Owner's Manual

Great *Little* campers…
For the great *Big* outdoors.

Camp-Inn™ Travel Trailers
Petenwell Industries LLC
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www.TinyCamper.com

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IMPORTANT SAFETY INSTRUCTIONS

FOR USING YOUR CAMP-INN™ TRAVEL TRAILER

ALWAYS make sure that your ball hitch is properly tightened and that the ball hitch is the correct size.

NEVER unlock or rotate the tongue jack if the coupler is not on the ball hitch.

ALWAYS block the trailer wheels **BEFORE** unhitching to prevent rolling.

NEVER leave the stove unattended when the burners are lit.

ALWAYS keep a fire extinguisher nearby when using a stove.

NEVER slide a lighted stove into the storage area in the kitchen cabinets.

ALWAYS turn off the propane tank when the stove or furnace is not in use.

ALWAYS turn off the propane tank when you are traveling.

If you smell propane, **NEVER** use a flame to detect a propane leak. Check for leaks using a soap solution on connections.

NEVER use candles, fuel type lanterns, fuel type heaters, or any other oxygen depleting device inside the sleeping compartment.

ALWAYS open a side window or fan at least ½ inch for ventilation and to reduce condensation when the sleeping area is occupied.

ALWAYS pull the trailer entirely off of the roadway before changing a flat tire.

NEVER use the leveling jacks to lift **both** wheels off the ground at the same time, while the trailer is in use.

If you are new to trailer towing, refer to "Towing Basics" section before hitching, unhitching or towing your Camp-Inn™ trailer.

This list does not include all possible hazards.

If you have any questions about using your trailer safely, contact Petenwell Ind. LLC

VIN Vehicle Identification Number and Serial Number

The trailer's VIN tag is located near the tongue jack on the trailer frame.

The Serial Number tag shows the build number of your trailer. **Camp-Inn**™ trailers are numbered sequentially as they are built. The tag is mounted to the hatch hinge on the left side of the kitchen.

Packing your Camp-Inn™

The first rule for happy camping in your **Camp-Inn™** is:

"Take only what you need! "

It is very easy to over pack and take along too much STUFF. After a few trips you should be able to weed out the extras. The large cabin area allows you to take along items such as beach toys, lawn chairs, canopy, screen tent, etc… but, think about each item and determine if it is necessary. You will have to unload these items to use the bed.

One trick for packing your teardrop is to put a piece of masking tape on every item you pack. When you use each item, remove the piece of tape. After 2-3 trips, if the item still has tape on it, consider leaving it home. Exceptions will be emergency items such as spare tire, first aid kit, fire extinguisher, or raincoats.

Pack heavy items as close to the axle as possible. Heavy items packed directly above the axle will not affect the trailer tongue weight. See the section on *Teardrop Tips* for more information on weight distribution.

Trailers often ride rougher than your car or tow vehicle. Items may bounce or shift during travel. Objects rubbing together may cause wear spots or scratches. Placing pieces of cloth between dishes or pans will reduce wear. Also, it helps to pack items tightly. If objects can't move, they can't wear. Pack the heavier items to the bottom. Avoid using glass containers. **Camp-Inn**s have a "frying pan slot" in the under-counter storage compartment. This "frying pan slot" gives you a place to store heavy fry pans, keeping them from beating against other dishes.

Items packed in the duffel shelf may not stay put if you hit bumps or brake hard. It is best to place your duffels on the bed during travel.

During travel, clothes, on coat hangers, can be hung from the coat hooks inside the cabin. When you stop for the night, these clothes can be laid on the car seat to get them out of the way.

Make sure all doors and hatch are latched and locked during travel.

Setting Up Your Camp-Inn™

When you arrive at your campsite, select a suitable spot for setting up your trailer. You should pick an area that is fairly level. Care should be taken to ensure that there is adequate clearance for opening of side doors and the rear hatch. Keep in mind that the area behind the trailer will be your kitchen/dining area.

Wheel Chock Blocks - Before unhitching your trailer, even on level ground, place chock blocks ahead and behind both trailer wheels to prevent the trailer from rolling.

If you have the parking brake option, it is recommended that you still use the chock blocks, in case the brake lever is accidentally released.

If the camping area is extremely sloped, it is recommended to leave the trailer hitched to the tow vehicle for stability. An extremely sloped area would be any area that slopes more than 8 inches in the length of the trailer or slopes more than 6 inches from side to side.

Leveling - If the ground in the campsite is not level, the trailer should be leveled, side-to-side. Adjust the leveling jack on the "Low" side first. When the trailer is level side-to-side, lower the leveling jack on the "High" side until it touches the ground.

<u>NEVER</u> use the leveling jacks to lift BOTH wheels off the ground at the same time, while the trailer is in use.

(TIP-1) (no pun intended) A food can, laid on it's side on the countertop, will indicate level side to side. The can will roll toward the low side. Also, small adhesive backed levels are available at many hardware stores and may be attached to the trailer cabinets or body for reference.

(TIP-2) A ½" drive ratchet wrench will give you more leverage for cranking the leveling jacks and will be easier than using the provided jack handle. You may also use a cordless drill with a socket attachment.

After unhitching the trailer from the tow vehicle, use the tongue jack to raise or lower the tongue, leveling the trailer, front to back.

You may leave the trailer hitched to the tow vehicle and still use the tongue jack to slightly raise the head of the bed for stability and to reduce movement. *Remember to fold jack before driving.*

Locks

When locking the doors and hatch, you may need to move the handle slightly up and down to allow the locking mechanism to properly engage. Do not force the lock, as this may damage the locking mechanism or break off the key. If the lock does not turn freely even when wiggling the handle, it may need to be lubricated.

To prevent sticking, door locks and hatch locks should be lubricated regularly with a silicone spray lubricant. Silicone lubricants work better than graphite, since the silicone helps repel water. After severe weather, you should lubricate the locks to displace any water that may have entered them.

Main Door Locks:
The main doors may be locked from both the inside and the outside. The inside and outside locks are <u>independent</u> from each other.

If the inside door latch is locked, you will not be able to unlock it from the outside.
For this reason, do not leave small children alone inside the trailer as they may accidentally lock the doors and be unable to understand how to unlock them. *(this has happened)*
Also, when packing, make sure there are no boxes or other items that may accidentally bump the latching lever and lock it. *(this has happened)*
If this happens and a window is unlocked, open the window and push in the screen. You can get a tool to reinstall the window screen at a hardware store.
If both inside latches and both windows are locked, the only way to open the door is to remove the hinge. NOTE: You must re-seal the screws with urethane caulk. Apply a small dab in the hole before replacing screw.

If the outside door lock is locked, you will not be able to unlock it from the inside.
When you open the door, do not lock the outside lock. If you are inside the trailer and the wind blows the door shut with sufficient force, it may engage the latch. *(this has happened)* If this happens open the window and push out the screen. Hopefully you have the key to unlock the door.

<u>Rules to Lock By:</u>

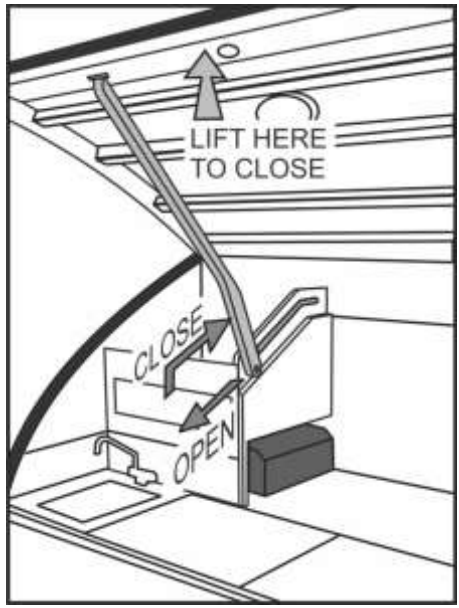
If you are outside: Make sure BOTH inside latches are un-locked.

If you are inside: Make sure BOTH outside locks are un-locked.

Lock the hatch and doors during travel.

Kitchen

Hatch



To open the rear hatch

Unlock the handle and rotate it vertically. Slowly raise the hatch. If the hatch gives any resistance, look under it to make sure the prop rod is sliding smoothly. On new trailers, you may need to assist the prop rod, with one hand, sliding it along the groove on the bottom end. Make sure that the prop rod slide is fully moved to the bottom end of the groove before releasing the hatch.

To close the rear hatch

When closing the hatch, rotate the handle *vertically* to pull back the locking bars.

Slowly raise the hatch with one hand lifting in the center of the hatch. Using your other hand, slide the bottom end of the prop rod upward, along the groove. As you guide the bottom end of the prop rod toward the top of the groove, slowly lower the hatch. The hatch should close smoothly without binding. If you feel resistance, do not force the hatch closed. Check for items that are too tall and may be hitting the hatch, ribs or prop rod. Check that the prop rod is sliding along the groove properly.

When new, the hinge may slide from side to side. If the hatch binds when almost closed, open hatch at least half way and then tap it sideways to center the hatch.

Close the hatch fully and rotate the handle *horizontally*, extending the locking bars, latching the hatch. Without rotating the handle, tug on the handle to ensure that both sides of the hatch are properly latched.

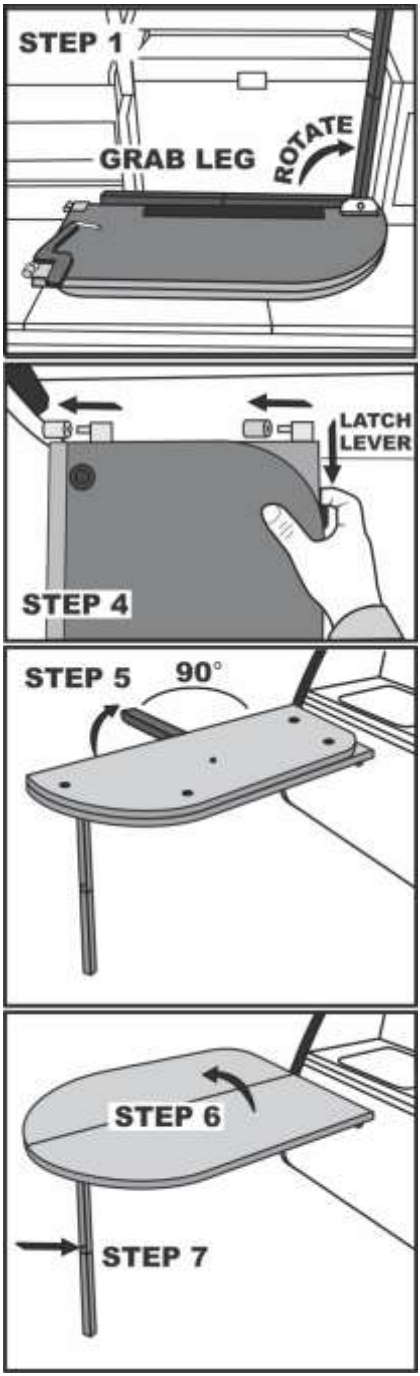
Hatch should be locked during travel.

Periodically clean out gutters along side gaskets and along hinge.

Table -

The kitchen table is easily set up at the campsite or roadside stop. Fully read through this step-by-step procedure before attempting to set the table up for the first time.

1. **Before** removing the table from the stowed position, grab table leg and pivot, to the vertical position.
2. In the vertical position, make sure leg snaps down into the stops.
3. Remove the folded table from the countertop and rotate it so the leg is pointing down and the hinge end is lined up with the trailer hinge.
4. Pull the latch lever back and slide the hinge halves together.
5. Rotate the brace on the bottom of the table so it is at right angle to the table.
6. Open the tabletop.
7. Level the table by pushing the button on the leg and moving lower leg section in or out of the upper section.
8. To stow the table, reverse the order of these steps.
9. When stowing the table, slide the guide pins into the holes in the cabinets.



Side Table - The Side Table/Cooler stand sets up in a similar manner and stows on top of the cooler with the fire extinguisher away from you.

Stove - The **Camp-Inn™** stove gives you a two-burner stove with a propane tank mounted on the trailer tongue. The stove slides under the left cabinet during travel or when not needed. When needed, the stove slides into the cooler storage area.

Using the kitchen stove

To use the stove, it must first be slid out of its storage area.

1. Grasp the elbow, on the front right corner of the stove, and slide the stove fully to the right. The entire stove should be out from under the cabinet. *It will not be centered in the alcove.*
2. Make sure that both burner valves are in the OFF position.
3. Turn ON the propane tank at the front of the trailer.
4. Light a match or lighter and hold it near the burner.
5. Slowly open the burner valve until the burner lights.
6. ***Do not*** leave the stove unattended when lit.
7. If the flame burns yellow, or soots the bottom of pans, adjust the air mixture screws on the sides of the valves to make the flame burn blue with slight yellow or red tips.

Stowing the kitchen stove

To safely stow the kitchen stove, follow these steps:

1. ***Never*** slide the stove under the cabinet when burners are lit.
2. Turn off burners and allow the stove to cool.
3. Clean the stove with mild soap and water.
4. Turn **off** the propane tank at the front of the trailer.
5. Grasp the elbow at the right of the stove and slide the stove fully to the left under the cabinet.
6. If you do not have a cooler, fill the cooler storage area with the side table or other gear to prevent the stove sliding out.

During the first use, the paint will burn off some of the burner and grate. You may repaint it with a high temperature paint, like barbecue grill paint, or leave it unpainted.

Because the stove has high output burners, it may be necessary to use a "flame tamer" or "simmer ring" to be able to simmer or limit heat. *Flame tamers and simmer rings are available at sporting goods stores, cooking stores, or online.*

Refilling LP (Liquefied Propane) Tank:

The propane tank should be removed from the trailer for refilling. Make sure the tank valve is shut off before unhooking. When reconnecting the tank, check for leaks with a soap and water solution on the joints.
The tank is equipped with an OPD (Overfill Prevention Device).

Where to find propane refilling stations while on the road:

• Truck stops	• RV Dealerships	• Private Campgrounds
• Hardware Stores	• Farmer Co-Ops	• U-Haul™ store

The tank mount bracket is sized to also fit a 20 lb. propane tank *(size on most BBQ grills)*. In some situations you may want to use a 20 lb. tank.

- For cold weather, when running the furnace for extended periods.
- Extended trips to remote areas.
- 20 lb. tanks can be exchanged rather than refilling.

Keep in mind that exchanging is usually more expensive than refilling.

Checking Propane Tank Level:

To check the propane tank level with the LP Gas Meter:

1. Run the stove or furnace for at least 5 minutes.
2. While running stove or furnace, Check Gas Meter.
3. Read the scale based on the ambient temperature.
   Green – Plenty of fuel
   Yellow – Fuel level low
   Red – Empty or almost empty

To check the level of the tank without a LP Gas Meter:

1. Unhook the propane tank.
2. On the collar, look for the Tare Weight. (*example* TW 13.4) *This is the weight of the empty tank.*
3. Weigh the tank of propane on a scale. (*example* 18 lbs.) *A Fish scale works well and is portable and compact.*
4. Subtract the measured weight from the Tare Weight. Result is the weight of propane in the tank. (18 – 13.4 = 4.6 lbs of propane)
5. The small **Camp-Inn**™ tank, when full, will hold about 9-10 lbs of propane. *(example tank above is about 1/2 full)*
6. A 20 lb. tank will only hold about 16-17 lbs. of propane.*

*Propane tanks are filled only 80-85% of their rated capacity. This allows a head space for generation of the gaseous form of propane.

Weigh your tank before "topping off" and let the filling attendant know about how much you will need. This avoids the attendant telling you that your tank is broken because it won't take the full amount of propane.

Reserve Propane Adapter:

Your Camp-Inn trailer is supplied with a reserve propane adapter. This adapter allows you to use a disposable 1 lb. propane tank, if you run out of propane in the trailer's main tank.

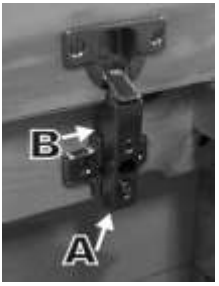
To INSTALL the Reserve Propane Adapter:

1. Turn off the stove and furnace and extinguish any nearby cigarettes or flames.
2. Wear gloves when installing and removing the Reserve Propane Adapter. **
3. Disconnect the propane hose from the trailer's main propane tank.
4. Install the Reserve Propane Adapter to the end of the propane hose.
5. While holding the **ADAPTER** FIRMLY with one hand, screw the disposable 1 lb. propane tank onto the adapter with the other hand.**
6. Do not over-tighten the disposable propane tank.
7. Position the propane tank so it is upright or upright at an angle. DO NOT place the tank horizontal or with the top downward.

To REMOVE the Reserve Propane Adapter, hold the **ADAPTER** FIRMLY with one hand and unscrew the disposable 1 lb. propane tank with the other hand.** Then remove the Adapter from the propane hose.

** *The Adapter attaches with left-hand threads to the hose, and right-hand threads to the disposable tank. Tightening the tank, without firmly holding the Adapter, may loosen the hose connection. If this happens, propane may vent from the loose connection. Venting propane is VERY COLD and will make the Adapter very cold. If this happens, you may get frostbite if you touch the Adapter or other connections with bare hands.*

Under Counter Storage Lids:



The under counter storage lids can be removed for cleaning. Open the lid fully. Operate the release at the bottom of the hinge at "A" and pull outward on the bottom of the hinge.

