

Setting Suspension Height Control Valve

This is an area which is probably most unfamiliar to the trailer operator and the one which will cause most problems if the following parameters are not adhered to. Too high a ride height can cause more roll motion too low means that there will be loss of axle travel (contacting bump stop) during arduous use.

Parameters for setting ride height:

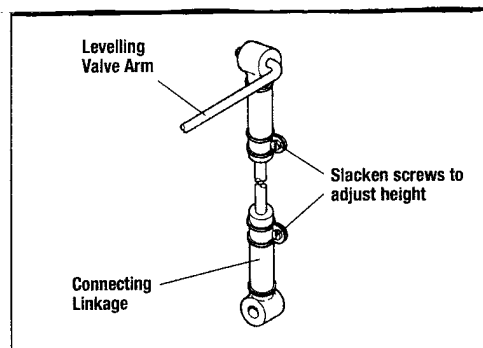
1. The trailer should be on level ground.
2. It should preferably be connected to the tractor unit to be used and in a straight line with the unit, or set at the correct kingpin height.
3. All the trailer brakes should be off.
4. There should be an air supply of at least 6.5 bar.
5. The trailer should preferably be unladen or the load evenly distributed laterally across the trailer.
6. If the trailer has been running it should be given at least 10 minutes to "settle down".
7. The valve should be set on increasing height as there is a "dead band" in the actuating stroke of the valve.
8. The ride height must be set on the axle which has the levelling valve.
9. If the trailer is fitted with a lift axle this should be in the down position.

The ride height is the distance between the centre line of the axle and underside of the frame. The ride height for each individual trailer is specified on the trailer specifications page of our Web Site .

If the ride height is found to require resetting the following procedure should be followed.

Lengthen or shorten the linkage rods which connect the levelling valve arm to the axle (giving a proportional increase or decrease in the ride height) by slackening the clamp screws which pinch the rubber eye ends onto the drop bar and pulling the bar in or out of the rubber. If there is insufficient adjustment i.e. the bar is in danger of coming out of the rubber, then further adjustment can be gained by slackening the bolts holding the levelling valve to the bracket and repositioning the valve within the holes. Bending of the levelling valve actuating arm is not recommended.

If the ride height is found to be above the recommended setting, the height should first be dropped below the required setting and then increased back to the nominal ride height, thus avoiding the "Dead band" in the actuating stroke of the valve. This can be done by shortening the linkage rod and bleeding air from the suspension by slackening the air pressure connection on top of the airsprings. This method also applies to situations where the ride has accidentally been taken above the recommended setting.



NOTE: Some care is needed when checking the ride height as a false reading may be obtained after tipping a load etc. The levelling valve emits and exhausts air very slowly, so time should be allowed for it to react once adjusted.

The valve emits air slightly faster than it exhausts. This is so that large volumes of air are not constantly bled off during normal suspension travel but still allowing a relatively quick reaction to an increase in load or when the trailer is being brought up to operating height from flat.