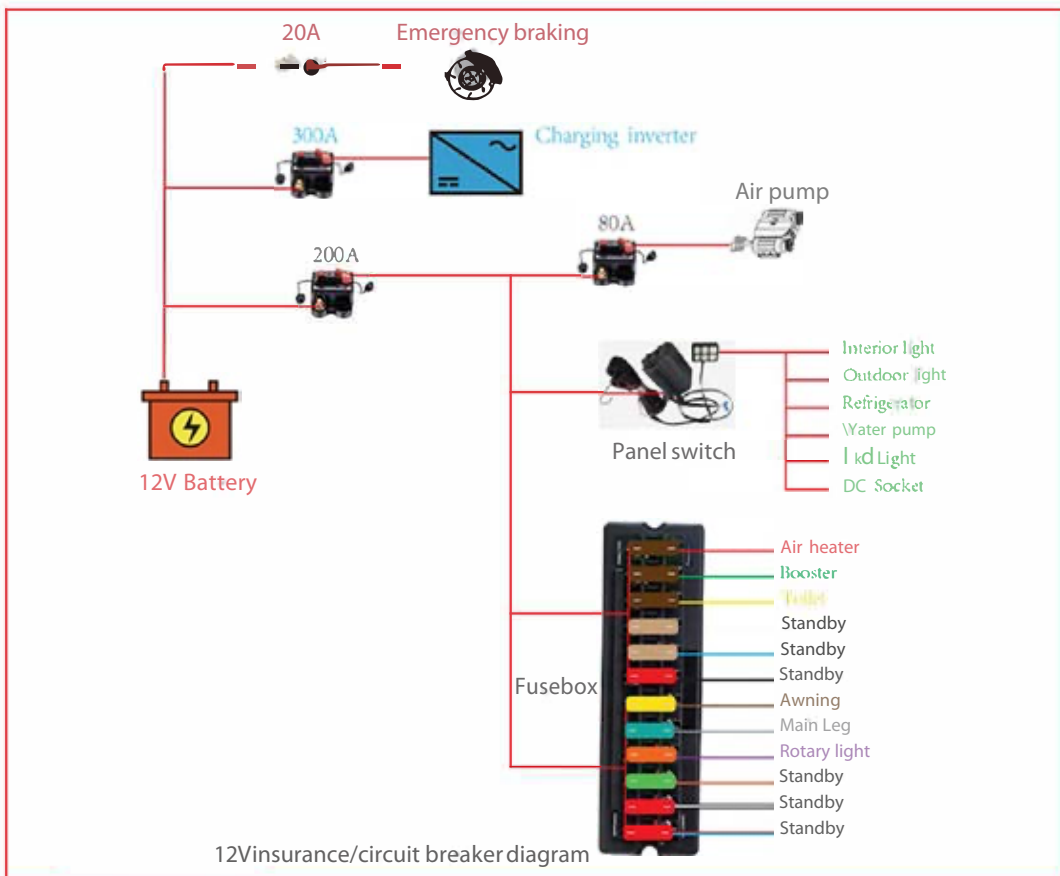
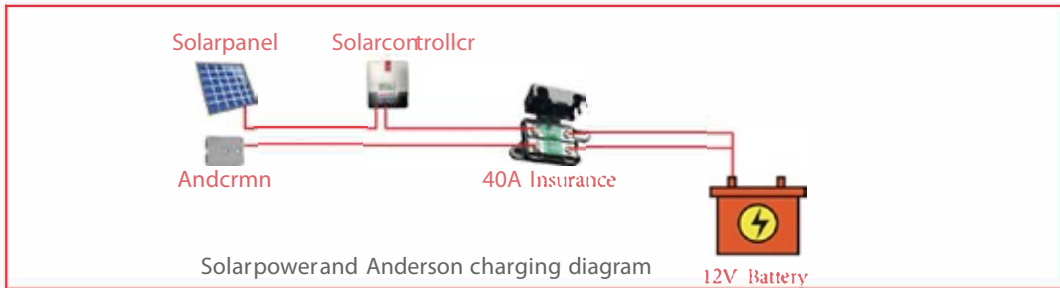
TRIBE
OVERLAND TRAILERS

TECHNICAL INFORMATION

MODEL: EXPEDITION 500

DIAGRAM: ELECTRICAL CIRCUIT DIAGRAM





SOLAR PANELS

Cleaning:

Regular Cleaning: Clean the surface of the panels regularly to remove dirt, dust, bird droppings, and other debris. Use a soft cloth or sponge with mild soap and water. Avoid abrasive materials or harsh chemicals that could damage the surface.

Avoid Scratches: Be gentle when cleaning to avoid scratching the surface. Use a non-abrasive cloth or sponge.

Rinse Thoroughly: After washing, rinse the panels thoroughly to remove any soap residue.

Avoid Shadows and Obstructions: Ensure that the panels are placed in an area where they receive maximum sunlight without any shadows or obstructions. Even a small shadow can significantly reduce the efficiency of the panel.

Inspect for Damage: Periodically inspect the panels for any signs of damage, such as cracks, tears, or exposed wiring. If you notice any issues, address them promptly.

Potential risks for solar panels

Excessive Bending or Flexing: While flexible solar panels are designed to be flexible, excessive bending or flexing, especially along the edges or corners, can damage the internal wiring and reduce efficiency.

Sharp Objects and Abrasions: Sharp objects or abrasive materials can scratch or puncture the surface of the panels, which can lead to reduced efficiency and potential electrical issues.

High Temperatures: Prolonged exposure to high temperatures can lead to degradation of the materials and reduced efficiency. It's important to avoid placing the panels in locations where they might be exposed to extreme heat.

Freezing Conditions: Extreme cold can also be detrimental to flexible solar panels. Ice formation or extremely low temperatures can lead to structural damage or other issues.

Excessive Moisture or Water Exposure: While most flexible solar panels are designed to be weather-resistant, prolonged exposure to moisture, such as heavy rainfall or submersion in water, can lead to electrical issues and reduced performance.

Physical Impact or Pressure: Physical impacts, such as being stepped on or hit with a heavy object, can cause damage to the surface, internal wiring, or other components of the panels.

Harsh Chemicals: Using harsh chemicals or solvents for cleaning can cause damage to the surface of the panels. It's important to use mild soap and water or other non-abrasive cleaning solutions.

Dirt and Debris Buildup: Accumulation of dirt, dust, bird droppings, or other debris on the surface of the panels can reduce their efficiency. Regular cleaning is essential to maintain optimal performance.

SHORE POWER

How to connect your shore power:

Locate the Power Pedestal: Find the power pedestal at your RV site. This is typically a metal box with one or more electrical outlets.

Check the Power Pedestal Voltage: Look at the power pedestal to determine the voltage it provides. the EXP 500 is equipped with a 50AMP power receptacle.

Turn Off RV Appliances: Before connecting to shore power, turn off all appliances, including the air conditioner, microwave, and other electrical devices inside your RV.

Get the Appropriate Power Cord: Depending on the voltage provided by the pedestal, get the appropriate power cord. For 30-amp service, you'll need a 30-amp RV power cord. For 50-amp service, you'll need a 50-amp RV power cord. the trailer does come with a 50 amp power cord

Connect the RV Power Cord: Align the prongs on the power cord plug with the slots on the power pedestal outlet. Push the plug firmly into the outlet. Twist it slightly if it's a locking type to secure the connection.

Connect to the RV: Take the other end of the power cord and plug it into the electrical inlet on your RV. This



Test the Connection: Once you've connected the RV to shore power, test your electrical appliances to ensure they are functioning properly.

Check for Power: Inside your RV, verify that you have power by turning on lights or using other electrical devices.

Monitor Electrical Usage: Be mindful of your electrical usage, especially if you're on a 30-amp service. Running multiple high-draw appliances simultaneously can overload the circuit.

Disconnecting Shore Power: When you're ready to leave the campsite, turn off the main breaker on the power pedestal, then unplug the RV from the pedestal. Remember to coil and store the power cord properly.

HOW TO MAINTAIN YOUR BATTERY

Trickle charging and storage:

1. Choose the Right Trickle Charger: Your Expedition 500 comes stock with two 100 AMP hour deep cycle AGM batteries. Make sure you have a trickle charger specifically designed for the type of battery you're using (e.g., lead-acid, AGM, gel-cell, etc.). Different types of batteries have different charging requirements.

2. Prepare the Battery: Ensure the battery is clean and free of any corrosion on the terminals. If there's corrosion, clean it using a mixture of baking soda and water and a wire brush.

3. **Select a Suitable Location:** Place the battery in a well-ventilated area, preferably on a stable, non-flammable surface. Ensure there are no open flames or sparks nearby.
4. **Connect the Trickle Charger:** Connect the red (positive) lead from the charger to the positive terminal on the battery and the black (negative) lead to the negative terminal. If your charger has multiple settings, set it to the appropriate one for your battery type.
5. **Plug in the Charger:** Plug the charger into a power outlet. Ensure that the outlet is not controlled by a switch, as you want a continuous power supply.
6. **Monitor the Charging Process:** Keep an eye on the charger periodically, especially during the initial few hours. If you notice any unusual heat or excessive bubbling, disconnect the charger immediately and re-check the connections.
7. **Maintain a Slow Charge:** Trickle chargers are designed to provide a slow, steady charge. This helps prevent overcharging and overheating. A typical trickle charge rate is around 1-2 amps.
8. **Check Voltage Levels:** Use a multimeter to check the voltage of the battery regularly.
9. **Disconnect the Charger:** Once the battery is fully charged, unplug the charger from the power outlet and then disconnect it from the battery.
10. **Perform Regular Checks:** Even when using a trickle charger, it's a good idea to check the battery periodically for any signs of damage or leakage.
11. **Store the Battery Properly:** If you're storing the battery for an extended period, ensure it's in a cool, dry place, away from direct sunlight. It's best to store it on a wooden or non-conductive surface.
12. **Recharge as Needed:** Check the battery's charge level every few weeks or months, depending on the storage conditions and the type of battery. If the charge drops significantly, give it a top-up charge.