To reinstall, hook the hinge first at "B" then push the bottom of the hinge "A" inward until it locks.

The lids are adjusted to fit one side and thus are not interchangeable.

Sink / Water System:

If your **Camp-Inn™** has a water system, you can operate the sink either from the onboard water tank or connected to city water. Your trailer comes with an eight-gallon fresh water tank, an electric, on demand, water pump and an eight gallon "gray" (drain) water tank.

Drain – Flush – and **Fill** the freshwater tank before each use.

Filling the fresh water tank

- Unlock and open the water access door on the side of the trailer.
- Flip up the blue tab on the water tank fill cap.
- Unscrew the cap.
- Fill the tank from a hose. You can fill the tank from a jug, pitcher or bucket but you may need a funnel.
- The tank has a vent line that comes out on the underside of the trailer. When water flows as a continuous stream out of the vent line, the tank is full.
- If you attempt to fill too quickly, the water may overflow, from the water fill, before the tank is full.
- *You can't fill the freshwater tank directly from the city water quick connect.*

Water Tank Meter–

If your trailer has a water tank meter, you can easily monitor the level of the fresh water and gray water tank.

Pushing the "**FRESH**" button will display the current level of the fresh water tank.

F (full), 2/3, 1/3, or E (empty)
These levels are only approximate.

Pushing the "**WASTE**" button will display the current level of the gray water tank.

Pushing the "**BATTERY**" button will display the approximate charge condition of the battery. Use the **Battery Scale**: **C, G, F, L**.

C (charging), G (good), F (fair), or L (low).

NOTE: The F, 2/3, 1/3, E scale is the WATER scale ONLY.

Switching ON the Water System- The pump on the freshwater system is activated by a switch .. The switch is located in the kitchen on the right side, near the AC and DC outlets. The switch is lighted in the ON position.

If you will not be using the water for a while, turn the pump switch OFF. A slightly dripping faucet may drain the freshwater tank in only a couple hours. Turning OFF the switch will prevent any dripping as well as prevent unnecessary pump cycling.

When the fresh water tank is empty, the pump will continue to run, even if the faucet is turned OFF. Turn OFF the **pump switch** when the tank is empty. Running the pump for a few minutes without water will not hurt the pump. Extended running without water may overheat pump motor.

Do not store items in front of the switch during travel. Items may accidentally activate the switch if items shift or bounce.

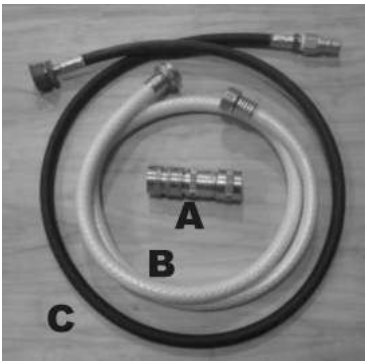
Cleaning the sink trap- The sink trap and drain are best kept clean through regular preventative maintenance. If you use a liberal amount of soap when washing dishes, that will help keep grease from clogging the trap and gray water tank.

If the sink seems to be draining slower, try the following:

1. Check that the gray water tank is not full.
2. Pour a large kettle of boiling water down the sink drain.
3. Put 2 tablespoons of RV tank enzymes in the drain and add about one cup of water. Let stand for 24 hrs. Then repeat #2.
4. The tank vent line may be clogged.
5. If all else fails, the trap may be removed for cleaning. You must remove the left side access panel under the sink and the false floor below the sink. Remove the screw holding the sink drain. Cut the zip tye on the bottom of the trap to disconnect. The zip tye will need to be replaced when re-assembling.

Water System Hookup Kit-

A - City water quick connect and pressure regulator.
B - Four feet long water hose.
C - LP accessory gas line.



Using the City Water Hookup – Install the city water quick connect and pressure regulator (**A**) on the male end of a regular garden hose. Attach the female end of the garden hose to the spigot at the campsite. To attach the quick connect to the trailer, pull back on the outer sleeve, push the quick connect onto the male connector on the trailer, then release the outer sleeve. Tug on the connection to make sure it is secure before turning on the water spigot.

Using the Water Outlet – The water outlet will operate either from the onboard water tank, or from city water, when it is hooked up. To operate the water outlet from the onboard water tank, turn on the water pump switch *(see Switching on the Water System).*
When you are connected to city water, the pump is bypassed and the water outlet will use city water only.

The four foot long hose (**B**) has been supplied for connection to the water outlet. Use this hose to fill buckets, add a sprayer, fill the freshwater tank, or connect to other water accessories.
If you want to fill the onboard freshwater tank when you are connected to city water, connect your four feet long hose to the water outlet and use the hose to fill the tank.

Draining the fresh water tank- The fresh water tank is on the sink side of the trailer. Simply remove the cap, on the drain spout, at the bottom rear of the tank. To more fully drain the tank, raise the tongue of the trailer. Remember to reinstall the cap before you fill the fresh water tank. The tank should be filled with water during storage in non-freezing weather.

The gray water tank- The sink drains into a "gray water" holding tank. The gray water tank is the same size as the fresh water tank. About the time that your fresh water tank is empty, your gray water tank will be full. If the gray water tank is over filled, wastewater will flow out of the tank's vent, under the trailer.

To drain the gray water tank, remove the cap from the gray water tank drain valve, then open the drain valve. The valve handle is on the underside of the valve. To more fully drain the tank, raise the tongue of the trailer.

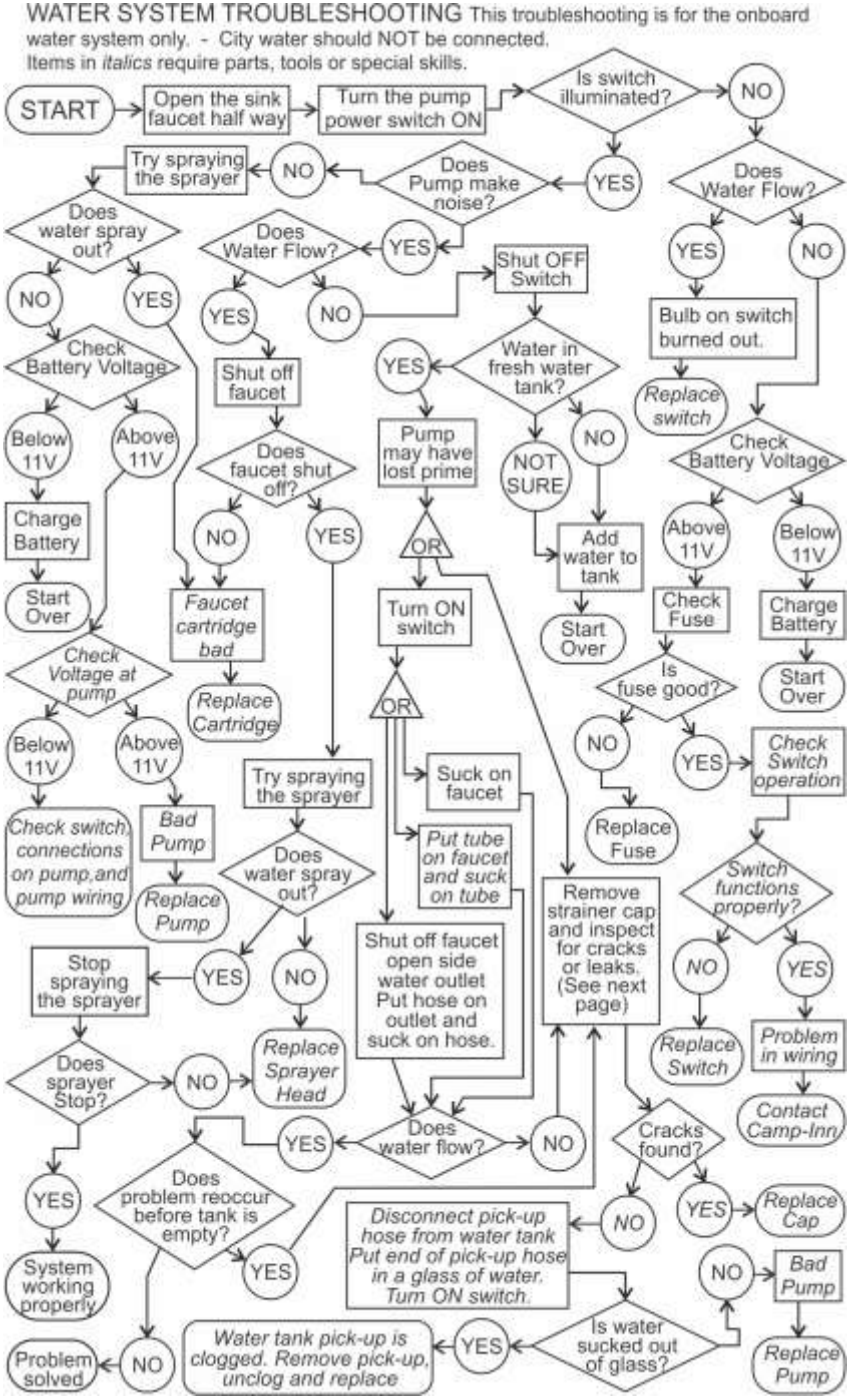
You may want to attach a short hose to the drain valve to help direct the flow away from the camper or down a sewer drain.
***NEVER* use a gray water hose for filling the fresh water tank.**
***NEVER* use the fresh water hose for draining the gray water tank.**

In a campsite with sewer hook-up, you may leave the gray water drain hose installed at all times.

Remember to close the valve and reinstall the cap when you are finished draining the gray water tank,

During warmer weather, you may want to add a small amount of RV holding tank enzymes or chemicals to control the odor. Add the enzymes or chemicals by pouring them in the sink drain and flushing them down with some water. These chemicals are available at all RV dealerships.

If the drain valve clogs due to particles in the wastewater, you may unscrew the drain valve to clean it. This will also drain the tank more quickly and completely.


WATER SYSTEM TROUBLESHOOTING This troubleshooting is for the onboard water system only. - City water should NOT be connected.
Items in *italics* require parts, tools or special skills.
START
Open the sink faucet half way
Turn the pump power switch ON
Is switch illuminated?
NO
YES
Does Pump make noise?
NO
Try spraying the sprayer
Does water spray out?
NO
YES
Check Battery Voltage
Below 11V
Above 11V
Charge Battery
Start Over
Check Voltage at pump
Below 11V
Above 11V
Check switch, connections on pump,and pump wiring
Bad Pump
Replace Pump
Does Water Flow?
YES
NO
Shut off faucet
Does faucet shut off?
NO
YES
Faucet cartridge bad
Replace Cartridge
Try spraying the sprayer
Does water spray out?
YES
NO
Stop spraying the sprayer
Does sprayer Stop?
NO
Replace Sprayer Head
YES
Does problem reoccur before tank is empty?
YES
NO
System working properly
Problem solved
Shut OFF Switch
Water in fresh water tank?
YES
NOT SURE
NO
Add water to tank
Start Over
Pump may have lost prime
OR
Turn ON switch
OR
Suck on faucet
Put tube on faucet and suck on tube
Shut off faucet open side water outlet Put hose on outlet and suck on hose.
Does water flow?
YES
NO
Remove strainer cap and inspect for cracks or leaks. (See next page)
Cracks found?
NO
YES
Replace Cap
Disconnect pick-up hose from water tank Put end of pick-up hose in a glass of water. Turn ON switch.
Is water sucked out of glass?
YES
NO
Bad Pump
Replace Pump
Water tank pick-up is clogged. Remove pick-up, unclog and replace
Does Water Flow?
YES
NO
Bulb on switch burned out.
Replace switch
Check Battery Voltage
Above 11V
Below 11V
Check Fuse
Charge Battery
Start Over
Is fuse good?
NO
YES
Replace Fuse
Check Switch operation
Switch functions properly?
NO
YES
Replace Switch
Problem in wiring
Contact Camp-Inn

Winterizing the water system-

- Before freezing weather, fully drain both the fresh water and gray water tanks.
- Turn on the pump switch and run the faucet until it starts bubbling air.
- Shut off pump switch.
- Reinstall the tank drain caps.
- Add at least two quarts of **RV (non-toxic) antifreeze** (usually pink) to the freshwater tank.
- Turn on the pump switch and run the faucet until antifreeze comes out of the faucet.
- Run at least two cups of anti-freeze into the sink drain to protect the trap and gray water tank.
- Burp the side water outlet until antifreeze comes out (turns pink).
- Spray the sprayer until antifreeze comes out (turns pink)..
- Turn off the pump switch.
- Unscrew the head of the sprayer and shake out remaining water.
- Leave the sprayer head off until warmer weather returns.

DE-Winterizing the water system-

Before using a water system that has been winterized, you should fully rinse the freshwater tank.

- Screw on the sprayer head if it was removed during winterizing.
- Fill the freshwater tank and drain it by removing the drain cap.
- Fill the freshwater tank again.
- Turn on the pump switch and run the faucet for at least 1 gallon of water.
- Run the sprayer for about one minute.
- Run the side water outlet for at least one quart of water.
- The water may still have a slight RV anti-freeze odor or taste, but RV anti-freeze is non-toxic.
- If you feel the odor or taste is still too strong, drain the tank again, refill, and run the faucet, sprayer and side outlet.

Sanitizing the fresh water tank-

If your water has a strange odor, color or taste:

- This process involves using bleach. Be careful to not spill or spray bleach or bleach/water onto clothing, skin or eyes. Refer to bleach container for safety precautions and what to do in case of spills or personal contact.
- Drain the fresh water and gray water tanks fully.
- Replace tank drain caps. (do not mix them up)
- Sanitize the fresh water tank by adding one (1) cup (8 oz.) of plain (unscented) chlorine bleach into the tank fill. (use funnel)
- Fill the tank, the rest of the way, with fresh water.
- While filling, run at least one quart of water out of the faucet.
- Also, run some water out of the sprayer and side water outlet. (do not get bleach/water on clothing, skin, or eyes)
- Fill tank until water runs out of the vent tube.
- Let stand for one hour.
- Drain the tank by running the faucet and allowing the bleach water to go down the sink drain. This will help clean out the gray water tank as well.
- Refill the freshwater tank with fresh water,
- Run at least one gallon of water out of the faucet, sprayer and side water outlet. (do not get on clothing, skin, or eyes)
- Drain the tank again by removing the drain cap.
- Replace cap and refill fresh water tank with fresh water.
- Run at least one gallon of water out of the faucet, sprayer and side water outlet.
- Top off tank. Fresh water is now ready to use.
- After this treatment, the water may have a slight chlorine taste and odor, but that will go away with time and is not harmful.
- After about 1 hour, remember to drain the gray water tank.

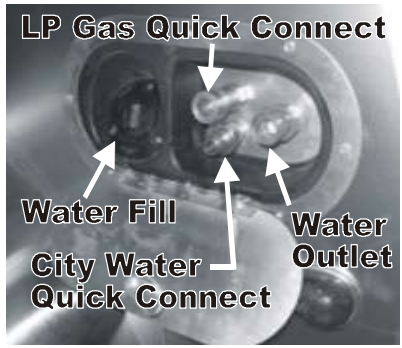
Calcium/Lime Treatment-

If the water you used has a high calcium or lime content it may foul the tank sensors and add scale to the faucet. Once a season, or more often as needed:

- Drain the fresh water and gray water tanks fully.
- Replace tank drain caps. (do not mix them up)
- Add two gallons of white vinegar to the fresh water tank.

- Fill the rest of the tank with water
- Run water out of the faucet, sprayer, and side water outlet.
- Let sit overnight.
- Run the water through the faucet and into the gray water tank.
- Let that sit over night.
- Drain the gray water tank.
- Refill both tanks with fresh water.
- Run water out of faucet, sprayer and side.
- Drain both tanks.
- You are now ready for storage, or refill tanks with fresh water for use.
- Repeat more often for harder water.

LP Gas Outlet



Using the LP Gas Outlet – The LP Gas Quick Connect allows you to use LP accessories such as barbecue grills, lanterns, or water heaters. A four feet long LP gas hose is provided for easy connection to your accessories. One end of the LP gas hose has a male quick connect for attaching to the trailer. The opposite end of the LP gas hose has a fitting like those on the disposable 1 lb. propane tanks. This hose can be attached to any LP accessory that normally uses the 1 lb. disposable tanks.

<u>ALWAYS</u> - turn off the main trailer LP tank before connecting or disconnecting the LP gas quick connect.

Connect the LP gas hose to your LP accessory BEFORE connecting to the trailer's LP gas quick connect.

Turn off your LP accessory and disconnect the trailer's LP gas quick connect BEFORE disconnecting the LP gas hose from your LP accessory.

You can use both the trailer's stove and the LP accessory at the same time.

Electrical

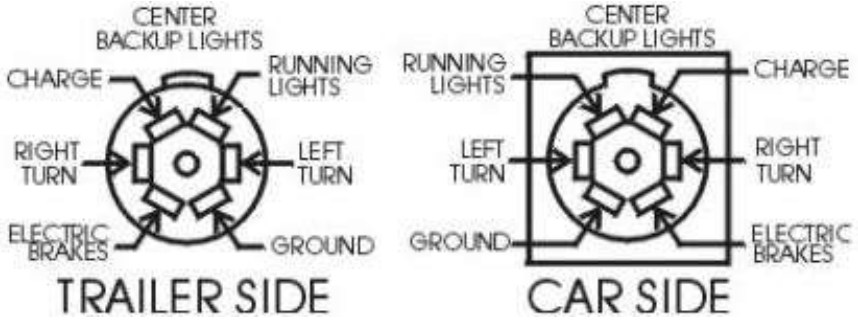
7-Prong Connector

The trailer connects to the tow vehicle with a 7 prong connector.

