Crusingator

2010 43QGP Allegro Bus

7/2/2012

52 – **FYI** – <u>CRUSINGATOR TAG AXLE DUMP SYSTEM.</u> I am not sure what else can be said about the tag axle dump system on our 2010 43QGP Allegro Bus that I have not already stated more than once, but I will try to explain what has occurred over the past sixteen months.

Tiffin motorhomes has a design problem related to the components they are using for the tag axle air bag dump system.

The valves used for (automatic) proportioning the rear coach weight on the drive axle and the tag axle according to Tiffin's design are to split the weight 60% to the drive axle and 40% to the tag axle. On our coach loaded for traveling that would mean the drive axle would carry 14,838 pounds while the tag axle carried 9,892 pounds and the steer axle would be carrying over 15, 400 pounds, about two hundred pounds BELOW the maximum capacity of the steer axle.

To gain control over the automatic proportioning valves Tiffin removed the automatic valves and installed a pair of manual proportioning valves, these valves can be set to a specific pressure for the tag axle's air bags. After multiple trips over the scales the optimum tag axle air pressure has been determined to be 30 PSI, this pressure allows the best weight balance for our coach. Months ago in an effort to remedy this over-weight problem a pair of air gauges were installed on the tag axle's air bags. With the tag axle air bag pressure set to 30 PSI, the tag axle dump valves will not dump either air bag or will dump one bag and not the second air bag.

After months of attempting to resolve this issue with Tiffin our last Red Bay visit resulted in the Powerglide engineers admitting we have a problem. After proving to Gary Harris and Brad Warner the valves Tiffin is using were not designed to be used the way Tiffin is using them. Gary Harris contacted the manufacture of the valves. The manufacturer (Parker Pneumatics) is shipping a set of valves designed to operate down to an operating pressure of 20 PSI.

I asked Gary Harris to ship those valves to me for installation when they were received. The low operating air pressure valves were shipped to me and have been installed. The result of that installation has provided us with to date after multiple tests 100% operation of the tag axle air bags dump valves.

CRUSINGATOR'S 2010 43QGP ALLEGRO BUS

Manual proportioning valves with low pressure tag dump valves

REAR Air Suspension and **TAG** Axle Dump System