Remember to always follow the manufacturer's instructions for both the battery and the trickle charger, as specific guidelines may vary depending on the make and model. This will help ensure that you're taking the best care of your battery.

HOW TO RECONDITION YOUR BATTERY

How to recondition your battery using a trickle charger with reconditioning mode:

If your battery is not holding a charge, or having any issues regarding its voltage, it's recommended that you recondition your battery before purchasing a new battery.

1. **Gather Necessary Materials:** Trickle charger with a reconditioning mode Safety glasses and gloves (optional but recommended) Distilled water (if working with a lead-acid battery) Battery hydrometer (for lead-acid batteries) Voltmeter
2. **Safety Precautions:** Put on safety glasses and gloves to protect yourself from any potential acid exposure.
3. **Prepare the Battery:** Make sure the battery is clean and free from any corrosion on the terminals. Clean with a mixture of baking soda and water if needed, then rinse thoroughly.

4. **Check Electrolyte Levels (for Lead-Acid Batteries):** If you're working with a lead-acid battery, check the electrolyte levels. If they're low, top them up with distilled water.
5. **Select a Suitable Location:** Place the battery in a well-ventilated area, away from any open flames or sparks.
6. **Connect the Trickle Charger:** Connect the red (positive) lead from the charger to the positive terminal on the battery and the black (negative) lead to the negative terminal.
7. **Set the Charger to Recondition Mode:** Switch the charger to the reconditioning mode. Refer to the charger's manual for specific instructions on how to do this.
8. **Initiate the Reconditioning Process:** Start the reconditioning process according to the charger's instructions. The charger will now apply a specific charge and discharge cycle to help de-sulfate the battery.
9. **Monitor the Charging Process:** Keep an eye on the charger during the reconditioning process. If you notice any unusual heat, excessive bubbling, or any other signs of trouble, disconnect the charger immediately.
10. **Allow Sufficient Time:** Reconditioning may take several hours or even days, depending on the charger and the battery's condition. Be patient and let the process run its course.
11. **Check Voltage and Specific Gravity (for Lead-Acid Batteries):** Periodically check the battery's voltage during the reconditioning process. This readings will give you an idea of the battery's progress.
12. **Complete the Process:** Once the reconditioning process is complete, the charger will typically switch to a maintenance or float mode. Leave the battery on the charger for a while longer to ensure it's fully topped up.
13. **Disconnect the Charger:** Unplug the charger from the power outlet and then disconnect it from the battery.
14. **Test the Battery:** Use a voltmeter to check the battery's voltage. It should be within the manufacturer's recommended range.
15. **Reinstall and Regular Maintenance:** reinstall it and perform regular maintenance checks to ensure it continues to operate optimally. Always follow the manufacturer's instructions for both the battery and the trickle charger, as specific guidelines may vary. This will help ensure that you're reconditioning the battery safely and effectively.

BODY LIFT OPERATION

How to lift the body of the expedition 500

1. To lift the body of your expedition 500 first locate the rocker switch, found on your front control panel.
2. Press the rocker switch up to begin raising the trailer. Similarly you can lower the trailer by pressing this button down.
3. Allow your trailer to lift up all the way or stop your trailers lift by putting the rocker switch in the neutral position. The lift will stop automatically, there is no need to stop the trailer when the lift has reached its peak.



How to reset your trailers lift mechanism:

there are multiple reasons why your trailers lift mechanism may not be working. If there is an issue with your trailers lift mechanism, here is the proper procedure for trouble shooting. Please try these steps before taking your trailer to a service center.

WARNING: Ensure battery is at least 50% before beginning Reset Motherboard Using Remote

1. locate the the automatic lift remote provided with your trailer:
Locate your lift controller, this controller will be used to reset the lifts motherboard.

2.Remove the Ethernet cable from the control motherboard.
once you have removed the Registered jack of Ethernet cable from the lifts control box, plug in the trailers remote to where the cable was previously plugged in.

3.Reset the motherboard

hold both buttons on the controller down for 30 seconds. this will initiate your motherboards hard reset.

4.Wait for reset to be completed

once the reset begins ,the trailers lift mechanism will start to raise and lower. step away from the trailer and allow this process ample time to be completed.

5. Once the trailer stops lifting and lowering

only once the trailer is finished with its reset should you enter the trailer, plug the original Ethernet cable back into the control box, and test your lifts mechanism.

Test individual lifts using override panel

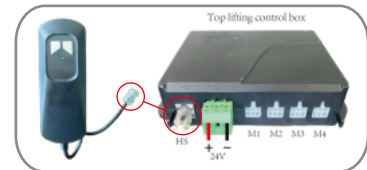
Locate Your Trailer's Override Panel:

Ensure that the override panel matches the provided photo. On the override panel, you will find five sets of labeled buttons corresponding to the four independent lifting mechanisms and one set of buttons to control all four mechanisms at once. The buttons labeled "_U" are for raising, while those labeled "_D" are for lowering. Prior to this label, you will find "M" followed by a number, which indicates the corresponding leg. One set of buttons will be labeled "ALL", which is used to control all four legs simultaneously.

Connecting the Legs to Your Override Panel:

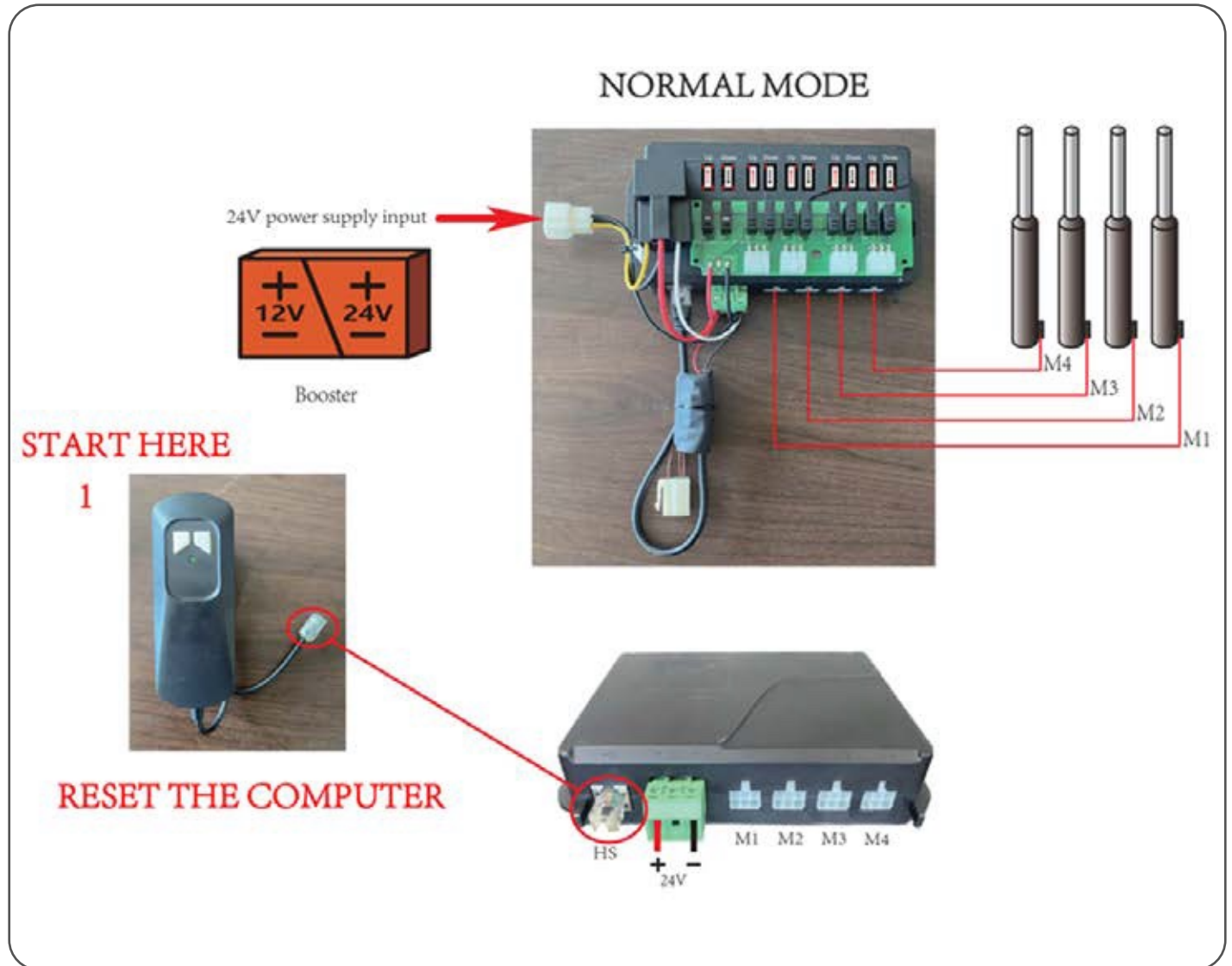
Begin by disconnecting each individual legs plug

Reconnect the legs to the corresponding plugs on your override panel



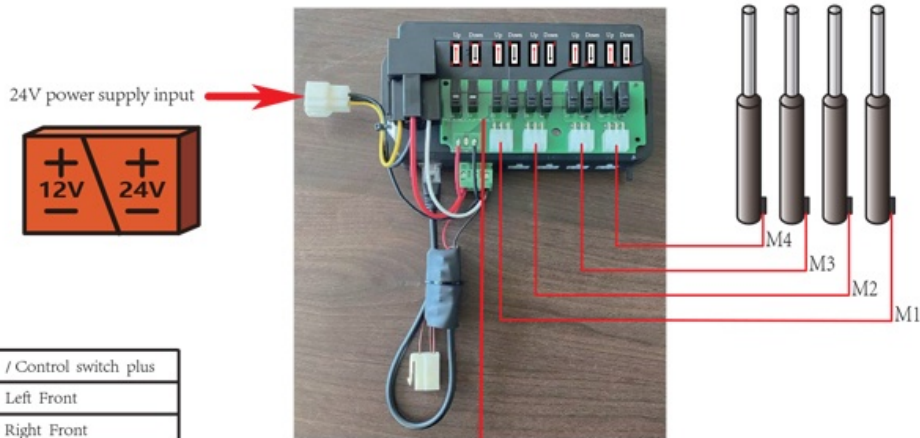
NOTE

Ensure that you follow safety precautions and guidelines while making these connections. If you have any doubts, consult a professional or contact our support team.



