Two Width Options. King Size Beds. New Slide Out Floorplans. Our Smallest TrailManor Comes Up Big.

We’re getting lots of buzz for the additions we made to our Model 2417 series trailers. For 2014, we expanded our 2417 offerings to include six models.

There are two widths—the 2417 Sport Series trailers which are six inches narrower than our standard trailers and are ideal for people with smaller tow vehicles who want light weight and more rear-view visibility when towing. The narrow-width 2417s are also designed for overseas sales. Our standard 2417 models are the same width as our larger trailers, and feature many of the same amenities. And in 2014, we’re offering all three of our popular floorplans—two-bed, slideout living room, and slide out dinette—in both the Sport and Standard models.

All 2417 models feature a king size rear bed, which means there’s plenty of comfort. You have a kitchen with two-burner glass top stove, a glass-top sink, plus a new larger refrigerator for 2014. There’s a surprising amount of counter-space and storage for smaller trailer, and you can get a hardwall wet bath with shower.

Your dealer will gladly show you the new 2417s—many have ordered them already, and you can of course see more on our website, www.trailmanor.com.

You’ll be glad you did.
October was an extremely busy month at TrailManor and as a result we missed getting a newsletter out. So we are putting November's newsletter out in a more timely fashion.

During October, the Red Sox won the World Series. The government shut down for a while. RV Sales continued to climb. And by the time this newsletter is published there will be only six weekends before Christmas. Time gets spent quickly. We hope that you are able to use your time on leisurely camping weekends.

During October we recorded a new video showing our 2014 models and demonstrating how easy it is to tow, to open and to close TrailManor travel trailers. The video also captures parts of the manufacturing process. It is posted on our website at trailmanor.com and you can see it on YouTube at http://www.youtube.com/watch?v=HsAsMGOXgao.

The RVIA Industry Show in Louisville, which will be held in early December, is a big RV Industry annual event. This year, many of the employees at TrailManor are planning to attend the show with us. They will have the opportunity to meet our vendors and scout out new ideas to incorporate into our units. We do have some new ideas that we are taking with us to Louisville and we are anxious to share those.

It is intriguing to see the warranty registration forms as they come into our office. We are very interested in what new owners have to tell us. We take your suggestions seriously – so thank you. We are currently updating our owners' manuals, and will make new versions available online. We have received good information about what you would like to see in the manual and we are working to incorporate those things. One thing for certain is that change is inevitable and keeping up with it makes for some interesting days.

From all of us at TrailManor – HAPPY THANKSGIVING.

Cleo’s Column

By Cleo Eickhoff, TrailManor VP of Marketing and Co-Owner

TrailManor Dealer Spotlight: Prosser RV

Long-time TrailManor dealer Mike Prosser is having a good year.

Recently, Prosser moved his Milwaukee dealership, Prosser RV, to a bigger location just off I-94 between Highway 20 and Highway 11. The new location, Prosser’s Premium RV Outlet, is more convenient for customers—and provides more room for sales and service, including new 2014 TrailManors. The old location will still be in use for RV rentals.

Prosser says he is able to offer the fantastic prices he provides to his customers because he’s “not like the big guys.” There’s one owner, and he can make decisions without layers of bureaucracy. He simply provides customers with the best deals possible.

Prosser operates the dealership with a small but highly experienced staff: Shane Bonner, his “right hand man,” office manager Katherine Bowers, and technicians Adam Figgoli and Russ Johnson. The crew has developed a reputation among customers as being exceptionally responsive to customer needs and requests, and people keep coming back to Prosser RV simply because they believe in the people there.

Prosser says he enjoys selling TrailManors because of their versatility and value. “TrailManor gives you a lot for your money,” he notes. “You get easy towing with the low profile, plenty of amenities, and an amazing camping experience.

Prosser’s Premium RV Outlet is located at 13815 Leetsbir Road in Racine County, Wisconsin, 53177. Hours are 9am til 5pm M-F; 9-4 Saturday; and 10-2 Sunday or by appt. Learn more at www.prosserrv.com.
Tech Talk With Ed Lytle

Battery Charging

After you take electricity out of a battery, you need to get electricity back in so you can use it once more. This is the process of charging the battery.

You should only charge batteries designed for re-use. Most RV lead acid batteries are designed for re-use. Carbon zinc flashlight batteries are an example of a battery that is not safe to charge.

Charging batteries means reversing a chemical reaction by running an electrical current through some materials. This generates heat due to the resistance of the materials to electricity flow and chemical reactions. The chemical reactions may also produce products that can be hazardous. If a battery is not designed for charging, attempting to charge may cause its container to burst or even explode spreading caustic material on anything nearby.

