## **WORK INSTRUCTION**



## Fitment of AL-KO Rocker Roller springs to chassis

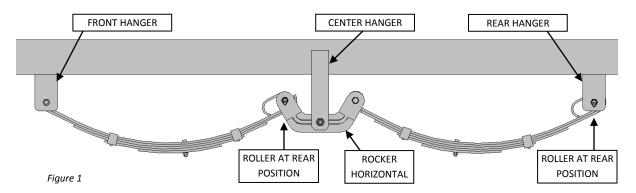
**STEP 1** Spring hangers are welded to the main chassis rails of the trailer. Each manufacturer needs to determine the axle positions prior to welding the hangers. AL-KO provides nominal dimensions for the spring and axle positions in our catalogue, but these are reference dimensions only and cannot account for normal commercial engineering tolerances.

**STEP 2** Position the center hanger in the correct position and tack weld in place. Make sure that the hanger is square and the hangers on each side are aligned.

**STEP 3** Assemble the rocker and springs to the center hanger using the 18mm diameter bolt provided (with grease nipple).

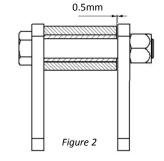
**STEP 4** Fit the front hanger to the front spring using the 16mm diameter bolt provided. With the rocker positioned horizontal, move the hanger as far forward as possible on the chassis rail. Make sure the hanger is positioned squarely then tack weld the hanger in place.

**STEP 5** Fit the rear hanger to the rear spring using the 16mm diameter bolt provided (with grease nipple). With the rocker horizontal, move the hanger as far rearward as possible on the chassis rail. Make sure the hanger is positioned squarely then tack weld the hanger in place.



**STEP 6** Fully weld all the hangers to the chassis rail.

**STEP 7** Secure the springs in the hangers at the front and rear using nyloc nuts on the pins. The spring is required to articulate 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 2). Use a feeler gauge to set this gap.



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

**STEP 8** Secure the rocker in the centre hanger with a nyloc nut. The same articulation about this pin is also required and thus a 0.5mm gap as per figure Step 7 should be maintained.

**STEP 9** Grease the centre pivot and rollers using the standard grease nipples. When fitting the centre pin, face the grease nipple toward the outside of the trailer, this will make ongoing maintenance simpler.

The centre rocker should sit horizontal whilst there is no load on the springs and the rollers must sit at the rear end of each spring as shown in figure 1. When the caravan weight and load is on the springs the roller position will move forward in the slot.

**STEP 10** The spring assembly is now complete and ready for axle fitment.