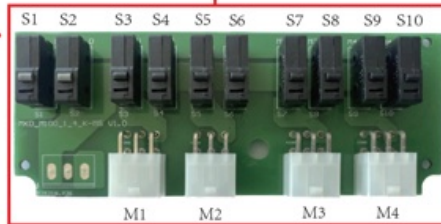
Plug the connector of the hand control into the HS, holding the buttons "up" and "down" for 3 seconds at the same time, the lifting system enters the learning mode. The body will go UP and DOWN automatically and reset the HS system.

RESET DOES NOT WORK
MANUAL CONTROL OF LIFTING



HS	Control handle plus / Control switch plus
M1	Electric push rod 1 Left Front
M2	Electric push rod 2 Right Front
M3	Electric push rod 3 Left Rear
M4	Electric push rod 4 Right Rear
S1	ALL-Up
S2	ALL-Down
S3	M1-Up
S4	M1-Down
S5	M2-Up
S6	M2-Down
S7	M3-Up
S8	M3-Down
S9	M4-Up
S10	M4-Down

MANUAL LIFT UP/DOWN



Forced lifting mode diagram

Mode	Whats Wrong	Noise
Low Voltage Mode	Low voltage pattern detected, all rods stop action and store the current status.	The buzzer continuously "beep"
Overload	When the current value of one of the rods exceeds the set overload value, all push rods stop action.	"Beep" 800ms, stop 800ms, which gives fault type + fault rod position For example: If the 2nd rod is overload, the warning sound will be "beep" 800ms stop 800ms for 2 times, the warning sound is repeated after 1 second.
Height Difference	When the height difference between the rods exceeds the set threshold. All rods stop, the user need run the learning mode again to active.	"Beep" 1 second stop 1 second, repeat
Sensor Fault	One or more sensors are detected to be faulty, all rods stop working.	"Beep" 300ms, stop 300ms, which gives fault type + fault rod position For example: If the sensor in 3rd rod has fault, the warning sound will be "beep" 300ms stop 300ms for 3 times, the warning sound is repeated after 1 second.

You have now successfully connected the override control panel to your trailer's lift system and can control each lift system individually or together. Exercise extreme caution when controlling the lift mechanisms individually. Once you have finished using the override system, please reset your lift system's computer by following the provided directions on how to reset your motherboard.

NOTE

If you encounter any major failures, you can test each leg individually or use the rocker switch on the front to control all four trailer lifting mechanisms via the override panel. However, be aware that this bypasses built-in safety precautions and may result in damage to the legs, trailer, or injury if not executed correctly.)

BODY LIFT OPERATION

How to break in your brakes:

Materials needed-

Tow Vehicle

Brake controller (if not pre-installed on vehicle)

Infrared thermometer (Optional)

Find a Safe Location: Choose a safe and open area with minimal traffic where you can perform the break-in procedure. An empty parking lot or a quiet road can be good options.

Prepare the Trailer: Ensure that the trailer is properly hitched to your towing vehicle. Make sure the trailer is loaded with an average camping load to simulate real-world conditions.

Safety Checks: Confirm that all connections, including electrical and safety chains, are secure.

Drive Slowly: Begin by driving at a slow speed (around 20-30 mph) on a flat, straight road. Avoid sudden stops or rapid acceleration.

Gradually Increase Speed: After a short distance, gently increase your speed up to around 40 mph. Continue driving in a straight line without sharp turns or abrupt maneuvers.

Apply Brakes Gradually: Once you reach the desired speed, gently apply the brakes to slow down the trailer. Do not slam the brakes as this can cause excessive heat and premature wear.

Release Brakes: After slowing down, release the brakes completely and continue driving for a short distance to allow them to cool.

Repeat the Process: Perform this process of gradual acceleration, controlled braking, and cooling several times.

Avoid Overheating: Pay attention to any signs of overheating like a burning smell or excessive brake dust. If you notice these signs, stop and allow the brakes to cool before continuing.

Final Test: After a few cycles of this process, perform a few controlled stops from higher speeds to ensure the brakes are working effectively.

Cooling Period: After completing the break-in procedure, drive for a short distance without using the brakes to allow them to cool down.

Inspect for Wear: After the break-in procedure, visually inspect the brake drums and pads for any signs of unusual wear or damage.

Remember, the break-in process is crucial for setting the brake linings properly and ensuring they provide consistent and reliable stopping power. Following these steps will help optimize the performance and lifespan of your new drum brakes. If you have any doubts or encounter any issues, consider consulting a professional mechanic or the manufacturer's guidelines for specific recommendations.

WHEEL & TIRE CARE

Tire Pressure: Regularly check and maintain proper tire pressure according to the manufacturer's recommendations. Underinflated or overinflated tires can lead to uneven wear, reduced fuel efficiency, and compromised handling.

Tire Tread Depth: Measure the tread depth regularly to ensure it's within legal limits and provides adequate traction. Use a tread depth gauge or the "penny test" (insert a penny into the tread with Lincoln's head upside down; if you can see all of Lincoln's head, it's time for new tires).

Wheel Alignment: Periodically check and adjust the wheel alignment to prevent uneven tire wear and ensure stable handling. Signs of misalignment include steering that pulls to one side or uneven tire wear patterns.

Balancing: Balance your wheels whenever you get new tires or if you feel vibrations while driving. Balanced wheels improve ride comfort and extend tire life.

Rotation: Regularly rotate your tires (typically every 6,000 to 8,000 miles) to promote even wear. This helps extend the life of the tires and ensures consistent performance.

Proper Load Capacity: Make sure your tires have the appropriate load capacity for your vehicle and any additional load you may be carrying. Check the tire's load index and ensure it meets or exceeds your vehicle's requirements.

Avoid Overloading: Exceeding the maximum load capacity of your tires can lead to overheating and failure. Always adhere to the load limits specified by the manufacturer.

Avoid Potholes and Obstacles: Drive carefully to avoid hitting potholes, curbs, or other obstacles that can cause damage to your wheels and tires.

Cleaning and Inspection: Regularly clean your wheels to prevent brake dust buildup, which can be corrosive. Additionally, inspect your tires for cuts, punctures, or bulges.

Tire Storage: If you have spare tires or seasonal tires, store them in a cool, dry place away from direct sunlight. Consider using tire covers to protect them from UV rays.

Tire Sidewall Information: Familiarize yourself with the information on the tire's sidewall, including size, load index, speed rating, and manufacturing date. This information is crucial when replacing or maintaining your tires.

Spare Tire Maintenance: Ensure that your spare tire is properly inflated and in good condition. It's often overlooked until needed, so regular checks are important.

Winter Tire Considerations: If you live in an area with cold winters, consider using winter tires for improved traction and handling in snowy or icy conditions.

Professional Inspection: If you notice any unusual wear patterns, vibrations, or damage, have your tires and wheels inspected by a professional mechanic.

By following these guidelines, you can ensure that your wheels and tires remain in good condition, providing safe and reliable performance for your vehicle. Regular maintenance and care can also extend the lifespan of your tires, potentially saving you money in the long run.

HOW TO ADJUST CAMBER AND TOE

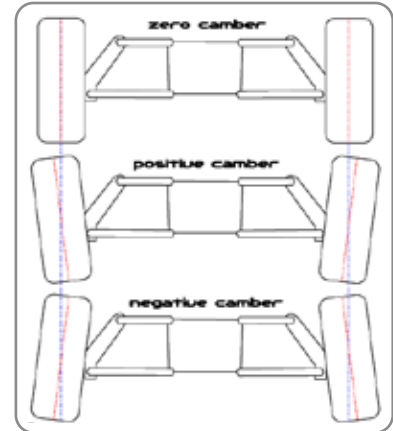
For us to talk about camber and tow adjustments we need to first discuss what camber and toe is. Camber and Toe should always be adjusted by a authorized professional.

Camber: Definition: Camber refers to the angle of a wheel when viewed from the front or rear of the vehicle. It is the measurement of how much the top of the wheel tilts inward or outward from vertical.

Positive Camber: The top of the wheel tilts outward.

Negative Camber: The top of the wheel tilts inward.

Significance: Proper camber adjustment ensures that the tire contacts the road surface evenly.



Toe:

Definition: Toe refers to the angle at which the wheels point relative to the centerline of the vehicle. It's the measurement of how much the front of the wheels point inward or outward.

Toe-In: The fronts of the wheels point toward each other.

Toe-Out: The fronts of the wheels point away from each other.

Significance: Proper toe adjustment ensures that the wheels are aligned and parallel, promoting straight-line stability.

Tools Needed:

Jack stands

Floor jack

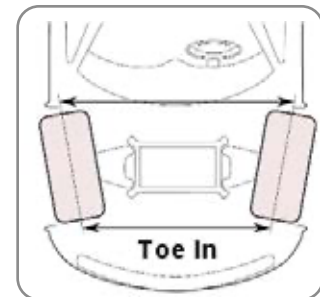
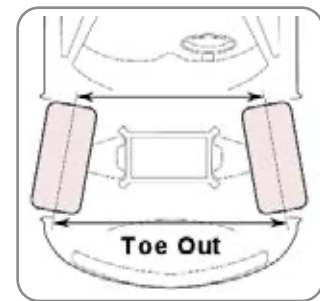
Camber gauge (optional, but highly recommended) Wrenches or socket set

Steps:

Park on a Level Surface: Make sure the trailer is on a flat and level surface before starting any adjustments.

