

Correct as at 21st May 2019. It may be superseded at any time.

Extract taken from: NZTA Vehicle Portal > VIRMs > Light vehicle repair certification > Motorcycles

## 10 Motorcycles

### 10-1 Frames and forks

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#### Reasons for rejection

1. A motorcycle frame has not been replaced when there is evidence that it had been deformed so that a localised kink of 90° or more has been formed over a small radius.
2. A motorcycle frame has been heated.
3. A steel frame of a motorcycle has been sectioned without an insert.
4. Heat has been applied to a frame in a manner that is not permitted in the manufacturers instructions.
5. A frame has been heated as part of the repair and the manufacturers temperatures and time limits have not been followed or evidence that this process has been followed has not been presented with the [LT308 \(Note 2\)](#).
6. A fork has been heated.
7. A fork has been straightened but the cross section has been deformed.
8. A thin-walled fork has been straightened after being bent more than 15°.
9. A fork has been straightened when the original damage is not known.
10. A fork has been sectioned.

#### Note 1

Damaged parts should be replaced at factory seams whenever practicable and when required by the vehicle manufacturer.

#### Note 2

If a frame is heated as part of a repair, evidence of the process must be included with the [LT308](#). This should include such information as the manufacturers specifications, temperature indicator used and the time that the heat was applied for.

### Summary of legislation

#### Applicable legislation

- [Land Transport Rule: Vehicle Repair 1998](#).

#### Condition

1. A repair to a vehicle, its structure, systems, components or equipment must restore the damaged or worn vehicle, structure, system, component or equipment so that it is within safe tolerance of the state of the vehicle, structure, system, component or equipment when manufactured.

### 10-2 Measurements

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#### Reasons for rejection

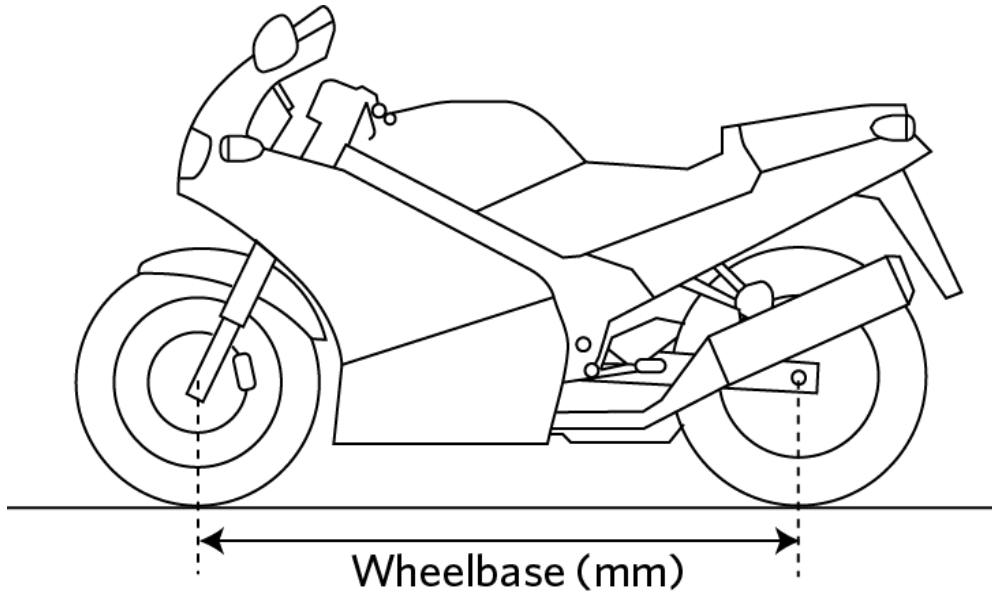
1. A fork has runout in excess of 0.4mm (unless permitted by the manufacturer).
2. One of the following measurements is not within the manufacturers specifications:
  - a) wheelbase (**Figure 10-2-1**)
  - b) steering head angle (**Figure 10-2-2**)
  - c) front wheel castor angle (**Figure 10-2-3**)

- d) wheel track offset (**Figure 10-2-4**).
- 3. The wheel alignment has not been measured.
- 4. The wheel alignment is not within specification.
- 5. A reference measurement of the frame has not been completed and recorded (**Note 1**).
- 6. A reference measurement of the frame shows a difference of more than 3mm (unless permitted by the manufacturers instructions).

