Crossfire Tire Equalizers on rear duals

The rear dual tires in the Sprinter chassis are a bit of a challenge, for filling, monitoring, and changing. For the filling and monitoring there a few methods that you can do it with.

The first is staying with the OEM valve stems and buying a special air nozzle to reach the two valve stems, the outer one that is in between the tires and facing inward, and the inner one which is also in between and facing outward. This is actually the most difficult way of filling air, and the hardest to put a Tire Pressure Monitoring System (TMPS) sensor on. One of the positive aspects is the spare tire will go on any position, should you need to change a tire out, or have them rotated, as recommended in the Dodge/MB Owner's Manual (every 10K miles).

The second way is to have "custom" valve stems installed. There are a few out there, Borg being the most popular. These will work and you can access all 4 rear tires easily and mount a total of 6 TPMS sensors. In my opinion, the major disadvantage to these stems are the inability to replace any of the 4 rear tires with the spare, should you have to, and be capable of adding air if necessary. It also practically removes the ability to do the tire rotation requirement without dismounting the tires from the rims.

A third method is the one that I have chosen for my rig, to use a pressure equalizing device with a single inflation stem. There may be others, but these are the two that I know of on the market;

This one, **Cat's Eye TPMS** made by www.linkmfg.com (approx. $125)

and this one, **Crossfire** maid by www.dualdynamics.com (approx. $75)

I have had experience with both on the rear axles of semi-trailers, and preferred the visual display of the **Crossfire,** which is the device I chose.

The valve stem and mounting are basically the same for both and, but please note you will have to order an additional straight end hose to mount these correctly. The 180deg hose does not fit properly to avoid sidewall damage.

There are many questions and statements out there in the blogs that are questionable. I recommend you go to both sites and read their FAQ's and statements to get a better feel of these items.
As for the pros I see, these allow you to rotate the tires as well as using the spare in any of the positions. I have mounted a single TPMS sensor on the valve stem of the CF and have had positive results when a puncture occurred. When a puncture occurs and a tire looses pressure, both of the devices will **only allow a 10psi drop in the undamaged tire**. With the TPMS mounted it will sense the drop and alarm, warning you to stop and investigate the issue. You can (as I have done) drive slowly until you can have or replace the tire yourself.

Though the devices show a fairly accurate pressure in the combined tires, this does not mean that you shouldn't verify it with a secondary pressure gauge. I usually do that at least once a week when on the road. I trust the CF enough if the visual, as well as the TPMS, indicate a good inflation, I probably don't need to second check it.

The cons of the install is you need to make sure that the hoses are properly routed. So either you explain to the tire tech how you want ii done, or you do it yourself. It's like anything else on these rv's, you need to know and pay attention to the work being performed. You will probably lose the fancy wheel spinners/hubcups if you do this. I don't know about the aluminum wheel, as mine are all steel. For my spinners, I removed the center section and made a new one out of a stainless-steel pie plate. Then I secured the outer section with tabs connected to the axle housing.


These two photos show the results of those efforts.

At this time I don't have a picture of the routing between the two tires, but will get one soon and publish it.

TireTraker TT-500 Tire Pressure Monitoring System (TPMS)

I have a 7 year old version of this system and it has stood up to the abuse of the road and time. The newer version has a cleaner user interface on the central monitor, but still takes a bit of patience to setup. Regardless of the type of valve stem assembly you have, one of these systems is a must. It will save you a good deal of grief and money. There are many different manufactures of these, I just happen to have chosen this one.

This is my TPMS monitor mounted with Velcro next to the radio. The charger cord plugs in nicely in the cig lighter outlet below.