Electrical System Troubleshooting

Don Berry

Sometimes electrical gremlins can be difficult to track down. Some of the coach electrical systems were not working properly, including the converter/charger.

Road vibrations can cause connections to loosen slightly over time. When they loosen, resistance causes excessive heat in the connection which can burn and corrode the connection eventually causing it to fail completely. Worse than failure, loose connections can and have caused fires in RVs. Below is a photo of an Automatic Transfer Switch (ATS) that failed. The wires shown are the Green safety ground, Black 120v leg, White neutral and a Red 120v leg. As you can see, the white neutral wire on the left shore power connection is burned beyond recognition and not making proper contact. As well, the red wire has charred some and is not contacting as it should.

As part of regular maintenance at least once per year, disconnect all 120v power and check the coach electrical system. Slightly loosen then re-tighten all connections in the ATS, any wired EMS such as a Progressive Industries, and all circuit breakers in the breaker panel. Loosening then re-tightening connections instead of just tightening them actually improves the contact.

Treat your electrical system like your life depends on it because it might.

