

## **WORK INSTRUCTION**

## Fitment of AL-KO slipper springs to chassis

**STEP 1** Spring hangers are welded to the main chassis rails of the trailer. Each manufacturer needs to determine the axle position(s) prior to welding the hangers. AL-KO provides nominal dimensions for the spring, spring hangers and axle positions.

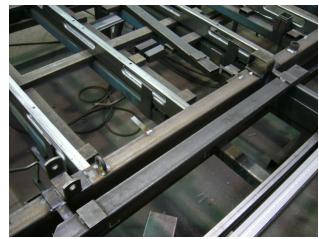


Figure 1

Figure 3

**STEP 2** Weld the front and rear hangers square to the chassis rail. Figure 1 shows a jig that is used to position the hangers for high volume production. Figure 2 & 3 show both hangers adjacent to the jig. An actual spring set may be used in the same way. AL-KO recommends tack welding all hangers first before welding. (weld only along the chassis rail, welding across may distort chassis rail)

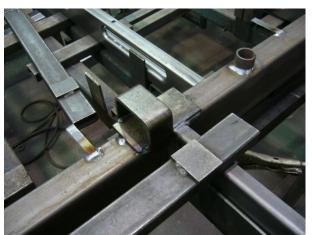




Figure 2



STEP 3 The rear of the slipper spring must be nested into the rear hanger as shown in figure 4 by approximately 20mm before moving onto step 4. It may be necessary to clamp the open leaves of the spring to enable these to be inserted into the rear hanger. It is also recommended that a small smear of grease be applied to the inside of the rear slipper to ease assembly and operation.

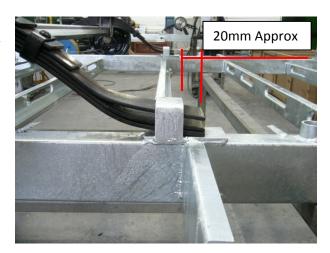
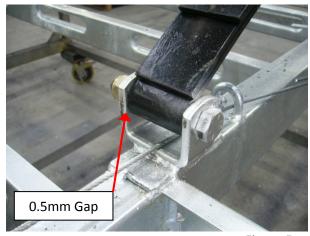


Figure 4

**STEP 4** Assemble the spring onto the hangers using the pins and nyloc nuts. The spring is required to rotate about the pin. Over tightening will cause a friction lock between the spring hanger and the spring eye, rendering the spring inoperable.

AL-KO recommends maintaining a 0.5mm gap between the spring eye and the hanger (see figure 5a and 5b). Use a feeler gauge to set this gap.

\*NB: Because the nut is theoretically not tight, no torque setting can be established.





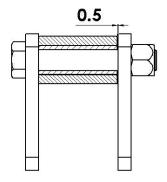


Figure 5b



**STEP 5** The spring assembly is complete and ready for axle fitment.



Figure 6