

Wheel alignment settings

Purpose of this document

This document will specify the wheel alignment settings and required torque specifications for all relevant wheel alignment fasteners.

Tools required

- Calibrated torque wrench
- Tool kit for fasteners
- Wheel alignment measuring equipment



Preliminary checks prior to adjustment

- Ensure all wheel bearings are in good condition without excessive free play.
- Ensure that the suspension is settled after raising by rolling forwards and backwards.
- Ensure the suspension is at ride-height level – if air suspension is fitted.
- It is recommended to adjust the wheel alignment on a fully loaded caravan.
- Before commencing any work, ensure the caravan is secured against rolling.
- Ensure all tyre wear are within legal limits, Recommended wear limit is 3 mm minimum tread depth.
- Ensure tyre pressures are within specification.
- It is not recommended to use the tyre sidewall for measurements; this measurement will not be accurate as the tyre is not rigid enough.
- Use appropriate tools to measure from solid components, such as rims or devices secured to flat surface of the wheel hub.

Specifications

Camber:

- 0 - 0.5 degrees Negative camber

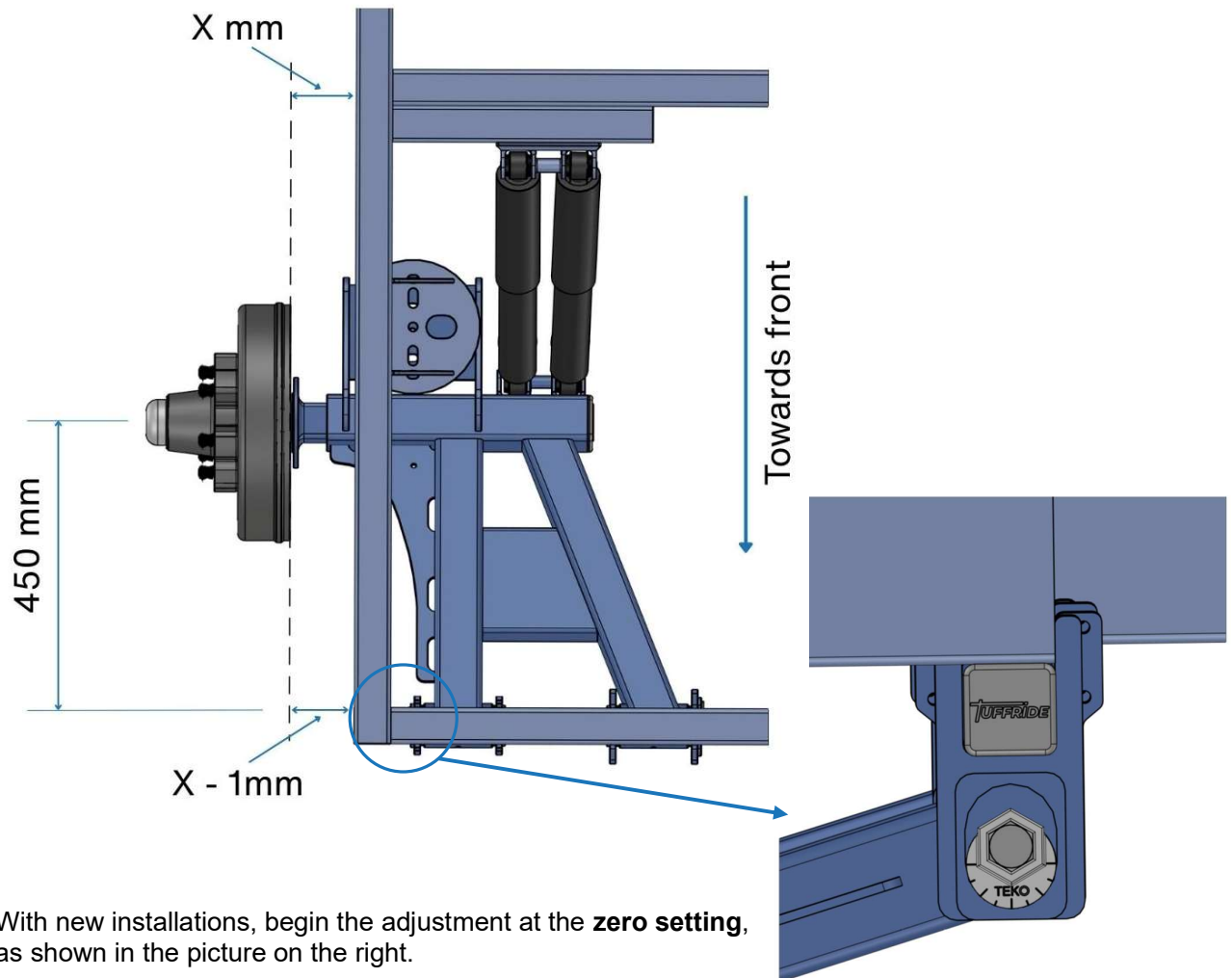
Toe:

