

Ride Height Adjustment

The ride height of the air suspension axles should be set to the permitted range as given by BPW. With single axles a minimum upward travel of 60mm is necessary. With multi-axle bogies a minimum upward travel of 70mm is necessary. The inclination of the trailer must also not exceed $\pm 1^\circ$, see Figure 1

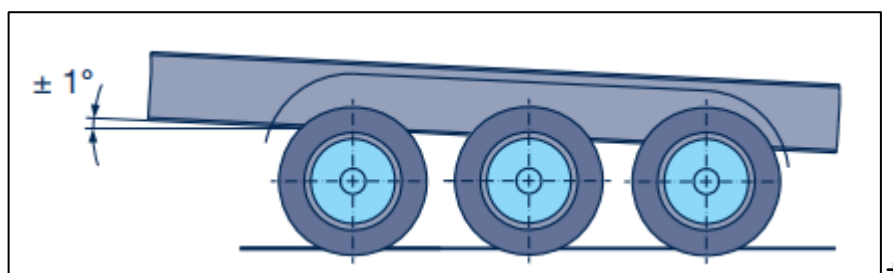


Figure 1

Ride Height Adjustment

To set the ride height the following steps must be taken:

1. Park the vehicle on level ground
2. Chock the wheels
3. Release the brakes
4. Ensure that there is air in the system
5. If the wheel alignment plates are not tack welded in place, mark the position with a white marker on all hangers, inside and outside:

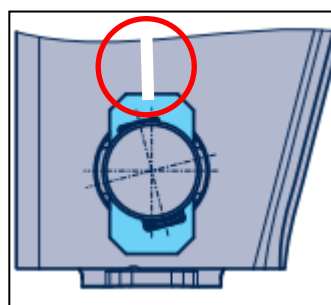


Figure 2

6. Loosen the pivot bolt
7. Ride height adjustment is done via the pivot linkage. Ensure that the angles and lengths are maintained as shown in Figure 3. i.e. length between the valve connection and guide connection must be a minimum of 200mm and the angle between the valve lever and guide rod must be less than 90° :

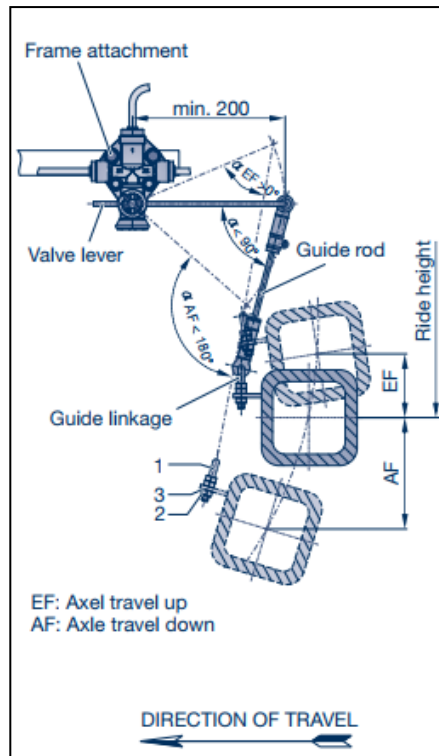


Figure 3

- The ride height is measured from the center of the axle beam to the bottom face of the chassis beam:

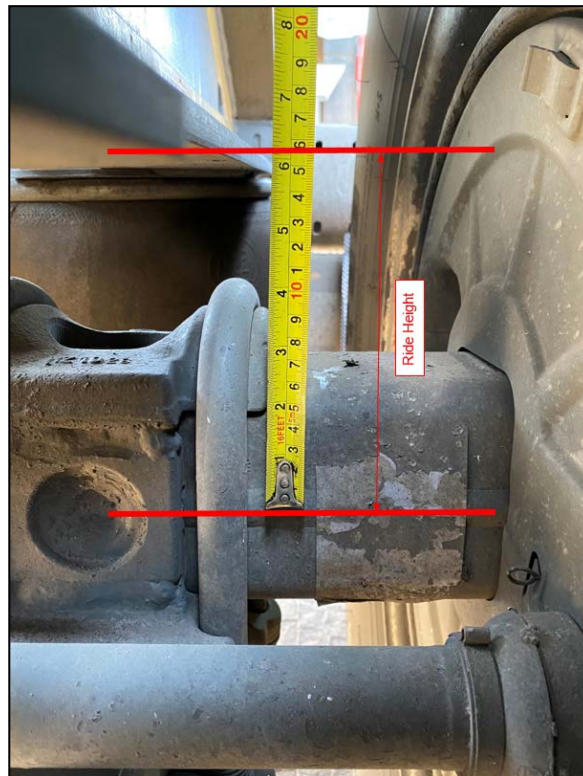


Photo 1

- The ride height is dependent on the type of suspension fitted, i.e.