Secure the Trailer: Engage the parking brake and use wheel chocks to prevent the trailer from moving.

Lift the Trailer: Use a floor jack to lift the trailer off the ground. Place jack stands under the frame for safety.



Locate the Camber Adjustment Bolts:

Your EXP 500 uses eccentric bolts to adjust the camber and toe of your suspension. To adjust the camber use the eccentric bolt located on the outside of the A arm bracket.

Use a Camber Gauge (Optional):

While not strictly necessary, a camber gauge can help you measure the camber angle accurately. Follow the gauge's instructions to set the camber angle to the desired specification.



Adjust the Camber: Turn the adjustment bolts either (what) to increase or (what) to decrease the camber angle, depending on your specific needs. Keep an eye on the camber gauge if you're using one.

Lower the Trailer: Carefully lower the trailer using the floor jack and remove the jack stands.

Toe Adjustment:

Tools Needed:

Tape measure

Wrenches or socket set

Steps:

Park on a Level Surface: As with camber adjustment, ensure the trailer is on a flat and level surface.

Secure the Trailer: Engage the parking brake and use wheel chocks.

Measure the Toe: Using a tape measure, measure the distance between the front and rear of the tires at both the front and rear of the tires.

Determine Adjustment Needed: Compare the measurements. If the front measurement is greater than the rear measurement, the wheels are "toed-in". If the rear measurement is greater, the wheels are "toed-out".

Adjust the Toe: Use a wrench or socket to turn the inner most Eccentric bolt. Turning (what) will increase toe-in, while turning (what) will increase toe-out. Make small adjustments and re-measure until the toe is even.

Test Drive: Take the trailer for a short test drive to ensure it handles properly.

AIR RIDE

Adjusting ride height:

NOTE

Before making any adjustments, ensure that the air compressor rocker switch is located inside the front box compartment and is turned on. Allow a few seconds for the compressed air tank to fill.

On-Road Adjustment:

Locate the Air Compressor Rocker Switch: This switch can be found inside the front box compartment.

Turn On the Air Compressor: Switch on the air compressor and allow a few seconds for the compressed air tank to fill.

Adjusting the Air Ride Suspension: The air ride suspension is adjusted independently for each side of the trailer.

There are two rocker switches: One controls the left airbag. The other controls the right airbag.



Using the Rocker Switches:

To Increase Ride Height: Press and hold the rocker switch corresponding to the desired side. This will inflate the airbag, raising the ride height.

To Decrease Ride Height: Press and hold the rocker switch corresponding to the desired side. This will deflate the airbag, lowering the ride height.

Check PSI Gauges: Above the rocker switches, you'll find two PSI gauges showing the air pressure inside the airbags.

On-Road Safety Guidelines:

While towing on the road, it is crucial to: Bring the suspension as low as possible without going below 20 psi in each airbag.

Off-Road Adjustment:

Off-Road Considerations: When off-roading, the height and PSI of the truck camper will vary depending on the obstacles faced.

CAUTION

Avoid Maxing Out Limiter Straps:

Do not bring the air ride suspension to the point that it maxes out the limiter straps on the camper's independent A-arm suspension.

Ensure Some Slack on Limiter Straps: There should always be some amount of slack on the limiter straps to prevent strain on the suspension system.

The Expedition 500 is equipped with cutting-edge Air Bag Air Ride Suspension, providing a smooth and controlled towing experience. To ensure optimal performance and longevity of this system, it is crucial to perform regular checks and follow safety guidelines. This manual outlines the basic checks and safety measures for using the air ride suspension effectively.

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Pre-Trip Inspection:

- 1.1 Visual Inspection of Air Bags
- 1.2 Check for Leaks
- 1.3 Inspect Air Lines and Fittings

In-Use Safety Guidelines:

- 2.1 Weight Distribution
- 2.2 Adjusting Air Pressure
- 2.3 Be Mindful of Speed
- 2.4 Proper Loading and Unloading

Routine Maintenance:

- 3.1 Lubrication of Moving Parts
- 3.2 Cleaning and Protecting Air Bags
- 3.3 Periodic Professional Inspection

1. Pre-Trip Inspection:

1.1 Visual Inspection of Air Bags

Before each trip, visually inspect the air bags for signs of damage, punctures, or unusual wear. Ensure that the air bags are properly seated in their brackets and that no obstructions are present.

1.2 Check for Leaks

Use a soap and water solution to check for air leaks. Apply the solution to all air connections and observe for bubbles. If any leaks are detected, address them immediately before towing.

1.3 Inspect Air Lines and Fittings

Check all air lines and fittings for signs of wear, cracks, or loose connections. Tighten any loose fittings and replace damaged air lines promptly.

2. In-Use Safety Guidelines

2.1 Weight Distribution

Ensure that the load is evenly distributed on the trailer to prevent overloading any specific air bag. Improper weight distribution can lead to reduced suspension performance and potential damage.

2.2 Adjusting Air Pressure

Adjust the air pressure according to the load being towed. Refer to the Expedition 500 manual for recommended pressure ranges. Avoid exceeding the maximum and minimum pressure limits specified.

2.3 Be Mindful of Speed

Adhere to recommended speed limits and drive cautiously, especially on uneven or rough terrain. Excessive speed can lead to stress on the air suspension system and affect its performance.

2.4 Proper Loading and Unloading

Use appropriate loading and unloading techniques to minimize sudden shocks to the suspension system. Avoid abrupt starts, stops, and sharp turns.

3. Routine Maintenance

3.1 Lubrication of Moving Parts

Periodically lubricate any moving parts associated with the air suspension system as per the manufacturer's guidelines.

3.2 Cleaning and Protecting Air Bags

Clean air bags regularly to remove debris, dirt, and moisture that could affect their performance. Consider using protective coatings to shield the air bags from environmental factors.

3.3 Periodic Professional Inspection

Schedule routine inspections with a qualified technician to ensure all components of the air ride suspension are functioning optimally. Address any identified issues promptly.

By following these basic checks and safety guidelines, you'll ensure that your Expedition 500 trailer with air bag air ride suspension continues to provide a safe and smooth towing experience. If you have any further questions or need assistance, please do not hesitate to contact Tribe Trailers' customer support.

TIRE PRESSURE

Understanding your tires:

Please keep in mind this is for the tires that come stock with your trailer. If you install after market tires, this information will not apply.

Load Range: E

Tire Size: 265/75R16LT

Load Index: 123/1200

Max load single: 3415 LBS at 80 PSI cold

Max PSI: 80 PSI cold

Recommended PSI: 45 PSI

Proper tire pressure is crucial for ensuring safe and optimal performance of your trailer, especially when venturing off-road. This section provides important information about tire pressure, its significance, and guidelines for off-road use.

I. What is Tire Pressure?

Tire pressure refers to the amount of air inside a tire, measured in pounds per square inch (PSI). Maintaining the correct tire pressure is essential for several reasons:

Safety: Properly inflated tires provide better traction, handling, and reduce the risk of accidents or blowouts.

Fuel Efficiency: Under-inflated tires increase rolling resistance, leading to decreased fuel efficiency.

Tire Longevity: Incorrect tire pressure can cause uneven wear, reducing the lifespan of your tires.

Load Capacity: Properly inflated tires ensure they can support the weight of your trailer and its contents.

II. Determining the Correct Tire Pressure:

For a "wet" trailer we recommend a on road tire pressure of 45 PSI. If your trailer is heavily loaded down with equipment you can adjust that tire pressure up to 80 PSI cold.

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III. Off-Road Tire Pressure Considerations:

When taking your trailer off-road, it's important to adjust tire pressure to suit the terrain. Here are some guidelines to follow:

Lowering Tire Pressure: Soft, uneven, or rocky terrain requires lower tire pressure to increase the tire's contact area with the ground, providing better traction and stability. Begin by reducing the tire pressure in small increments, checking periodically until you find the optimal pressure for the specific terrain. **Do not go below 25 PSI**, dropping your tires PSI too low can cause the trailers wheel to come off of the Rim. you assume all liability for lowering your own tires, please be cautious while doing so.

Monitor Tire Temperature: After driving off-road, it's crucial to check the tire temperature. Overly hot tires may indicate that the pressure is too low, causing excessive flexing.

Reinflation after Off-Road: Once you return to regular road conditions, reinflate the tires to the manufacturer's recommended pressure before traveling at high speeds.

Avoid Over-Deflating: Do not deflate the tires to the point where the rims are at risk of contacting the ground, as this can result in damage to both the tire and rim.

Be Mindful of Load Distribution: Ensure that the load in the trailer is evenly distributed, as this affects the effectiveness of tire pressure adjustments.

IV. Regular Tire Maintenance:

Check Tire Pressure Regularly: Regularly inspect and adjust tire pressure according to the manufacturer's recommendations.

Inspect for Damage: Periodically inspect tires for signs of wear, punctures, or other damage. Replace damaged tires promptly.

Alignment and Balancing: Proper wheel alignment and balancing are essential for even tire wear and optimal performance.

CONCLUSION

Understanding tire pressure and its importance, especially in off-road conditions, is essential for the safety and longevity of your trailer. By following these guidelines, you can ensure that your trailer's tires are properly maintained and adjusted for any type of terrain you may encounter.

TIRE DIAGRAM



HOW TO CHANGE TIRE

Tools and Materials Needed:

Jack suitable for trailers
Jack stands (optional, but recommended for added safety)
3/4 or 19mm Lug wrench or socket wrench
Wheel chocks
Spare wheel

Safety First:

Park the trailer on a flat, stable surface.
Engage the hand parking brake.
Use wheel chocks on the opposite wheel to prevent any rolling.

