



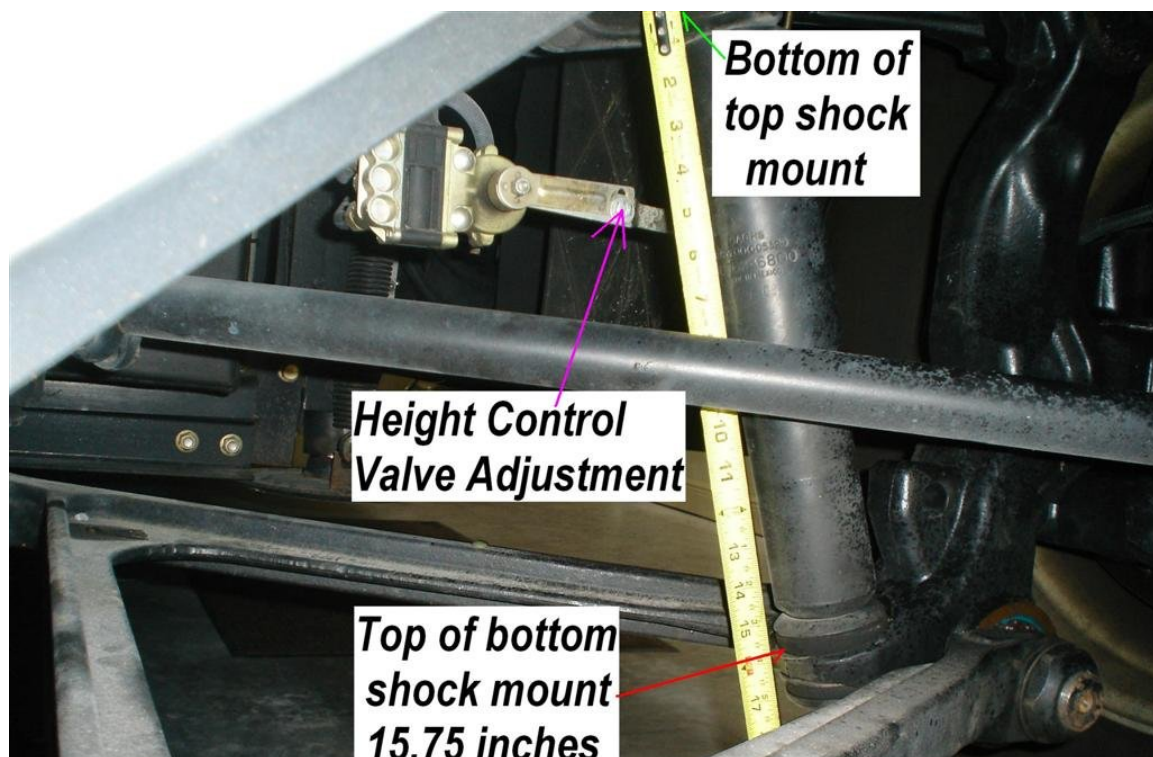
2010 43QGP Allegro Bus

10/7/2011

29 – FYI - POWERGLIDE CHASSIS RIDE HEIGHT ADJUSTMENT.