- a. Hanger bracket size
- b. Airbag length
- c. Suspension layout; ALO, ALM or ALU

Ask BPW for the correct ride height setting. On trailers built by Afrit the ride height is found printed on the brake data plate.

10. Referring to Figure 4, loosen Nut 2 on the lever arm and adjust Nut 1 to change the ride height.

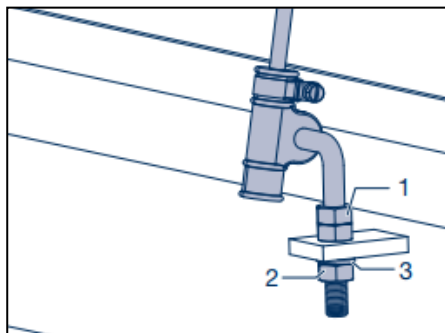


Figure 4

11. If more ride height adjustment is needed, the length of the guide rod (see Figure 3) must be adjusted.
12. Once ride height has been set correctly tighten Nut 2 (see Figure 4)
13. Ensure that the white marks on the hangers and wheel adjustment plates line up before tightening all pivot bolts to 650 Nm.

ECAS – Electronic Controlled Air Suspension

In addition to the conventionally operated air suspension valves, electronic controlled air suspensions or ECAS are also used on vehicles, see Photo 2. The sensor is usually connected to the brake system which also controls the valve functions. With ECAS, the ride height cannot be set manually and software is needed to do the adjustments.



Photo 2

Things to look out for

1. Pivot linkage set-up. Ensure that the Pivot linkage is installed correctly. This will ensure correct operation
2. Adjusting plates (for wheel alignment) are installed correctly. The plates must point the same direction and be level, see Figure 5. This will ensure the tightness of the pivot bolt.

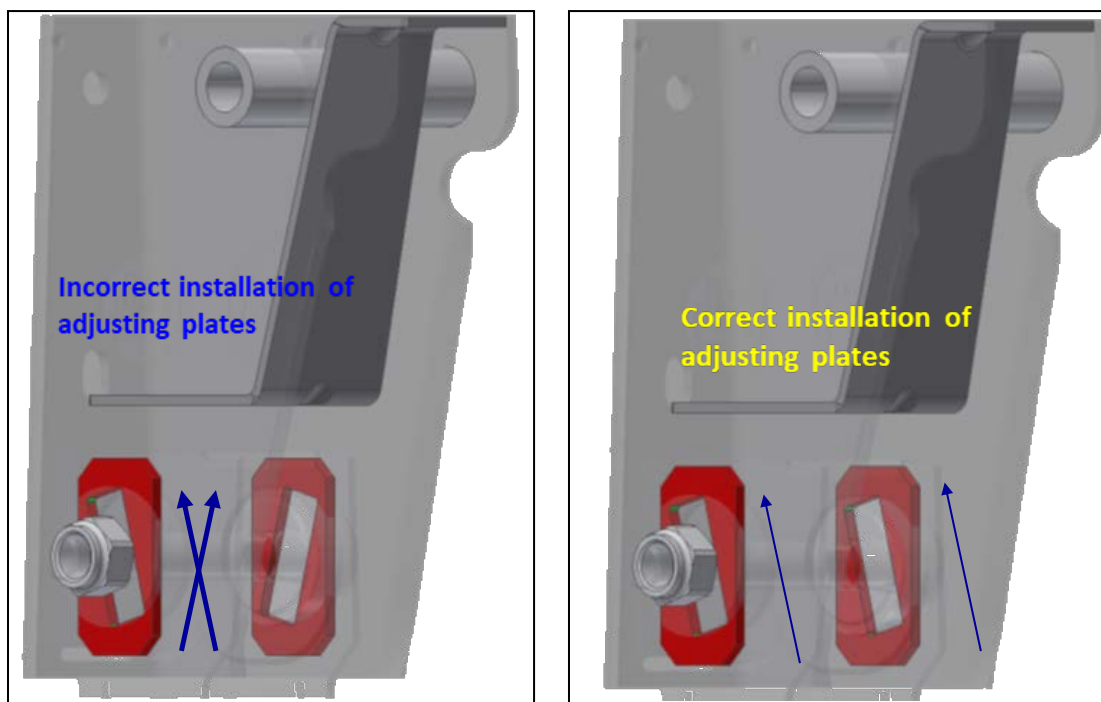


Figure 5