



Rustic Trail Teardrop Campers User Manual

Updated 11/14/2021

Owners manual overview

This manual was designed to ensure that you get the most of your Rustic Trail Teardrop and help answer any common problems. While this document is able to be downloaded and printed, it is recommended to use a digital version of it (PDF or web view) so you can interact with the live links that we have embedded throughout this document. It is also best to always check our website for the latest version of the owner's manual as it is always being updated.

For further information about towing your Rustic Trail Teardrop and keeping it in the best shape possible, please refer to our starter guide located on our website by [clicking here](#). Be sure to also check out our recommended [camping accessories here](#).

Wherever you go, remember to always "Follow The Trail"



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Trailer Registration

At time of sale, you will receive a Bill of Sale and MCO documents (Manufacturer Certificate of Origin). Most states just require these two documents to register your camper. An important note: MAKE on the MCO is the MAKE you will register it under. The MAKE is the issuer of the VIN. The trailer BODY TYPE is UTILITY - SINGLE AXLE. Your camper is not classified as a “camper” or “RV” because it does not have a bathroom, kitchen, or greywater tank. Yay for simplicity, right!? This also means you may pay less in taxes and insurance.



Trailer Frame and Towing

The Rustic Trail Teardrop frame is cold-rolled steel 3/16" C channel and L-angle. The frame is primed and painted black gloss. Any paint chipping or spot rust on the frame can be touched up with outdoor spray paint. Fenders are welded to the frame and not attached to the camper sidewalls. Trailers are equipped with 2" ball hitch ball, which measures 17-19" from ground for level towing.

Trailer wiring is 7-Pin RV connection. (You can tow with 4-pin using an adapter.) Trailer wiring is following industry standard wiring and is independent from the camper wiring system. The backup lights and 12v are not used on the 7-pin connection. You can hook the 12v hot trickle charge to your battery if you want to charge while towing.

If your trailer is equipped with electric brakes, then there will be a breakaway cable, switch, and control box with battery located on the driver side of the frame. This is usually Hopkins brand and has a push-to-test button to check the battery. This 12v battery will charge from the 7-pin trailer plug when towing and has an expected life of two to five years. (Note: A breakaway system is required by law in most states for trailers that are equipped with electric brakes and have a GTW of at least 3,000 lbs.) The license plate mount is located on the drivers side of the camper just under the brake/tail light box. There will be two holes for mounting and an integrated light to make the license plate visible at night.

Tires and Rims:

- Tire size is R15". (205x75x15).
- Tire pressure max is 50 PSI. Operate 40-50 PSI.
- Rated speed is below 75mph.
- Rims are 5 lug on 4 1/2" pattern. Studs are 3/8", 20 TPI.
- Lug nuts are:
 - Aluminum Rim: 13/16"-20
 - Steel Rim: 3/4"-20
- Lug nuts should be torqued to 100 ft-lbs.

Electrical System

Rustic Trail Campers have a simple power system ready to go camping, but also ready for customization to your unique needs. 12V DC wiring in the camper is 14g and runs through the roof. 12g wire is used going to the battery. There is a wiring junction on the passenger side of the fan housing that can be accessed by removing the four fan screws. White is Negative unless red is present, then Black is negative and Red positive.



Shore Power/Camperground power

Shore Power into the camper is a 110v 15 amp NEMA inlet (standard inlet from your home). Most campgrounds offer this outlet without an adapter. It is recommended to use a 12 gauge extension cord, [found here](#).

Important battery maintenance info

Overtime AGM batteries will begin to lose their charging capabilities. To keep your battery in top working condition it is recommended that while storing your camper that you leave the shore power connected whenever possible. The integrated trickle charger will ensure that the battery will not overcharge and will help maintain the life of the battery for years to come. If the camper is not left plugged in and your battery depletes, your interior lights, fan, rear USB ports, and outside porch light will not function.

What runs off of shore power?

- 4-way outlet located in the lower front cabinet
- Standard Front power strip
- Optional air conditioner
- Optional outside outlet