The connector has a raised rib along one side to orient the connector when mated. The cover or door on the tow vehicle side of the connector has a locking detent that engages with the raised rib to lock the connector when it is fully engaged.

Before mating, inspect both connectors for corrosion on the contacts. If light corrosion is present, plug and unplug the connector several times. Usually this is sufficient to self-clean the contacts. If the corrosion is more severe, you can scrape it with a tool or clean with a small piece of sandpaper. In the most severe cases, the connecter will need to be replaced.

To minimize corrosion and dirt fouling, the connector should be stored so it is not in contact with or near the ground.



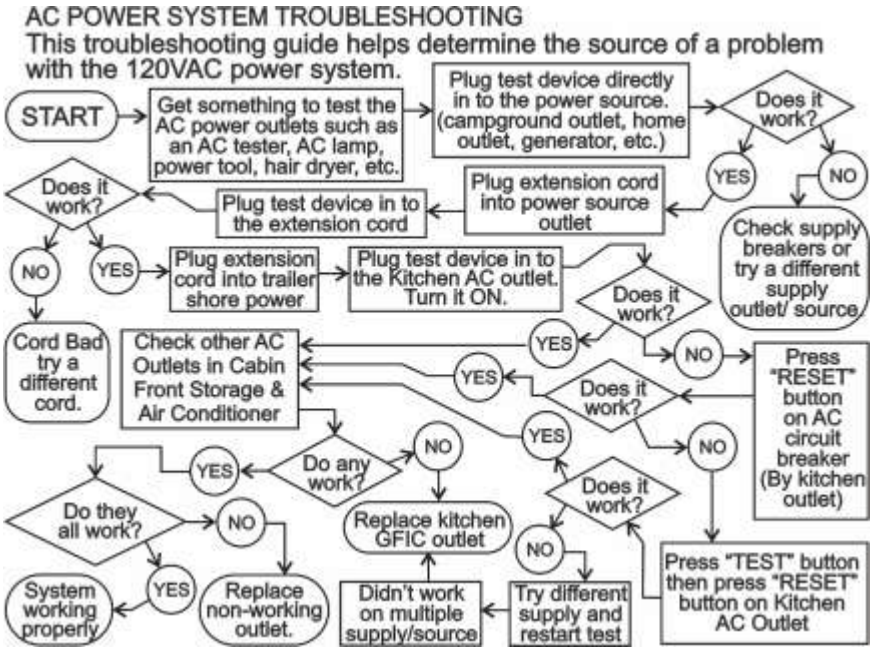
AC Power- 110-120VAC (Alternating Current)

**See Air Conditioner section for AC (air conditioner) info.

Shore Power- Below the right taillight, there is an AC input receptacle. Plug in an extension cord connected to any 110/120V AC source (at home or a campsite with hookup, or generator). While you are plugged in, you will have 110V AC power to AC receptacles in the kitchen, cabin, front storage and the one for the air conditioner.

If you are plugged in, but do not have 110V AC power at these receptacles, try pressing the "Reset" button on the GFCI (ground fault circuit interrupt) kitchen receptacle. If you still do not have AC power, check the source outlet for power. Try a different AC source outlet or a different circuit. If the source outlet is improperly wired, it may cause GFCI tripping, or GFCI may not operate, or GFCI may not "Reset."

AC Fuse/Breaker- The AC Circuit Breaker is located next to the GFCI outlet in the kitchen. The button in the center will pop out when tripped. Wait about 2 minutes then push the button to reset the breaker. If the button does not stay in or if it pops out again after a short time, there is still a short on the system. Identify the short and correct it before trying to use the AC power.



Operating Xenon Lights

The xenon lights (chrome, Ultra) have a dimmer and a three-position switch to toggle between white and red light. The red light will help keep your night vision by leaving your pupils dilated.
The xenon light can be turned off TWO ways:

1. Rotating the dimmer switch all the way down until it clicks.
2. Putting the red/white toggle switch in the middle position.

If the light fails to turn ON, try both switches. All the cabin lights are on the same fuse. If any one of the cabin lights work, the fuse is good.

Replacing Light Bulbs

Standard Kitchen/Cabin Lights - Remove the plastic lens on the light by squeezing it slightly. Remove the lights by pushing in and rotating. Replace with a bulb of the same number.

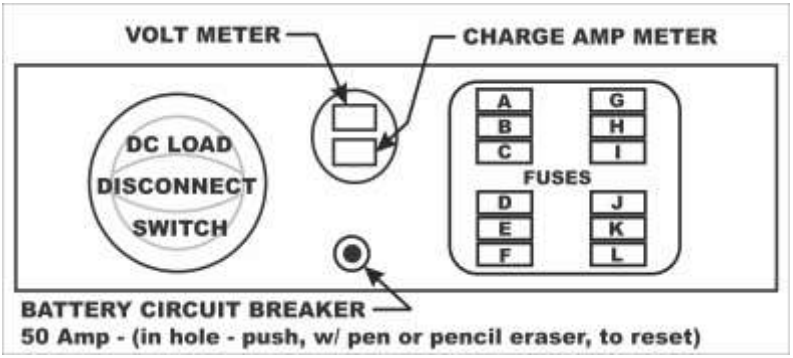
Xenon Lights **-** Remove the three screws holding the lens. Remove the lens carefully (it is glass). Pull the light bulb out. Replace the bulb with the same size and type. Use a clean cloth or paper towel to hold the new bulb when replacing. **Do not touch the new bulb with your fingers.** Oils on your hands will reduce the bulb life.

Tail Lights - Using a small screwdriver, gently pry the light module out of the black rubber trim ring. Unplug the connector from the back of the light module. Replace with a new light module. Carefully push the light module back into the rubber trim ring. (The bulb inside the module can not be replaced.)

Side Marker Lights- Remove the screw holding the colored lens. Push in and twist the bulb to remove. Install a new bulb with the same number. Replace lens.

Location	Incandescent	LED
Side Marker, Red (Aluminum Base)	#57	BA9s *
Side Marker, Amber (Aluminum Base)	#57	BA9s *
Side Marker, All (Rubber Base)	#67	
License Plate	#67	
Back-Up/Flood Light		Camp-Inn*
Tail Light	6” Oval Module*	
	Incandescent	Xenon
Kitch-Cabin Light White	#1141	10XE/12*
Kitch-Cabin Light Red		10XE/12R*
*LED & Xenon bulbs available from Camp-Inn Online Store		
Incandescent bulbs and 6” Oval Modules available at auto parts stores		

DC Fuses



- The fuse block is located behind an access cover on the right side, in the under counter storage box. Loosen the two screws on the corners of the access cover. Rotate the cover to remove it. There is a fuse diagram on the back of the cover. To prevent damage to wiring, accessories, or trailer, replace fuses with the same size and type.

Battery Circuit Breaker (50 Amp) - protects against a major short circuit. If the Battery Circuit Breaker trips, Reset it by pushing the button in the hole, using a pencil eraser, pen, or stick.

FUSES					
A	15A	Kitchen USB and Kitchen DC outlets Volt / Amp Meter	**G**	10A	Battery Charger GPS Tracker
B	15A	Cabin USB and Cabin DC outlets	**H**	10A	Solar Controller Solar Connector
C	15A	Front Storage USB and DC outlets	**I**	1A	Tri-Metric Battery Monitor
D	10A	Cabin Lights	**J**	10A	Water Pump Backup Light
E	10A	Fan*, Hatch Light	**K**	10A	TV, Radio
F	10A	Furnace	**L**	15A	Outside Right Rear DC outlet

*The Fan has two fuses. One on the fan itself and one in the fuse block.

The **Autowbrake** fuse is located on the underside of the Autowbrake controller box.

DC Load Disconnect Switch

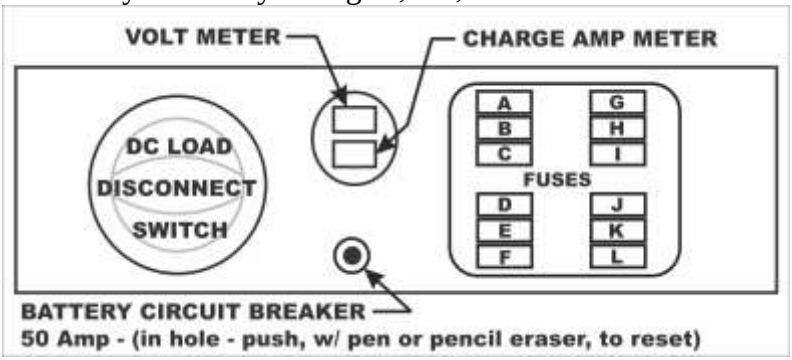
Located on the right side of the right, under-counter storage compartment is the DC Load Disconnect Switch. This switch disconnects all LOADS from the battery. If you are storing your trailer, just want to make sure everything is OFF, or minimize any drain on the battery, turn the DC Load Disconnect Switch to the OFF position.

In the OFF position, the battery is still connected to the tow vehicle charging circuit, on-board battery charger, solar charger, and Tri-Metric battery monitor.

Volt Meter / Charge Amp Meter

Located --- **-** next to the DC Load Disconnect Switch is a dual meter. The top meter shows the voltage of the battery. The bottom meter shows how many charging amps are being put into the battery. This meter will show charging Amps from the Onboard Charger, Solar Panel, or Tow Vehicle.

The Charge Amp Meter does not show the discharge or drain on the battery caused by the lights, fan, DC outlets etc...



Battery Meter – If your trailer has a Water Tank Meter, you can use it to quickly check the battery level.

Pushing the "BATTERY" button will display the approximate level of the battery:

C (charging), G (good), F (fair), or L (low).

(The **F, 2/3, 1/3, E** scale is for **water tanks!**)

BatteryCharging

If your **Camp-Inn™** is a Special, Classic or Ultra Model, it has it's own on-board battery and charger, and your trailer has been wired for charging by the tow vehicle. If you have solar panels, those will also recharge your battery. It is perfectly safe use the on-board charger, solar panels and tow vehicle charging simultaneously.

The length of time you can go between charging depends on how many of the lights you use and how long they are on. The roof fan, furnace fan, and other DC appliances plugged into DC Outlets or USB Outlets will use your on-board battery power.

If you are conservative, using the roof fan only when you are sleeping, and use lights sparingly, you can go several days on a charge. Heavier use will require more frequent recharging.

Charging from tow vehicle- If your tow vehicle is properly wired for it, you can recharge your trailer's battery any time the trailer's 7-prong electrical connector is connected to the tow vehicle and the tow vehicle's engine is running.

Some newer vehicles reduce the charging voltage to the point that it will not fully recharge the trailer's battery. You should recharge using the on-board charger any time your have shore power available.

On-Board Charger- Your **Camp-Inn™** is equipped with an onboard, automatic charger. To recharge your on-board battery:

Below the right taillight, there is an AC power 110V input receptacle (shore power). Plug in an extension cord connected to any 110/120V AC source (at home or a campsite with hookup). Your battery will start recharging immediately and should fully recharge within 8-10 hours.

The voltage shown on the voltage meter should never exceed 15.0V. If it exceeds 15.0 V, disconnect the AC supply and contact **Camp-Inn**™ .

If the voltage on the meter does not increase, you may need to press the "Reset" button on the ground fault receptacle in the kitchen for the charger to operate. Follow the Charger Troubleshooting Flow Chart for solving more charging problems.

The automatic charger allows you to leave your **Camp-Inn™** plugged in continuously without worrying about over charging.

The charger is located in the right side under-counter storage compartment. Looking inside the compartment, it is mounted on the wall to the rear of the trailer.

The charger has two LED Indicators to show the charge condition:

ON	OFF	Condition
Red	Green	Charger is in the "Soft Start" or "Bulk Stage" and the battery is being charged. If the red LED stays on for more than 24 hours refer to Problem 1 below.
Red & Green	None	Charger is in the "Absorption Stage" and delivering constant voltage to the battery. If the red 7 green lights stay on for more than 24 hours refer to Problem 2 below.
Green	Red	The charger has moved to the "Float Stage" and is topping off the charge to the battery and keeping the battery ready for use. If the green LED stays on when you battery is known to be low, refer to Problem 3 below.

Problem 1: Red LED stays on for more than 24 hrs.	One or more defective or damaged cells	Load test battery and replace if necessary.
	On-board DC systems are drawing more current than the charger can replace.	Turn off DC disconnect switch and charge for 24 hours.
Problem 2: Red & green LEDs stay on for more than 24 hrs.	On-board DC systems are drawing 1.5 -3.5 amps.	Turn off DC disconnect switch and charge for 24 hours.
	One or more defective or damaged cells	Load test battery and replace if necessary.
Problem 3: Green LED stays on when the battery is known to be low.	Open DC output fuse.	Replace fuse
	Battery terminals corroded	Clean battery terminals
	One or more defective or damaged cells	Load test battery and replace if necessary.

TriMetric Battery Monitor (TM-2030) option

The Tri-Metric battery monitor system allows more detailed monitoring of battery levels, battery use, and battery condition. The three primary displays are Volts, Amps, and % Full. Pressing the "Select" button cycles between the three displays. The fourth position turns off the display to conserve power.

The TriMetric remains active when the DC disconnect switch is turned off. It also remains active when the TriMetric display is turned off.

The TriMetric has to cycle through a couple discharge/recharge cycles before the % Full will be accurate.

For more information, refer to the TriMetric User Manual. Or, go to: www.bogartengineering.com.

CTEK Battery Charger/Controller:

The CTEK battery charger optimizes the recharging of your battery. It includes the functionality of a battery isolator and a solar controller. The CTEK automatically selects the best connected DC energy source (from tow vehicle or solar) for the purpose and switches between them to achieve high efficiency multi-stage charging.

The CTEK works with the new "Smart Alternators" on many modern vehicles. On newer vehicles, smart alternators run minimal charging in order to boost fuel economy. This "smart charging" doesn't effectively charge deep cycle batteries in travel trailers. The CTEK boosts the charging to the trailer's battery to overcome the drawbacks to a Smart Alternator.

LED lights on the CTEK indicate the functional state using alternator power (from tow vehicle) or solar panels.

Refer to CTEK manual for more information.

Roof-Mounted Solar Panels (560 models-only)

The roof-mounted solar panels add 126 watts of solar panel to the roof of a 560 Raindrop. The option includes a CTEK Battery Charger/Controller and an Exterior Solar Panel Connector.

See the "*CTEK*" and "*Exterior Solar Panel Connector*" sections for more information.

The roof-mounted solar panels will recharge your batteries any time the sun is out, whether you are parked or moving. They will even charge, at a reduced rate, on overcast days and even partial shade. For maximum charging, the trailer should be positioned in full sunlight.

Checking the Volt Meter/Charge Amp Meter (see charge meter section) will indicate the rate (amps) of charge as well as the current battery voltage. In bright sunlight, if the voltmeter reads higher, (above 13V) and the amp meter reads low, the battery is probably close to being fully charged. The TriMetric option will give you more accurate and complete information.

Clean the solar panels with mild soap and water.

Exterior Solar Panel Connector (option)

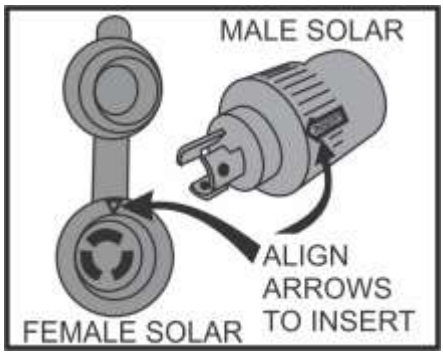
The solar hookup option allows you to connect **up to** a 120 watt, portable solar panel to recharge the battery on your trailer. Sizing the solar panel is important to ensure you have enough capacity for your intended usage.

