

How To Guide

2016 RS Adventurous



HOW TO: Monitor Panel

The monitor panel is located inside the side door, above the passenger side rear captain's seat. Depending on the options you have, there may be an inverter panel to the left of the main control panel and there may be a propane generator starter switch and hour run meter to the right.

The monitor panel monitors your battery and tank status, and provides controls for all of the on-board utilities.

Battery Disconnect Switch

The battery disconnect switch turns the coach battery power off and on. When off, it prevents your coach batteries from being drained while the Roadtrek is not in use. The lights, the water pump, the fan, the refrigerator control board, even the igniters for the propane cooktop need 12 volt power from the batteries. If something electrical in your Roadtrek doesn't work, the first thing to check is to make sure the battery disconnect switch is on.

The battery disconnect switch is on the bottom left corner of the monitor panel. To its immediate right is a blue indicator light which illuminates when the switch is on.

You will hear a "clunk" as the battery disconnect switch is pressed - this is a big relay connecting the coach batteries to the electrical loads.

If you hear a clunk-clunk, or nothing at all, it's possible that your batteries are depleted to the point where they cannot drive the relay. Take steps to charge your batteries, such as starting the vehicle engine, and try again after building the batteries up to a charge level where they will power the relay.



Monitor Panel with standard 1250 watt inverter and optional propane generator



Battery disconnect switch on

Inverter Switch with Standard 1250 Watt Inverter

Just as the battery disconnect switch powers the lights, fan, and other 12 volt electrical loads, the inverter powers some of the 120 volt alternating current loads. This is the regular electricity you have in your house.

The inverter takes 12 volt power from your coach batteries and changes it into 120 volt electricity. It powers the television and home theatre system, plus some other outlet or outlets, depending on model. With this inverter, you can watch television or play a DVD while you are camping, without the need to plug into shore power or run your generator.

The inverter is rated for 1250 watts maximum output, larger loads such as the air conditioner are too big to run on the power produced by the inverter, and will not operate unless you plug in or start your generator. The inverter will shut off if you try to **draw too much power through it**. The inverter switch is on the left side of the monitor panel, above and to the right of the battery disconnect switch. It has an indicator light inside it that comes on to let you it's on. If you are not using any 120 volt electricity, turn the inverter off to conserve battery power, since it uses a small amount of electricity even when it's not powering any appliances.

The inverter will shut off if the battery voltage falls below a certain level. This is to protect your batteries, wiring, and the inverter itself from damage. Battery voltage drops under load, so it is possible to have the inverter cut off under high load and then the battery voltage will come back up to normal with no load.



Standard inverter switch

Inverter Switch with 2500 Watt Inverter

This inverter provides 120 volt AC (household current) to the 120 volt appliances and all wall outlets.

The switch has three positions: off in the middle position, power save auto in the top position, and power save off in the bottom position.

In the power save auto setting, when you're not using anything with 120 volt power, the inverter will put itself to sleep. In this mode, it still uses a small amount of power. If you turn on a 120 volt appliance, it senses a load and will come back on in about 20 seconds. If you select power save auto you'll reduce the electricity it takes to keep the inverter powered, and your batteries will require less recharging.

Pressing the bottom of the switch selects power save off. When this setting is selected, the inverter will be on continuously. On the right side of the inverter switch are three lights. There is a shore power indicator light to show you the system that is receiving shore power. There is also a battery charging indicator light to tell you when the batteries are being charged by shore power. The third light will alert you to any inverter error messages, which are displayed on the inverter display panel.

Your refrigerator will run on either 12 volt battery power or 120 volt inverter power, but will use less electricity if the inverter switch is off because of the conversion loss. If all you're running is your refrigerator, such as when you retire at night, turn the inverter off and save battery power.



Optional 2500 watt inverter switch

Patio Light

On the control panel, the top left switch is the patio light switch. Press the top of the button to turn the lights on, and the bottom to turn them off. These are LED lights and use very little power.