**Note 1**

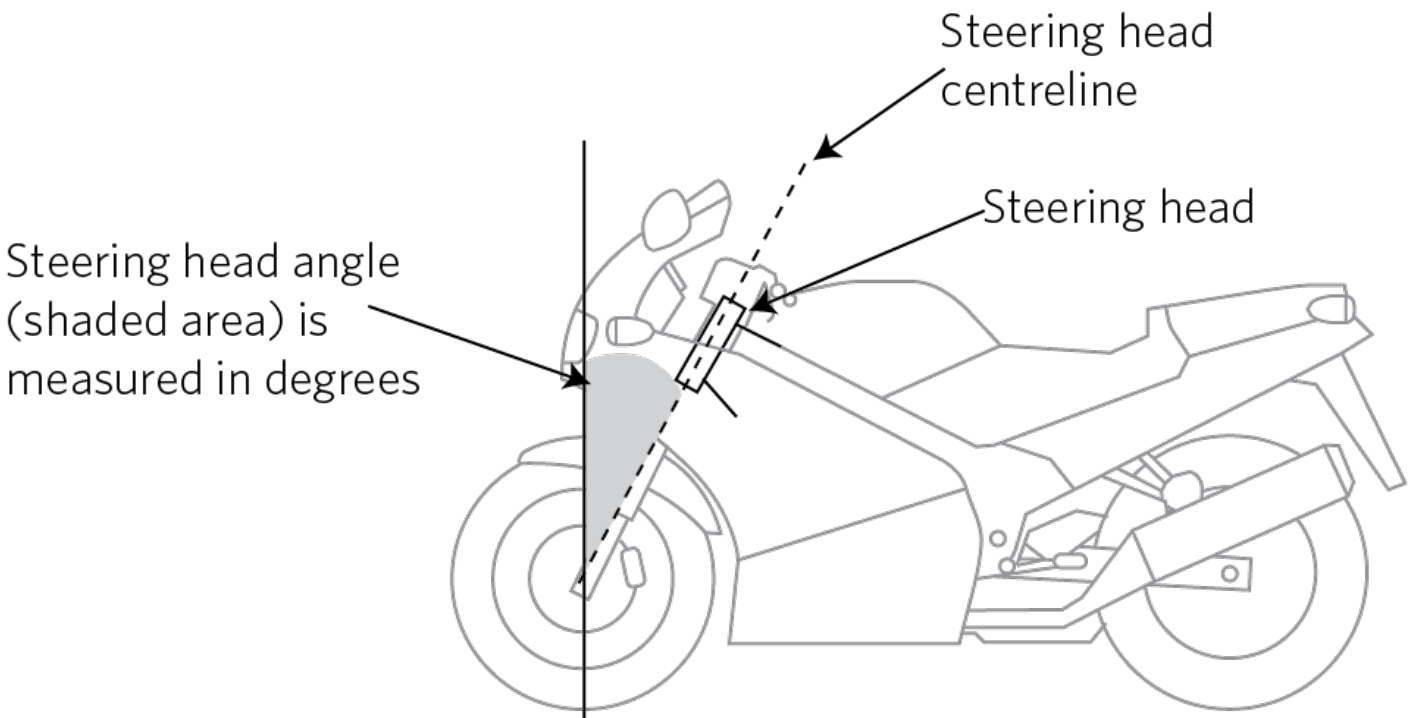
A reference measurement of the frame is a comparative measurement of each side of the frame to verify symmetry.