Trailer DC Usage Examples (when not plugged into shore power)	**Solar Panel Size**
Storage (no lights, fan, etc...) Maintain battery charge.	15-20 Watts
Use lights for several hours and fan all night. OR - 5-8 hours of laptop computer use.	50-60 Watts
Use DC refrigerator OR – Use CPAP machine at night.	80-90 Watts
Use DC refrigerator AND – Use CPAP machine at night.	100-120 Watts

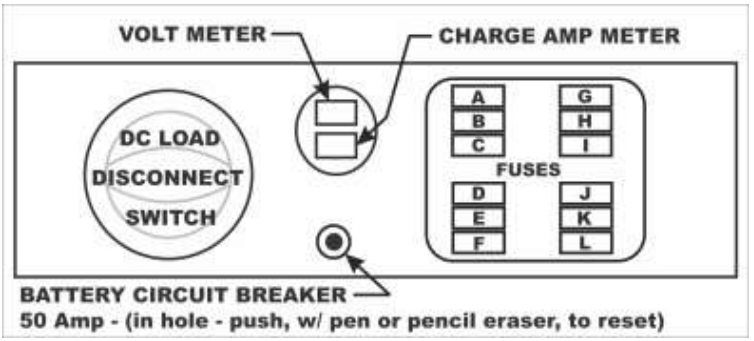
The Camp-Inn solar option has a 10 amp, built-in solar controller and a circuit that bypasses the controller. You may use a solar panel with its own solar controller or a solar panel without controller. Follow the chart below to wire your solar panel to the Male Solar Connector (provided). The outer cover of the Male Connector is flexible and must be pried off to make wiring connections. *These connections should be made by someone with the proper electrical training.*

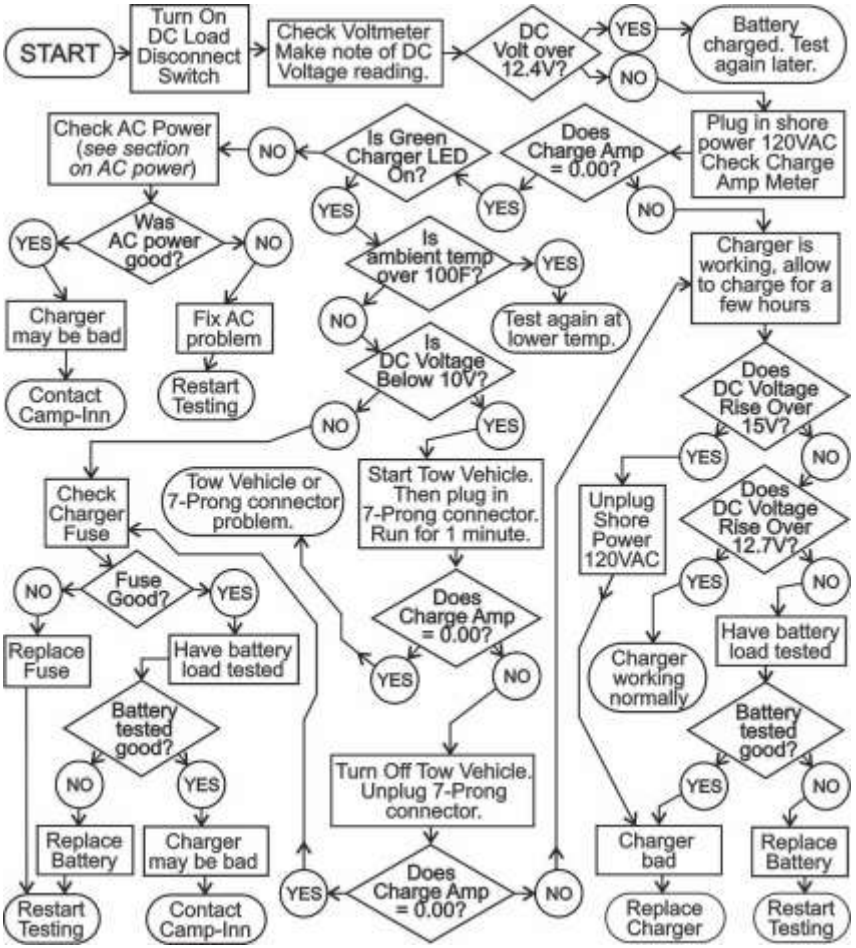
MALE SOLAR PANEL CONNECTOR WIRING			
Panel Configuration	**Pin 1**	**Pin 2**	**Pin 3**
Solar Panel with Controller	Panel Negative (-)	No Connection	Panel Positive (+)
Solar Panel without Controller	Panel Negative (-)	Panel Positive (+)	No Connection

The Female Solar Connector is located on the exterior right (curb) side of the trailer, near the rear. To mate connectors, align the arrows on the Male and Female connectors before pushing in. The male connector may be gently turned slightly clockwise, to lock the connectors together.



Charger Troubleshooting Flow Chart





Battery Life

Important information about battery charging to keep from killing your battery. Even if you abuse your batteries they will probably work just fine—for awhile. By knowing how to care for them you can extend their life to maximize their return to you.

1. Charging for sufficient time: After trips, you should charge the battery for at least 48 hours to bring the battery to 100%. *Charging with your tow vehicle will charge your battery to only about 80-90%, even on a 10 hour long drive.* If you do not fully charge the battery, you will lose some capacity. Charging to only 90% will, with time, lose the top 10%.
2. Charge at frequent intervals during storage: Either leave trailer plugged in, for automatic charging during storage, or plug in for 48 hours every two months.
3. Don't often let the battery become totally discharged: Totally discharged is 10.5V or below. Avoid discharging below 11.75V whenever possible.
4. Don't leave battery discharged for a long time: Leaving a battery discharged causes damage that reduces the capacity of the battery. Even short times (less than 24 hours) will cause small amounts of damage. Leaving a battery deeply discharged for a week may reduce its capacity by 25% or more.

Battery Circuit Breaker

If the Volt Meter is blank, even though the DC Load Disconnect Switch is turned ON, the Battery Circuit Breaker may have tripped. The Battery Circuit Breaker usually will only trip if something major happens, like the 7-Prong Connector wire is cut with something metal or the 7-Prong Connector coming unplugged and being dragged until most of it is worn away.

The Battery Circuit Breaker is located below the countertop in the right storage compartment. There is a small hole below the Volt Meter/Charge Amp Meter. To Reset the breaker, insert the eraser end of a pencil or the blunt end of a "stick" pen into the hole and push. (Note: pushing a non-tripped breaker will not hurt the breaker) If the breaker will not reset, or the Volt Meter is still blank, have battery checked. If the battery is OK, look for a shorted wire.

Battery Thermal Protection- Charging a battery at high ambient temperatures can damage the battery, reducing it's life. Your **Camp-Inn™** trailer is equipped with a thermal breaker that protects the battery from overheating during recharging.

At ambient temperatures above 100 degrees Fahrenheit, heavy recharging may overheat the battery. If the battery temperature rises above 120F, the thermal breaker will disconnect the charger. When the temperature returns below 120F, the thermal breaker will automatically reset and charging will resume.

A battery that is going bad may overheat, during recharging, even at lower ambient temperatures. In this case, the thermal breaker will prevent run-away overheating.

Battery Isolator- If the trailer's 7-prong electrical connector is connected to the tow vehicle and the tow vehicle's engine is NOT running, the trailer's cabin lights and accessories may drain the tow vehicle's battery. To prevent discharging the tow vehicle's battery you must either disconnect the trailer's 7-prong electrical connector or use a battery isolator.

A battery isolator electrically disconnects trailer and tow vehicle any time the tow vehicle's engine is shut off. If you did not get the Battery Isolator Option, you should consider installing a battery isolator in your tow vehicle. Check with a local mechanic or RV dealer to have one installed.

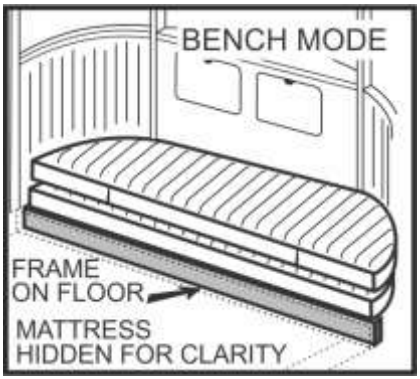
Battery Replacement

If the battery does not hold a charge, it may need to be replaced. The battery is located behind an access cover on the right side, in the under counter storage box. Remove the four screws on the sides of the access panel. The battery should only be replaced with a battery of the same size and type. Contact Camp-Inn, for more information, if you want to change battery types or sizes.
Be sure to mark the polarity of the wires before you remove them and install the wires to the correct polarity on the new battery.
RED wire should connect to the battery's positive (+) post.
BLACK wire should connect to the battery's negative (-) post.

Raindrop™ Couch / Bunk Bed

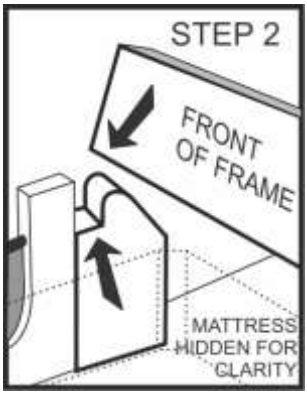
The **Raindrop**™ Models have a bench that converts into a couch and a set of bunk beds. Following are instructions on how to convert from one into another:

Bench Mode: The frame is folded and placed on the floor as far forward as possible. This creates a raised platform in the front of the cabin. Both cushions may be placed on the frame to make a seating area.



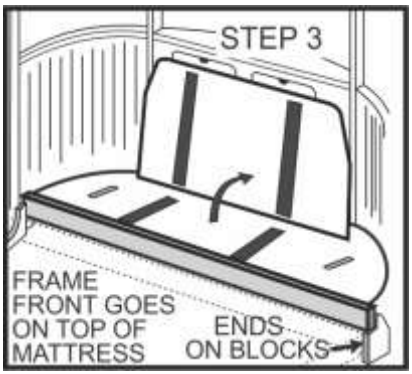
If only one cushion is used, it will lay almost flush with the mattress and will extend the length of the bed for taller people.

Converting Bench to Couch:



For more comfortable semi-reclined seating….

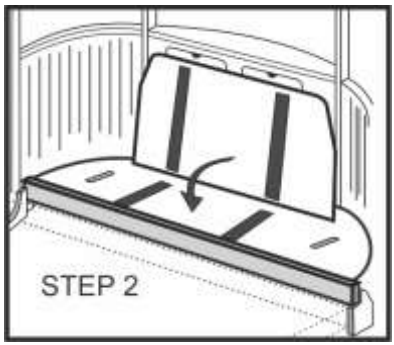
1. Move all the cushions out of the way.
2. Lifting the frame, pull the frame toward you until it can be dropped onto the notched blocks, near the doors.
3. Lift the backrest against the front wall.
4. Put the solid cushion on the seat.
5. Put the cushion with "wings" against the backrest.
6. To convert back to a bench, reverse steps.

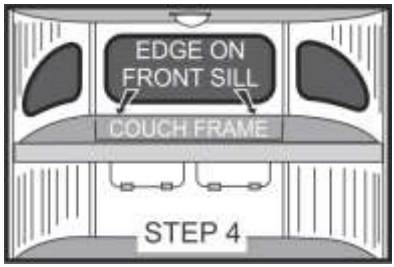


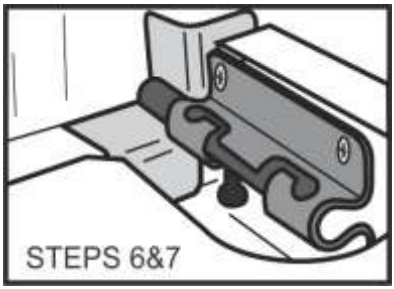
Raindrop™ Couch / Bunk Bed (continued)

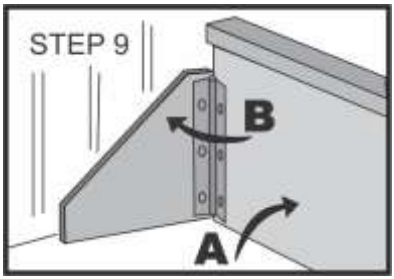
Converting Bench to Bunk Beds: To make a set of bunk beds for smaller children. The beds are about 54" long.

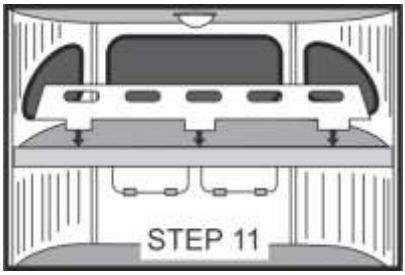
1. Move all the cushions out of the way.
2. Fold the back rest flat onto the frame seat.
3. Kneeling on the bed, grab the frame by the two hand holes.
4. Lift the frame up and place the far edge of the frame onto the front window sill.
5. Lift the side of the frame closest to you, up, higher than the window sills.
6. Extend the two bolt latches outward and make sure they lock.
7. Lower the frame until the bolt latches rest on the window sills.
8. Raise the headboard, that is attached to the floor.
9. Swing the two wings on the ends of the headboard outward until they contact the walls.
10. Put one cushion on the upper bed and one on the lower bed.
11. The upper bunk railing is added by dropping the tabs on the railing into the slots in the front of the frame.
12. To convert back to a bench, simply reverse the steps.











Alcan Cover

The Alcan cover (front padded bra) is good for preventing stone damage to the front of the trailer or may be added later to cover damage. Once installed, it is usually left in place. The cover will trap moisture and cause the aluminum beneath it to tarnish. The tarnish will actually slow the rate of corrosion.

If you travel in areas with road salt or ocean spray, you will want to wash under the Alcan cover as soon as possible to minimize corrosion.

To clean under the Alcan Cover:

- Unhook the elastic under the trailer.
- Lift up the flaps to wash underneath.
- Dry or allow to air dry fully before re-hooking elastics.
- The Alcan cover may be removed by sliding the top sideways out of the rail at the top. *(it does not need to be removed for normal cleaning)*
- Under the Alcan Cover is an ideal place to test any aluminum cleaners. After testing, rinse area and let completely dry before using on other areas of the trailer.

Receiver Hitch Option

If your **Camp-Inn™** is equipped with a receiver hitch, you can use it to haul bicycles. The receiver hitch has a **150 lb. load limit** (bikes and bike carrier weight combined). It is designed and intended only for a two bike carrier. It has not been designed or tested for towing a second trailer or using any other receiver type cargo carrier. Exceeding the load limit of the receiver hitch will reduce tongue weight, and may create a hazardous towing situation.

Windscreens Option

The windscreens in the kitchen snap into place. They may be rolled up or fully removed when not needed.
Roll the windscreens inward so they do not interfere with closing the hatch. When using the Velcro tie-backs, bias them toward the inside of the trailer. If they are biased to the outside, they may interfere with the hatch seal.

Furnace

WHAT TO DO IF YOU SMELL GAS

- **Evacuate all persons from the vehicle.**
- **Shut off the gas supply at the propane tank.**
- **Do not touch any electrical switch, or use any phone or radio in the vehicle.**
- **Open the main doors to ventilate the cabin area.**
- **Contact the nearest gas supplier or qualified service technician for repairs.**
- **Do not turn on the gas supply until the leak(s) has been repaired.**

WARNING! Do not install screens over the exhaust vent for any reason. Screens will become restricted and cause unsafe furnace operation. Accessories are being marketed for RV products which we do not recommend. For your safety, only factory authorized parts are to be used on your furnace.

WARNING: The air returns are inside the top of the front storage box. Do not fill front storage box so full that air returns are blocked.

To operate the furnace:

1. **STOP!** Read the safety information on the label in the front storage box of your trailer.
2. The appliance is equipped with an ignition device which automatically lights the burner. Do **not** try to light the burner by hand.
3. Turn propane tank shut-off valve to "ON" or "Open".
4. Set thermostat to desired setting. The fan should start.
5. If the fan does not start, try a higher thermostat setting, verify that the electrical power is ON, and check the furnace fuse.
6. If you are camping at altitudes above 4000 ft, you may need to switch the Altitude Compensator to the HI setting.
7. The furnace will try to ignite 3 times. If it does not ignite, the furnace will "lock-out".
8. If the furnace should "lock-out," fan will go off within about 2-3 minutes and remain off.
9. To reset the unit, turn the thermostat off, wait until the fan turns off. Verify that there is propane in the propane tank and that the tank valve is on.(** next page) Then, reset thermostat to desired setting.
10. If the appliance will not operate, after three "reset" attempts call **Camp-Inn**™.
11. To turn off the furnace, set the thermostat to the OFF position. It will run through a "cool down" cycle before stopping the fan.

Furnace Altitude Compensator

The Altitude Compensator boosts the voltage going to the furnace making the furnace fan turn faster, compensating for the thinner air at higher altitudes.

The Altitude Compensator may be set on HIGH at lower altitudes to boost the amount of warm air being blown into the cabin, but due to the small size of the cabin, this is usually not necessary.

At lower altitudes, below 4000 ft. in elevation, you should run the furnace with the Altitude Compensator switch set in the LOW speed position.

At higher altitudes, above 4000 ft. try the furnace first with the Altitude Compensator switch set in the LOW speed position.

IF the furnace shuts down after about **30-45 seconds**:

- Turn OFF the thermostat.
- Switch the Altitude Compensator switch to the HIGH position.
- Turn ON the thermostat and set to the desired temperature.

If the furnace again shuts down after 30-45 seconds, with the Altitude Compensator switch at the HI speed position, there are a couple possible reasons:

- You are at too high an elevation for the furnace to operate, even with the boost.
- There is another failure in the furnace. – Contact Camp-Inn

If the furnace runs for **1-2 minutes** and then shuts down, switching the Altitude Compensator to HIGH, - WILL NOT HELP! If the furnace runs for **1-2 minutes** and then shuts down, it is because the burner did not ignite. This can be for a couple of reasons:

- The propane is turned off. (turn on the propane)
- You are out of propane. (fill tank)
- There is air in the propane lines. (turn off the thermostat and turn it on again to flush out lines. If after the third attempt, the furnace still does not ignite, there is probably another problem.)