Locate Jack Points:

WHAT ARE OUR JACK POINTS

Loosen Lug Nuts: Using the lug wrench or socket wrench, slightly loosen (but do not remove) the lug nuts on the wheel you're going to change. Do this while the trailer is still on the ground. This prevents the wheel from spinning when you lift the trailer.

Jack the Trailer: Position the jack under the recommended jack points. Use the jack to lift the trailer off the ground until the wheel you're changing is completely clear. Make sure the jack is stable and secure before proceeding.

Insert Jack Stands (Optional):

For added safety, place jack stands under the trailer in a secure location.

Remove the Lug Nuts and Old Wheel: Finish removing the lug nuts and set them aside in a safe place. Carefully pull the old wheel off the hub. If it's stuck, gently tap it with a rubber mallet to free it.

Mount the Spare Wheel: Lift the spare wheel onto the hub and align the holes with the lug bolts. Push it on until it's snug against the hub.

Hand-Tighten Lug Nuts: Start threading the lug nuts onto the bolts by hand. This ensures they're properly aligned before you use the wrench.

Tighten Lug Nuts: Use your 3/4 or 19MM lug wrench or socket wrench to tighten your wheel. Go in a star pattern to ensure even pressure on the wheel. Tighten them as much as possible without lifting the trailer off the jack or stands.

Lower the Trailer: If you used jack stands, remove them. Carefully lower the trailer back to the ground using the jack.

Final Tightening: Once the trailer is on the ground, use the lug wrench or socket wrench to give each nut a final tightening. Again, use the star pattern.

Check Lug Nut Tightness: After driving a short distance, re-check the lug nuts to make sure they're still tight.

NOTE

Changing your trailers tire is extremely dangerous and should be done with extreme caution. insure that you are always clear of the trailer in the case of jack, or jack stand collapse. failure to follow these instructions may result in bodily harm or death. Please consider seeking professional assistance.

HOW TO REMOVE SPARE TIRE



Gather Supplies:

3/4 Inch or 19MM Tire Iron, Lug Wrench, or Socket Wrench
Impact Driver (Not Necessary But Recommended)

Locate Spare Tire:

the EXP 500 spare tire can be found on top of the front box of the trailer.

Remove Lug Nuts:

There will be three Lug nuts located on your spare tire, remove these lug nuts before removing the spare tire.

Lower Tire:

Now that you have removed the lug nuts from the spare tire you are able to lower the spare tire to the ground. lift upwards evenly lifting the tire off of the three bolts previously connected to the wheel with the removed lug nuts. once the wheel has been taken off of the Bolts you are now able to lower the wheel to the ground.

CAUTION

the spare tire can be extremely heavy, please use extreme caution while lowering tire. It is recommended to have two people lower the tire to minimize risk of injury. If you do not feel comfortable lowering the tire, please consult a professional for help.

HOW TO CLEAN AND MAINTAIN YOUR FIBERGLASS SHELL

Your Expedition 500's outer layer is made of fiberglass, it is imperative that you maintain this fiberglass insuring your trailer longevity. Improper care could result in irreversible damage.

Gather Supplies:

Mild dish soap or a dedicated fiberglass cleaner
Soft-bristle brush or sponge
Bucket
Water hose or pressure washer (on low setting)
Microfiber cloths or towels
Soft, clean rags

Preparation: Park your trailer in a shaded area. This prevents the cleaning solution from drying too quickly, which can cause streaks or water spots.

Rinse the Surface: Start by rinsing the entire surface of the fiberglass shell with water. This helps remove loose dirt, debris, and dust.

Prepare the Cleaning Solution: Fill a bucket with water and add a mild dish soap or a dedicated fiberglass cleaner according to the manufacturer's instructions. Avoid using abrasive cleaners or harsh chemicals, as they can damage the fiberglass.

Scrub Gently: Dip a soft-bristle brush or sponge into the cleaning solution and gently scrub the surface of the fiberglass. Work in small sections, starting from the top and moving down.

Pay Attention to Stains: For tougher stains or spots, you can use a bit of extra elbow grease. If necessary, you can let the cleaning solution sit for a few minutes to help break down the dirt.

Rinse Thoroughly: Rinse the entire surface again with clean water. Make sure to remove all traces of the cleaning solution to prevent streaking.

Dry the Surface: Use a microfiber cloth or towel to dry the fiberglass shell. This helps prevent water spots and streaks from forming.

Inspect for Remaining Stains or Damage: After the shell is dry, inspect it for any remaining stains, spots, or damage. Address any issues promptly.

Apply Wax (Optional): To protect the fiberglass and add a layer of shine, consider applying a coat of automotive wax specifically designed for fiberglass surfaces. Follow the manufacturer's instructions for application.

Regular Maintenance: To keep your fiberglass shell in good condition, establish a regular cleaning schedule. This might be necessary after trips where your trailer encounters a lot of road grime, bugs, or other debris.

Fiberglass is a durable material, but it can be damaged by a variety of factors. Here are some common things that can potentially harm fiberglass:

Abrasive Materials: Rough or abrasive materials can scratch the surface of fiberglass, causing cosmetic damage.

Chemical Cleaners: Harsh chemicals, solvents, acetone, and abrasive cleaners can react with the fiberglass and cause it to deteriorate or become discolored.

Impact or Force: Strong impacts or excessive force can lead to cracks, chips, or fractures in the fiberglass structure.

UV Exposure: Prolonged exposure to ultraviolet (UV) rays from the sun can lead to fading, discoloration, and degradation of the surface.

Freezing Temperatures: Fiberglass can become brittle in freezing temperatures. This can lead to cracks or other structural damage if the material is subjected to stress or impact.

Heat and Fire: Fiberglass can melt or become deformed when exposed to high temperatures or open flames.

Improper Storage: Storing fiberglass in a way that puts excessive pressure on specific areas or exposes it to extreme environmental conditions can lead to damage.

Chemical Exposure: Exposure to certain chemicals, such as gasoline, oils, or strong acids, can weaken or corrode the fiberglass material.

Biological Growth: Algae, mold, or other types of biological growth can develop on the surface of fiberglass if it is not properly cleaned and maintained.

HOW TO CLEAN ALUMINUM

Aluminum can be found in multiple places throughout your trailer. Anything from your trailers stove, or cooking surface, to components on your trailer can be aluminum. A quick way of checking if a metal component is aluminum, is to test and see if it is magnetic. Generally if the piece is not magnetic it is in fact aluminum. please follow the below instructions for your aluminum parts.

Gather Supplies:

Mild dish soap or a specialized aluminum cleaner

Soft-bristle brush or sponge

Bucket

Water hose or pressure washer (on low setting)

Microfiber cloths or towels

Preparation: If dealing with outdoor aluminum, choose a shady time of day to clean. Avoid direct sunlight, as it can cause cleaning agents to dry too quickly.

Rinse: Rinse the aluminum surface with water to remove loose dirt, debris, and dust.

Prepare the Cleaning Solution: Fill a bucket with water and add a mild dish soap or a specialized aluminum cleaner.

Scrub Gently: Dip a sponge or micro fiber cloth into the cleaning solution and gently scrub the aluminum surface. Work in small sections, starting from the top and moving down.

CAUTION

Aluminum is incredibly scratch susceptible, insure you do not clean any aluminum surface with anything even remotely abrasive.

Pay Attention to Stains: For tougher stains or spots, you can use a bit of extra elbow grease. If necessary, you can let the cleaning solution sit for a few minutes to help break down the dirt.

Rinse Thoroughly: Rinse the entire surface again with clean water. Make sure to remove all traces of the cleaning solution.

Dry the Surface: Use a microfiber cloth to dry the aluminum. This helps prevent water spots and streaks from forming.

Maintaining Aluminum:

Regular Inspection: Periodically inspect the aluminum for signs of oxidation, corrosion, or damage. Address any issues promptly.

Apply a Protective Coating (Optional): To further protect the aluminum, you can apply a specialized aluminum polish or wax. This creates a barrier against environmental elements.

Avoid Harsh Chemicals: Avoid using strong solvents, bleach, or abrasive cleaners, as they can damage the aluminum surface.

Protect from Harsh Environments: If possible, store or cover aluminum items during extreme weather conditions or in areas with high pollution or salt content in the air.

Avoid Contact with Dissimilar Metals: Minimize contact with other metals, especially those that are less noble (like steel), as it can lead to galvanic corrosion.

HOW TO CLEAN FLOORS

Materials You'll Need:

Broom or vacuum cleaner
Warm water
Mild dish soap or a specialized vinyl floor cleaner
Bucket
Mop (microfiber or a soft mop)
Soft cloths or microfiber towels
Soft-bristle brush (optional)
Rubber gloves (optional)
White vinegar (optional)

Remove Debris: Start by sweeping the floor with a broom or using a vacuum cleaner with a soft brush attachment to remove loose dirt, dust, and debris. This prevents scratching during the cleaning process.

Prepare a Cleaning Solution: Fill a bucket with warm water. If your vinyl floor is particularly dirty, you can add a few drops of mild dish soap or a specialized vinyl floor cleaner. Avoid using abrasive cleaners, ammonia-based cleaners, or harsh chemicals, as they can damage the vinyl.

Test a Small Area: Before you start cleaning the entire floor, it's a good idea to test your cleaning solution on a small, inconspicuous area to ensure it doesn't cause any damage or discoloration.

Mop the Floor: Dip a mop (preferably microfiber or a soft mop) into the cleaning solution, wring out excess water, and then mop the floor. Make sure the mop is damp, not dripping wet. Start from one corner and work your way towards the exit to avoid walking on the freshly cleaned area.

Scrub Stains (if necessary): For stubborn stains, you can use a soft-bristle brush or an old toothbrush to gently scrub the affected area. Be careful not to use anything too abrasive, as it could scratch the vinyl.

Rinse the Floor: Empty the bucket and fill it with clean, warm water. Rinse out the mop and wring it out thoroughly. Mop the floor again with clean water to remove any soap residue.

