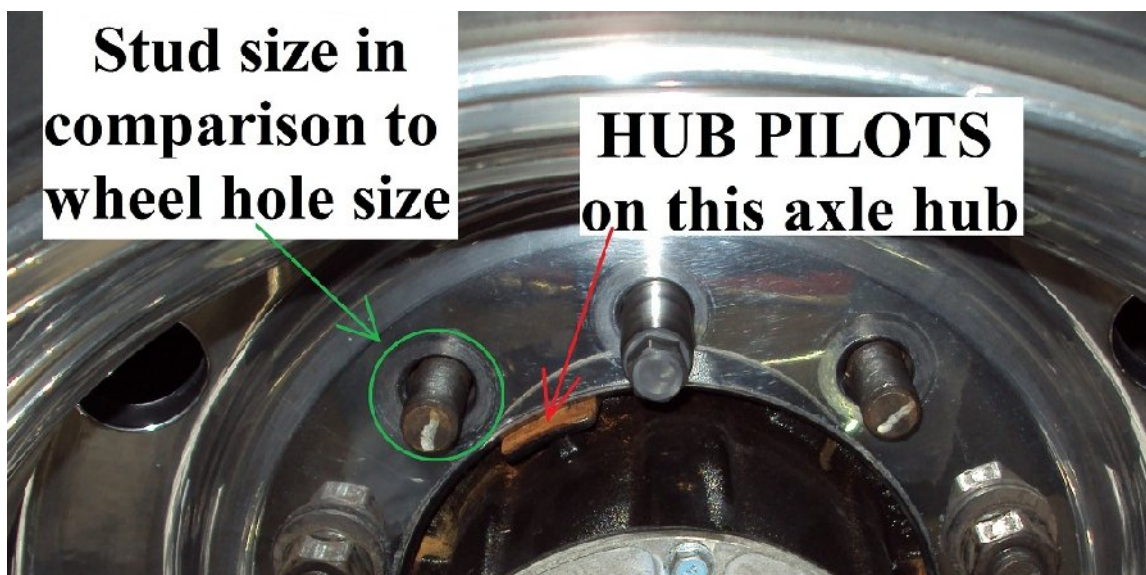




2010 43QGP Allegro Bus

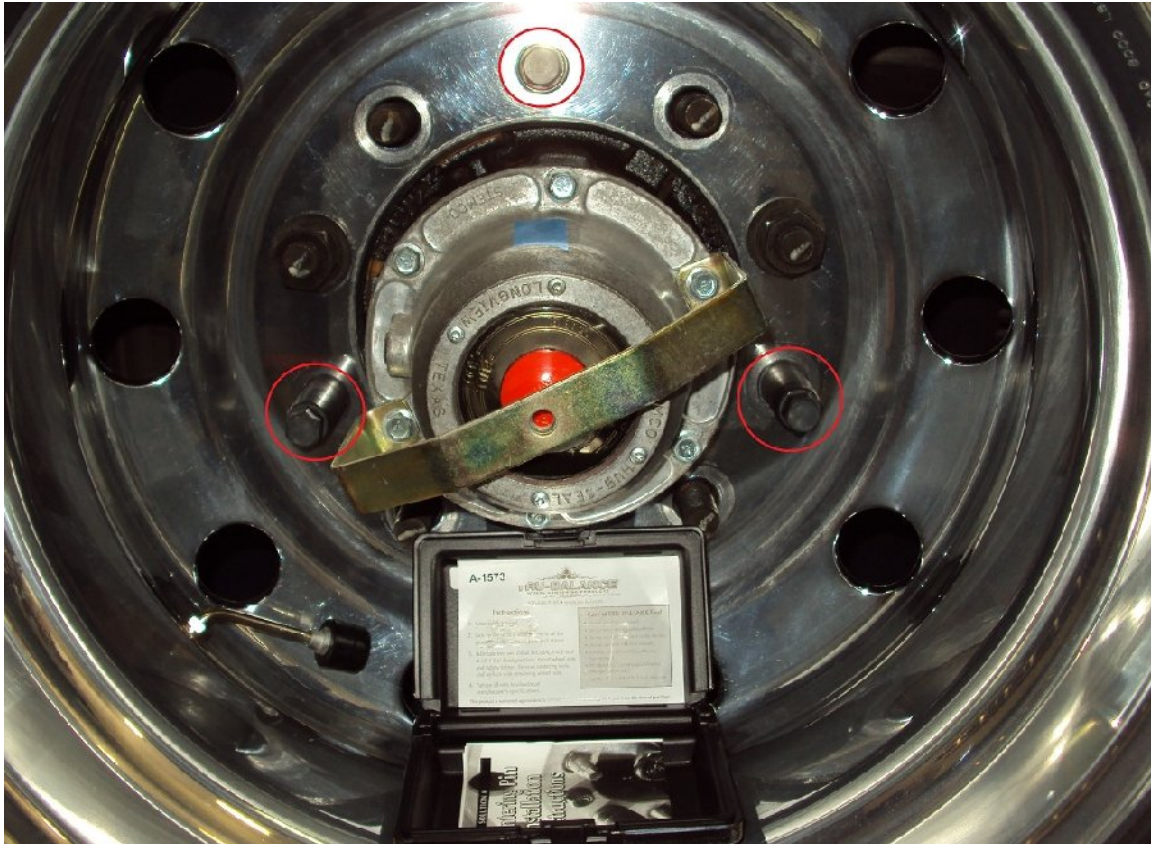
12/31/2012

71 – FYI – WHEEL CENTERING TOOL. A recent thread on the TRVN forum refreshed my memory. Several years ago when Freightliner Custom Chassis Corp. (FCCC) began installing a ZF independent front axle suspension on their chassis they (Freightliner) found at least one serious problem. That one problem related to their use of **BOTH** metric and SAE (Society Automobile Engineers) components during assembly. Most rear diesel powered coach owners which have 22.5 wheels know, there is a minor size difference between the actual size of a 33MM nut and a 1 5/16" nut used to mount a 22.5 inch wheel on the coach. If you have a 33MM socket great however if you only have a 1 5/16 inch socket it will work, it's just a little bit big but it works OK. The real problem does not have a thing to do with the socket size used to install or remove the wheel nuts, the problem relates to the axles hub size. Most wheels on these coaches are called "Hub Piloted". A hub piloted wheel is designed to "SELF CENTER" on the spindle hub of the axle when the wheel is installed. That is the problem when one component is METRIC and the second component is S.A.E., the components do not match EXACTLY. To add to that problem, the wheel stud size is smaller than the hole in the wheel now with the hub size being smaller than the wheel it is easy for the wheel to be mounted OFF-CENTER on the hub.



One method to prevent the occurrence of wheel and hub being assembled OFF-CENTER is to use a tool which actually centers the wheel on the wheel studs and not on the hub.

The centering tool set (A-1573) manufactured to fit my 2010 Allegro Bus on the Powerglide chassis is sold by Tru-Balance wheel centering products. Their web-site can be found at this link, <http://www.tru-bal.com>



As seen in the above photo the A-1573 case contains three center tools. After the wheel has been slid in place on the wheel studs one of the centering tools is threaded completely onto a stud at the 12 O'clock, 4 O'clock and 8 O'clock positions. The three centering tools are hardened steel however they **ARE NOT** designed to be installed using an **IMPACT WRENCH**, they are designed to be installed and removed using a $\frac{3}{4}$ inch wrench or $\frac{3}{4}$ inch socket.

During our warranty trips to Red Bay the front axle and tag axle wheels were removed and re-installed using one of the above tool sets. I know at least one set of these centering tools is used in the Powerglide shop when the tire/wheel assembly is initially installed on the Powerglide chassis.

My A-1573 centering tool set is expensive at \$ 225.00, However IMO well worth the money if you perform your coach's maintenance.