- You are at too high an elevation for the burner to ignite properly. (move to lower altitude)

If none of the above fixes the problem, there may be another failure in the furnace. (have furnace checked by trained RV Technician)

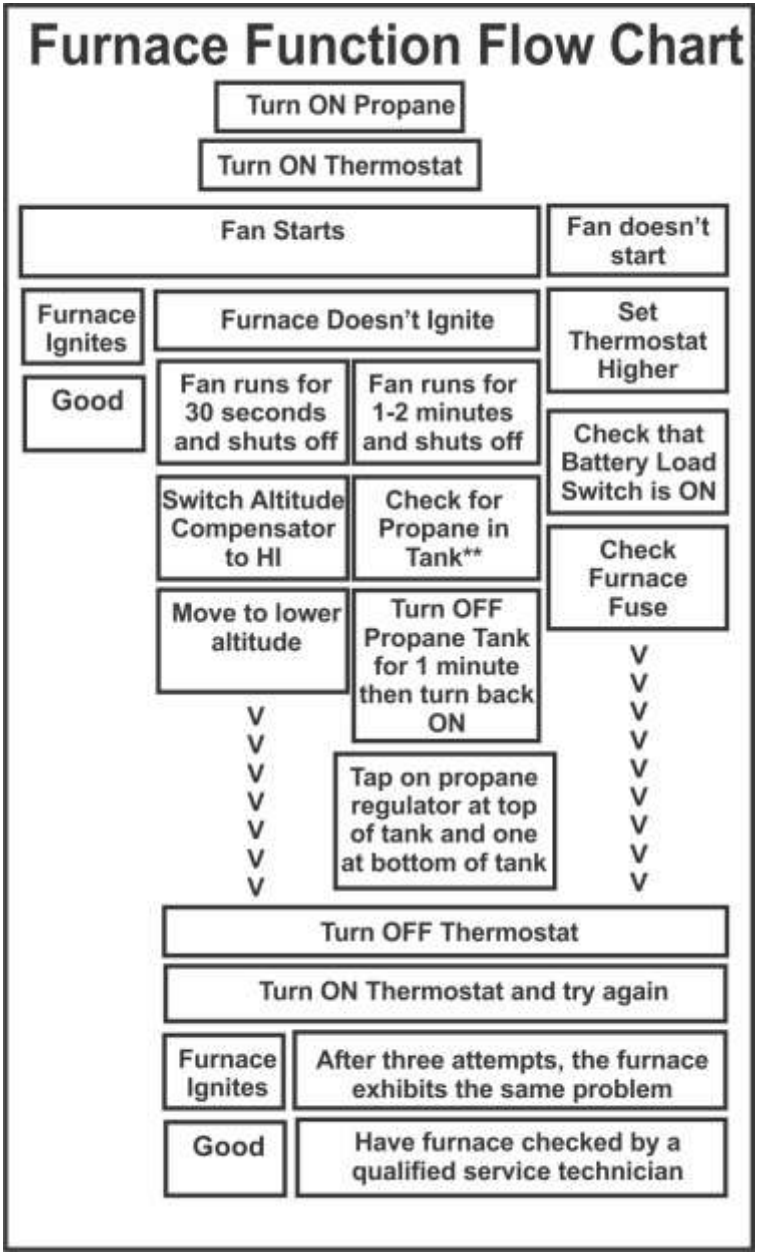
If the furnace does ignite, there may still be problems at higher elevations.

- As the altitude increases, the air is thinner and has less oxygen. This causes the flame to burn "rich" (not enough oxygen to burn the all of the propane *(LP)*).
- A "rich" burning flame will create more soot. This may show up as a blackened exhaust area on the side of the trailer.
- Excess soot may foul the igniter. (the furnace must be removed from the trailer to clean the igniter.)
- Running the furnace at lower altitudes will help to burn off some accumulated soot and may help to keep the igniter cleaner and prevent fouling of the igniter.
- *If the igniter is fouled, the furnace will not ignite even at lower altitudes, until the igniter has been cleaned.*

- If the furnace will be used almost exclusively at higher altitudes, smaller orifices may be ordered from Suburban furnace and installed by a trained RV Technician to adjust the air/fuel mixture to make it more "lean".

- If you put in a "lean" orifice, the furnace may not ignite or burn properly at lower altitudes.

- There will be an altitude where even a "lean" orifice and the Altitude Compensator set to HIGH will cease to function. This altitude is unknown and has not been tested and will vary from trailer to trailer.



** If the kitchen stove operates normally, with both burners lit, for more than one minute, the propane tank valve is ON and there is sufficient propane to light the furnace.

Air Conditioner

Because of the small volume of the **Camp-Inn**™ cabin, it is recommended that you run the air conditioner on the lower settings. Running your air conditioner on higher settings will cause more rapid cycling and will not be as effective at removing the humidity from the cabin air. If the air conditioner cycles excessively, even on the lower setting, try opening the side windows a little bit.

As the outside temperature increases, an air conditioner will decrease in efficiency. Direct sunlight will also increase the load on the air conditioner and decrease efficiency. At higher temperatures, and in full sunlight the air conditioner efficiency may decrease to the point that the air conditioner stops cooling. If this happens, move the trailer into shade or add a canopy over the trailer until the temperature drops or the sun goes down.

The air conditioner has a filter on the right side of the face. The filter slides out sideways. Remove and clean periodically with mild soap and water.

The air conditioner has a GFCI plug where it plugs into the 120VAC wall outlet. If the air conditioner does not run at all, try pressing the reset on the GFCI plug. If this does not solve the problem, see section on *AC Power 110VAC* for troubleshooting information.

Door Screens

The door screen option adds a full door size screen that zips open and closed. To reduce the risk of damaging the screen, it should be un-zipped fully when you are entering or exiting the cabin or sitting in the doorway.

When left open, the screens should be rolled up and tied back. The best method for rolling up the screens is as follows:

1. Unzip the screen fully.
2. Fold the upper 6 inches *(approximately)* downward and to the inside.
3. Starting at the free end, roll the screen inward* and toward the hinge.
4. When rolled up tightly, use the Velcro™ ties to hold in place.

**Rolling inward helps keep the screen from interfering with the door.*

Roof Fan

To open the roof vent, turn the opening knob. This will raise the vent top. The vent must be open for the fan to operate.

The Fantastic Vent™ fan has three controls: Direction, Speed, and Thermostat.

Direction: Select whether you want the fan to blow outward or inward. *If you want to reverse direction, turn the fan off, and let it come to a complete stop before reversing switch and restarting.*

Speed Control: Turn on to the desired speed.

Thermostat: The thermostat may be adjusted to automatically turn the fan OFF if the temperature drops or to turn the fan ON if the temperature increases.

The fan will turn OFF automatically when you lower the vent lid.

IF the fan does not turn ON, you must make sure:

1. The vent is open far enough to release the switch
2. The Direction switch is selected IN or OUT
3. The Speed knob is turned to 1, 2, or 3
4. AND - That the Thermostat is set high enough.

The vent should be closed during travel. Always close the vent fully during inclement weather.

Rain Sensor Fan This option has an automatic closing feature when the fan detects rain.

For Rain Sensor to operate, the Speed Control must be set on 1,2 or 3. ***If you set the Speed Control to "0", the Rain Sensor WILL NOT FUNCTION to automatically close the lid!***

NOTE: If you want the Rain Sensor to function with the **vent open** and the **fan off**, set the Speed Control on 1,2 or 3 and the In/Out switch to the middle (Off) position.

To open the vent, push the Vent Open Switch (near the Opening knob). **To stop the vent cover part-way open:** As the vent is **opening**, grab the Opening knob and hold it until the vent cover stops. **DO NOT grab the Opening knob when the vent cover is CLOSING.**

In case of power failure, close manually by rotating the Opening knob.

When traveling, make sure the Vent Open Switch is set to "Close" OR set the speed knob to "0" to prevent automatic opening while driving.

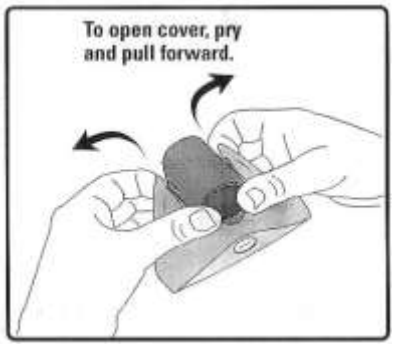
Roof Rack Option

The Yakima™ brand roof rack system mounted on **Camp-Inn**™ trailers has a **200 lb. load limit** when traveling (Dynamic Load). The roof rack will support more weight (like the Yakima™ roof mount tent plus two adults) when the trailer is parked (Static Load). Various roof rack accessories, such as bike racks, cargo haulers, kayak racks, etc. are available at sporting goods stores nationwide and online.

Avoid mounting items on the roof rack that may interfere with the opening of the roof fan lid. For items like roof-top tents, spacers may need to be installed to raise the tent platform high enough, that the fan lid will open sufficiently, to allow the fan to operate.

For hauling long items such as canoes, you must tie a rope from the front of the canoe to the tongue of the trailer, and a rope from the rear of the canoe to the rear of the trailer. If you do not have a rear bumper or receiver hitch option, you must provide your own attach point for the rear rope. Contact **Camp-Inn**™ about best location for this attach point. (DO NOT tie to the hatch handle or license plate holder or light)

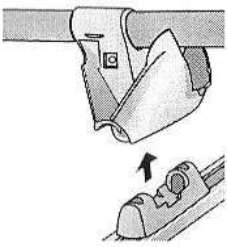
Locks- Yakima™ offers key locks for the towers to make them tamper-resistant.



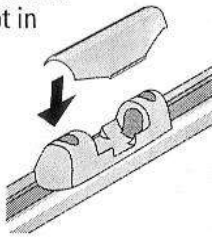
Removing Cross Bars-

The cross bars of your roof rack may be removed by prying outward on the tower's cover. Unlock both sides then lift off the crossbars and towers together.

- **Remove rack.**



Use the Landing Pad cover when the Control Tower is not in use.



Awnings

Refer to awning Owner's Manual or awning manufacturer's web page for information on proper use and care of their awning.

Always use guy lines as recommended by awning manufacturer. To prevent damage to the awnings of the trailer, take down awnings in strong winds or if strong winds are expected.

Drop-Front Desk

To open the Drop-Front Desk, simply press the top two corners and release. If one corner seems to be hanging up, press only that corner again.

To close the Drop-Front Desk, lift the door and press in at the top. Test latching, by gently pulling outward on the top two corners. If one corner is not latched, press only that corner again.

To adjust the angle of the desk (door) on your Drop-Front Desk, simply un-snap the support arm (pull arm sideways) from the snap at the top. Slide the small spacer, on the support arm, to the desired position and re-snap the arm. For a level desk, put the spacer above the snap. For a downward angle, put the spacer below the snap. Set both support arms to the same position.

If your Drop Front Desk has a picture frame face, remove the screws holding the back cover to access the matte and position pictures. Pictures must be taped to the matte to prevent shifting.

Radio

The Radio option allows the customer to select an alternative radio unit, speakers, or antenna, which meets their quality, feature, and cost expectations. Because of this variation, the functioning of every system will vary. Refer to the radio owner's manual on operation of the radio. Following are some of the more common set-ups:

The radio has a power shut-off switch to turn the radio off completely. The power shut-off switch for the radio is located on the left side of the face of the lower cabinet. An LED should illuminate when the switch is ON.

Galley and Cabin Speakers:

With A-B Switch: Use the A-B switch to select which speakers are functioning: Galley, Cabin, or Both. The Fader function on the radio does not adjust the cabin and galley speakers separately.

Power Antenna:

If you have a power extension antenna, there is a separate antenna switch. This switch allows you to disable the power antenna if you are using the radio to play MP3's, or Bluetooth.
The Power Antenna will only extend when you turn ON the radio and the antenna switch is turned ON. It will retract automatically when you turn OFF the radio, turn OFF the antenna switch, or turn OFF the Radio power shut-off switch.

Ipod's, MP3's, etc...
Most radios have a headphone jack on the front of the unit. This is the AUX Input. Plug a patch cable into your player and the AUX input and set the radio source to AUX.

Check in the radio's owner's manual for information about Bluetooth

GPS Tracker

The SPOT Trace GPS Tracker offers advanced theft-alert tracking. Receive a text or email when your trailer moves, or have family follow your travels on Google Maps by phone or computer.

If trailer is stolen, contact Police for recovery. Do not attempt to recover trailer yourself.

A monthly/yearly subscription is required for tracker to function. Go to: www. findmespot.com to activate your tracker or to renew subscription.

To access the tracker, open the roof fan cover fully. Go outside the trailer and using a ladder, locate the tracker. It is a small black box mounted inside the fan housing. Unsnap the tracker from its mounting bracket. Disconnect the power cord.

-To configure your tracker it must be removed from the trailer and attached to a computer via the USB cable.

1. Power on tracker by pressing the button on the top of the device; lights will illuminate.
2. After 1-5 minutes the device should obtain a GPS signal and will enter Track Mode.
3. Keep batteries installed even when using line power.
4. Log into your account to edit the following features:
   *Tracking *Movement Alert *Low Battery
   *Status *Power Off *Dock Mode

Important Note: A reconfiguration of Spot tracker is required after certain features are edited. Spot tracker must be plugged into your computer with included USB cable to complete reconfigurations.

If your trailer was built with the tracker installed, it is wired to the trailer's battery for extended monitoring during storage.

The tracker also has internal batteries. Replace them with :

(4) AAA Energizer NiMH rechargable batteries (L92) or equivalent. *ONLY use NiMH type rechargable batteries.*

Record your Information here for future reference:

ESN: _____ Auth Code _____

UserName _____ Password _____

For more information, go to www.findmespot.com

Maintenance

With proper maintenance, your **Camp-Inn™** trailer will give you years of trouble-free service.

Inspection

Your **Camp-Inn™** trailer should be inspected before every use. Here is a checklist of items to inspect:

- ***Tires*** - Check for proper inflation pressure and adequate tread.
- ***Lights*** - Make sure all brake, turn signal, running, and marker lights are working.
- ***Hardware*** - Check for loose or missing screws and bolts. Tighten or replace as necessary.
- ***Lubricate*** - Oil hinges, locks and latches for smooth operation.
- ***Battery***- **Camp-Inn™** uses a maintenance-free type battery. All it should need is regular recharging. Typical battery life is 3-5 years. Battery capacity will decrease with age.
- ***Sink*** – Drain, Flush, and Fill fresh water tank and check pump operation. Check sink drain for clogs. Drain gray water tank.

Hatch

When new, the hatch hinge may slide from side to side. If the hatch binds when almost closed, open hatch about half way and then tap it sideways to center it.
Make sure the area between the side gaskets and the body is kept free of dirt, leaf litter and debris. This may cause water to back up and leak past the gasket. Closely inspect the area near the hinge.

Air Conditioner

The air conditioner has a drain pain for condensation and rainwater. The drain comes out the bottom of the trailer. Once a year, you should flush out the drain by running water into the roof vent and watching for it to drain out the bottom. Inside the cabinet below the air conditioner, there is a section of clear tube where you can inspect for water flow and possible clogs.

Cleaning

Always wash your trailer as soon as possible after traveling near a saltwater beach, or on winter roads where salt has been used. The salt will cause corrosion of the aluminum resulting in white spots and pitting on the aluminum surfaces.

Always test cleaning methods or chemicals on a hidden area and allow to dry fully, before using on the rest of the trailer.

Interior- Clean the interior of the trailer with mild soap and water using a soft sponge or rag.

Exterior- Clean the exterior of the trailer with a mild soap and water and a sponge. Using plain water, rinse off as much of the dirt as possible before using the soap and sponge. Use liberal amounts of water. Start at the roof and work your way down. Rinse off the soap suds before they have a chance to dry.

To preserve the original brushed finish, only rub in the grain direction of the original brushed finish.

We recommend cleaning the aluminum regularly with Walbernize™ brand cleaner.

For heavy oxidization or stains, use Bon Ami™ cleaner on a damp rag. Rub very gently in the direction of the original brushed finish. Use only the pressure of the weight of your hand. Any more pressure when rubbing will cause scratching. Randomize the rubbing stroke length so the edges of the cleaned area are "feathered out." Practice in a less visible area before doing a visible area. **Keep in mind, Spot cleaning makes clean spots.** You may need to clean entire areas or the whole trailer to have a uniform appearance.

Fenders- Use purple Scotch Brite™ pads for cleaning brushed stainless steel parts like the fenders, water door and LP tank bracket. Use pad dry and in the direction of existing brushed finish. DO NOT touch or use pads on the aluminum surfaces. Scotch Brite™ pads can be purchased at most auto parts and hardware stores.

Hatch Gaskets- Periodically clean debris from gutter along hatch side gaskets and hinge. Pay special attention to the top corners. Debris in these areas may back up water causing a hatch leak. Clean the gaskets with a mild soap and water.

Cleaning continued…

Wheels and Bumper- Use fine 000 steel wool for cleaning the chrome wheels and hubcaps and polished stainless bumper. Use an automotive wax to protect the wheels and hubcaps after cleaning.

Stainless Countertops and Kitchen Surfaces- For regular cleaning of the stainless steel in the kitchen, use soap and water. Periodically for deeper cleaning, use an aerosol type stainless steel appliance cleaner. Hint: use very little. *Do not use the stainless appliance cleaner on the aluminum.* For heavy or burned-on stains try Bon Ami™ cleaner on a damp rag.

Windows- The front windows are made of acrylic. Clean with mild soap and water and a soft cloth. Glass cleaners may be used but you must make sure that the cleaner is acrylic safe. Side windows are tempered glass so any glass cleaner may be used. DO NOT get the glass cleaners on the aluminum as it may cause discoloration.

