

**CUSTOMER INFORMATION SHEET – NO. 20**

**CRUISEMASTER™ TOE & CAMBER ADJUSTMENT**

**1 General**

- The toe and camber adjuster levers are used to adjust wheel alignment and are located on the hinge assembly.
- The adjuster levers also improve bolt retention and ensure that, when correctly fitted, the hinge bolts are securely fixed within the hinge assembly.
- The outer “wheel side” adjuster is used for toe-in/out adjustment and the inner for camber adjustment.



**2 Installation Procedure**

This procedure describes recommended fitment of the adjustment lever and fasteners only and does not describe general fitment of suspension A-Frames.

1. Place bolt through adjuster lever locating bolt head into hex recess in lever.
2. Align frame assembly with hinge slot and insert bolt/adjuster, ensuring round end of adjuster locates within U-bracket on hinge.
3. Fit Nylon Insert nut to bolt but do not tighten as yet.
4. Check wheel alignment in both toe and camber directions (see below) and if necessary adjust by rotating the lever using an open ended spanner or the special Cruisemaster™ spanner.
5. Fasten the Nylon Insert nut (always use new nuts) whilst holding the adjuster lever, ensuring it does not rotate from the adjusted position.
6. Torque Nylon Insert nut to 190N.m using a suitable torque wrench whilst holding the adjuster lever if required.



*Hold adjuster with spanner whilst tightening Nylon Insert nut*



*Torque Nylon Insert nut to 190N.m (140lbf.ft)*

### 3 Wheel Alignment Procedure

1. Place the trailer/caravan on a smooth level surface and, if possible, at typical operating load.
2. Move the trailer backwards and forwards to eliminate any twist in the wheels.
3. Run a straight edge across the face of the tyre (watch for surface irregularities) then measure the distance from the straight edge to the chassis rail. Do this in front and behind the tyre. Record these two measurements. (A jig can be made up to take measurements straight from the wheel)



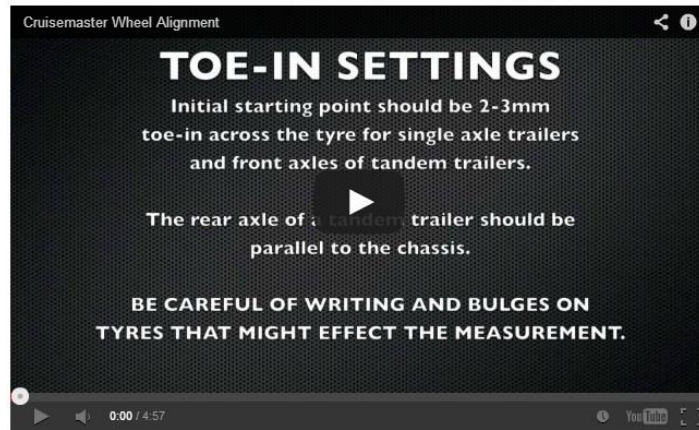
*It is also possible to measure alignment directly from the brake drum/disc face to the chassis rail. However, this does not take into account the effect of load on the suspension and may be more prone to measurement errors.*

4. A single axle or front axle on a tandem should be adjusted to have 2 - 3mm toe-in. That is, the measurement taken in front of the tyre should be 2 - 3mm less than the rear measurement.
5. Rear wheels on a tandem should measure parallel from the chassis rail, so the two measurements should be equal.
6. When setting the wheel camber, we recommend to use a digital spirit level on the rim and to set the camber at 0° to 0.5° negative to the vertical for all wheels. (Negative camber is where the top of the wheel is leaning in towards to trailer)



*Exact measurements will depend on the type and loading configurations. However, experience has shown that the figures given are a good starting point. Modifications to these figures may need to be made to suit individual installations.*

7. If adjustments need to be made, loosen all hinge bolts (and U-Bolts on leaf suspensions) and adjust by rotating the adjuster lever using an open ended spanner.
8. Check measurement again and repeat adjustment until correct.
9. Fasten all hinge bolts to the prescribed torque as detailed above, whilst ensuring that the adjuster lever does not move from the set position.
10. If correct toe/camber adjustment cannot be achieved (insufficient adjustment or earlier models without adjustment facility), special offset bushes and/or spindles can be used to gain additional adjustment. Please contact us for further information.



*For information on factors affecting tyre wear, see Customer Information Sheet 23 – Prolonging Tyre Life, or visit the Information section of our website at [www.cruisemaster.com.au](http://www.cruisemaster.com.au)*

*For a detailed video on how to perform a wheel alignment on Cruisemaster Independent Suspension systems, follow the links from our website at [www.cruisemaster.com.au](http://www.cruisemaster.com.au)*