

BATTERY MODE/DISCONNECT

One of our readers raised several questions regarding the "Aux Start" and "Aux Batt" switches in his 1997 Brave. Those switches, of course, allow you to use your coach batteries to help start your engine and to disconnect your coach batteries during periods of vehicle storage. Over the years these systems have stayed basically unchanged, where the switches themselves have varied in appearance and labels. In this article we will address the specific questions our reader asked, and also provide illustrations of the various switches and basic circuitry.

Q. Can the house batteries be charged with the auxiliary electrical switch ON and AC power to the converter?

A. Yes. Always leave the auxiliary battery switch in the ON position unless the coach is to be in storage. Never attempt to save your battery power by turning it off while using your RV. Shore power (110 volts alternating current) flows to the converter where it is changed or converted to 12 volt direct current which is then distributed to the coach batteries for charging and supplied to the 12 volt lights and appliances.

Q. Can the chassis battery be charged through the converter in any switch arrangement?

A. No. The chassis battery cannot be charged by the converter regardless of the switch positions. The automotive alternator is the only charging source for the chassis battery. Should this battery lose its charge, the auxiliary start feature allows you to utilize your coach batteries to help to start your engine. (Certain diesel chassis vehicles have a bi-directional isolator relay delay, or bird relay, that will allow the converter to charge the chassis battery dependent upon its voltage level.)

Q. If, during storage, charging of the chassis battery is needed, is there a way, short of connecting an external battery charger, to charge the battery?

A. No. During storage both coach and chassis batteries should be checked frequently and recharged as needed. Remember that even a partially discharged battery can freeze in cold weather, resulting in either cell damage inside the battery or a cracked battery case. All computer controlled engines have some current draw on the batteries even when the engine is not running.

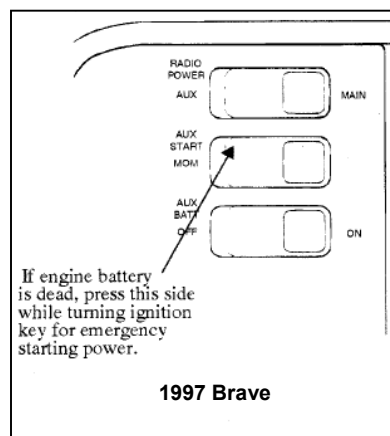
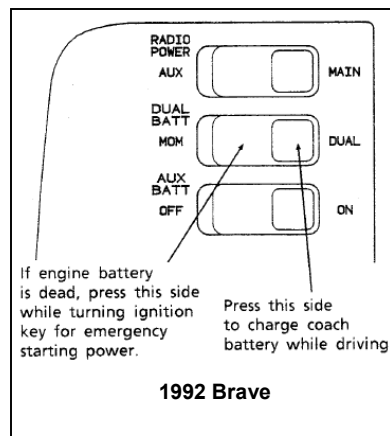
Q. Will the generator be easier to start with the auxiliary electrical switch ON and with shore power provided to the converter?

A. If your coach batteries are fully charged, you will see a negligible benefit in starting your generator from being plugged in to shore power. With batteries that are discharged, the converter will only supply, at best, a fraction of the power required by the starter. Fully charging your batteries is the best thing you can do to ensure your generator will start when you need it to.

Q. Can the house batteries be charged with the auxiliary electrical switch OFF?

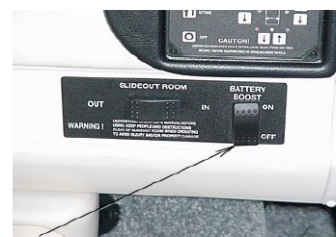
A. No. Refer to the first question. You should always have the auxiliary switch in the ON position unless the coach is in storage. Your solar panel, when operating, will provide a minimal maintenance charge.

To the right are examples of battery mode and disconnect switches we have used over the years. Yours may appear slightly different, but the functions should be similar. We are also providing schematics of typical battery mode and disconnect wiring. We hope the information provided here will be helpful in answering any questions you may have concerning your Winnebago Industries motor home.