Curtains- Curtains should be dry-cleaned only. Curtains are removed by unscrewing the end caps from the curtain tracks and sliding the curtain clips off the end. When re-installing the curtain end clips, **do not fully tighten** them. The curtain end clips are supposed to be free to move.

Interior Moisture and Condensation

Under normal use, it is common for condensation to accumulate in the cabin overnight. The condensation is more apparent during colder weather as it forms on the insides of windows and on aluminum trim. Leaving the side windows or roof vent open slightly will help reduce the condensation. In the morning, you can wipe off any condensation with a towel. In fair weather, leaving the windows and sunroof open during the day or when traveling will help keep the inside dry and aired out.

Your **Camp-Inn™** has been designed and built to keep out rainwater. Under normal circumstances very little if any water should leak into the cabin or kitchen areas. Due to damaged, worn or aged gaskets and seals, or severe weather, leaks may occur. After any rainstorm or after driving in the rain, you should inspect all areas of your trailer to look for signs of leaking. Any water found should be dried up immediately. You should inspect, to determine if the source of the leak can be found. It is your responsibility to caulk cracks, or repair or replace gaskets to prevent further leaking.

Wheel bearings

Wheel bearings should be checked every 2000 miles to check for proper adjustment. To **check wheel bearing** adjustment:

- Jack the trailer up so one wheel is off the ground.
- From the side, grab the wheel front and rear.
- Push and pull the wheel side to side.
- You should get only slight movement (Less than 1/16")
- If you get more movement, have it checked and adjusted by a qualified mechanic or technician.
- It is recommended that you have the wheel bearings inspected by a qualified mechanic or technician before any major trip.

Wheel bearings should be repacked every 25,000 miles or when the tires are replaced or trailer brakes are serviced. If you are towing in severe temperatures or loading your trailer to near its weight capacity, you should repack the wheel bearings more often. Bearings should be replaced every 50,000 miles.

Seal #474276 Bearing set #B-A4 (Bearing L44649 & Race L44610) You will need two bearing sets and one seal per wheel.

Brake Maintenance

Brakes should be adjusted after the first trip or after at least 2000 miles of operation, when the brake shoes and drums have "seated." After that, brakes should be adjusted at 4000 mile intervals, or as performance and use requires. The brakes should be adjusted in the following manner:

1. Park on a flat level surface and chock the wheels. Make sure the parking brake lever is released. *(if installed)*
2. Jack up one side of the trailer until the tire is off the ground. Check that the wheel and drum rotate freely.* D*o not remove the wheel.*
3. Through the adjuster hole on the back of the hub, with a flat screw driver or standard brake adjusting tool, rotate the starwheel of the adjuster assembly to expand the brake shoes.
4. Spin the wheel and adjust the brake shoes out until the brake shoes lightly drag against the drum for about one quarter of the revolution.**
6. Lower trailer and repeat on opposite side.
7. Adjust parking brake. *(if installed)(see pg. 52)*

* If the brakes drag before being adjusted or make a grinding noise, the brake mechanism should be inspected.
** If the brakes grab erratically or make a grinding noise after being adjusted, the brake mechanism and drums should be inspected.

Brake Inspection

Your trailer brakes should be inspected and serviced at 2-year intervals or more often as use and performance requires. Magnets and shoes must be changed when they become worn or scored thereby preventing adequate vehicle braking.

Clean the backing plate, magnet arm, magnet, and brake shoes. Make certain that all the parts removed are replaced in the same brake and drum assembly. Inspect the magnet arm for any loose or worn parts. Check shoe return springs, hold down springs, and adjuster springs for stretch or deformation and replace if required.

It is recommended that you repack the wheel bearings any time the brakes are inspected.

If the brakes require replacing, use **2000 lb Dexter 7" trailer brake assemblies**. Left and Right assemblies are NOT interchangeable.

Use waterproof connectors for making the electrical connections.

Autowbrake -Fuse – Located on the underside of the controller box. Controller box is located in the right-side under-counter storage.

Autowbrake Controller Calibration

Calibration is required the first time you use your Autowbrake.

1. Connect trailer to tow vehicle and plug in trailer connector.
2. Calibrate on a level driveway or parking lot, this allows Autowbrake to determine the common towing position.
3. If you will be heavily loading the trailer or the tow vehicle, load them prior to calibrating to ensure correct ride height.
4. Put vehicle in Park or chock wheels on standard transmission vehicles
5. Turn vehicle ignition to ON position. Vehicle doesn't need to be running.
6. Have one person get in the vehicle and press the brake pedal. Have them continue to hold brake pedal down.
7. While the brake pedal is depressed, have second person go back to Autowbrake module and depress both buttons at the same time for 2 to 4 seconds then release.
8. Once the LED stops flashing you can release the brake. Your Autowbrake is calibrated.

Autowbrake Controller Adjustment

Check current setting anytime by pressing the gain/right button on Autowbrake controller. For Camp-Inn trailers, it should be on **Setting 1**. It should not need adjustment, but if it does...

1. Press and hold the brake pedal.
2. Press the gain/right button to increase setting.
3. Press the calibrate/left button to decrease setting.
4. Once set, release brake pedal. The last setting will be saved for future use.

Flash settings:

Setting 1: 1 slow flash 3 times in a row (total 3 flashes)
Setting 2: 2 slow flash 3 times in a row (total 6 flashes)
Setting 3: 3 slow flash 3 times in a row (total 9 flashes)

Autowbrake Key Fob

The key fob provides you the ability to make subtle changes in braking force. These changes may be made in motion or when stopped, any time the trailer is connected. Up button is used to increase braking force and Down button is used to decrease braking force.

There are 5 brake force levels available.

1. At a complete stop: Press brake pedal and use Up/Down buttons to increase or decrease the braking force.
2. In motion: Lightly press the brake pedal and use the Up/Down buttons to increase or decrease the braking force.
3. If you are not sure where you are at 1-5, Press the Down button 5 times to move to the #1 level. Then push the Up button the number of times needed to get to the desired level.

To check the power level, press the left button on the Key Fob. LED will flash. Count the flashes to determine the current level.

On dry pavement, you may adjust the brake force higher. On gravel or wet pavement adjust the braking force down. On ice or snow, set the brake force at the lowest setting. If the trailer brakes lock-up when applied, they are set too high.

To manually apply trailer brakes: Press any button on the key fob. If you are moving, you should feel the trailer brakes engage. Hold button down as long as you want the trailer brakes applied.

Parking Brake Adjustment

Periodically check the parking brake.

- On a level surface, with the trailer unhitched, lock the parking brake handle then push on the trailer to test the parking brake. The trailer may move slightly (less than 6 inches) before the brakes engage.
- If the brake does not grip sufficiently, release the parking brake handle and twist the handle a few turns.
- Re-apply the parking brake and test again.
- Adjust the brake handle until the brakes hold.

To keep the brake handle adjustment moving freely, periodically twist the handle a few turns in one direction then turn back the same number of turns. If the handle is not moved periodically, it is more likely to rust or seize in place.

Driving with Parking Brake On

If you accidentally drive with the parking brake applied, and you smell hot brakes, you may have damaged the brakes. Release the parking brake and allow the brakes to cool before proceeding. Check the parking brake as outlined above. If the brakes do not function correctly, you should have the brakes inspected as soon as practical to make sure they are still working safely.

If you drive **more** than ½ mile with the parking brake accidentally applied, and the brakes do not smell hot, you should adjust the parking brakes. The brakes may need adjusting too.

If you drive **less** than 1/8 mile with the parking brake accidentally applied, the brakes should not be damaged and probably don't need to be adjusted. Check the parking brakes, before using, to make sure that they still grip sufficiently. Adjust them if necessary.

Lubricating the Rear Leveling Jacks

- Lower the jack until it touches the ground.
- Using a Popsicle stick or small brush, wipe a small amount of general purpose grease into the threads of the jack screw front and rear.
- It is only necessary to add it to one side of the screw. The grease will be distributed around the screw when the screw is turned.
- Raise and lower jack.
- Wipe off any globs of grease.
- The leveling jacks should be lubricated annually.

Lubricating the Tongue Jack

Lubricating the tongue jack will allow the jack wheel to swivel freely making it easier to "steer" the trailer when pushing by hand.

- Hitch the trailer to the tow vehicle.
- Rotate the tongue jack to about 45 degrees.
- Crank the jack handle to lower the wheel, exposing about 10 inches of the jack tube.
- With a brush, wipe a light coating of general purpose grease onto the lower jack tube. Give special attention to areas showing wear.
- Crank the jack handle to raise the wheel all the way. Make sure the lower tube goes into the upper tube without scraping off all the grease.
- Spin the lower tube to spread the grease inside the upper tube.
- Lock the jack in the vertical position.
- Un-hitch the trailer.
- Wipe off grease on areas exposed when the trailer is sitting level. *(this will minimize the dirt and grit getting into the grease)*
- The tongue jack should be lubricated annually.

Storage

As with any travel trailers, the **Camp-Inn™** travel trailer should be stored in a cool dry place when not in use. Proper storage methods will preserve the good looks and condition of your **Camp-Inn™** for many years.

When storing your **Camp-Inn™** for the winter or for extended periods of more than a week, follow these procedures:

- Turn OFF the DC Power Disconnect Switch. (p.25)
- Recharge battery fully before storing for the winter or any extended period. Recharge battery, at a minimum, once every 3 months during storage. (Units with TriMetric, either leave plugged in, or recharge monthly, or disconnect battery and charge battery every 3 months.)
- If you are storing it in an area where freezing temperatures are a possibility, add RV non-toxic anti-freeze to the water system. See Section on **Winterizing** the water system. (p.18)
- It is recommended that, your **Camp-Inn™** should be stored in a building. Leaving the windows and hatch open for a while will help dry out the cabin and kitchen areas.
- A temporary shelter like those made by Shelter Logic™ are a good second choice. *www.**shelterlogic**.com*
- If you cannot store it in a building, or a temporary shelter, you should use a **Camp-Inn™** storage cover. This storage cover is weather resistant and water repellant but like any cloth cover it may develop small leaks with age. After any major rainstorm or multiple days of rain, your trailer should be inspected, inside kitchen and cabin, for water that may have leaked in.
- You should NEVER store your **Camp-Inn™** travel trailer under a plastic tarp or other non-breathable covering. Doing so may cause condensation to form on the outside and inside of the trailer and may cause mold, mildew or rot. This may also cause corrosion of the aluminum skin creating blemishes on the surface.
- There should be space around your trailer for airflow.
- Storing your trailer in a manner not consistent with the above procedures, or storing outdoors for extended periods without covering, will void the warranty.

Towing Basics

Safe trailering is essential in making your **Camp-Inn™** experience pleasurable for years to come. If you do not have experience pulling trailers, please read through this section to familiarize yourself with the basics of safe trailering.

Vehicle Towing Rating

Before trailering your **Camp-Inn™** travel trailer, it is necessary to make sure that it does not exceed the towing capacity of your tow vehicle. There are two important factors to check; **Towing Weight** and **Tongue Weight**. Exceeding either of these will create an unsafe condition and may void the tow vehicle's warranty. To determine these ratings for your specific vehicle, review your vehicles owner's manual or contact your automobile dealer.

Total Towing Weight

Towing Weight is the total of the trailer's weight and all gear and supplies that will be hauled in the trailer. Some car manufacturers define "Total Towing Weight" to include the weight of passengers and cargo hauled in the car.

Determining the actual weight of the trailer with all your gear can be difficult. The easiest method is to load the trailer and then take it to a truck stop and weigh it on their scale. Make sure you disconnect the trailer from your tow vehicle to get an accurate reading.

Tongue Weight

Tongue weight, is the downward force of the trailer tongue on the tow vehicle's hitch. Proper balancing of the trailer is important to ensure smooth trailering. Too little tongue weight will cause the trailer to sway or wander. Too much tongue weight will push down on the rear of the tow vehicle and may overload the hitch or tow vehicle's rear axle.

For your **Camp-Inn™** travel trailer, Tongue Weight should be between 140 lbs. and 220 lbs. The acceptable range for your tow vehicle or hitch may be different.

Tongue weight is easily adjusted by shifting the loading of gear and supplies within the trailer. Loading gear in front of the trailer's axle will increase tongue weight. The further forward you load it, the more it increases the tongue weight. Loading gear behind the axle will reduce

the tongue weight. Loading weight directly above the axle will have no effect on the tongue weight.

Tongue weight can be easily be determined by placing the tongue of the trailer on a scale and loading the trailer, adjusting the load to give the desired result. *Make sure the trailer is level for accurate measurement.*

Hitch Rating

Hitches come in different ratings depending on the trailer you intend to tow. The first three classes are:

Class I 2000 lb. Max Trailer weight, 200 lb Max Tongue weight.

Class II 3500 lb. Max Trailer weight, 300 lb Max Tongue weight.

Class III 6000 lb. Max Trailer weight, 600 lb Max Tongue weight.

For your **Camp-Inn**™ trailer we recommend using any one of these three hitch classes.

The reason to use a Class III is that it is made with a 2" square receiver tube. If you already have accessories, like a bike rack, with a 2" square tube, they will be interchangeable. Another reason would be, if you have other heavier trailers you plan to pull. *All three Classes may not be available for your tow vehicle.*

Hitch Height

To make your **Camp-Inn**™ trailer look right when it is being towed, the ball on your hitch should be set at the proper height for your trailer model. Receiver hitches have inserts with different offsets so you can adjust the ball height by changing inserts. Inserts are available in 2" increments and can be used offset-down or offset-up as needed.

Street Model: 14"-16" measured from ground to top of ball.

SUV Model: 17"-19" measured from ground to top of ball.

To measure this height without the trailer hitched, apply a downward force of about 200 lbs to the hitch or rear bumper of the tow vehicle. (sit on the bumper while measuring.)

Being outside these ranges by up to 3" either way will not damage the trailer, but the trailer will not look level. Being outside these ranges by more than 3" may affect tire wear and will increase or decrease tongue weight, potentially causing unsafe handling.

Hitching

Your **Camp-Inn™** trailer has a 2" ball type hitch. First, make sure that the hitch ball size on your towing vehicle matches the hitch size on your **Camp-Inn™** trailer. Then proceed as follows:

1. Remove the safety-locking pin or lock from the locking lever.
2. Make sure the locking lever on the trailer tongue is in the unlocked or upright position (straight up and down).
3. By cranking the jack handle, raise the tongue so it clears the ball on the tow vehicle.
4. Move the vehicle or trailer to align the tongue with the ball.
5. By cranking the jack handle, use the jack to lower the trailer hitch onto the ball.
6. Make sure the tongue lowers ***fully*** onto the ball hitch.
7. Lower the locking lever **fully** (it will be horizontal) and install safety-locking pin or lock.
8. Crank jack handle until wheel clears the ground by 2-3 inches.
9. Pulling jack lock pin, rotate jack to horizontal position for traveling. ***(Caution: Do Not rotate the jack until you have locked the trailer tongue onto the ball hitch.)***
10. Hook up safety chains. Chains should be crossed. The chain on the left side of the trailer tongue should be hooked to the loop on the right side of the hitch and the chain on the right side of the trailer tongue should be hooked to the loop on left side of the hitch. *(this prevents the chains from binding when going around corners and will catch the hitch if it comes off the ball)* The safety chains should not be too loose or too tight. The correct amount will be determined by the tow vehicle's hitch design. Turning as tight a corner as possible, make sure that the chains do not bind. Also, make sure that the chains will not drag on the ground when the trailer and tow vehicle are fully loaded.
11. Connect 7-prong connector trailer lights to vehicle lights.
12. Turn on headlights and turn signals to check for proper operation of all trailer lights prior to towing, even during daylight hours.
13. Trailer lights should be checked periodically during your travels. As a minimum, they should be thoroughly checked daily, or every time you hitch up your trailer.

Unhitching

1. Before unhitching your trailer, place chock blocks ahead and behind the trailer wheels to prevent the trailer from rolling.
2. Unhook trailer light connection.
3. Rotate tongue jack to vertical position and make sure the jack locking pin is fully seated before cranking jack. Shake jack roughly to ensure it is locked.
4. Remove safety locking pin or lock from the hitch lock lever and raise the lever to the unlocked position (straight up and down).
5. By cranking the jack handle, jack up the trailer tongue until it is clear of the ball hitch.
6. Lower the hitch lock lever to horizontal position.
7. Replace the safety locking pin or lock.
8. Unhook safety chains.
9. Move tow vehicle away from the trailer.
10. Jack trailer tongue either up or down to level the trailer.
11. Lower rear leveling jacks to stabilize or level the trailer side to side.

Your **Camp-Inn™** trailer can be used for sleeping or cooking while it is still connected to your tow vehicle. You can lower the leveling jacks or tongue jack to stabilize the trailer while it is hitched to the tow vehicle. But be sure to raise the jacks before moving.

Using Trailer Brakes

In order for the trailer brakes to function, the tow vehicle will need a brake controller installed or the trailer will need the Autowbrake option. When the brakes are applied in the tow vehicle, the brake controller applies a voltage to the electric trailer brakes to activate them. The trailer brakes are applied proportional to the tow vehicle brakes.

The brake controller should have an adjustment for the braking strength and a slide lever for manually applying the trailer brakes.

When the brakes are new, they need to be "broke in." Start by setting your brake controller on the highest possible setting. As the trailer brakes "break in" you will feel them assisting more with the braking. If the brakes start to skid or lock-up, turn down the strength adjustment. If your trailer is loaded, and you are on dry pavement, you may be able to leave the brakes on the highest setting all of the time.