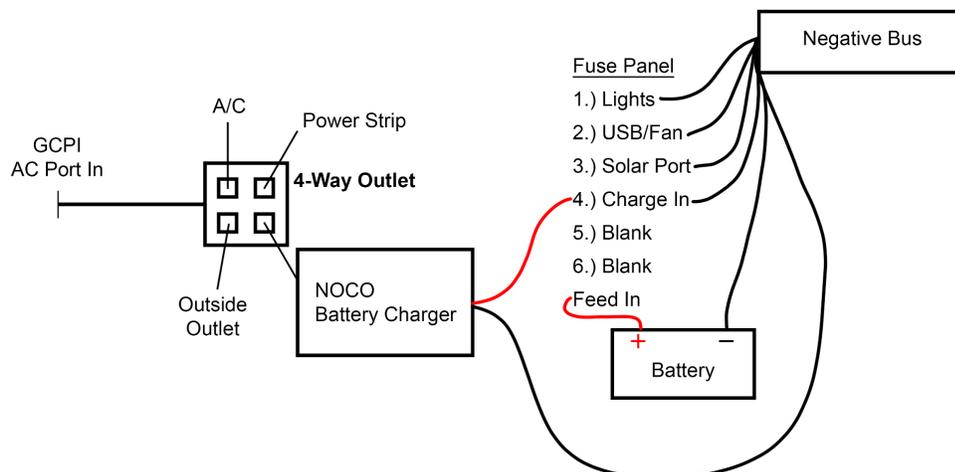
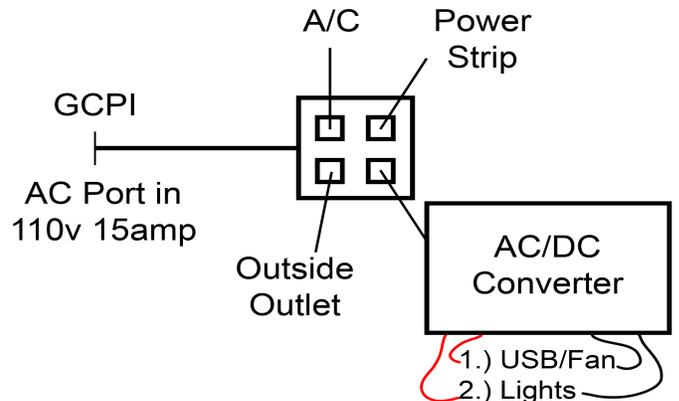
What runs off the optional battery?

- Roof Fan
- Rear USB ports
- Interior LED lights and outside porch light

Fuse Panel Info: (Red - Positive)

1. Solar Panel Port in (SAE)
2. Roof Fan and USB
3. Lights
4. Battery in
5. Blank
6. Blank

Standard Wiring Diagrams





The fuse panel is 10A fuses, there are 7.5A fuses at both battery terminals. The fuse at the battery are the ones that come standard with the NOCO charger wiring. You certainly can change them out to something larger. The ampacity of 14 gauge wire used in the campers is 13A to 19A. That is why we use 10A fuses in the panel. It is safe to draw 10A under normal temperatures and conditions.

Solar

Some solar panel brands reverse polarity. Simple solution is to reverse the wires on the solar port going into the fuse panel. A 100W solar panel would produce 6 amps max peak output, therefore we recommend not installing more than 200W panels using the SAE port without adding another one or upgrading the wire.

Battery: AGM Deep Cycle LDC 12-115-G31 BCI Group 31

<http://www.leoch.com/pdf/motive-power/golf-cart-battery/golf-cart-battery/lcd-series/LDC12-115-G31-T.pdf>

AC/DC Converter: 100W, 8.5A, Meanwell LRS-100-12

<https://www.meanwell-web.com/content/files/pdfs/productPdfs/MW/LRS-100/Enclosed%20Type.pdf>

NOCO Charger: NOCO GEN 5 X1

https://www.batterystuff.com/files/1225-genius5na_user_guide_1.pdf

Air Conditioner

(Comfort Aire RADS-51Q)

The modern Air Conditioners (2019 and newer) have a tray inside that catches the water and evaporates it back into the system to help cool the system. You really should not have any water drainage from your A/C. Note: Having said that, however, there is always room for user error that could cause water drainage. If you are using the AC while parked on a slope, the tray inside will not be level and the water could drain out. Always try to have the camper level when towing and when camping. If you know that you are not going to be able to do this, then use a bath towel to absorb any amount of drainage that the A/C produces. You can replace the A/C with any unit that will fit the cutout, 16" long x 11" tall.

Roof Fan

Rustic Trail Teardrops have a Maxxair brand fan made by Airxcel. The manufacturer states that one common problem with these fans can result in beeps, stop/start, or randomly shutdown if the fan is



supplied with inconsistent voltage that spikes either too high or too low. Airxcel has a 2-year limited Warranty on fans. You may need the serial number of the fan when you contact them.

Standard fan part# 00-06401k.

Deluxe fan part# 00-7500k or 00-6200k.

Parts list, repair, and operation manual is located here: <https://www.airxcel.com/rv/maxxair/products/fans>

Maintenance

Your Rustic Trail Teardrop was designed to be easy to maintain. However, there are some basic tasks that need to be done to ensure the smooth and safe operation of your camper for years to come. We will go over these below:

- **Tire inflation:** At the time of this writing the max tire pressure on the stock RTTC tires is 50 PSI. To ensure the safe operation of your camper we recommend keeping the tires at around 40 – 45 PSI (40 in the summer and 45 in colder weather) Please note that this information is for non-off road tires. Before every trip, we recommend checking the tire pressure when you are torquing the wheels.
 - Tire pressure gauge: <https://amzn.to/3r6GPpd>
 - Battery operated tire inflator: <https://amzn.to/2WLzPQM>

