

AXLE TRIANGULATION

AXLE TRIANGULATION PROCEDURE

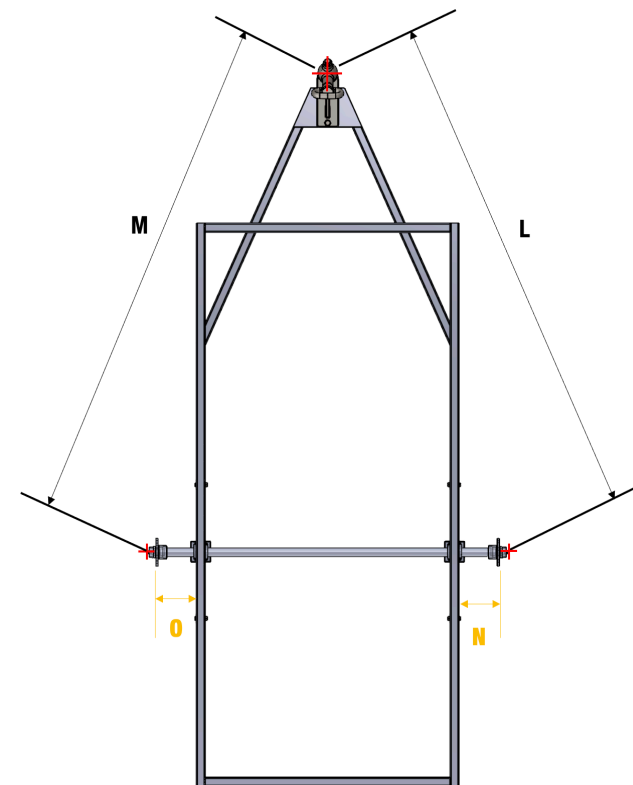
Correct axle alignment is essential to efficient towing performance of any trailer or caravan. Aligning the trailer or caravans axles correctly will ensure minimal tyre wear and optimal towing, ultimately resulting in more comfortable, cost-effective and safer towing.

Below shows the procedure required to check the alignment and re-align axles.

1. Raise the trailer or caravan. Remove the wheels and hub caps.
2. Attach a device to locate the centre of the coupling (this could be a weight attached to a string which is tied through the adjustment screw). This will be the primary measurement point.
3. Measure distances **L** and **M** (as indicated in Figure 1) to obtain the distance from the centre of the coupling to the tip of the axle on the front edge. This measurement must be accurate - ensure no droop in the tape measure and do not use elastic string.
4. If measurement **L** is within 4mm of measurement **M**, the axle is aligned correctly (move onto step 7). If measurement **L** is 4mm greater or less than measurement **M**, continue on to Step 5.
5. Loosen the U-bolts which attach the axle to the trailer chassis.
6. Manoeuvre the axle whilst checking measurements **L** and **M**. Manoeuvre until the difference between **L** and **M** is less than 4mm.
7. Measure distances **N** and **O**. If the difference between **N** and **O** is less than 5mm tighten the U-bolt group. The axle is now aligned and centralised. If the difference between **N** and **O** is greater than 5mm continue on to step 8.
8. Loosen both U-bolt groups. Slide the axle until distance **N** and **O** are within 5mm of each other. Re-align axle (see Step 6).
9. Once **L** and **M** are within 4mm of each other and **N** and **O** are within 5mm of each other, tighten all U-bolts. Check distance **L**, **M**, **N** and **O** again and re-align if required. The axle is now aligned and centralised.
10. Fit wheels and hub caps. Lower the trailer.

Ensure U-bolts and wheel nuts are tightened to the correct torque. Tandem axles require both axles to be centralised and aligned.

FIGURE 1



L - Distance from the centre of the tow coupling to the tip of the axle (RHS)

M - Distance from the centre of the tow coupling to the tip of the axle (LHS)

N - Distance from the outer hub face to the chassis

O - Distance from the outer hub face to the chassis