

Correct as at 3rd June 2026. It may be superseded at any time.

Extract taken from: In-service certification (WoF and CoF) > General trailers > Steering and suspension

## 6 Steering and suspension

### 6-1 Steering and suspension systems

#### Reasons for rejection

##### Condition

1. A ballrace turntable is:
  - a) not securely fastened, eg bolts or fasteners are loose, or
  - b) worn beyond manufacturer's tolerances, or
  - c) cracked or distorted, or
  - d) corroded or has deteriorated so that it is no longer safe.
2. A steering linkage or joint:
  - a) is insecure, or
  - b) is damaged, significantly corroded, distorted or cracked, or
  - c) shows signs of welding or heating after original manufacture, or
  - d) has play beyond manufacturer's specifications, or
  - e) does not operate smoothly without roughness or stiffness, or
  - f) is fouling on the vehicle structure, wheel tyre or brake system component.
3. A steering arm or associated component:
  - a) is insecure, or
  - b) is damaged, significantly corroded, distorted or cracked, or
  - c) shows signs of welding or heating after original manufacture.
4. A kingpin or outer ball joint:
  - a) is insecure, or
  - b) is damaged, significantly corroded, distorted or cracked, or
  - c) shows signs of welding or heating after original manufacture, or
  - d) has play beyond the manufacturer's specifications, or
  - e) does not operate smoothly without roughness or stiffness.
5. A lock stop is loose or damaged.

6. A steering or suspension component mounting point:

- a) is insecure, or
- b) has corrosion damage (Note 2), buckling or fractures within 150mm of a mounting point (Figure 6-1-1).

7. A suspension component (including air suspension):

- a) is insecure, or
- b) is damaged, significantly corroded, distorted or cracked, or
- c) shows signs of welding or heating after original manufacture, or
- d) has play beyond manufacturer's specifications, or
- e) does not operate smoothly without roughness or stiffness, or
- f) has excessive leakage of air or damping fluid ([Technical bulletin 9](#)), or
- g) shows excessive play, roughness or stiffness in a strut upper support bearing, or
- h) is a flexible bush that is significantly cracked, damaged or perished.

8. Air bag bellows has obvious external damage - protruding, exposed or worn cords.

9. There is corrosion damage (Note 2) within 150mm of a suspension component mounting point.

### Performance

10. During operation:

- a) the vehicle veers significantly to one side, or
- b) the vehicle requires unreasonable force to steer, or
- c) the steering is unreasonably stiff or rough.

### Note 1 Definitions

**Steering system** means those components, parts and systems that connect the driver's controls to the vehicle's wheels or tracks by means of which the direction of motion of a vehicle is controlled.

### Note 2

**Corrosion damage** is where the metal has been eaten away, which is evident by pitting. The outward signs of such corrosion damage is typically displayed by the lifting or bubbling of paint. In extreme cases, the area affected by the corrosion damage will fall out and leave a hole.

