

# Steer Axle Wear Measurements

BPW self-steering axles have two measurements for checking the amount of wear present in the swivel pins.

## Vertical Movement

During the steering operation the stub axles move up and down on the undulating thrust washers as the stub axle rotates around the swivel pin.

Depending on the design of the thrust washer (55) in **Diagram 1**, there may be a ribbing on the outside as a wear marker. If this marker is no longer visible, the thrust washers must be replaced. If no ribbing is present the size of the thrust washer will need to be measured as below.

The undulating thrust washers have a total thickness of **25mm** when new and can wear **3mm** before requiring replacement. The thrust washer thickness is measured when the axle is 'locked' in the straight ahead position. The self-steer axle is 'locked' by applying air to the pneumatic activator on the middle of the beam.

This equates to a vertical movement of **9mm** when the axle is new and **12mm** when the undulating washers are worn out. Wear is measured at the points indicated in **Diagram 2**.

Diagram 1

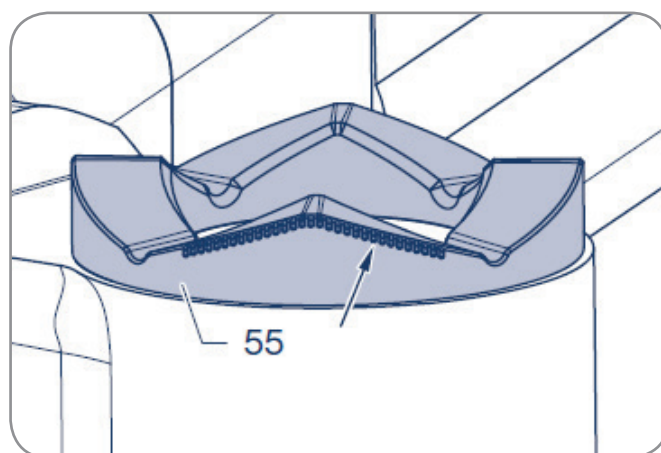
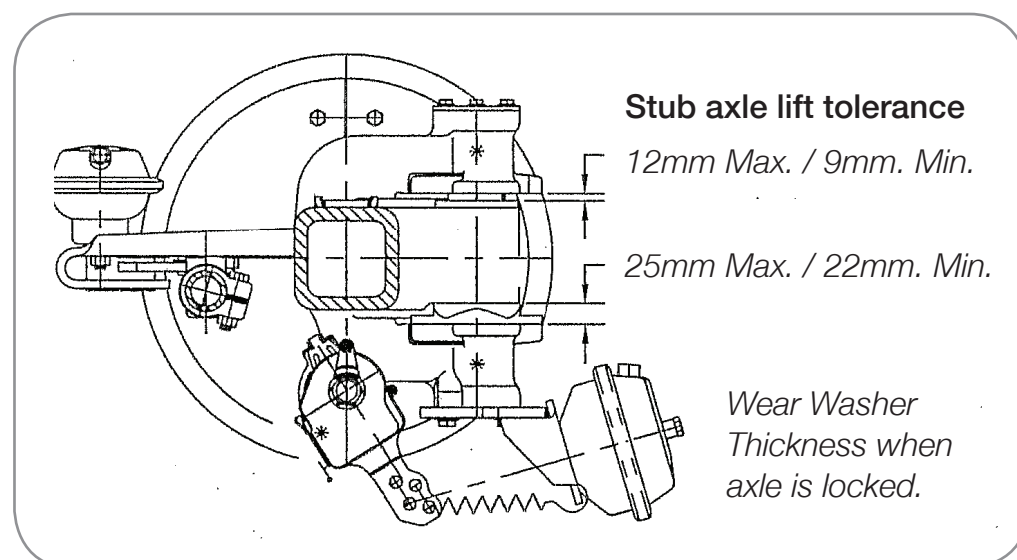


Diagram 2



### Horizontal Movement

The maximum horizontal movement allowed for the stub axle is **1mm** when measured at the point indicated in **Diagram 3**.

The movement is measured by attaching a dial indicator to the axle beam and measuring the sideways movement of the stub axle body.