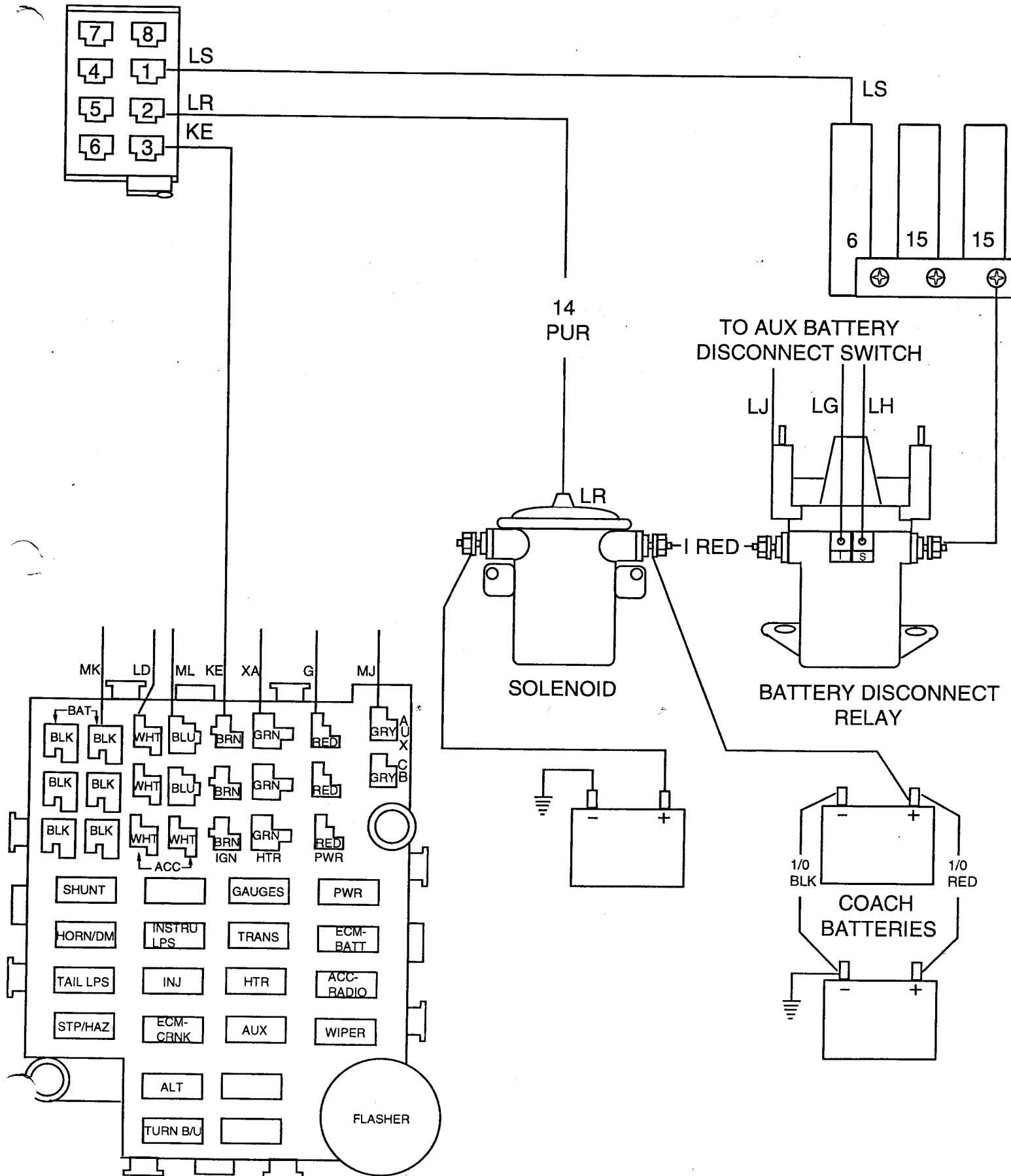


BATTERY BOOST SWITCH

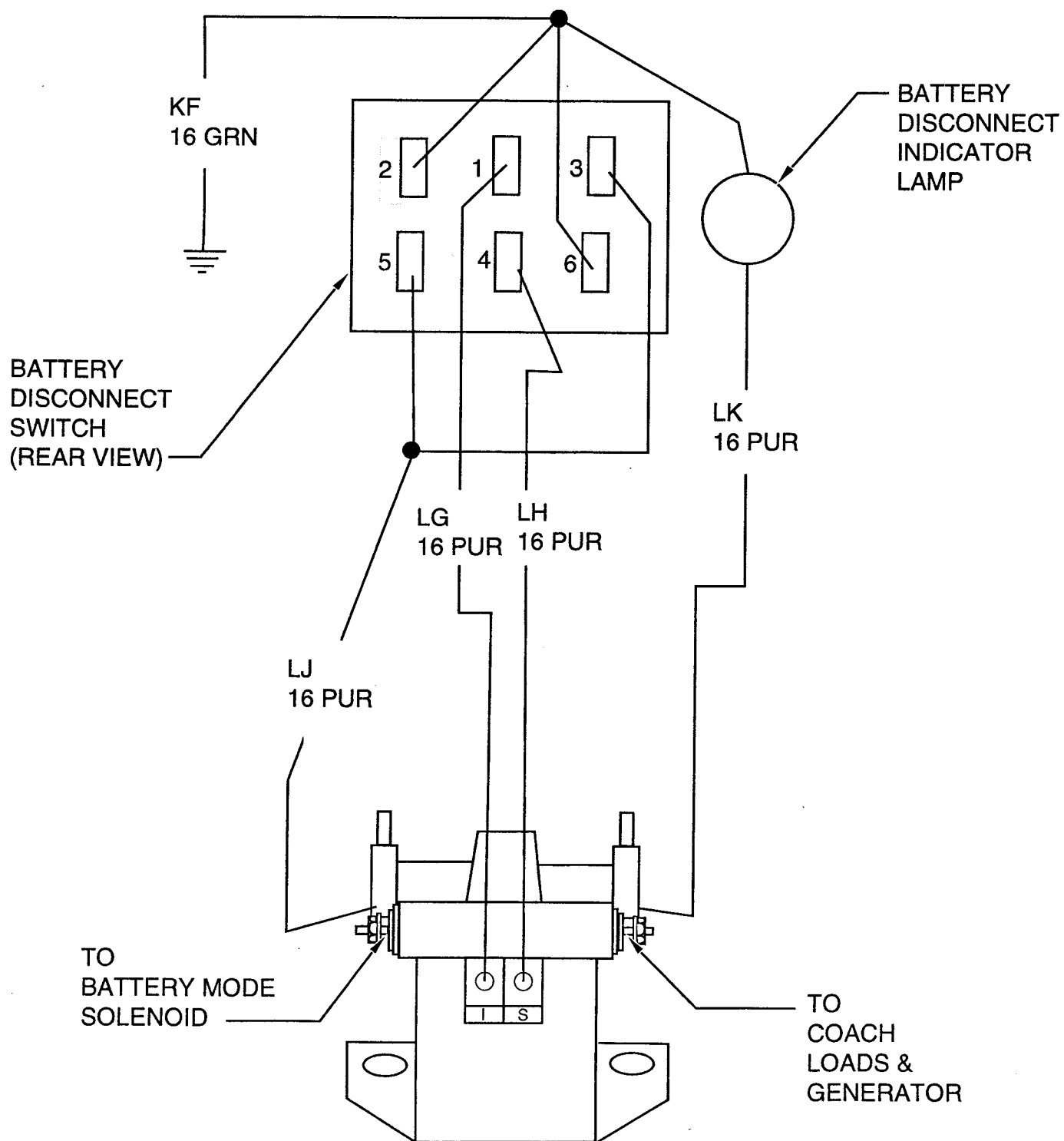
This switch can be used to provide emergency starting power from the motor home auxiliary battery if the automotive battery is dead.



TYPICAL AUXILLIARY START CIRCUIT 1994 AND UP



AUXILIARY BATTERY DISCONNECT SYSTEM WIRING SCHEMATIC (TYPICAL)



BATTERY MODE SYSTEM WIRING SCHEMATIC (TYPICAL)