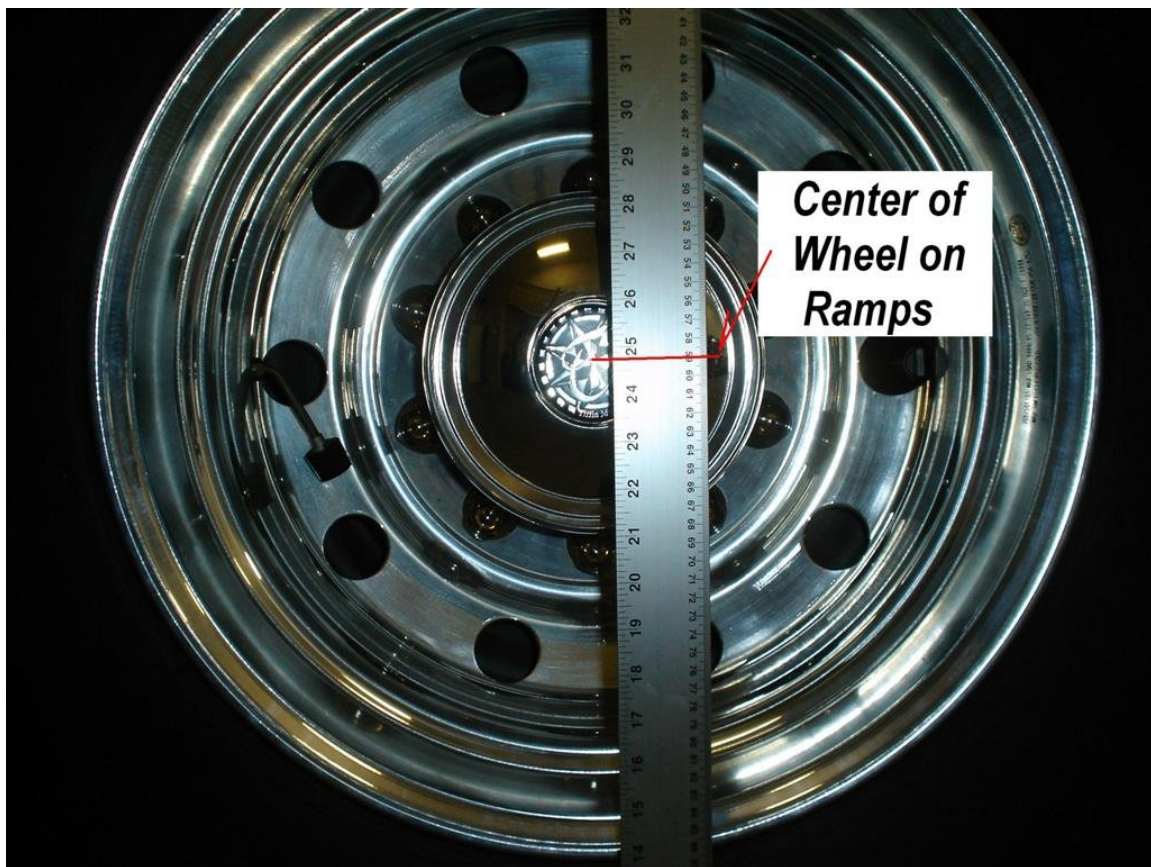
The ride height of the coach is critical to good coach handling and long tire life. It has taken me eight months to get around to checking the coach's ride height. Most of the delay was caused by my not taking the time to design and build the heavy duty ramps necessary to drive up on which will lift the coach high enough to safely work under the coach while checking and making any necessary adjustments to the coach's ride height. The ramps have been designed and built so now it was time to drive up on the ramps and check the ride height.

The front ride height is easy to check and adjust if necessary. The book states: Set the shock length to 15.75 inches, measure from the bottom of the top shock mount surface to the top of the lower shock mount surface. The measurement was not hard to perform nor was it difficult to make a minor adjustment on the driver's side of the coach which was slightly low by 1/2 inch. The height was increased by loosening the height control valve adjustment bolt and pushing the arm UP to raise the height, then re-tightening the bolt.