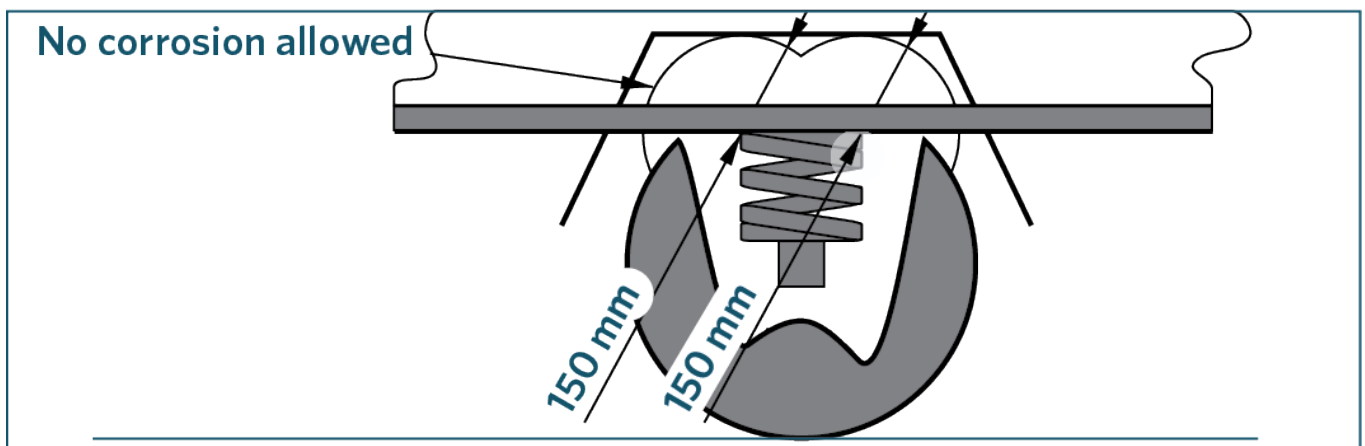
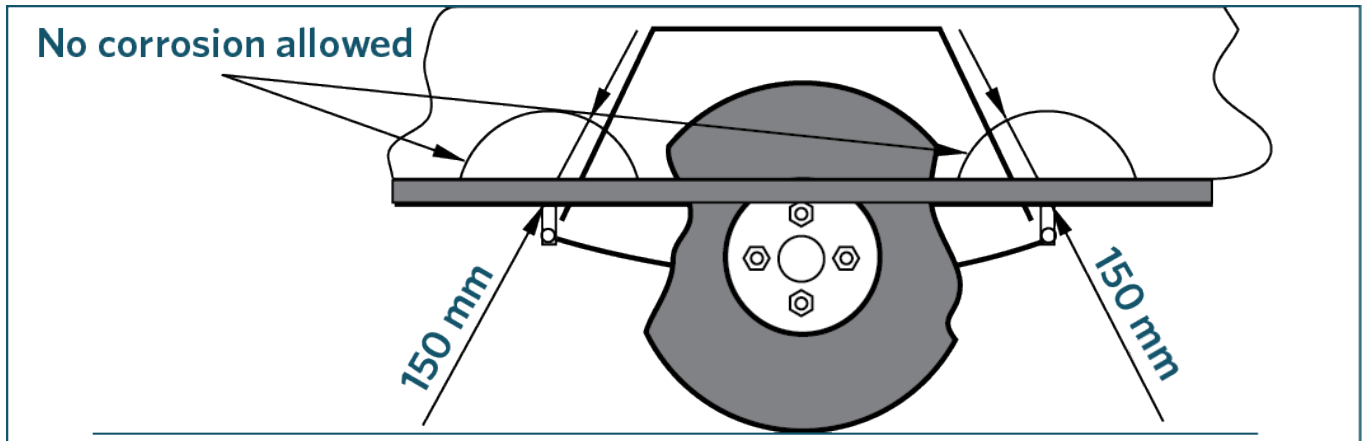
### Note 3

**Ballrace turntable** means a device incorporating a low friction ball bearing fitted between two substantial structural components of a vehicle to enable rotational motion between those components about a vertical axis.

### Note 4

**Suspension system** means a system that allows controlled and limited movement of an axle relative to the chassis or body of a vehicle; and includes a spring and damping system and any associated controls.

Figure 6-1-1. Corrosion limits around front or rear suspension anchorages



## Summary of legislation

### Applicable legislation

- [Land Transport Rule: Steering Systems 2001](#).

### Condition

1. The steering system (Note 1) and associated systems and components that directly or indirectly affect the directional control of the vehicle must be:

- a) sound and in good condition, and
- b) strong, durable and fit for their purpose, taking into account whether adverse effects have resulted from a loss of integrity of any protective system used by a relevant component.

## **Performance**

2. The steering system and associated systems and components that directly or indirectly affect the directional control of the vehicle must provide the vehicle with safe, efficient, convenient and sensitive control.

Page amended **1 November 2014** (see [amendment details](#)).