By Jack Bradshaw - Reprinted from Fall 2007 Motorcader

Thinking back on some of the questions that have been asked, one question comes to mind, what has AC priority, the generator or shore power? Here is a list of the year the coaches were built and what type of transfer relay was installed.

| Year | Manufacturer | Model | Relays/Contactors |
|----------------|----------------------|---------|----------------------------------|
| 1979-1980 | Progressive Dynamics | PD-30 | Relays-Generator Priority |
| 1981-Mid 87 | Progressive Dynamics | PD-30 | Relays-Generator Priority |
| Mid 87 -Mid 94 | Todd Engineering | PS-250 | Contactors-Generator Priority |
| Mid 94-Mid 01 | Magnetek | ATS-100 | Relays-Shoreline Priority |

MagneTek ceased production on the model ATS100 around the end of 2000. Parts were not offered by MagneTek for the model ATS100 even when it was in production by them. The ATS100 can be electrically replaced by the ATS501 however there is a physical size difference as the ATS501 is larger.

| Mid 94-Mid 01 | Lyght 3-pole Replacement contactor | LPT50CA Eaton/Cutter Hammer C25DNF340A | |
|----------------------------------|--|---|----------------------------------|
| Mid 01-02 | Dyna Gen | RV-604 | Contactors-Shoreline Priority |
| Mid 02 thru 05 | Maverick Technologies | MTS-105 | Contactors-Generator Priority |
| 06 Present | Automated Eng. Corp | ESP10040A | Relays-Generator Priority |
| | | | |
| Replacement Transfer Switch | Lyght | LPT50BRD | |
| Replacement Transfer Switches | Elkhart Supply | | |
| Replacement Relays | RV Powerhouse | | |

Up to the mid-02 year models all the transfer control boxes were built without any type of protection from voltage spikes, over/under voltage or any type surge from bad ac power from the campground power pedestal.

The Maverick transfer box installed in mid 02 coaches provides over/under voltage protection from shoreline power only with a surge protection device mounted on the side of the box. If

you look at the box you see two lights indicating power is connected to your coach, this small box is the surge protector. One word of caution, do not remove the cover of this small box thinking something is wrong with power or you think one of the lights are out. This surge protection device is filled with a sand type substance to absorb the power if the unit were to fail due to a high voltage spike or power surge. The transfer box is calibrated at the factory to protect from over/under voltage in the range of 100v to 133v AC.

The 06 to present transfer relay box is an automated electrical control system with electrical system protection (ESP). This control box is a line/generator switch, load manager and surge protection for generator and shoreline power and is capable of line diagnostics. The ESP monitors polarity, phase and voltage level readings between 102v to 135v ac. These readings are used to switch to utility power or generator power. Surge protection is on the input lines as well as the load lines and protects the coach with maximum coverage. The cover for this control box is plastic to allow you to see a LED readout that is mounted inside the box. The LED displays the voltage and amperage for each leg of power and provides a diagnostic fault code condition if the power is out of tolerance. These fault codes are in your owner's manual and are very helpful in determining what is wrong with the power so you can tell the campground manager if their power is out of limits. If you can't get power on your coach one thing to try is to open the circuit breaker at the pedestal and unplug the shore power plug for a few seconds. If the ac power is within limits you should be able to apply power to your coach.

No matter what type of transfer relay you have, it is a good practice to turn off the pedestal circuit breaker or disconnect the shore power plug if you want to run the generator for any reason.

I hope this has cleared up another question about your coach.