

How to Guide - Zion Models

Monitor Panel



HOW TO: Monitor Panel

The monitor panel is located inside the side door, above the doorframe. Depending on the options you have, there may be a gasoline generator starter switch and hour run meter to the right.

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, all 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 of the monitor panel. This is a momentary switch, meaning it will always return to the home position.

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. When the battery disconnect is on, you will see the voltage displayed.

If you hear a clunk-clunk, or nothing at all, there are a few things that could be happening. Your lithium batteries (if you have them) may not be turned on, it may be too cold for the batteries to work or your batteries may be depleted to the point where they cannot drive the relay. The best way to charge your batteries in this situation is to start your vehicle engine and try again after it has charged for a while. Once the relay is working, you can continue to charge with the generator or shore power.



Inverter Switch

Just as the battery disconnect switch powers the lights, fan, and other 12-volt electrical loads, the standard inverter takes 12-volt power from your coach batteries and changes it into 120-volt electricity. It powers some of the smaller 120 volt alternating current loads, such as the TV and DVD player. This is the regular electricity you have in your house. 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 3,000 watts maximum output. 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, to the right of the battery disconnect switch. 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 also shut off if the battery voltage falls below a certain level. This is to protect your batteries, wiring, and the inverter itself from damage. Your battery voltage drops under load, so it is possible to have the inverter cut off under high load when the battery voltage is normal with no load. If this happens, try turning off any power-hungry appliances and trying again. Things like electric toasters, electric curlers and hair dryers, or anything else that produces heat are usually energy hogs. Most appliances have the wattage indicated on a label somewhere on the appliance. With practice, you will learn what you can and can't run within the 3,000-watt limit.



Patio Light

On the monitor 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 water pump should be on only when you have water in the freshwater 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.

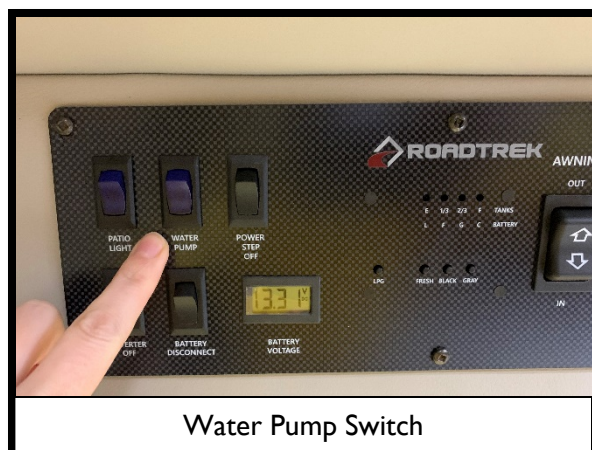
Power Step Switch

In the off position the side step will extend and retract with the sliding door. If you are parked at a location and you would like the step to remain in the extended position, turn ON the power step override switch.

❗ As a safety precaution, the step will automatically retract when the key is inserted into the vehicle ignition.



Patio Light Switch



Water Pump Switch



Power Step Switch

Awning Switch

The awning switch is located to the right of the main panel. Press the top to extend the awning and the bottom to retract the awning.



Always check out the area and make sure that the awning will not extend into trees, bushes, or other obstructions.

If the power to the vehicle is not available, the awning can be safely retracted using the manual override located on the idler (right) end of the case. (Picture 30.4)

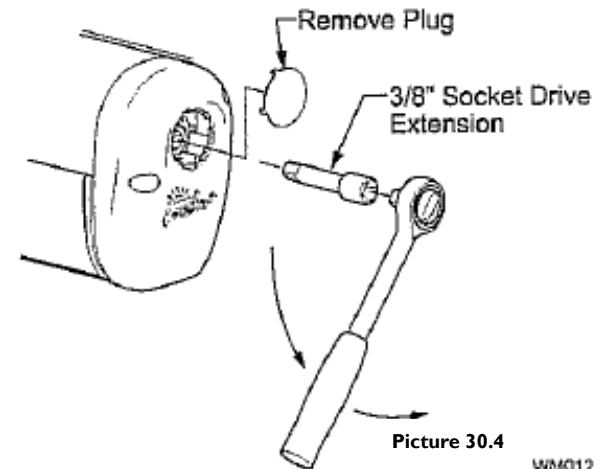


This procedure cannot be used to extend the awning.

1. Remove the plug from the right end cap and save.
2. Insert a 3/8" socket drive extension and handle into the square drive hole inside the endcap.
3. Turn the handle clockwise until the awning is retracted.
4. Replace the plug.



After closing the awning with the manual override, the lead rail may move out from the case 1/4"-1/2". This is normal and the awning is secure for travel until the power is restored or repairs are completed. Do not attempt to force the lead rail in with the override, serious damage can occur to the awning.



Tank Levels and Battery Charge Indicator

To the right of the monitor panel switches are the indicator lights for the battery charge level, the propane tank level, the freshwater 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 always keep a small amount of water in your gray and black tanks. 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 battery indicator lights are only applicable on a Roadtrek unit with AGM batteries.

The propane indicators will show full when the tank is at 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 22 liters/5.9-gallon propane tank is full when it holds 17.6 liters/7.2-gallons of propane. There is another gauge directly on the tank that you can see behind the propane fill door on the side of the van. This gauge has finer gradations and will give you more information about your propane level than the indicator light display will.