**Note:** Prior to checking this measurement the wheel bearings need to be adjusted correctly. Please consult the latest **BPW Operator's Manual** for more information.

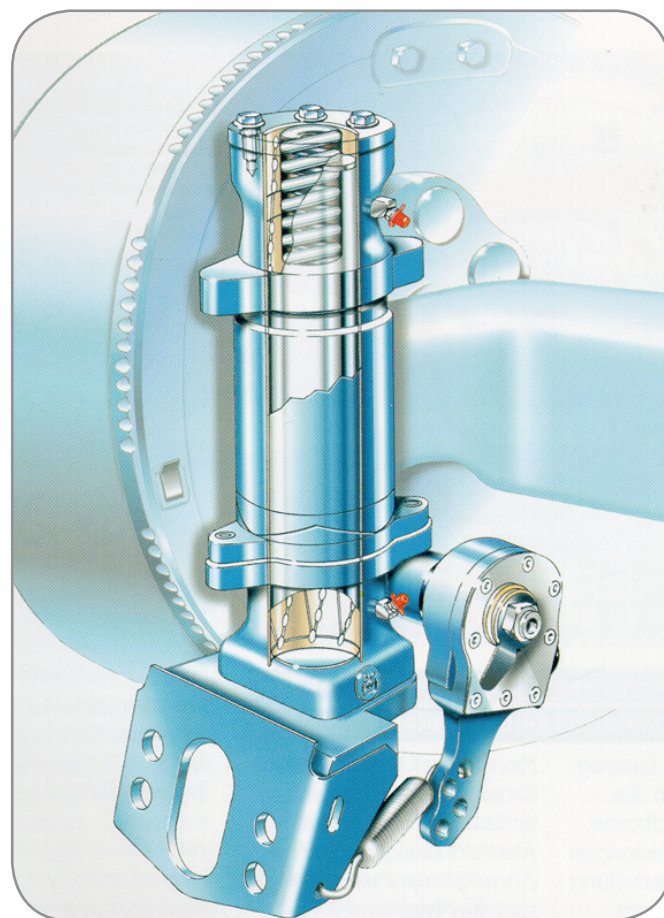
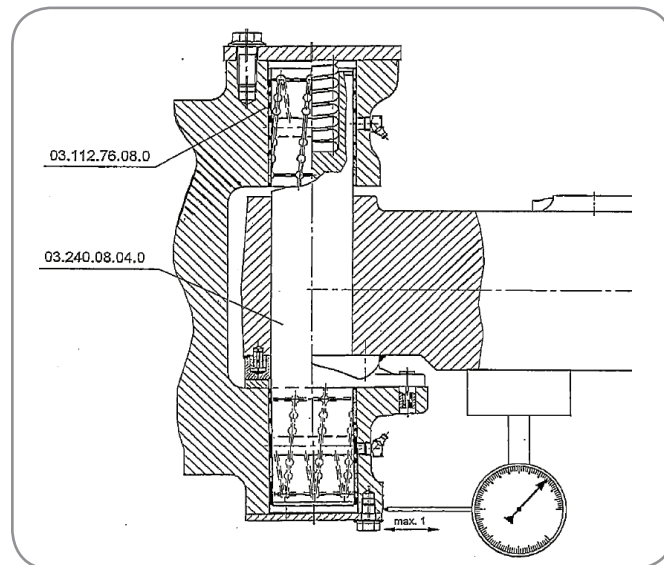
This movement at the stub axle body equates to a movement, measured at the tyre edge, of approximately **3mm**.

### Lubrication Requirements

- ⦿ BPW specifies the use of **BPW ECO-Li Plus** long-life grease for all lubrication requirements.
- ⦿ Service intervals for greasing the self-steer stub swivel pins are not to exceed 4 weeks.
- ⦿ Pump new **BPW ECO-Li Plus** grease into the steer axle stub grease nipples until new grease exudes from around the entire circumference of the bush.
- ⦿ The hubs, brakes and suspension fitted to the BPW self-steer axle are maintained in line with the requirements outlined in the **BPW Operator's Manual**.

To download the latest version of the **BPW Operator's Manual** please visit [bpwtranspec.com.au](http://bpwtranspec.com.au) and click the link under 'What's New'.

Diagram 3



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