Water Pump Switch

The button to the right of the patio light switch is the water pump switch. It should be on only when you have water in the fresh water tanks and wish to use the sinks, showers, or toilet. The pump should not be run without water. As with the patio light switch, pressing the top of the button turns the pump on, and pressing the bottom turns it off.



Patio light switch



Water pump switch

Water Heater Switch

The water heater switch is to the right of the water pump switch. As with all the other switches on the monitor panel, the battery disconnect switch must be on for the water heater to work. Even though the water heater uses propane to heat the water, all the igniters and controls are electrical. Be sure that the water heater is full of water before turning it on - check the position of your bypass valves and fill the water heater if necessary.



You can turn on the water pump and push on the pressure relief valve on the outside of the waterheater to check if the water heater is full.

After turning it on, the red light to the right of the switch will come on for a few seconds, then go off as the burner ignites. If the light keeps going on and off, your burner is not lighting. Make sure that you have propane in your propane tank and that the main valve is open. If the stove burners light, your propane supply is good.



Water heater switch

Optional Webasto Water Heating Systems

Some RS Adventurous models come with optional Webasto diesel-powered water heating systems. These have their own controls mounted in the rear area of the Roadtrek, and there will be no water heater switch on the monitor panel. Follow the instructions for these units in the user's manual for that unit. The Webasto control switches are mounted in the rear lounge area behind the TV.

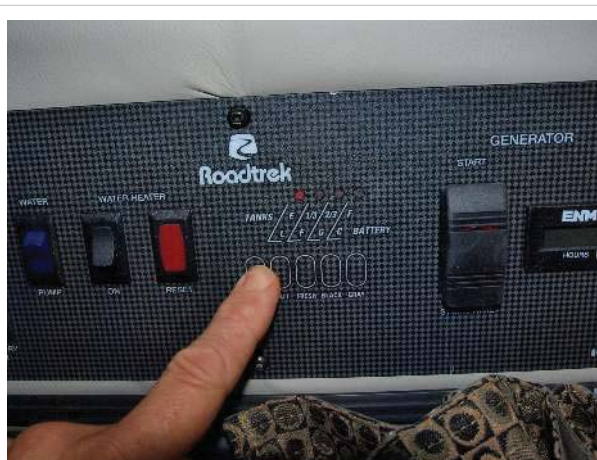
Tank Level and Battery Charge Indicators

To the right of the control switches are the indicator lights for the battery charge level, the propane tank level, the fresh water tank level, and the black and gray water tank levels. Press the button for each to see the display. These will give you an approximate reading, to the nearest third, of how much is in each tank.

Roadtrek recommends that you keep a small amount of water in your gray and black tanks at all times. This will reduce the likelihood of material sticking to the inside of the tank.

The four indicator lights for the battery are low, fair, good, and charging. Battery voltage dips under load; the greater the load the greater the voltage dip. A battery under heavy load will show much lower state than one at rest.

The propane indicators will show full when the tank is at its maximum capacity. Because of the safety-related need for a vapor space at the top of the propane tank, the maximum fill capacity is 80% of the volume of the tank. Your 60 liter/16 gallon propane tank is full when it holds 48 liters/12.8 gallons of propane. There is another gauge directly on the tank that you can see behind the front utility bay door at the bottom of the driver's side. This gauge has finer gradations and will give you more information about your propane level than the indicator light display will.



Tank level indicators



Propane generator switch and hour meter

Optional Propane Generator Switch and Hour Meter

To start the generator, push START until the engine catches, then release. Allow the generator to run for a couple of minutes before turning on heavy loads such as the air conditioner.

To stop the generator, first shut down all heavy loads, let the generator run a few minutes to cool down, then press the STOP side of the rocker switch.

The hour meter keeps track of how many hours your generator has been running. This is important for servicing intervals such as oil changes, etc. See your Cummings/Onan generator service manual for details. There is a break-in oil change after the first 20 to 50 hours of use. You also need to exercise your generator every month by running it for an hour under moderate load.