

e feature many articles in this magazine that can help you improve the handling, performance and comfort of your motorhome. And while we also touch on the topic of safety from time to time (such as proper tire pressure and weight/loading), this article is different in that it deals with a critical safety issue on some Monaco Roadmaster chassis and a company that offers an effective solution.

We're talking about the TRA-1003 Trailing Arm Kit offered by Source Engineering of Elmira, Ore. As you may have heard, the trailing arms on the Roadmaster R4R and R4RR chassis equipped with "Monaco Gold" suspension manufactured by the former Monaco Coach Corp. (MCC) are prone to failure, which can cause sudden handling problems and even a loss of vehicle control that could result in a crash.

The problem was originally discovered in 2005 and was subject to a National Highway Traffic Safety Ad-

ministration (NHTSA) recall that included model years 2002-03 Holiday Rambler Ambassador and Monaco Knight; 2002-04 Safari Sahara and Zanzibar; 2002-05 Holiday Rambler Neptune and Monaco Cayman; and 2003-05 Safari Cheetah motorhomes manufactured from Nov. 30, 2001, through Oct. 1, 2004.

According to Source Engineering, the recall remedy provided by the former MCC was to replace the defective trailing arms and mounting hardware with re-engineered arms — but unfortunately, these are prone to cracking as well. In addition, the R4R and R4RR chassis were also used on some MCC products as recent as the 2009 model year, so many coaches that were not originally included in the recall may be equipped with the defective trailing arms.

To provide a permanent solution to the problem, Source Engineering designed new trailing arms for these coaches that are reported to be stronger than the original parts and are backed by a lifetime warranty to the original purchaser.

The founders of Source Engineering, Scott Zimmer and Jim Walls, should know a thing or two about MCC chassis; Zimmer logged 25 years at MCC in various positions including director of powertrain development, while Walls spent more than 13 years in the technical support department.

Source Engineering was formed in 1995 as a supplier to the RV air-conditioning industry and was reorganized in 2009 when Walls joined the company. Today, Source Engineering specializes in suspension kits/chassis components and cooling products (charge air coolers, radiators and hydraulic fluid coolers) for Monaco, Country Coach and Western RV chassis. In fact, Source Engineering is the sole distributor of JB Radiator Specialties, the OEM supplier to MCC and others.

The Source Engineering TRA-1003 trailing arms are made from reinforced steel, which is then shot-peened to increase surface hardness (which helps stop surface cracks from forming). Powder coat is then applied to prevent corrosion and provide a long-lasting finish. These arms are a direct replacement for the original parts, and can be installed in about eight to 10 hours by



1. According to Source Engineering, the original trailing arms on the Roadmaster R4R and R4RR chassis with the four-air-bag "Monaco Gold" suspension could eventually crack and fail. This typically occurs between 16,000 and 25,000 miles.





3. The lower shock mount bolt is loosened, but before it is removed, the rear of the trailing arm is supported to prevent it from falling down.

a competent repair facility.

To observe the installation of the Source Engineering trailing arms, we visited Redlands Truck and RV in Redlands, Calif. Redlands Truck and RV is an authorized Source Engineering dealer, and is equipped with an expansive RV maintenance and repair facility.

With a suggested retail price of \$1,800 plus freight, the Source Engineering trailing arms aren't inexpensive, but considering a factory trailing arm failure could cause serious damage or even an accident, they're well worth the cost. ◆

## FOR MORE INFORMATION

REDLANDS TRUCK AND RV 888-249-0124, www.redlandstruckservice.com. SOURCE ENGINEERING INC. 541-935-0308, www.rv-chassis.com.



6. The Source Engineering TRA-1003 arm (top) is compared with the stock trailing arm. Note that the TRA-1003 is made from a single section of straight steel (instead of bent like the stock arm) and is reinforced in the load-bearing midsection.





2. Once the air has been released from the air bags, the first step is to remove the nuts from the %-inch U-bolts that secure the arms to the rear axle. Next, the nuts that secure the air bag to its perch are removed, followed by the rear track bar mounting bolts.



4. With the shock removed, the arm can hang freely.



A crack begins to form at the weld. Once a crack starts, the arm can fail completely (and without warning) within 3,000 to 4,000 miles.



7. The TRA-1003 kit comes with new %-inch U-bolts, which are far more robust than the stock %-inch bolts.



8. The new bar is installed, ready for years of trouble-free travel.