- **Greasing the wheel bearings:** At the time of this writing all RTTC campers are equipped with Dexter easy lube axles. It is recommended to grease the bearings on the camper every 5,000 miles or every 2 years, whichever comes first.
 - Video on how to grease the bearings: <https://youtu.be/XT0RKDGgDm8>
 - Recommend grease (Purchase two tubes): <https://amzn.to/2BvhVbc>
 - Grease gun: <https://amzn.to/2J6XLYZ>

- **Torquing the wheels:** It is recommended to torque the lug nuts on your rims every 500 miles for the first 1,000 miles then once per year. (or when a tire is changed)
 - Video on how to torque your rims: <https://youtu.be/bEXtTeDbC8Q>
 - Torque wrench: <https://amzn.to/2VWgfRp>
 - Socket for steel rims: <https://amzn.to/3cmk78u>
 - Socket for aluminum rims: <https://amzn.to/36suunu>

- **Caulking the camper:** It is recommended to check the caulking on your camper every year for peeling or cracking along the edges of the camper and around the roof fan seam.
 - Pro Flex clear caulk: <https://amzn.to/34oTqZw>
 - Caulking gun: <https://amzn.to/2CeyUyx>
 - How to caulk your camper video: <https://youtu.be/Z4t6VDmwbD8>

- **Check the frame for spot rust.** Remove with sandpaper or scratch pad and touch up with paint.
 - Gloss black spray paint: <https://amzn.to/3Dwa4bh>



- Black paint pen (easited to touch up the paint): <https://amzn.to/3BDRAoB>

Construction Methods & Materials

Side walls

Rustic Trail camper walls are $\frac{3}{4}$ " with inside and outside overlays. The outside overlay is factory-bonded painted aluminum (.032") and inside laminate is a HDPE poly or High Pressure Laminate. These are factory bonded to a marine plywood. If you want to secure something to the walls like a TV, shades, or rack, or we recommend $\frac{5}{8}$ " screws. You may want to predrill a small pilot hole if you have high pressure laminate as it can crack and split with screws. For exterior attachment, again $\frac{5}{8}$ " screws that are Stainless steel.

Cabinets and inside sheeting are cabinet-grade White Birch Wood.

Rear Leveling Jacks

Rustic Trail Campers are equipped with two stabilizing rear jacks. These are common RV jacks for ease of replacement parts. To lower the jacks, insert the jack crank into the drive screw and turn counterclockwise. Alternatively you can use a powered drill with $\frac{3}{4}$ " socket to turn the jack screw. Older Rustic Trail models had the jacks welded on to the frame. Mid 2020 models began bolting jacks to the frame using the standard bolt-on pattern. Jacks are rated for 1,000lbs and technically not supposed to be used to change a camper tire. Instead use the jack from your vehicle.

Main Entry Door

Rustic Trail Campers have common RV doors. Your door will come with two keys. (purple) The top lock will lock the latch mechanism and the bottom lock will lock the deadbolt. From the inside of the camper, the red lever will lock the deadbolt. There are after-market parts and features that can be added. The Screen door and striker plate can be adjusted to modify the closing and fitment of the door. Info here: <https://www.challengedor.com/wp-content/uploads/2019/04/950-Install.pdf>

Baggage Doors - If equipped

As of late 2021 RTTC campers equipped with baggage doors (Grizzly, Kodiak, and Polar Bear) will have two latches to close the baggage doors. To ensure no leaking, please ensure that both of these are in the closed position and locked.

FAQs?

Q. What should I use if I want to attach curtains or TV or something else to the wall?

The side walls are $\frac{3}{4}$ " plywood with laminated Aluminum exterior and a poly or laminate interior surface. Using $\frac{5}{8}$ " screws or other fastener that will penetrate less than $\frac{3}{4}$ " will work. You may want to pre-drill a pilot hole in the interior laminate to prevent cracking or splitting. You can attach items to the exterior the same way. Recommend using stainless steel fasteners for exterior.

Q. Is the camper insulated?



The walls are solid plywood with aluminum factory-laminated exterior. There is no insulation inside the walls or floor. But the wall itself has an R value of about 8. The roof and front/back walls have 1.5” polystyrene foam board insulation with a radiant barrier for an R value of about 13. However, insulation is a non-issue in campers of any size. In certain weather conditions, all campers will require cooling or heating to be comfortable. Because our campers are so small they cool off or warm up very quickly.

Q. What should I do to get the camper ready for travel/towing?

Getting the camper ready for travel. Please review the travel checklist below:

Travel Checklist:

- ✓ Inside table bracket secured, secure all loose items!
- ✓ Lock both windows and the main entry door.
- ✓ Lock both baggage doors with the thumb latch and lock, if applicable.
- ✓ Ensure the stabilizing jacks upright and as high as possible (do not over tighten)
- ✓ A/C Cover is on with the bungee cord secured.
- ✓ Check the hitch connection on the car, the safety pin is on and the safety chains are properly secured.
- ✓ Check trailer lights & braking system.
- ✓ Check tire pressure and lug nuts.