Correct as at 27th June 2026. It may be superseded at any time.

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

9 Steering and suspension

9-1 Steering and suspension systems

Reasons for rejection

Mandatory equipment

1. A forklift capable of exceeding a speed of 50 km/h equipped with a modified or aftermarket steering system with no direct mechanical connection between the driver's means of control and the wheels, or other means of changing the vehicle's direction, does not have at least one additional means of steering.

Condition

2. The steering wheel:

    a) is insecurely attached to the steering shaft, or

    b) shows excessive movement indicating unacceptable wear or looseness in the steering box or rack or steering column bearings, or

    c) has a rim covering which is insecure so that the directional control of the vehicle is affected.

3. The steering column is insecure.

4. The power steering:

    a) has been disconnected, or

    b) system does not operate correctly, requiring unreasonable force to steer the vehicle, or

    c) has a hose, pump drive, drive belt or pump mounting that is insecure, damaged, or has significantly deteriorated, or

    d) has a significant fluid leak.

5. The hydrostatic steering system:

    a) has been disconnected, or

    b) does not operate correctly, eg requiring unreasonable force to steer the vehicle, or

    c) has a hose, pump drive, drive belt, cylinder, including their mountings, that is insecure, damaged or significantly deteriorated, or

    d) has any fluid leakage, except for minor seepage.

6. A linkage or joint between the steering column shaft and steering box or rack:

    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 does not operate smoothly without roughness or stiffness, or

e) is fouling on the vehicle structure, wheel, tyre or brake system component.

7. The steering box or rack:

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 an excessive fluid leak.

8. A steering rack gaiter is missing, insecure or split.

9. A steering linkage or joint (Note 2):

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, or

g) shows signs of plastic injection.

10. 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.

11. A kingpin or suspension joint (Note 2):

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, or

f) shows signs of plastic injection.

12. A lock stop is loose or damaged.

13. A steering or suspension component mounting point:

a) is insecure, or

b) has corrosion damage, buckling or fractures within 150mm of a mounting point.

14. Any other suspension component:

a) is insecure or missing, 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 damping fluid (**Technical bulletin 9**), or

g) shows excessive play, roughness or stiffness in a strut upper support bearing, or

h) is a replacement urethane suspension bush that is not voided or shaped to allow for similar movement to an OE bush.

15. There is corrosion damage (Note 3) within 150mm of a suspension component mounting point.

Performance

16. During operation the forklift cannot be controlled in a safe, efficient convenient and sensitive manner, eg:

a) the vehicle veers significantly to one side, or

b) the vehicle requires unreasonable force to steer, or

c) the steering is unreasonably stiff, rough or light, or

d) the vehicle does not handle safely under normal conditions of road use, eg the suspension is excessively hard or soft, or there is excessive body roll.

Note 1 Definition

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

A damaged boot on a steering or suspension joint is not a ground for rejection; however, the vehicle's owner should be advised.

Note 3

Corrosion damage is where the metal has been eaten away, which is evident by pitting. The outward sign 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.

Summary of legislation

Applicable legislation

- **Land Transport Rule: Steering Systems 2001**.

Mandatory equipment

1. A forklift capable of a speed of more than 50 km/h and equipped with a modified or aftermarket steering system with no direct mechanical connection between the driver's means of control and the wheels, or other means of changing the vehicle's direction, must have at least one additional means of steering.

Condition

2. The steering system 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

3. 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 **14 October 2013** (see **amendment details**).