**Figure 10-2-1. Wheelbase measurement**

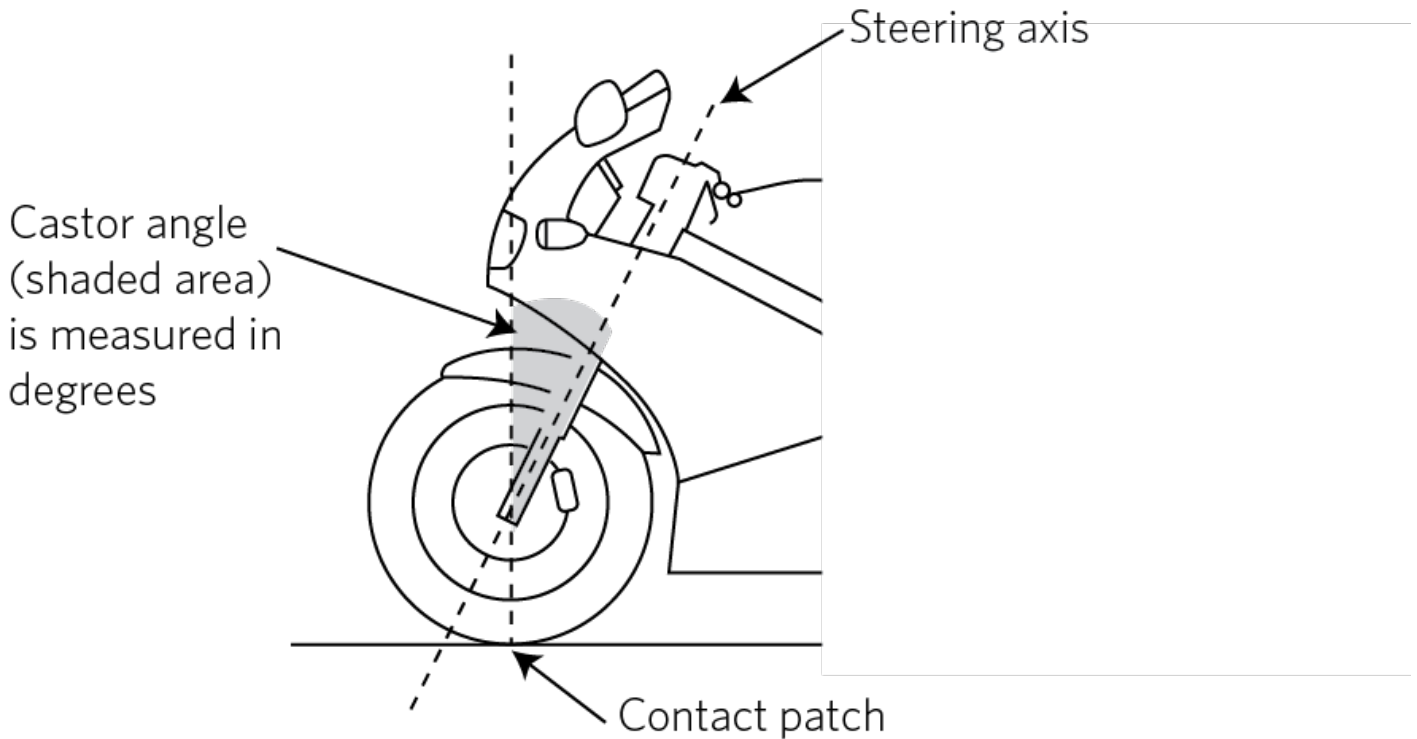


Wheelbase is measured between the centre of the contact patches of the front and rear wheels.

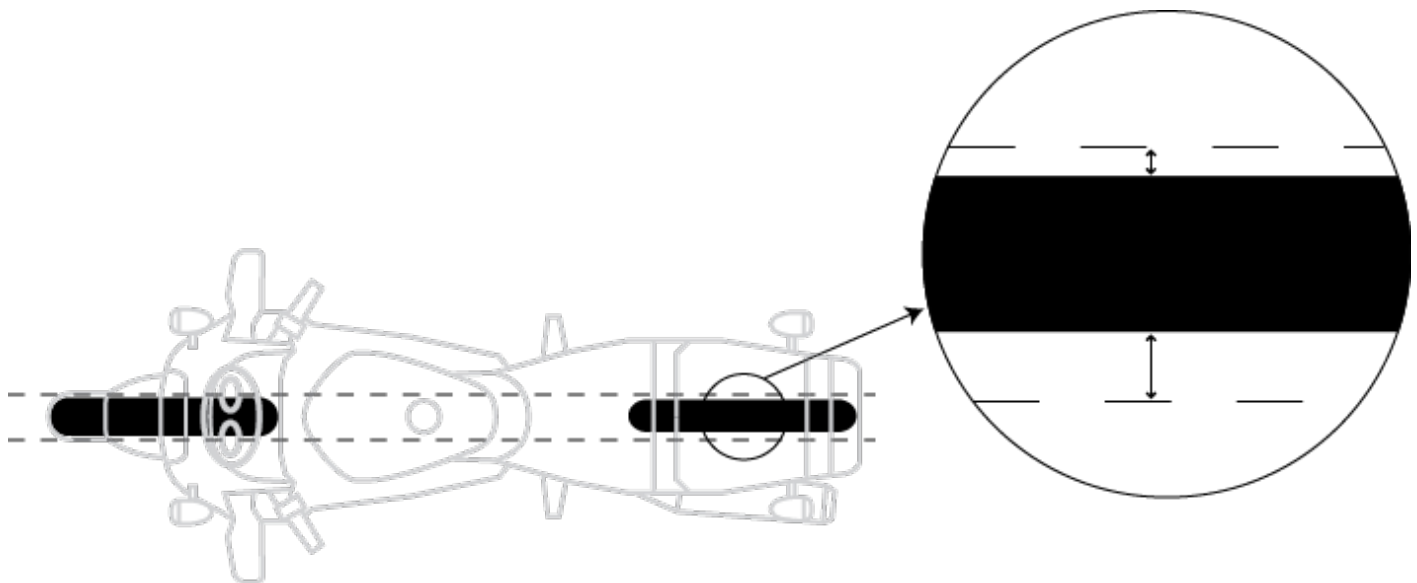
**Figure 10-2-2. Steering head angle measurement**



**Figure 10-2-3. Front wheel castor angle measurement**



**Figure 10-2-4. Wheel track offset measurement**



## Summary of legislation

### Applicable legislation

- [Land Transport Rule: Vehicle Repair 1998](#).

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