On gravel, wet pavement, ice or snow it is recommended that you turn down the brake strength. **Any time you need to reduce the braking strength, it is advised that you slow down your traveling speed.**

To properly set the brakes:

1. Find a straight section of road, clear of other traffic.
2. Slow down to a safe speed, (less than 20 mph. Slower on ice).
3. Adjust the brakes to a low setting (2-3).
4. Apply the brakes hard.
5. If the trailer brakes do not lock-up or skid, turn up the brakes.
6. When the brakes DO lock-up or skid, turn the brakes down.
7. The best brake setting is just below where they start to skid.
8. You will have to readjust the brakes as road conditions change.

Check the functioning of the trailer brakes periodically, especially if it has been stored for an extended period.

To check the brake function:

1. Turn the braking strength up to the highest setting.
2. Drive at about 20 mph. Put the car in neutral and coast.
3. Apply the trailer brakes using the manual override on the brake controller. You should feel the brakes slow you down.
4. If you don't feel the brakes pull, they may need cleaning. To clean the brakes, drive at 20 mph and pulse the trailer brakes ON for 20 seconds, OFF for 5 seconds until you feel them starting to pull. (usually less than ¼ mile)
5. Repeat Steps 2&3. If they still aren't pulling, inspect the brakes.

Speed, Acceleration and Braking

For safety, when towing a trailer, we recommend that you drive 5-10 MPH slower than normal.

When towing a trailer, you must always keep in mind that you are adding load to your tow vehicle. Allow for slower acceleration when pulling out into traffic.

Braking distances are also greater; so leave a longer distance between you and the car ahead of you. If you regularly travel in heavy traffic, have a smaller tow vehicle, or drive in mountains, you should consider having electric trailer brakes installed. Trailer brakes are required in some states.

Downgrades -If signs warn there is a long, steep downgrade ahead, slow down and shift into a lower gear, BEFORE starting downhill. Shift into a lower gear on both automatic and manual transmissions.

The engine should do the majority of the braking for you. If you are in a low enough gear, you will only need to intermittently use your brakes.

The steeper the downgrade, the lower the gear and the slower you should go. Without applying brakes, your engine should hold below 2/3 of the red-line RPM. (if red-line is 6000 RPM, don't exceed 4000 RPM) If the engine exceeds 2/3 of red-line, you are in too high a gear and going faster than you should.

On long downgrades, stop periodically to allow your brakes to cool before continuing. If you experience hard brakes or brake fade, stop as soon as possible and allow brakes to cool fully before continuing.

Uphill - On longer or steeper upgrades, your automatic transmission may downshift. This will cause the engine RPM's to rise. Very high RPM's put more strain on the tow vehicle's engine and transmission. You should slow down to keep the RPM's below the 2/3 of red-line when going uphill as well.

When climbing hills, you may want to manually shift your transmission into a lower gear to keep it from hunting up and down the gears.

TIP: Going Uphill or Downhill, drive using the tachometer rather than the speedometer.

Overdrive Ⓓ or 🅓 - Overdrive is usually marked on the shifter by a "D" with an "O" or square around it. Overdrive is intended to increase gas mileage but, on many passenger cars, it is not durable enough for the added load of towing a trailer. SUVs and small trucks may be able to tow in overdrive. Check with your car dealer or look in your car's *owner's manual* to see what gear the manufacturer recommends for trailer towing.

Driving in drive (plain "D") or 3rd gear will not hurt the engine or transmission. It will, however, decrease gas mileage slightly, and cause the engine to rev higher at highway speeds. Because the engine is not working as hard, the gas mileage is affected less than most people expect. Anyone who has ridden a 10-speed bike understands that high gear is not the best gear for all conditions.

Backing - To fully enjoy your **Camp-Inn**™ trailer, you must master backing your trailer. Backing a trailer takes a lot of practice and patience. You may want to practice backing in a large open area, like a parking lot. Practice backing into a parking spot, away from other vehicles.

One trick is to put one hand at the bottom of the steering wheel. Push that hand in the direction you want the trailer to go. When the trailer starts turning, turn the tow vehicle so it follows the trailer. If the trailer begins to jackknife (turns too sharply), pull forward and try backing again.

When backing, it is helpful to have a second person watch behind the trailer to make sure that you will not hit any obstacles. It is important that the second person remain in view of the driver at all times. Develop a system of hand signals to aid in directing.

For the person directing, keep in mind: If you can't see the driver's eyes, *(in the mirror)* they probably can't see you. At night, make sure you are illuminated so the driver can see you. If necessary, hold a flashlight so it shines on you or at least illuminate your signal hand.

Until you become experienced at backing, choose parking areas that you can pull-through.

If the ground is smooth and level, you can unhitch the trailer and roll it backward by hand. ***Never attempt this on a sloped surface, you may lose control of the trailer causing bodily injury or causing damage to property.***

Tires

- Check the tire inflation to make sure it is within the recommended range.
- Check the tow vehicle owner's manual for the tow vehicle's correct tire inflation for trailering.
- If you are hauling heavy loads, check the load rating of the tires to make sure you do not exceed the load limits.
- Inspect the tires for any signs of damage, weathering or tread wear beyond the allowable limits.
- Lug nut Torque 95-105 ft-lb (alloy rims Torque 75-85 ft-lb)
- Lug bolt pattern – 5 x 4.5" (small Ford)
- Lug nut size – 13/16" *Note: Camp-Inn does not provide a lug wrench. If the wrench for your tow vehicle doesn't fit, you should get a separate lug wrench for your trailer.*
- Inflation Pressure 28-32 psi.
- If you have a spare tire, make sure it is properly inflated and in good condition. Spare tire inflation pressure 65-80psi.
- Tire Size: Street: 195/70R14 SUV: 205/75R14

Spare Tire,

The **Camp-Inn**™ spare tire is rated for a loaded trailer at highway speeds. Being smaller diameter, it will cause that side of the trailer to ride lower. You may use it to drive for extended distances, but it is recommended that you repair or replace the original tire as soon as practical so you will have a spare tire available.

The **Camp-Inn**™ provided spare tire meets the following specifications:

- Size 5.30 –12
- Load Range C High Speed
- 1045 lb load @ 60psi

If you replace the spare or buy your own, it is recommended that you purchase an equivalent tire.

The spare tire stows in the curb side of the in-floor storage. It should be checked periodically to ensure that it remains at the correct inflation pressure.

ALWAYS pull the trailer entirely off of the roadway before changing a flat tire

Specifications	550 Street	550 SUV	560 Street	560 SUV
Body Length	8'	8'	10'	10'
Total Length	11' 11"	11' 11"	13' 11"	13' 11"
Body Width	5'	5'	5'	5'
Width Fenders	6' 6"	6' 6"	6' 6"	6' 6"
Height	61"	64"	61"	64"
Interior Cabin Height	3' 8"	3' 8"	3' 8"	3' 8"
Bed Size	58"x 78"	58" x 78"	58"x 78"	58" x 78"
Weight Approx.*	850-1100 lb	900-1150 lb.	1000-1300 lb	1050-1350 lb.
Ride Height**	11"	14"	11"	14"
Tire Pressure	28-32psi	28-32psi	28-32psi	28-32psi
Tire Size	195/70R14	205/75R14	195/70R14	205/75R14
* Weight varies depending on options. ** Measured from ground to body side. Ground clearance is about 4" less.				

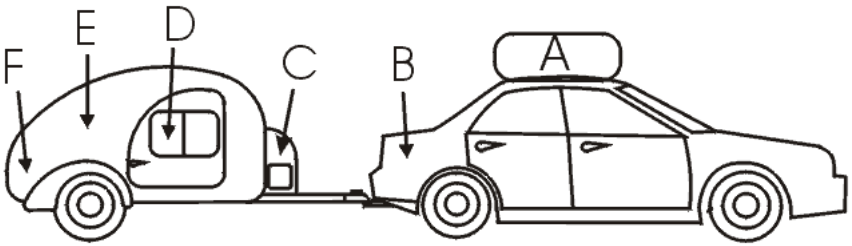
MAINTENANCE SCHEDULE *(long trip – over 2,000 miles)*	Before Each Trip	Start of Season	Before Long Trip	Mileage
Check trailer lights, safety chains, coupler	X	X	X	Daily on trip
Check cabin & kitchen lights	X	X	X	
Drain – Flush – Fill freshwater tank	X	X	X	
Test water pump	X	X	X	
Check tire pressure	X	X	X	
Check spare tire	X	X	X	
Check charging voltage	X	X	X	
Lubricate locks & hinges		X	X	
Lubricate hitch jack and leveling jacks		X		
Test / Adjust brakes		X	X	4,000
Adjust parking brake handle		X	X	2,000
Inspect brakes *(remove drum)* *(repack wheel bearings at same time)*				2 years 12,000
Check wheel bearings (see pg. 49)		X	X	2,000
Repack wheel bearings *(w/o brakes)*				25,000
Check tire tread wear		X	X	2,000
Sterilize freshwater tank		X	X	
Load test battery *(at auto parts store)*			X	2 years
Clean air conditioner filter and drain		X		

Teardropping Tips

We are sure you will enjoy using your **Camp-Inn**™ teardrop and will find ways of making your travel experiences more enjoyable. Here are a few tricks that we have found to get you started.

1. To determine what is necessary to take with you, put a piece of masking tape on every item. When you use each item, remove the tape. After a few trips consider leaving home any item that still has the tape on it.
2. Bedding:
   - ✓ A twin size comforter and/or blanket will fit well. Anything larger tends to be too bulky to tuck in.
   - ✓ Using a queen size fitted sheet and a full size flat sheet works well. The full size flat sheet allows about a 10" overhang on both sides of the bed, which can easily be tucked in. If you choose to use a queen size flat sheet instead, there will be about a 15" overhang on both sides of the bed.
   - ✓ **On all models**, an easy way to make the bed and keep the sheets in place is to sew the bottom of the flat sheet to the bottom of the fitted one. This is done just like waterbed sheets. Line up the centers of the bottom ends of the fitted and flat sheets. Then pin them together and machine stitch the two sheets together, sewing **only between** the two elastic corners of the fitted sheet . If you sew onto the elastic corners of the fitted sheet, you will tear both the stitches and sheets when you try to put them on the mattress.
3. Trick for making the bed: Lay the fitted sheet on top of the mattress in the correct orientation. With one person on each side of the trailer, fold the top three feet of mattress. Then slide the mattress toward the front of the trailer. Now you can reach the foot end of the mattress to install the fitted sheet. Slide the mattress back into place and continue making the bed.
4. For your cooler, try wrapping a towel from the top, around the back and underneath when you put it into the storage area on the countertop. You can pull on the bottom of the towel, to assist sliding the cooler out. It will also add insulation and reduce scuffing of the stainless countertop.
5. The in-floor storage is a good place for items that you need, but not very often, like rain gear, cold weather gear, road flares, reserve bottled drinking water, spare 1lb. propane tank, etc… It is nice to have these items, "just in case."

6. Placing pieces of cloth between pots and pans will reduce scuffing and scratching of your cookware.
7. Make a clothesline that stretches between the coat hooks in the cabin. Open the side windows slightly, and you can dry towels etc… as you drive. Use a small rope with a loop tied on each end.
8. In cooler weather, you will get condensation on the windows. Roll up a small towel and place it between the curtains and the windows. This will absorb excess condensation that might otherwise drip onto you at night. Opening side windows, sunroof or roof vents slightly will help reduce condensation.
9. Weight Distribution:



Using the picture above, imagine you were hauling a **50 lb. load**. The following table shows approximately how much effect that 50 lb. load would have on different points on the car and trailer.

Weight Added or (-xx)Removed

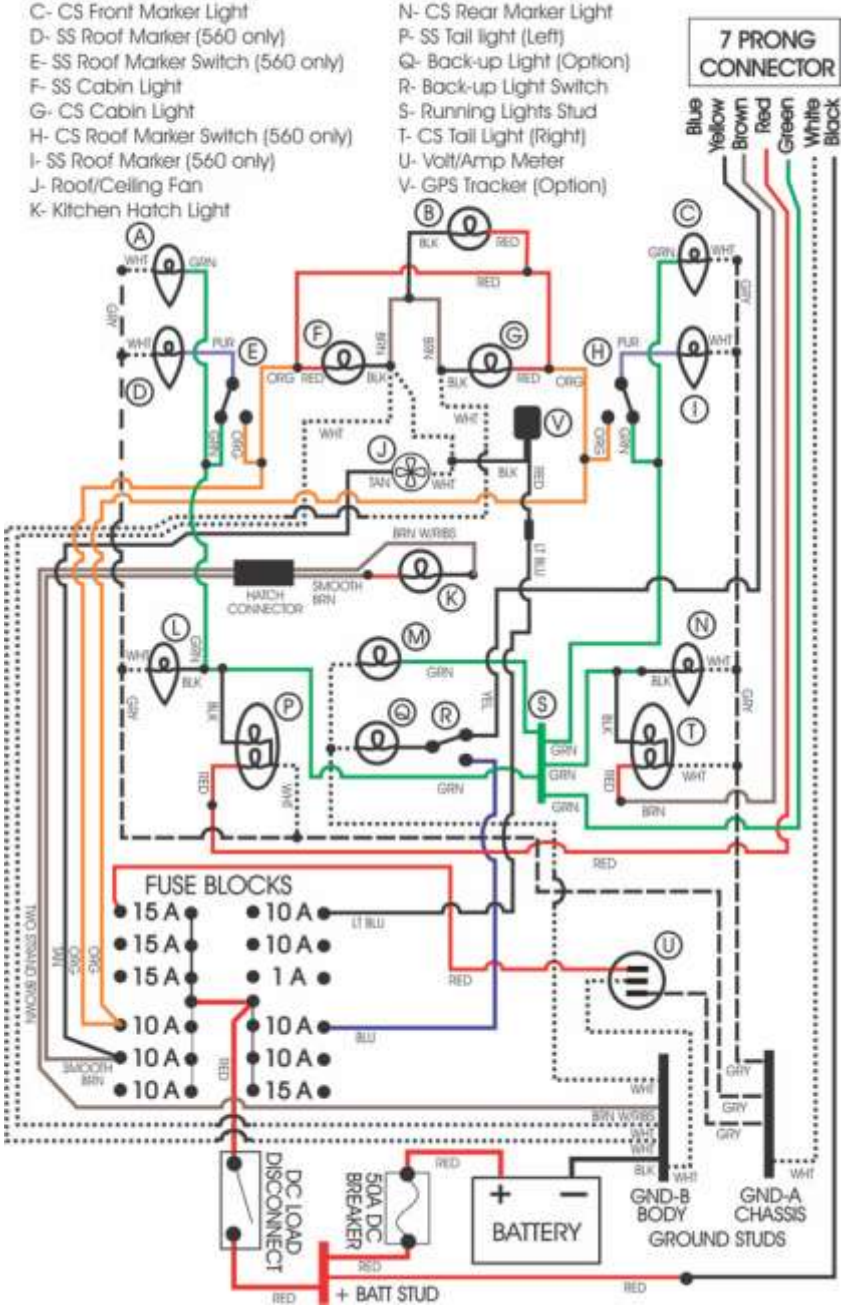
	Load Location	**Trailer Axle**	**Hitch / Tongue**	**Car Rear Axle**	**Car Front Axle**
A	Roof top carrier	0 lbs.	0 lbs.	30 lbs.	20 lbs.
B	Car trunk	0 lbs.	0 lbs.	50 lbs.	0 lbs.
C	Front storage	17 lbs.	33 lbs.	44 lbs.	(-11) lbs.
D	Cabin area	33 lbs.	17 lbs.	22 lbs.	(-5) lbs.
E	Cooler area or Footwell *(above axle)*	50 lbs.	0 lbs.	0 lbs.	0 lbs.
F	Under counter storage	62 lbs.	(-12) lbs.	(-16) lbs.	4 lbs.

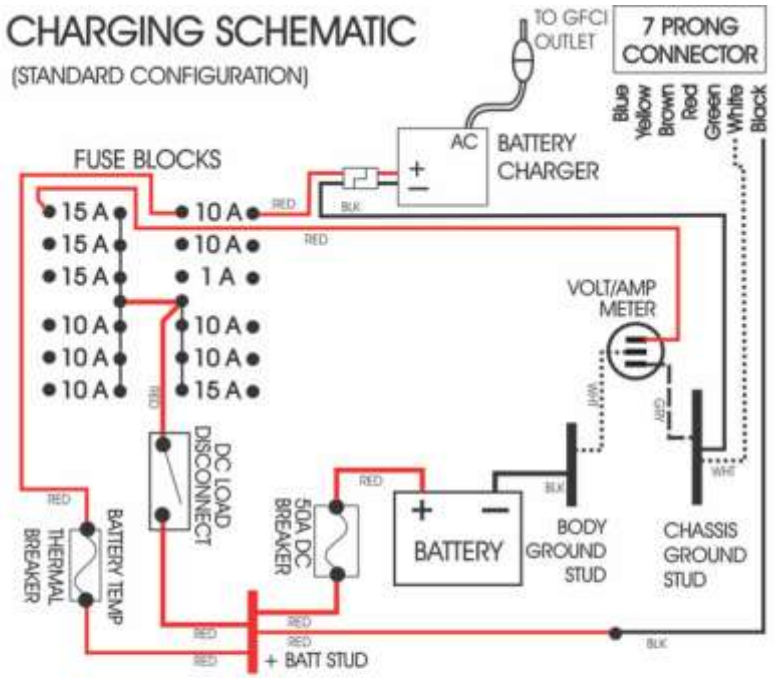
As you can see, where you add the weight can affect the ride of the car and trailer. Since a **Camp-Inn**™ trailer is rated for 500-1000 lbs. of cargo carrying, you should use it to haul all your heavy gear. The best place to haul heavy items is to slide them into the footwell area of the bed (inside the cabin). As you can see from the table above, it will not affect the tongue weight or load the rear axle of the car. Putting heavy items in the under countertop storage area will actually take off tongue weight.