Dry the Floor: Use soft cloths or microfiber towels to dry the floor thoroughly. This helps prevent slips and falls and also avoids any potential water damage to the vinyl.

Optional: Vinegar Rinse (for stubborn spots): If you have some tough spots or want to add extra shine, you can create a mixture of equal parts water and white vinegar. Dampen a cloth or mop in this mixture and gently go over the affected areas.

Tips:

Avoid using abrasive materials like steel wool or scouring pads, as they can scratch the vinyl.

Wipe up spills promptly to prevent staining and potential damage to the vinyl.

By following these steps and tips, you should be able to keep your vinyl floors clean and in good condition.

HOW TO PROPERLY STORE YOUR TRAILER

Properly storing your camping trailer for long periods of time is essential to ensure it remains in good condition and ready for use when you're ready to hit the road again. Here's a step-by-step guide to help you with the process:

Clean Thoroughly: Clean the interior and exterior of the trailer. Remove all food, perishables, and trash to prevent attracting pests. Clean the appliances, counter tops, and floors. Wash the exterior, including the roof, to remove dirt, grime, and bird droppings. Dry it thoroughly to prevent mold and mildew.

Inspect for Damage: Check for any signs of leaks, cracks, or damage to the roof, windows, doors, and seals. Address any issues promptly. Inspect tires for wear, damage, and proper inflation. If possible, store the trailer on blocks or jacks to prevent flat spots on the tires.

Check and Service Mechanical Systems: Empty and clean the holding tanks (fresh water, gray water, black water). Service the brakes, wheel bearings, and suspension components. Lubricate as needed. Top off the propane tanks and ensure all appliances are turned off.

Disconnect Utilities: Disconnect the battery and, if possible, store it in a cool, dry place. Use a trickle charger or battery tender to maintain its charge. Disconnect the propane tanks and store them in a cool, dry place away from direct sunlight or heat sources.

Ventilation and Moisture Control: Leave roof vents cracked open to allow air circulation and prevent condensation. Consider using moisture-absorbing products or dehumidifiers inside the trailer, especially if it will be stored in a humid environment.

Rodent and Pest Control: Seal any openings where rodents or insects could enter the trailer. Use steel wool, silicone caulk, or foam insulation. Place rodent traps or deterrents inside and around the trailer to prevent infestations.

Regular Check-ups: Periodically check on the trailer to ensure everything is in good condition. This includes inspecting for leaks, pests, and any other potential issues.

Documentation and Security: Keep all important documents like insurance, registration, and maintenance records in a safe and easily accessible place. Consider additional security measures like wheel locks or an RV alarm system to deter theft.

Winterization: before storing your trailer for winter it is imperative that you winterize your trailer to avoid damages. please refer to the winterization section of this manual for information on how to properly winterize your trailer.

Prepare for Re-commissioning: Before using the trailer again, go through a thorough inspection and maintenance checklist to ensure everything is in working order.

Remember, proper storage can greatly extend the life of your camping trailer. Taking the time to do it right will pay off in the long run.

CUTSHEET

The TRIBE Expedition 500 trailer features independent suspension with heavy-duty shocks for rough trail riding. Two (2) airbag systems control the height of the trailer for on-road towing to off-road adventuring.

Trailer size	LIFT UP 200" x 86" x 114" LIFT DOWN 200" x 86" x 83"
Box size	LIFT UP 133" x 86" x 83" LIFT DOWN 133" x 86" x 114"
Toolbox size	22" x 22.5" x 26" ELECTRIC AWNING Fully Electric awning 119"
Tare weight	3660 LBS.
ATM	4100 LBS.
Suspension	Independent suspension with dual air shock absorbers, coil springs
Brakes	12" electric brake plus additional hand brake included, brake away system
Draw-bar	Pointed 360-degree universal hitch
Safety chain	Dual (not single) draw-bar safety chains
Chassis	Heavy duty off road galvanized chassis
Rims and tires	265 75/R16 LT tire, 16" aluminum alloy wheel, including spare
Finish	All aluminum sandwich panels lightweight frame
Jockey wheel	Fully electric UP/DOWN with Stand and Wheel as accessorie
Stabilizer legs	4 x heavy duty lockable and adjustable drop-down, 1x electric leg
Jerry can holder	1 x jerry can holder with 10L jerry can
Gas bottle holder	2 x gas bottle holder
Lights	12V LED light outside, separate switch indoor LED light
Electrical	1 x 200 A/H lithium battery, Overload protection, Cigarette sockets, Water sensor, Voltage meter (DC & AC), 1000w inverter, Solar power control
Kitchen system	INDOOR / ARANA American standard gas stove, tempered glass cover OUTDOOR/ Including Portable Stove
Water tank	1x 160L clear PE water tank, 1x 70L black PE water tank, 1x 70L Grey PE water tank, with 12V electrical pump



↑
OPEN POSITION
↓



↑
CLOSED POSITION
↓



STEP INTO LUXURY - AC/HEATER FULL KITCHEN



FULL SIZE BATHROOM/SHOWER



HOW TO CONVERT DINETTE TO SLEEPING AREA

The Expedition 500 is designed to provide maximum comfort and versatility for your camping experience. Converting the dinette into a second bed is a straightforward process that can be accomplished in a few easy steps. Follow the instructions below to transform your dinette into a cozy sleeping space:

Flip Up the Metal Brackets:

Begin by locating the metal brackets underneath the dinette seating area. These brackets are designed to provide stability and support when converting the dinette into a bed. Carefully flip them up into the upright position.



Disconnect the Table from the Wall:

Once the metal brackets are securely in place, gently disconnect the table from the wall mounting. This can be done by releasing any locking mechanisms or clasps that may be holding it in position.



Position the Table on the Metal Brackets:

With the metal brackets in the upright position, place the table on top of them. Ensure that the table is balanced evenly on both brackets to create a stable platform for the bed.



Arrange the Cushions:

Take one of the rectangular back cushions from the seating area and the extra triangular cushion. These cushions will serve as the foundation for the bed. Lay them on top of the table, ensuring they are positioned to cover the entire surface.



Wedge Between Bottom Cushion of the Seating Area:

LEVELING

The below steps are for leveling and stabilizing the trailer while stationary. If you are leveling the trailer while driving please follow steps 5 and 6. Make sure while driving there is always at least 25 PSI in Each airbag, airbags will not have even PSI as the trailer is not evenly weighted. Keep the trailers air ride as low as possible while driving to ensure a smooth ride. Not doing so may result in trailer sway that could lead to an accident.

Tools Needed

Before you begin, make sure you have the following tools and equipment location on hand:

- Electric jack remote control
- Air ride suspension controller
- Stabilizer leg crank
- Leveling blocks or ramps (optional, for fine-tuning)

Step 1: Preliminary Checks

Select a Suitable Location: Park your trailer on a level surface, if possible. This will make the leveling process much easier. **Engage the Parking Brake:** Ensure the trailer is securely parked by engaging the parking brake.

Step 2: Using the Electric Jack

Activate the Electric Jack: Use the rocker switch to activate the electric jack. Raise the trailer slightly off the hitch. **Adjust the Height:** Raise or lower the jack until the trailer is approximately level from front to back.

Step 3: Deploying Stabilizer Legs

Locate the Stabilizer Legs: There are four stabilizer legs, one at each corner of the trailer.

Lower the Stabilizer Legs: Use the stabilizer leg crank to lower each leg until they make contact with the ground.

Apply Gentle Pressure: Apply a little pressure to each stabilizer leg to ensure they are in firm contact with the ground.

Step 4: Adjusting Air Ride Suspension

Locate the Air Ride Suspension Rocker Switch: The controller allows you to adjust the height of the left and right sides of the trailer independently.

Step 5: Turning On Air Compressor

Turn on Compressor: Turn on the compressor rocker switch to turn on the air compressor

Allow compressor to fill with air: You will hear the Air compressor turn on, give the compressor a few seconds to fill air into the compressed tank.

Step 6: Adjusting Air Ride Suspension

Activate the Controller: Turn on the controller and familiarize yourself with the adjustments available.

Make Necessary Adjustments: Use the controller to raise or lower the left and right sides as needed to achieve a level position.

Step 7: Fine-Tuning (Optional)

Use Leveling Blocks or Ramps: If further adjustment is required, place leveling blocks or ramps under the wheels that need to be raised.

Check for Levelness: Use a spirit level to ensure the trailer is perfectly level from side to side and front to back.

Step 8: Final Checks

Stability Test: Gently rock the trailer from side to side and front to back to ensure it feels stable.

Re-check all Connections: Verify that the electric jack, stabilizer legs, and air ride suspension are secure and functioning properly.

LP SAFETY

PROPANE GAS SYSTEM

Propane gas, also known as LP or liquefied petroleum, is a naturally odorless, highly flammable fuel stored in gas cylinders (commonly called LP tanks) used by the stovetop. A strong odor, almost like sulfur or rotten eggs, is added to the gas so hazardous leaks can be smelled.

Important Safety Information:

- ALWAYS close shutoff valves on LP tanks when the propane system is not in use. Hand tighten only to avoid damaging interior seals on the valve.
- DO NOT use an open flame to check for leaks. Use a dish soap and water solution. Spray onto fittings and joints. Bubbles will develop at the leak point.
- DO NOT restrict access to the LP tank. Always keep the valve accessible for emergency shutoff.
- DO NOT use any LP tank other than the one supplied with your trailer unless provided to you by a qualified dealer or service technician.
- DO NOT block installed vents in your propane compartment. The compartment must be ventilated for proper air flow.
- DO NOT cross thread, jam or try to force the fitting onto the hose connector.
- DO NOT pack or store extra LP tanks inside the camper, whether full or empty.

The valves have safety devices that can release gas into the atmosphere when under high pressure. Always ventilate your camper when using propane appliances to avoid carbon monoxide and asphyxiation danger.

