

2010 43QGP Allegro Bus

7/5/2011

19 – FYI – <u>TIRE RADIAL RUN OUT GAUGE</u>. Over the years I have performed almost all of my vehicle maintenance. I found with the larger 295 tires it was time to add to my tool collection. Installing the tires and wheels on the front steer axle can be time consuming and frustrating if the proper equipment is not used to center the tire, wheel and axle hub.

One of those pieces of equipment is a radial run out gauge for the tire/wheel positioning on the wheel hub. The wheels are hub piloted which means when the wheel is pushed on over the three hub tabs the wheel should be centered. But alas that does not happen very often. Partly because the spacing between the hub and the wheel is not exact, just a little space a few thousandths of an inch. Then you add in the tire not being perfectly round or the wheel not being perfectly round and now three components can cause out of balance problems. There is a manufacture which markets the below device/gauge the drawback is they are expensive to the tune of about \$ 390.00. Sorry about the low resolution picture, it's the best picture I could find.



Tiffin uses the above instrument in their Powerglide shop they may even use it in the mechanical shop where they prep the Freightliner and Spartan chassis's, I do not know if it is used for the Freightliner or Spartan chassis's if replacing the tire/wheels is necessary. I do know while working on my Powerglide chassis the run out gauge was used.

That kind of equipment cost puts a stop on my plans, or does it. Recently while spending a few hours shopping in our local flea market, I came across

a Yuasa 300-005 dial gage just like the one in the above picture. The gauge was new in the case still wrapped in plastic. Checking on line I found this gauge is about \$ 30.00 retail. Of course purchasing the gauge at the flea market I was able to steal it for \$ 15.00.

Next I needed to find a way to make a tripod in which to mount the gauge. Again some of my garage items came to my rescue. We have a tripod mounted 500 watt light collecting dust, so now I have my tripod and gauge. The only item left was a means to connect the two items to each other. A 1/4 inch diameter 3 foot long steel rod was purchased for \$ 2.00, it was cut to the desire length and then both ends were threaded for attachment to the gauge and tripod. I drilled a 5/16 inch hole though the tripod pole just below the top. Now the gauge, rod and tripod are all assembled with 1/4 inch Nylock nuts. After assembly I have a \$ 17.00 radial run out gauge and tripod which can be used for my maintenance.



No, I do not have the fancy roller installed on the front of my gauge to roll across the tire surface. However, I found in my research the fancy roller was not used in some other competitor's radial run out gauge designs.