



**Rick March, General Manager  
Customer Relations Group**

Greetings! I hope you enjoyed the Holiday season as much as I have. The only thing that could have made the week better was some warmer weather. It is bitter cold as I write this article in January in Ohio!!

I have had a question or two lately concerning power converters that we install in the trailers. In our 2018 model year line up we replaced the single stage converter we have used for many years and started installing a three stage converter in all models. I will explain the three stages of charging. I will also explain the battery disconnect switch and the change that we made to this as well.

I appreciate all the feedback I have received. Keep it coming for future articles!!

### **Single stage converter vs three stage converter.**

There has been a lot of discussion over the last few years about why Airstream uses a single stage converter system in its products. With all the newer technology available today why have we not switched to something better? This was always a tough question to answer. Some of our owners who have owned their Airstream for many years have enjoyed the reliability of the single stage converter and had not really experienced any issues. Why change? Most of this feedback from you, our owners, has come from mens and womens feedback sessions during Alumapalooza or the International Rally. Many of you have taken part in these sessions and hope you will continue. Great feedback!! So the change was made. Here are the differences.



**Single Stage Converter**

The Parallax 7300 series power center model 7355A had a single stage convertor with an output of 55 amps. The battery charging portion will charge the batteries at 13.6 to 13.8 volts.



**Three Stage Converter**

The WFCO WF-8900 series power center has a three stage converter with an output of 55 amps. The three stages are listed below.

**Absorption Mode:** This mode is the normal operation mode, this supplies 13.6 volts to the 12 volt appliances as well as a slow charge to the batteries.

**Bulk Mode:** In this mode if the batteries are low the charger will switch to 14.4 Volts for a maximum of four hours and then return to Absorption mode.

**Float Mode:** In this mode the converter will trickle charge the batteries at 13.2 volts. When the converter senses a demand (by turning on lights) the converter will automatically return to Absorption Mode.

**Note:** I know the first question I am going to be asked. Can I replace my existing single stage converter with the three stage model? First, the three stage converter is 9 inches deep versus the single stage converter only being 7 inches deep. In many installations there is not an extra 2 inches of space available for the change-out. You may be up against a wheel well, wall, or some other obstruction. Second, the new three stage converter that we purchase comes modified to have the battery disconnect solenoid installed in it. All single stage applications will have the battery disconnect solenoid installed in the front end of the trailer separate from the converter. You could order the WFCO three stage converter without the disconnect solenoid modification and then you could replace it.

## Battery Disconnect Switch



In 2018 models Airstream changed the wiring from the disconnect switch above to be able to charge the batteries from either the use or the store position. This was a big change as all previous years the disconnect panel had to be in the use position to be able to have the converter charge the batteries. The store position completely disconnected the converter from the batteries. By using the new three stage converter with the built in solenoid it provides better control of battery charging by engaging as soon as the shore power connection is hooked up.

I would love to hear from you and if you have a suggestion or topic you would like to see covered in a future article, or have a question just drop me a line at [rmarch@airstream.com](mailto:rmarch@airstream.com).

Have a great month!

Rick March