

Diesel Motorhome Battery System

PROBLEM: I have a 2001, 390 Land Yacht motorhome with a 330 Cat engine. The coach was built in 2001 but was titled in 2002. My question is: Will shore power charge both batteries and not overcharge them if left plugged in while in storage for perhaps 2 weeks? I understand if I hit the disconnect switch by the entry steps and don't plug into a landline that the batteries will still be used to supply the electronics in the coach and run them down. Does this apply to one or both sets of batteries? Do I need to remove and isolate the negative cables on one or both sets of batteries when left in storage with no landline power for say a couple of months? Thank you for your time and effort to answer my questions.

ANSWER:

1. Both of your battery systems are being charged from shore power, the generator or the engine. When you are using the landline (shore power), the Trace inverter/charger provides the proper charge level regardless of the batteries charge state. It has a computer controlled charging system. When your batteries are fully charged, the Trace will go into a trickle mode. This means you can connect to shore power and just leave it connected until you are ready to use the motorhome. I leave my charging system on all of the time when I am home.
2. The disconnect switch removes the coach battery supply to your Intellitec Battery Control Center. I have enclosed a manual for the Intellitec Battery Control Center. **Figure (1) Disconnect- Switched Coach Battery – Fuses** is a list of what is turned off when you operate the disconnect switch. Your RV only has one disconnect relay/switch and it is on the coach battery. This includes many lights, several fans, furnace, refrigerator, water pump, etc. Some RV's have a second switch that disconnects the engine

battery.

AIRSTREAM - BATTERY CONTROL CENTER - Diesel

SERVICE MANUAL

FUSES

The fuses used on this board are standard, plastic "ATO", blade (automotive) type.

There are 18 positions for fuses on the board (See Figure 4). These are fed from four main sources, Disconnect-Switched Coach Battery, Coach Battery, Chassis Battery, and Ignition Switched Chassis Battery.

The 18 fuses and their size are as listed*

Disconnect-Switched Coach Battery - (All Fuses 20A)

Radio, Aisle/Gen Comp Lights	F1	Refer Light	F12
Lounge Area Lights / Fan	F2	Ceiling, Patio, Step Lights	F13
Luggage Comp Lights	F3	Pwr. Cord Reel	F14
Furnace/Bath Area Lights	F4	Spare	F15
Bedroom Lights /Fan	F5	Water Pump, Monitor Panel, Galley Locker Light	F16

Coach Battery

Spare	F6	20 Amp
Bat Disconnect Pwr	F9	5 Amp

Chassis Battery

Spare	F10	20 Amp
Spare	F11	20 Amp
Spare	F17	20 Amp

Ignition Switched Chassis Battery

Spare	F7	20 Amp
Ignition Signal	F8	5 Amp
Spare	F18	20 Amp

* These values may be different than the ones listed. Check the label on the cover for the correct value

Intellitec

131 Eisenhower Lane North
Lombard, IL 60148
630 268 0010 / 1 800 251 2408

www.intellitec.com 11 P/N 53-00755-000 Rev. C 023105

Figure (1)

- You do not have to remove the ground cables on the batteries when you store the rig. If you activate the disconnect switch (remove power to the Intellitec from the coach battery) all of the heavy-duty loads on the coach battery will be removed. The engine battery does not have any significant loads on it and should be able to start the rig after several months of sitting without being charged.

4. A more serious problem is that if you are located where there is severe freezing weather and have lead acid batteries, if they are not in a reasonable charge state they could freeze and ultimately crack the case. This is not a problem if you have AGM batteries.