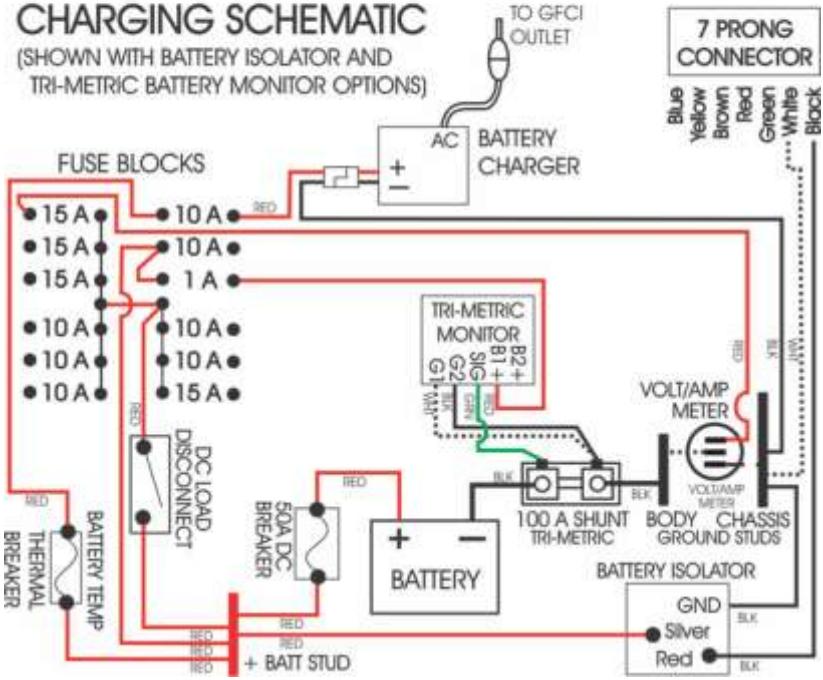
LIGHTING SCHEMATIC (STANDARD CONFIGURATION)

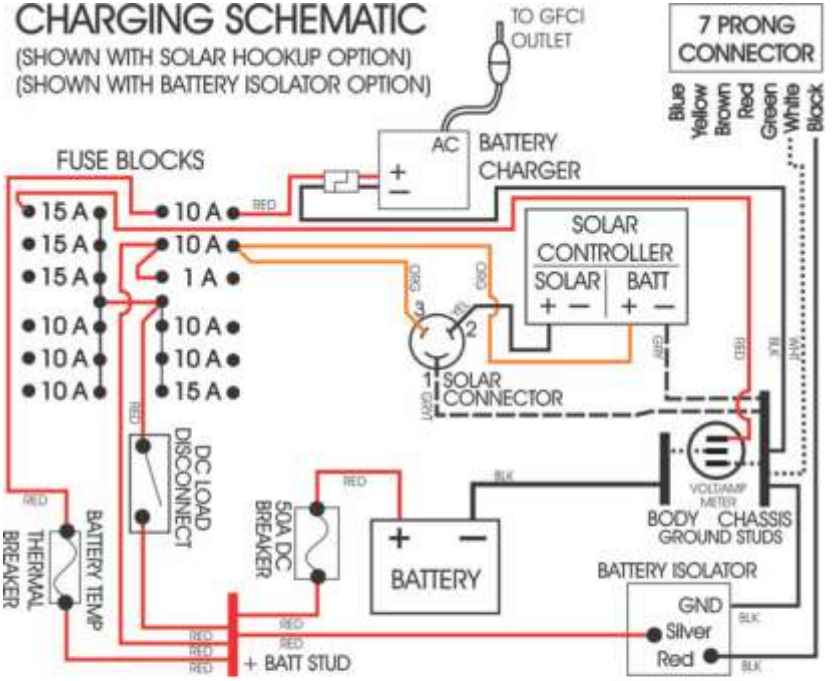
SS = Street Side
CS = Curb Side

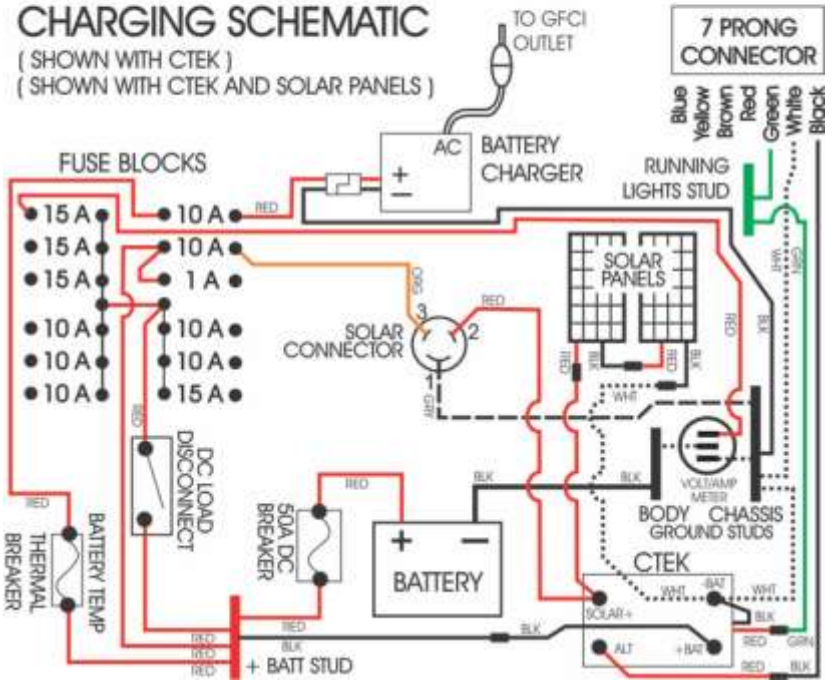
A- SS Front Marker Light
B- Couch Light (560 only)
C- CS Front Marker Light
D- SS Roof Marker (560 only)
E- SS Roof Marker Switch (560 only)
F- SS Cabin Light
G- CS Cabin Light
H- CS Roof Marker Switch (560 only)
I- SS Roof Marker (560 only)
J- Roof/Ceiling Fan
K- Kitchen Hatch Light
L- SS Rear Marker Light
M- License Plate Light
N- CS Rear Marker Light
P- SS Tail light (Left)
Q- Back-up Light (Option)
R- Back-up Light Switch
S- Running Lights Stud
T- CS Tail Light (Right)
U- Volt/Amp Meter
V- GPS Tracker (Option)



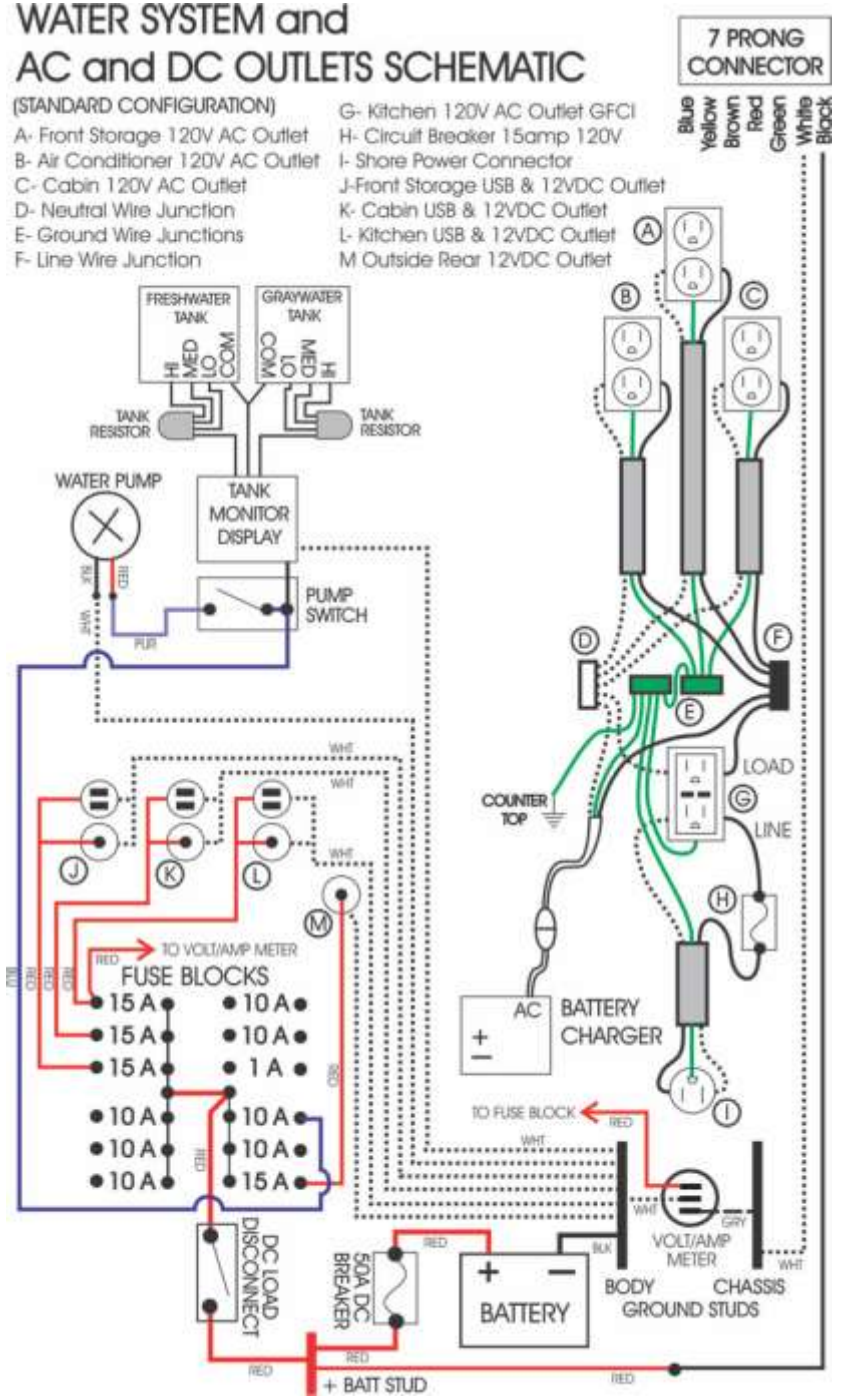

CHARGING SCHEMATIC
(STANDARD CONFIGURATION)
TO GFCI OUTLET
7 PRONG CONNECTOR
Blue
Yellow
Brown
Red
Green
White
Black
AC
BATTERY CHARGER
FUSE BLOCKS
15 A
10 A
1 A
VOLT/AMP METER
DC LOAD DISCONNECT
50A DC BREAKER
BATTERY
BODY GROUND STUD
CHASSIS GROUND STUD
THERMAL BREAKER
BATTERY TEMP
+ BATT STUD
RED
BLK
WHT
GRY


CHARGING SCHEMATIC
(SHOWN WITH BATTERY ISOLATOR AND
TRI-METRIC BATTERY MONITOR OPTIONS)
TO GFCI OUTLET
7 PRONG CONNECTOR
Blue
Yellow
Brown
Red
Green
White
Black
AC
BATTERY CHARGER
FUSE BLOCKS
15 A
10 A
1 A
TRI-METRIC MONITOR
B2 +
B1 +
SIG
G2
G1
VOLT/AMP METER
DC LOAD DISCONNECT
50A DC BREAKER
BATTERY
100 A SHUNT TRI-METRIC
BODY GROUND STUDS
CHASSIS
BATTERY ISOLATOR
GND
Silver
Red
THERMAL BREAKER
BATTERY TEMP
+ BATT STUD
RED
BLK
WHT
GRY

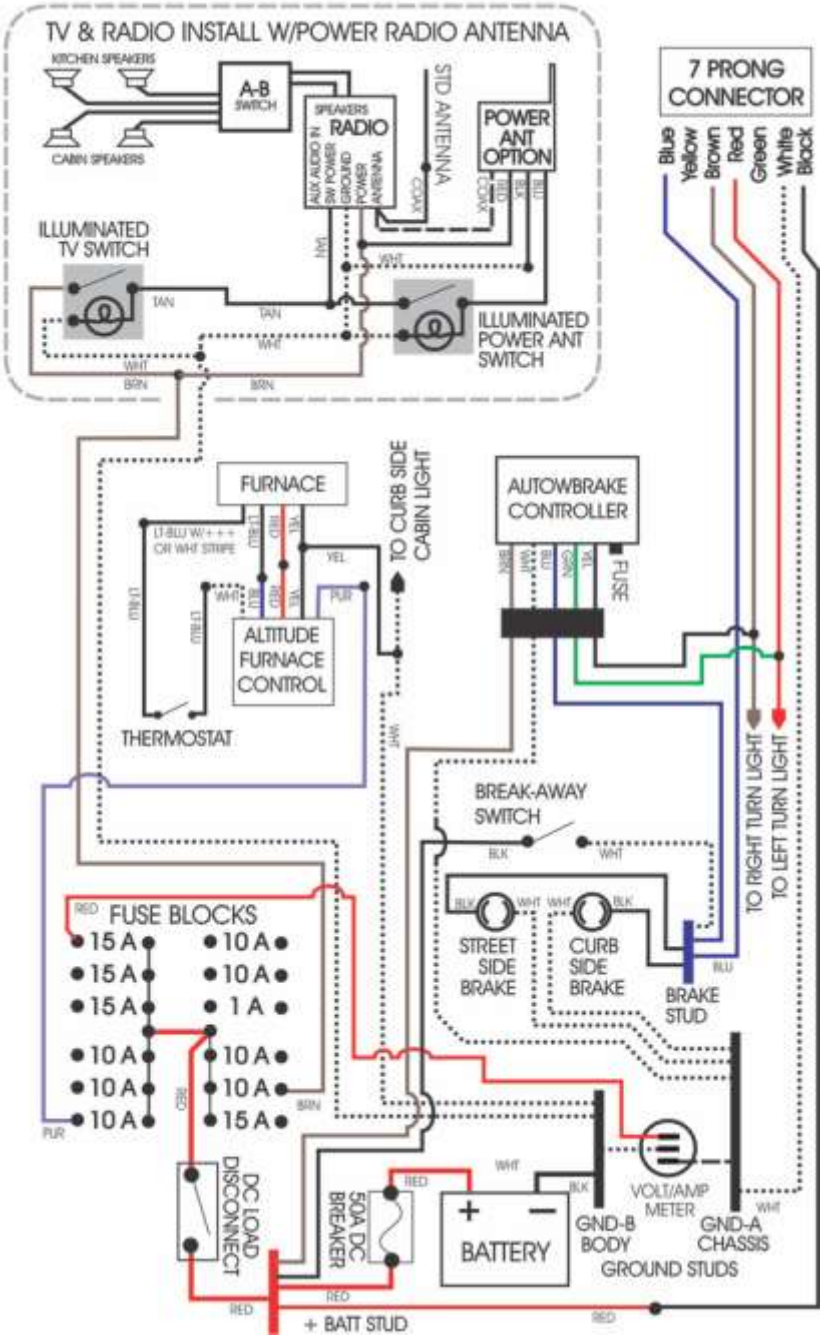

CHARGING SCHEMATIC
(SHOWN WITH SOLAR HOOKUP OPTION)
(SHOWN WITH BATTERY ISOLATOR OPTION)
TO GFCI OUTLET
7 PRONG CONNECTOR
Blue
Yellow
Brown
Red
Green
White
Black
AC
BATTERY CHARGER
FUSE BLOCKS
15 A
10 A
1 A
SOLAR CONTROLLER
SOLAR
BATT
SOLAR CONNECTOR
DC LOAD DISCONNECT
50A DC BREAKER
BATTERY TEMP
THERMAL BREAKER
BATTERY
VOLT/AMP METER
BODY CHASSIS GROUND STUDS
BATTERY ISOLATOR
GND
Silver
Red
+ BATT STUD


CHARGING SCHEMATIC
(SHOWN WITH CTEK)
(SHOWN WITH CTEK AND SOLAR PANELS)
TO GFCI OUTLET
7 PRONG CONNECTOR
Blue
Yellow
Brown
Red
Green
White
Black
AC
BATTERY CHARGER
RUNNING LIGHTS STUD
FUSE BLOCKS
15 A
10 A
1 A
SOLAR PANELS
SOLAR CONNECTOR
DC LOAD DISCONNECT
50A DC BREAKER
BATTERY TEMP
THERMAL BREAKER
BATTERY
VOLT/AMP METER
BODY CHASSIS GROUND STUDS
CTEK
+ BATT STUD

WATER SYSTEM and AC and DC OUTLETS SCHEMATIC



BRAKE, FURNACE, and RADIO SCHEMATICS



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