Airstream Tech Help Group

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This group has been established by WBCCI to help the membership with any of their technical RV problems. Examples of questions that might be of interest to many members will be published in the *Blue Beret*. We will respond directly to you, in response to your email or letter describing a problem you are having. We hope you will find this new service of value in the care and feeding of your RV. You may contact us as follows: techhelp@wbcci.org or by mail: Howard Lefkowitz, 11508 Colt Terrace, Silver Spring, MD 20902

Trailer Rock Guards

Question: 1987 Airstream Sovereign 29 foot.

I badly damaged both left rock guards when I hit a deer.

1. What is the best way to remove the piano hinge pin to remove the lower guard?
2. Can you tell me where I can purchase USED rock guards for this trailer?

Answer: You must drill out the rivets that hold the piano hinge to the trailer. When replacing, make sure you put sealer under the hinge so it will not leak. You should also buy the blocks to replace the old retainers. They break loose and allow the stone guard to swing out and be damaged. I do not know of any source for used rockguards. You will probably have to buy them from an Airstream dealer.

Phil Broomall

AGM Battery Charging

Problem: I read the battery article in the April 10 issue of the *Blue Beret* with great interest and feel I've finally found someone who might help with questions about my 2008 - 31 foot Airstream Classic Limited. This trailer came from the factory with glass mat batteries, solar panels, and an inverter with 2 special outlets mounted alongside the regular outlets in the living area.

Here are my questions:

What is the low battery capacity for these AGM batteries?

Several times I have stopped at Wal-Mart for the night, go inside and the current capacity level is already down to 85%! What's that about? Do I need to install a computer chip charger? I am relatively sure Airstream did not install one in this trailer.

Secondly, would I be wise to install one with the Battery Wizard now? Those AGM babies are very expensive and I don't want to "cook" them with an inadequate charger.

Finally, would the solar panels keep AGM batteries charged up during the winter without having AC power in the trailer?

Answer: You can take the AGM's into a deep cycle (down to 20% of a fully charged battery) or about 10 volts without harming the battery. You can do this several thousand times without any permanent damage.

You absolutely need a computer chip charger if Airstream did not install one. The optimum charge voltages are different for an AGM and also change with battery temperature. So you need a charger that has a temperature sensor that optimizes the charge voltage along with the computer control. The sensor is attached to the battery terminal and connects to the charger (usually with a telephone type cable/connector).

Yes the AGM batteries are quite expensive and the sooner you provide the proper charging environment the longer they will last.

Solar panels will keep the batteries up during the winter providing you have adequate sunlight (Florida, Arizona, etc.). AGM's have no liquid so they will not freeze. I keep my charger plugged in all of the time the rig is parked at home (24/7). With the correct charger the batteries should last many years since the computer controlled charger constantly adjusts to the batteries needs.

Question: My primary option is the Inteli-Power 9200 Series Converter/Chargers with Charge Wizard, but the blurb doesn't say anything about a temperature sensor.

Answer 2: The Inteli-Power Chargers with the Charge wizard are fine for flooded batteries, however, they do not have an AGM charge mode. Some of the best chargers are from Xantrex. The True Charge 2 is available in 10, 20 or 40 amp rated units. It has an AGM mode as well as a gel cell and flooded battery switch. They have a temperature sensor with cable available (at extra cost) that hooks up to the battery. I used a factory rebuilt unit in my 1990 Classic Motorhome for over 23 years and for the last two years it has been traveling around in England with the same charger. Check online for the instruction manual. The 40 amp unit lists for $400 but is available for under $300 at many sites. Amazon sells them for $310 with free shipping. A 40 amp rated unit would allow you to easily handle extra batteries in the future and provide a fast charging rate.

Howard

Yamaha Generator Ground Problem

Question: I have a Flying Cloud trailer which when plugged into shore power works fine. When I plug my polarity indicator in any trailer outlet I get a good indication. When I plug my trailer into my Yamaha EF2000is generator I get one yellow light, which indicates an 'open ground'. I have checked my generator and trailer for a broken wire or some short and found no problem.

Answer: This Yamaha model has the ability to hook two units together and get twice the power. This is just like the Honda generators. In order to do this the output lines (neutral and hot) must be floating so the two generators can automatically adjust and synchronize. This allows the two generators to share the load and provide double the output capacity. This means the ground and neutral on the Yamaha are not connected, which is exactly the indication you are getting.

This can be a serious safety issue since the trailer body can have voltage on it and give you a bad shock especially if the ground is wet or you are standing in a puddle (I actually measured 85 volts between the trailer body and the generator on a rainy day). In a shore power hookup the neutral is directly grounded in the main voltage supply box. In a motorhome the generator neutral is internally grounded. In a high power Inverter the neutral is grounded when it is used as the primary 120 VAC source. Your trailer has floating neutral and hot lines so the source 120 VAC must always provide the ground. A simple ohm meter test can confirm that both trailer lines are floating relative to the chassis ground.

If you are never going to hook two generators together and have them synchronize then you can permanently ground the neutral on the back of the outlet socket. If you want to consider using two generators or do not want to modify the generator then you can make a special adaptor, which can be easily removed. Make a short 3-wire cable (10 inches is fine) with a 20 amp male plug and a 30 amp female end. Connect the neutral to ground inside the female 30 amp end, which will provide the proper grounding function as well as the proper adaptor. You should locate the special adaptor in close proximity to the generator and use at least #10 or #12 wire.

The simplest approach (if you do not need both 20 amp outputs) is to take a 20 amp male plug, connect the neutral line to ground and plug it in. Use a waterproof plug and seal the wire input area.

By the way neither Honda nor Yamaha will answer any questions or acknowledge this as a problem since it could be a liability issue. Both of them recommend using ground rods in close proximity to both the trailer and the generator.

Howard

Why Tow Chains?

I have seen all manner of installing the tow chains including:

1. Straight back to the tow vehicle
2. Crossed in the middle
3. Crossed twice in the middle because they were too long
4. The two chains twisted together along the entire length because that is how my Dad did it
5. No chains because they are not needed

The proper installation is with the chains crossed in the middle so that if the main hitch receiver should break or the ball mount fails the chains will catch the A-frame, support the trailer and prevent serious damage.

If the chains are too long get links removed so they do not ride too close to the ground. If they are too short get new chains and adjust them to the correct length. Just because they came from the dealer that way does not insure they have been properly set up.

Figure 1, shows what happened to one of the participants on the recent Southwest Adventure Caravan. Fortunately, this occurred as they were coming to a stop and all of the protections worked.

This is also a good time to check the breakaway switch cable. This cable should be attached to the car not the hitch. A good approach is to use an eyebolt that is securely bolted through the car bumper (usually one of the license plate mounting screws). The breakaway switch cable is then clipped to the eyebolt.

As part of your camping season begins, be sure and torque all of the hitch and receiver platform bolts before you get out on the road.

Howard

Figure 1