Discharge considerations

Batteries should not be discharged too fast or too far. Taking electricity out of a battery or putting electricity back into a battery requires both chemical and electrical processes. Chemical processes require that two (or more) materials come into contact with each other and change into something else. Electrical processes move electrons through materials. Neither process is 100% efficient and both suffer degradation through use cycles.

Here’s a good rule of thumb: “If you operate your house bank between 50% to 85% state of charge, as many experts recommend, and charge once daily, you should be able to return the 35% of battery capacity by properly charging for slightly over an hour.” (West Marine)

A twelve volt battery is about half discharged at 12.2 volts and this is about as far as you should discharge it in normal use.

Charging versus maintenance

It is one thing to get a battery charged and yet another to keep it charged.

When batteries sit, they will slowly discharge even if there is nothing connected to them. This means that battery maintenance needs to accommodate three states. One is usage. Another is charging. And the third is keeping the charge. Each of these states has its own particular demands on a battery charger.

If a battery charger is left on-line when appliances are connected to the battery (the usage state), you need to be careful that the charger is designed so as not to damage the appliances. This characteristic is one of the primary considerations of an RV converter.

The state that kills most batteries is that of keeping the charge when the battery is not otherwise in use. A trickle charger (low current charger at a float voltage) can prevent discharge. The other problem is called sulfation (see AZ Wind Sun http://www.windsun.com/Batteries/battery_desulfator.htm) which happens when a battery isn’t stirred up every now and then. (Maintenance device brands: Battery Pal, Battery Tender.)

Basic Charging Devices

The most basic type of battery charger is called a "constant voltage, current limited" type. This type of battery charger can be made with only three components. A transformer converts house voltage to battery voltage. A rectifier converts the household alternating current (AC) to battery direct current (DC). A resistor limits the current as a protection for both the charger and the battery. They are very good at providing a bulk charge but not so good at finishing a charge or maintaining a battery.

All a basic charging device needs to know about its battery is its voltage. This knowledge is usually built into the design of the device.

(continued Page 4)
This is true even with most “under $100” automotive battery chargers at department or automotive stores.

RV Converters

The converter in an RV is intended to provide a nominal battery voltage for RV lights and appliances as a first priority. Charging batteries is a second priority. These are similar to basic charging devices except that they may have some extra protections as well as some filtering to minimize noise and interference in RV appliances and to prevent excess voltage.

A converter should not be confused with an inverter. The 'con' takes AC and converts it to DC. The 'in' takes DC and inverts it to AC so you can run household appliances when not connected to the AC grid. Many of the better quality inverters will include a multi-stage battery charger as well.

RV Converters are not good at battery maintenance so, if yours is left connected for any period of time, be sure to closely monitor battery water level.

(Manufacturers: Intelli-Power, Magnetek)

Multi-stage Charging Devices

Somewhat intelligent, these battery chargers will tailor charging current for rapid restoration of battery capacity. They incorporate controls to separate battery charging into several stages. These stages can include the following:

- **Bulk** - full current to bring battery voltage up - usually ends when the voltage gets up to a pre-determined point.
- **Absorption or acceptance** - maintain a rather high fixed voltage to complete the battery charge - usually ends when the current gets down to a pre-determined point.
- **Float** - a reduced constant voltage to provide maintenance without boiling off electrolyte.

A multi-stage charger needs to know not only the voltage of the battery to be charged but also its charging current limitations. The charging current for lead acid batteries is usually assumed to be one fifth of its amp hour capacity. (e.g. a 100 amp hour battery should be charged at no more than 20 amps).

(Brands: Truecharge, Charge Pro, Intelli-Power with Charge Wizard)

Intelligent Charging Devices

Intelligent devices have a means to learn about the battery so charge restoration can be carefully controlled for a specific battery and conditions. These are often programmed with switches and dials and may have a temperature probe in order to consider battery temperature while charging. The programming tells the device what kind of battery (AGM, Gel Cell, Wet Cell, NiCd, etc) it is charging and the battery capacity. With this knowledge, they can carefully shape charging characteristics for fastest charging and best battery life.

Automotive Alternators

The alternators in common car systems are essentially a basic charging device. They have some temperature compensation to adjust charging voltage for under the hood temperatures but are otherwise constant voltage current limited devices. The common problems with these types of chargers is not at issue because automobiles are not operated continuously. The downside is that, if you leave the vehicle unused for a while, you may need to pay attention to maintenance charging and sulfation.

Giggles

*Igloo:* Stuff Eskimos use to hold an ig together.

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**TrailManor**

TrailManor Manufacturing Company, LLC
General Offices: P.O. Box 397, Hartington, NE 68739
Mfg. Plants: 1202 McGhee Lane Jacksboro, TN 37757
423.563.6685

[www.trailmanor.com](http://www.trailmanor.com)