Check the LP gas system for leaks or malfunctioning parts before each trip to avoid mishaps. Always fasten LP tanks securely and properly in the bracket intended for them. When using the propane gas system for the first time, and after the first 5,000 miles of use, employ a qualified technician to check the piping for leaks. The piping system is tested and checked at the factory, but travel vibrations can loosen joints.

- Read and understand operating manuals of propane powered appliances before you start using your propane gas system.
- The hatch door is equipped with a safety shutoff valve on the gas prop that will cut off the gas supply to the stove if you happen to leave the stove on before closing the hatch door. This is for your safety.

FILLING LP TANK(S)

Important information for filling LP tanks:

- Propane appliances will not light when there is an improper mixture of gas and air. Brand new LP tanks often have air and moisture trapped inside before first time use. Have a qualified service technician purge your new LP tanks before filling them for the first time.
- Fill the LP tank at authorized propane fueling facilities only.
- It is illegal to fill an LP tank inside the compartment or inside your camper. Remove the LP tank from the camper to fill them.
- Never overfill the LP tanks beyond the safe level.
- Always extinguish all open flames and shut off appliances before removing or reinstalling the LP tank.
- When the LP tank is not connected to the piping system, always attach a dust cap to the connection fitting to keep it clean.

Steps for properly removing, filling and reinstalling the LP tank(s):

1. Close valves securely on the LP tank(s). Hand tighten only. This will shut off all appliances.
2. Position the changeover lever to the full bottle
3. Unthread the pigtail hose attached to the empty LP tank and attach the dust cap.
4. Close valves securely on the LP tank(s). Hand tighten only. This will shut off all appliances.
5. Position the changeover lever to the full bottle.
6. Unthread the pigtail hose attached to the empty LP tank and attach the dust cap.

Fill the LP tank at a qualified propane fueling station.

1. Place the filled LP tank in the compartment and securely fasten it.
2. Remove the dust cap.
3. Carefully thread and hand tighten the pigtail hose connector onto the tank's fitting.
4. Open the valve on the LP tank very slowly to prevent a rush of liquid propane called freeze-up. If you experience freeze up, close the valve, wait 15 minutes and try again.
5. When you open the valve, you will hear a hissing noise. If the hiss lasts longer than 2 seconds, close the valve and have your dealer service the propane system. You may have a leak.

PROPANE SYSTEM MAINTENANCE

It is possible for the propane regulator to “freeze” in certain climate conditions due to the properties of propane and the dynamics of pressure change inside the regulator. In case of freezing, use an incandescent light bulb or heated blanket to warm the regulator and then have the system purged.

Environment, usage and time can deteriorate parts of the propane piping system. Inspect the piping system before each camping season. Look for cracks, loss of flexibility and corrosion. If parts need replaced, consult your TRIBE dealer for proper parts of the same type and rating.

PROPANE USAGE

Propane usage fluctuates, so there is no real way to accurately measure propane usage. This fluctuation is due to varying usages of appliances. Propane usage can be measured to some degree of accuracy by understanding BTUs of appliances and the capacity of LP tanks. A standard 20 lb. LP tank contains approximately 430,270 BTUs of propane gas while a standard 30 lb. LP tank contains approximately 645,405 BTUs.

LP GAS SAFETY PRECAUTIONS

WARNING: DO NOT use propane while traveling. The main propane service valve must be shut off while traveling because of the danger of a fire or explosion if a propane line under pressure were ruptured in an accident. In addition to being unsafe, it is **ILLEGAL** in some states to operate a propane appliance while the vehicle is in motion.

- Inspect the entire LP gas system for possible leaks or damaged parts before each trip
- When testing for leaks use soapy water.
- **WARNING:** Never check for LP gas leaks with an open flame.
- Never lock the LP gas compartments. The tank service valve should always be accessible in case of an emergency.
- **WARNING:** Do not place or store an LP gas container inside the vehicle. LP gas containers are equipped with safety devices, which relieve excessive pressure by discharging gas into the atmosphere.
- Only have the LP gas tank filled by an authorized technician
- Always make certain that the tank is secured in place

- **WARNING:** Always extinguish all LP gas appliance pilot lights before refueling the gasoline tank | on your vehicle.
- Never use an upright tank in a lay down position or a lay down tank in an upright position
- Use caution when drilling holes or fastening objects to the walls or floor of your camper. Gas lines could be damaged and present an extreme safety hazard.
- **WARNING:** Never use natural gas in your LP gas system.
- **WARNING:** Most LP gas appliances used in recreational vehicles are vented to the outside of the vehicle. When parked close to a gasoline pump, it is possible that the gasoline fumes could enter this type of appliance and ignite from the burner flame, CAUSING A FIRE OR AN EXPLOSION. FOR YOUR SAFETY, when refueling, shut off all LP gas appliances that are vented to the outside.

USING YOUR LP GAS SYSTEM AT LOW TEMPERATURES

Your gas system will function at low temperatures provided the system components are kept at a temperature above the vapor point of the LP gas.

NOTE: Propane vaporizes at about 40 degrees F below zero.

LP gas systems can and do freeze in very cold weather. It is a common misconception that the regulator or the gas itself freezes. Actually, it is moisture or water vapor that gets trapped in the system or is absorbed by the gas that freezes and causes the problem. This ice can build up and partially or totally block the gas supply.

There are a number of things you can do to prevent this freezing:

1. Be sure the propane tank is totally moisture -free before it is filled.
2. Be sure the tank is not overfilled. This is also a safety consideration.
3. keep the valves on empty tanks tightly closed.
4. keep the valve closed during storage periods.
5. Have the gas tanks purged by the LP gas technician if freezing occurs.

NOTE: TRIBE is not responsible for personal injury or property damage resulting from misuse or improper maintenance of the propane system or propane appliances.

CARBON DIOXIDE / LP DETECTOR

SAFETY AND WARNING DEVICES

LP/CO DUAL ALARM

If the trailer does not come with a LP/CO Alarm purchase one for your safety. Some of the trailers have these alarms but it is always a good safe practice to have the best quality LP/ CO detector you can purchase.

The unit contains an alarm that will sound, alerting you to the presence of propane or carbon monoxide. The Red LED will flash and the alarm will sound a steady tone whenever a dangerous level of propane or methane gas is detected. IMMEDIATE ACTION IS REQUIRED. The detector will continue to alarm until the Test/Mute switch on the front of the alarm is pressed. Ventilate the camper. The Red LED will continue to flash until the gas is cleared, or the gas alarm will reactivate in approximately 5 minutes if the gas is still present. DO NOT RE-ENTER THE CAMPER. This alarm will return to normal operation after the camper is properly ventilated.

NOTE: This device detects the presence of propane; it does not disconnect the gas supply.

Be aware of the difference between propane leaks versus propane escaping from an unlit, open burner. Pure propane from a leaking pipe or fitting is heavier than air and will buildup its heaviest concentration at the floor level first. Propane from open burners is intentionally mixed with air to induce burning and will dissipate into the air. The primary purpose of the detector is to detect propane leaks. The propane from open burners is mixed with air (oxygen) so that it will burn. When mixed with air, the propane becomes only marginally heavier than air and may not sink to the floor. If a burner is left on, the area around the burner, range and adjoining counter space will be combustible and will cause injury and damage if ignited. This condition may exist for an extended time period before the propane can reach the detector's location and be detected. The detector only indicates the presence of propane at the sensor. Propane may be present in other areas.

PROCEDURES TO TAKE DURING AN LP (PROPANE) GAS ALARM

Turn the propane off at the tank(s), turn off all propane appliances, extinguish all flames and smoking material and open all doors and major windows to air out the camper. Do not reenter the camper until the alarm stops sounding. If the alarm sounds a second time after the propane is turned back on, leave the propane off and have a TRIBE Dealer make the necessary repairs to the source of the propane leak.

CARBON MONOXIDE WARNINGS

CARBON MONOXIDE (CO)

Carbon Monoxide gas is colorless, tasteless, and odorless. It is a combustion by-product of fuel burning engines. The engine in your truck and generator system (if installed); produce it constantly while they are running. Carbon monoxide gas is deadly. Please read and understand the following warnings and precautions to protect yourself and others from the effects of carbon monoxide gas. Areas between the camper and truck bed are used for ventilation. Filling or blocking these areas could trap and prevent gases from escaping.

WARNINGS

1. Exhaust gases are deadly. Do not block the tailpipes or situate the vehicle in a place where the exhaust gases have any possibility of accumulating either outside, underneath, or inside your vehicle or any nearby vehicles.
2. Outside air movement can carry exhaust gases inside the camper through windows or other opening remote from the exhaust outlets. Due to this possibility, TRIBE DOES NOT RECOMMEND that any passenger ride inside the camper while traveling.
3. Operate the engine(s) only when safe dispersion of exhaust gases can be assured and monitor outside conditions to be sure that exhaust continues to be dispersed safely.
4. Do not, under any circumstances, operate any engine while sleeping.

SYMPTOMS OF CARBON MONOXIDE POISONING

- Dizziness
- Headache
- Weakness and sleepiness
- Nausea
- Vomiting
- Muscular twitching
- Throbbing in temple
- Inability to think coherently.

If symptoms indicate the possibility of carbon monoxide gas poisoning:

- Turn off engine(s) immediately.
- Get out into fresh air at once.
- Sumon medical assistance.

Check the exhaust systems during routine maintenance and repair any leaks, damage, or obstruction before further operations. DO NOT modify any exhaust system in any way.

SMOKE DETECTOR AND FIRE EXTINGUISHER

Smoke Detector

Most fire casualties are caused by inhalation of toxic fumes (smoke) from a fire and not by flame. The smoke detector responds to smoke that enters the sensing chamber. It does not sense gas, heat or flame. Some TRIBE trailers have a wall mounted, battery powered smoke detector. If equipped, please read the smoke detector Owner's Manual for details on testing and caring for this important safety device. Test the smoke detector after the camper has been in storage, before each trip, and at least once a week during use.

