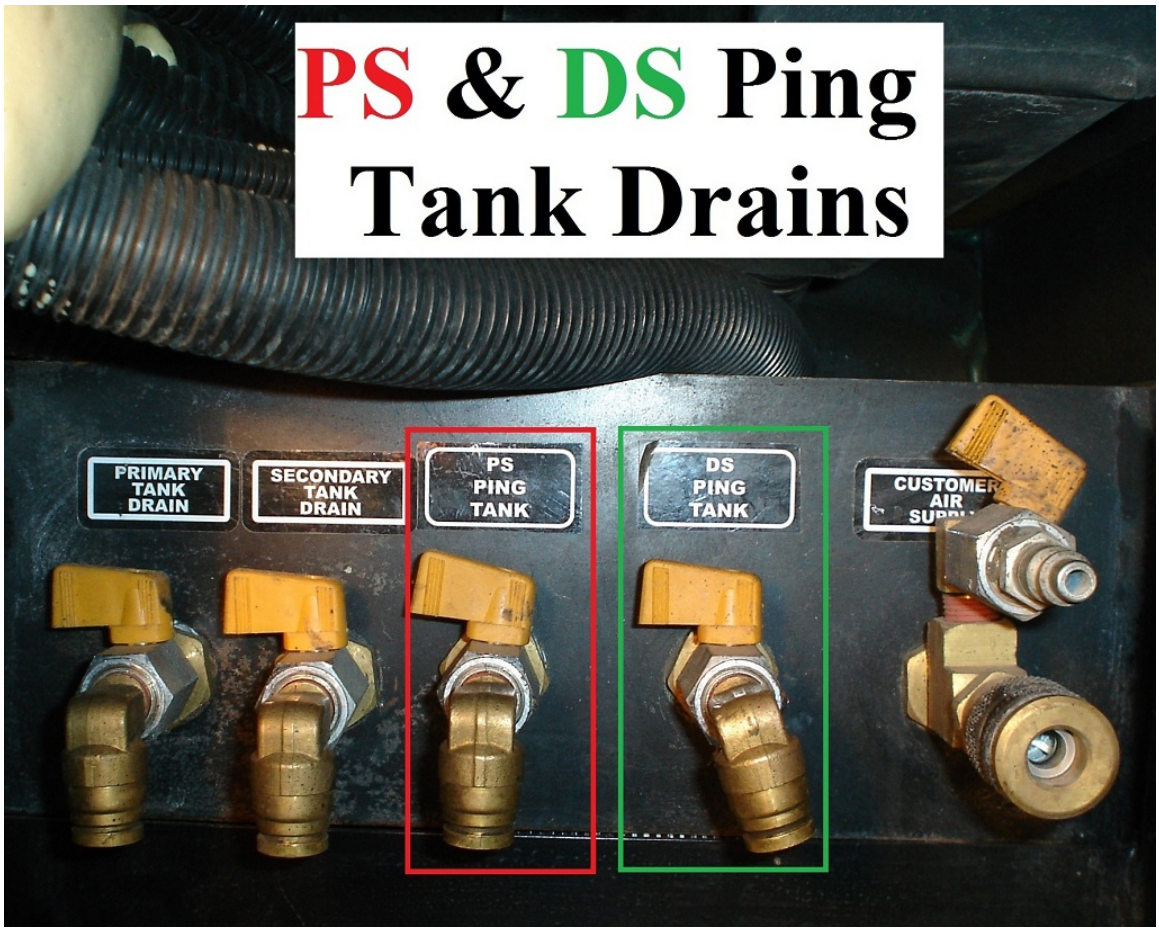
2010 43QGP Allegro Bus

8/25/2012

SIXTY-FIFTH - coach modification – **TAG AXLE AIR PRESSURE GAUGES.** The operation of our coach's Powerglide tag axle suspension provided me with many questions to ask Tiffin's Powerglide shop personal. When those questions did not get answered to my satisfaction, I decided it was time to explore answering my own questions.
I was not satisfied the coach was actually dumping the tag axle air bags as it should when backing (Automatically) or when the manual cockpit switch was depressed. After asking questions and doing some research I decided to install a pair of air pressure gauges on the tag axle air bags. Those gauges would display the tag axle air bag pressure and when the tag axle dumped the loss of air pressure in the air bags would be a good indicator of their dumped status, or when re-inflated at what air pressure.



For this installation of two air pressure gauges the following items were needed, two 1/4” 0 – 160 PSI air pressure gauges, two 1/4” brass “T”s and two 1/4” brass couplers. The items were purchased from Harbor Freight. Before any work can safely be performed the complete air suspension system requires draining of all air pressure. Complete draining of the system is easily done using the five valves in the above photograph. When all air pressure has been drained it is safe to work on the air system. The first step is to remove the 90 degree turn down fitting and 1/4 turn air shut off valve from both the PS & DS Ping Tank Drains. Then screw a 1/4” coupler into the fitting where the shut off valves were removed using Teflon tape on the threads. Next screw one end of a 1/4” “T” into the coupler using Teflon tape. The next step is to screw an air pressure gauge onto the side port of the “T” again using Teflon tape. Make sure all connections are tight to prevent air leaks then install the 1/4 turn shut off valve onto the open port on the “T” using Teflon tape. Last install the 90 degree turn down fitting using Teflon tape. When finished you should have the following fixtures.

After experimenting with 40 PSI, 35 PSI and 30 PSI air pressure settings in the tag axle air bags, 30 PSI in the Tag Axle Air Bags was found to be the best weight balance for this coach. This pressure allows the front axle to carry 14,970 lbs., the drive axle to carry 20,130 lbs. and the tag axle to carry 4,600 lbs., the TOTAL COACH WEIGHT is 39,700 lbs.