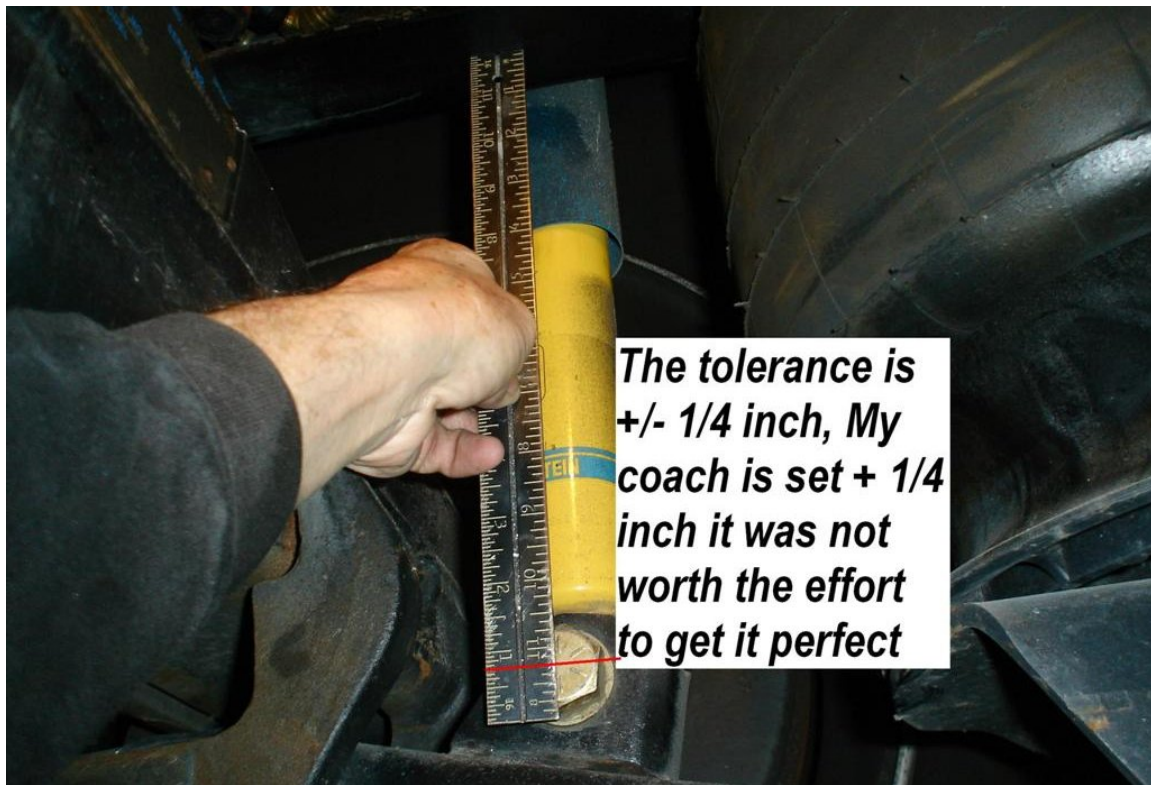
Both height control valves on the front of the coach were checked and the driver's side corrected to 15.75 inches.

The two rear ride height control valves are easy to see but are a bear to get to and adjust. The book states the ride height should be 7 inches and is measured at the axle centerline and is the distance from the bottom of the chassis frame rail to the center of the wheel. WOW that is a mouth full and not easy to perform. This required a few minutes of head scratching, this is what I finally decided to do. I first measured from the garage floor to the centerline of the axle hub. In this case it was 24.75 inches 5 inches of the 24.75 is due to the ramps the coach is sitting on.



That gives me the centerline of the axle/wheel. To that measurement I added the 7 inches of ride height getting a total of 31.75 inches. I cut a piece of wood 32 inches in length then used the stick as a guide for checking the rear ride height control valves. The passenger side was 1/2 inch too low so I needed to adjust that valve. This is where the bear part comes into play. My arms are just barely long enough to remove the link from the control valve. The rubber grommets on the linkage require regular maintenance lubrication to keep them pliable otherwise removing the grommet from the control arm

linkage is very hard to do. After fighting to get the grommet separated from the control arm the grommets were lubricated which made re-assembly easy. The next time the ride height needs to be checked I will use my just developed short cut for checking. After all four ride heights were set and the locking bolts were tightened down I decided to just measure the length between the bottom chassis frame rail and the centerline of the lower shock absorber bolt as my test measurement for the correct ride height. The measurement below is 11.25 inches. I used a 32 inch stick which was actually 1/4 inch long. I used a + 1/4 tolerance for setting the ride height as it is easier to just subtract up to 1/2 inch and still be within the +/- 1/4 inch tolerance. There for if my math is correct when checking the ride height in the future, if checked in the below manner the measurement should be 11 inches +/- 1/4 inch, or no shorter than 10.75 inches and no longer than 11.25 inches.



Adjusting the coach ride height is a job which requires careful planning and equipment to safely lift the coach in a manner which keeps the coach level just as if the coach was on the road ready to drive. After all adjustments have been made it is always best to run through a few auto level tests and back to ride height to make sure everything has been correctly set.