The smoke detector should never be disabled due to nuisance or false alarm from cooking smoke, a dusty furnace, etc. Ventilate your camper with fresh air and the alarm will turn off. Do not disconnect the battery. Replace the battery once a year or immediately when the low battery "beep" signal sounds once a minute. If the smoke detector fails to operate with a new battery, replace the detector with a new unit.

FIRE EXTINGUISHER (Not Included)

Always a good idea to get a good fire extinguisher. Your fire extinguisher should be replaced immediately after use or discharge. The fire extinguisher should be a Class B (gas- line, grease, flammable liquids) and Class C (electrical). Read the instructions on the fire extinguisher. Know how and when to use it. You and your family should be familiar with its operation. If you find it necessary to use the fire extinguisher, stand 45 degrees from the flame and spray side to side, starting at the top of the flame. Use caution to avoid standing upwind or uphill. If flames are climbing, spray vertical and work the retardant downwards. Dry chemical flame retardant should be cleaned away as soon as possible

P A S S



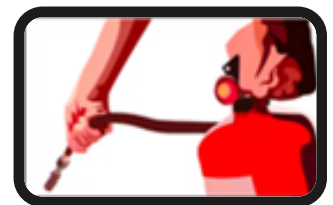
1. **P**ull the pin:



2. **A**im low:



3. **S**queeze the handles



4. **S**weep from side to side:

FIRE SAFETY

FIRE SAFETY

These common causes are related to fire safety hazards and should be avoided at all costs:

Smoking in bed

- Leaving children or animals unattended
- Using flammable cleaning fluids
- Leaving food unattended while cooking or baking
- Having faulty wiring
- Using damaged electrical devices
- Having propane or gasoline fuel leaks
- Being careless

In a fire emergency:

- Evacuate the camper at once. Safe escape is the most important part of a fire emergency.
- Execute the Fire Safety Plan you developed.
- Understand the type of fire you are dealing with. Using water in a grease fire may spread the fire while using water for an electrical fire may result in electrocution.
- Call 911 from a safe distance away, regardless of the fire size.

FIRE SAFETY PLAN

In case of fire or weather emergencies, it is vital to have a Safety Plan developed for all occupants. The plan should be rehearsed and frequently practiced. Review the safety warnings in the General Safety portion of this manual for details. Pay attention to door and emergency exit locations, fire safety and how to operate safety equipment in your camper.

Educate all occupants on the following:

- The designated outside meeting place is a safe distance away from the camper where everyone gathers in an emergency. This should be chosen at each stop after parking your camper.
- The instruction for using the emergency exits. Practice finding the exit blindfolded. In case of a real fire, smoke may obstruct your vision.
- The safety procedure in the event of a fire, smoke or gas: stay low to the floor, avoid breathing in the fumes and exit immediately.
- The safety procedure in the event clothing catches fire: Stop, Drop and Roll. STOP, don't run, DROP to the ground, and ROLL back and forth until the fire is extinguished. Use your hands to shield your face from the fire. Running will only increase a fire.

GAS STOVE

Important Safety Information you must know and understand:

- Prevent fire and damage hazards by using approved pan sizes. Generally, the pan should cover the burner but must not be more than one inch larger. Keep handles turned inward but not over other burners.
- Only use cookware that is approved for use on top burners and is suitable to be exposed to direct flame.
- When using the burners and afterward, do not touch the burner grates until they are cooled.
- If you need to light the range with an external source, use a grill, kitchen or BBQ lighter as opposed to a flint lighter. This will keep your hands away from the flame. Keep the area around the appliance clear and free from combustible materials, gasoline, and other flammable vapors and materials.



- Never leave unattended food or utensils on the range.
- Do not use aerosol cans near any appliance with open flames. Most aerosol cans are explosive when exposed to heat or may be highly flammable.
- Do not leave plastic items on the cook-top as they may melt or soften. This can contaminate food if it is in plastic containers. The best practice is to discard the container and contents as a safety precaution.
- Familiarize yourself with the safety information on propane gas.
- In a fire emergency execute your family's Safety Plan. This is vital to you and your family's safety.

GENERAL WARNINGS

This owner's manual will contain basic safety information and instructions for your trailer. Please always read the manual before loading and towing the trailer. If you are unsure of what to do always call TRIBE® to get instructions. This owner's manual cannot cover all trailer operating instructions and you are responsible as an expedition trailer owner to continue to do research on safety precautions and procedures when towing a trailer on the road and off- road.

⚠ WARNING

THIS CONNECTION IS FOR 110-125-VOLT AC, 50 HZ, 50 AMPERE SUPPLY. DO NOT EXCEED CIRCUIT RATING. EXCEEDING THE CIRCUIT RATING MAY CAUSE A FIRE AND RESULT IN DEATH OR SERIOUS INJURY.

⚠ WARNING

Awning must be in travel position while using this propane connection. Failure to comply could result in a fire or personal injury.

⚠ WARNING

When using this outdoor cooking area: The vehicle must be level and stabilized. Do not violate the manufacturer's instructions on required clearances for cooking appliances during use. Do not store cooking appliances until cool to the touch. Failure to comply could result in a fire or personal injury.

NOTICE

CHECK WHEEL LUG NUTS

1. Prior to each trip and only using a torque wrench, tighten each lug nut to manufacturer's specifications.(100ft. lbs. or noted)
2. If removing wheel, using a torque wrench tighten wheel lugs at 50 miles, 100 miles and 200 miles.
3. Following winter storage, check before beginning a trip.
4. Following excessive braking, inspect wheel lugs.

⚠ CAUTION

Do not leave the unit unattended while filling tank. Overfilling the tank may cause damage to your RV.

⚠ WARNING

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

⚠ CAUTION

HOT EXHAUST

Avoid prolonged exposure to exhaust vent area. Do not touch exhaust vent. Failure to comply can result in personal injury.

⚠ CAUTION

GAS SHUT-OFF VALVE

Always shut off gas when not in use. Before going to sleep shut off Gas. Propane Gas is extremely flammable if you smell gas, shut off tank as well as shut off valves. Test gas connections to see if there is a gas leak with soapy water and look for bubbles. If detected repair by a professional.

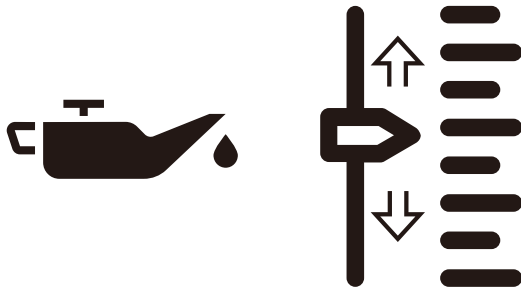
⚠️ WARNING

Do not fill propane container(s) to more than 80 percent of capacity. A properly filled container contains approximately 80 percent of its volume a liquid propane. Overfilling the propane container(s) can result in uncontrolled propane flow, which could lead to a fire or explosion and result in death or serious injury.

⚠️ WARNING

This propane piping system is designed for use with propane only. Do not connect natural gas to this system. Securely cap inlet when not connected for use. After turning on propane, except after normal cylinder replacement, test propane piping and connections to appliances for leakage with soapy water or bubble solution. Do not use products that contain ammonia or chlorine to test for leaks. Can lead to a fire or explosion, which could result in death or serious injury.

NOTICE



NOTE FOR SLIDE MAINTENANCE

Keep the slide track clean when using, grease once a month

⚠️ DANGER

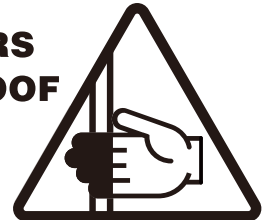
IF YOU SMELL PROPANE

1. Extinguish any open flames and all smoking materials.
2. Shut off the propane supply at the container valve(s) or propane supply connection.
3. Do not touch electrical switches.
4. Open doors and other ventilating openings.
5. Leave the area until the odor clears.
6. Have the propane system checked and leakage source corrected before using again.

Ignition of flammable vapors could lead to a fire or explosion and result in death or serious injury.

⚠️ WARNING

KEEP FINGERS CLEAR OF ROOF DURING OPERATION



⚠️ WARNING

HEATER AIR OUTLET WARNING STICKER

Be careful not to close to the outlet of the diesel heater, and do not blow on a certain part of the body for a long time to avoid burns.

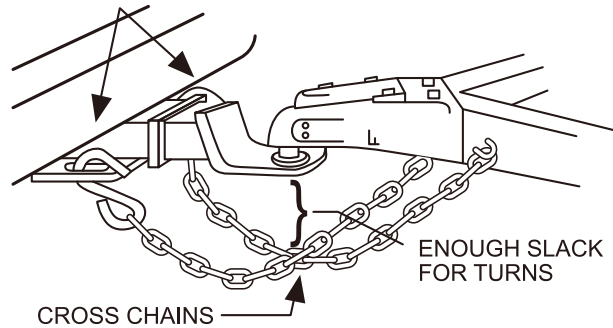


⚠️ WARNING

ALWAYS use safety chains.
Chains hold trailer if connection fails.
You must:

1. CROSS chains underneath coupler.
2. ALLOW slack for trailer to turn.
3. ATTACH chain hooks securely to tow vehicle frame.

ATTACH HOOK TO TOW VEHICLE FEAME



DANGER

FLAMMABLE

LEASH BUCKLE



TRIBE FAMILY PET
ATTACHMENT POINT

LOAD YOUR PET
BEFORE MOVING
VEHICLE

SAFETY BREAK-AWAY SWITCH WILL NOT OPERATE

unless connected to a power source-
equivalent to or greater than an auto-
motive type 12 volt, 12 amp hour
wet-cell battery.

WARNING

SAFETY LATCH MUST
BE ENGAGED
DURING TRAVEL

DIESEL FUEL ONLY



TRIBE
OVERLAND TRAILERS

THANK YOU!

www.tribetrailers.com