- The total toe for the **front axle** must be **2 mm toe-in**. Each wheel must be set to **1 mm toe-in**, measured **450 mm from the wheel centre**.
- The second and third axles must be set to **zero toe**.

Adjusting hinge bar bolt torque specification:

- 175 N.m dry torque

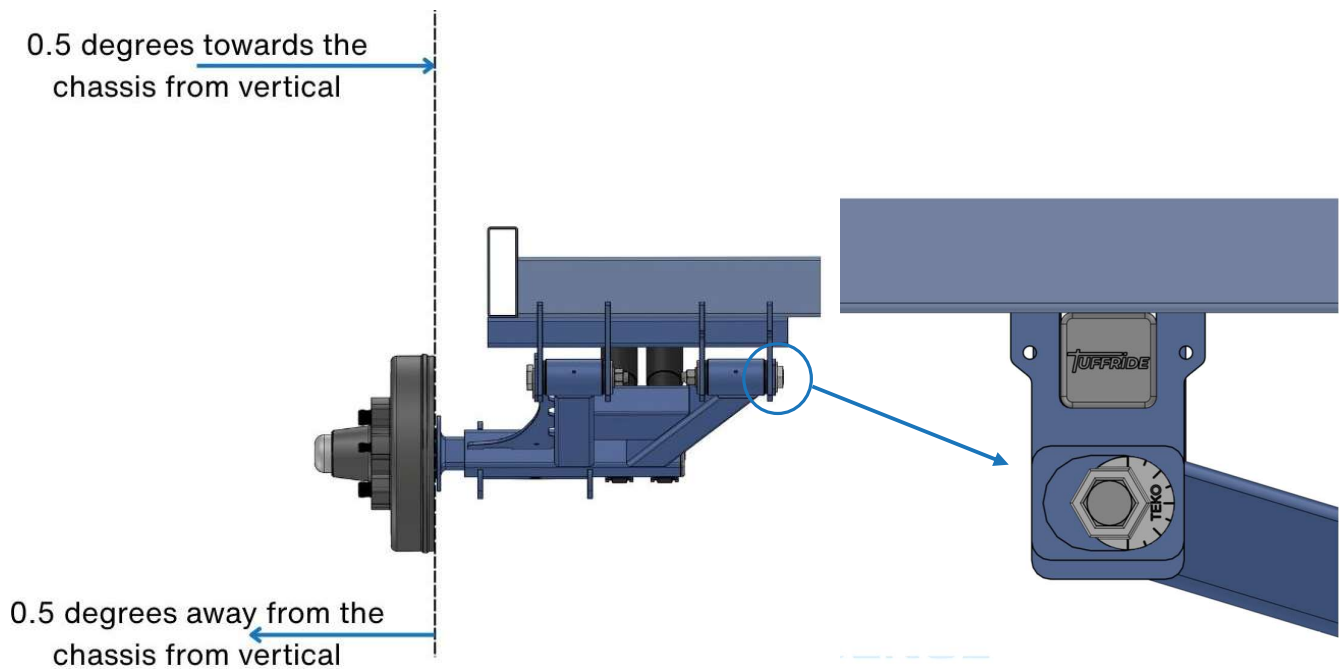
Toe adjustment



With new installations, begin the adjustment at the **zero setting**, as shown in the picture on the right.

Hinge bar nut torque specification: 175 N.m (dry)

Camber adjustment



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Maintenance:

- Wheel alignment should be done annually or every 10 000km, whichever comes first.
- Ensure tyre pressures are correctly adjusted before every trip.
- Ensure wheel bearings all inspected annually or every 10 000km, whichever comes first.
- Ensure all grease points are greased with every service.
- This document refers to Tuffride's independent suspension only.
- Any damage or wear caused by incorrect wheel alignment settings, incorrect wheel bearing free play settings or tyre pressures remains the responsibility of the owner.