HOW TO MEASURE RIDE HEIGHT

Ride height isn’t just a matter of comfort or personal preference – it is essential to help maintain the correct height of the trailer and driveline angles, which prevent trucks from leaning into turns. Adjusting the ride height outside of specifications can all damage air springs and lead to expensive driveline failures.

A truck’s ride height should be measured only when the trailer is disconnected or the vehicle is unloaded.

To accurately measure ride height:

a. Determine the correct ride height for the vehicle as specified by the manufacturer, and determine which axle the ride height valve is connected to.

b. Drive the vehicle forward at least two vehicle lengths on a flat surface. This will release any bushing wind up.

c. Unload the vehicle and/or disconnect the trailer. Block the front tires to prevent the vehicle from rolling.

d. Pressurize the air system with a constant flow of air in excess of 70 psig (4.8 bars). Check that all air springs inflate correctly and raise the suspension to vehicle specifications.

e. Measure from the ground to the bottom of the frame rail (1).

f. Locate the axle centerline (the center hole on the end of the hub works best) using a steel rule or an appropriate tool (2). Measure from the ground to the axle centerline (3).

g. Calculate the difference between (1) and (3). The difference is the ride height (4).

h. Check the ride height against manufacturer’s specifications.

If ride height is not within specification, it must be corrected before a truck returns to the road. To figure out what’s causing the problem, check these parts for wear or damage:

• Wear plates or pads; these must be replaced in pairs
• Spring hanger frame bracket
• Air spring, Z-spring and radius spring
• Link rod
• Leveling valve

Once any damaged components are replaced, measure the ride height again to ensure it falls within the correct range.

Sources: SAF-Holland and Volvo Group Air Suspension Service Manual (PV776-TSP27725/1)