

Correct as at 12th June 2026. It may be superseded at any time.

Extract taken from: In-service certification (WoF and CoF) > Tractors > Brakes > Service brake and parking brake

## 8-1 Service brake and parking brake

### Reasons for rejection

#### Mandatory equipment

##### Service brake (Note 1)

1. A vehicle does not have a service brake that acts on the wheels as designed by the vehicle manufacturer.
2. A light tractor manufactured on or after 1 January 1990 and not capable of exceeding a speed of 40km/h does not have a service brake designed to act on the wheels that are intended to provide traction.

##### Parking brake (Note 1)

3. A vehicle does not have a parking brake.
4. A parking brake does not act on at least one complete axle.
5. Where dual wheels are fitted, a parking brake does not act on at least one axle that has dual wheels fitted.

#### Condition

##### Service brake

6. There is corrosion damage (Note 2) within 150mm of a brake component mounting point.
7. The service brake pedal:
  - a) is insecure, or
  - b) is spongy (indicating air in the system), or
  - c) creeps, or
  - d) has a non-slip surface which has deteriorated to such an extent that the brake cannot be safely applied, or
  - e) has excessive travel (pedal travel reduces after one or two applications).
8. The brake pedal locking attachment on a tractor with split brake pedals is insecure, damaged or has deteriorated to such an extent that it is no longer fit for purpose.
9. The brake master cylinder is:
  - a) leaking brake fluid, or
  - b) insecure, or
  - c) excessively corroded.

10. A brake valve is:

- a) not operating (eg has a seized-load sensing valve), or
- b) leaking brake fluid, or
- c) insecure, or
- d) excessively corroded.

11. A brake pipe (including connections) is:

- a) leaking brake fluid, or
- b) insecure, or
- c) deformed from its original shape, or
- d) chafed, or
- e) excessively corroded, eg there are signs of pitting or a noticeable increase in the pipe's outside diameter.

12. A flexible hydraulic brake hose (including connections):

- a) is leaking brake fluid, or
- b) is insecure, or
- c) bulges under pressure, or
- d) is twisted, stretched or chafed, or
- e) has external sheathing which is cracked to the extent that the reinforcing cords are exposed, or
- f) has metal connections that are excessively corroded, or
- g) has an end fitting that is not attached to the hose by means of swaging, machine crimping or a similar process (Note 3).

13. A brake calliper:

- a) shows visible signs of leaking, or
- b) is insecure.

14. A brake backing plate is:

- a) insecure, or
- b) severely corroded, or
- c) deformed from its original shape, or
- d) cracked, or
- e) contaminated by brake fluid, oil or grease.

15. A wheel cylinder:

- a) shows visible signs of leaking, or
- b) is insecure, or
- c) is seized.

16. An ABS system component is damaged, insecure or missing.
17. A brake disc or drum is:
- a) worn beyond manufacturer's specifications (where visible without removing vehicle components), or
  - b) fractured or otherwise damaged (where visible without removing vehicle components), or
  - c) contaminated by brake fluid, oil or grease.
18. Brake friction material (where visible without removing vehicle components) is:
- a) worn below manufacturer's specifications, or
  - b) separating from the brake pad backing plate or brake shoe, or
  - c) contaminated by brake fluid, oil or grease.
19. A service brake component shows signs of heating or welding after original manufacture.

### **Parking brake**

20. The parking brake lever:
- a) has excessive travel, or
  - b) is insecure, or
  - c) mounting is damaged, corroded, distorted or fractured within 150mm of the lever mounting, or
  - d) mechanism or lever pivot bearing is worn or damaged so that the parking brake could be easily released by accident.
21. The parking brake cable:
- a) is knotted, frayed or excessively corroded, or
  - b) has an auxiliary tensioner fitted, or
  - c) has otherwise deteriorated so that it may affect the parking brake performance.
22. A parking brake actuating rod or guide:
- a) is excessively corroded, or
  - b) is excessively worn, or
  - c) has otherwise deteriorated so that it may affect the parking brake performance.
23. A parking brake component shows signs of heating or welding after original manufacture.
24. The locking mechanism on a service brake that is designed to be locked in applied position (Note 1):
- a) is missing a component, or
  - b) does not operate, or operates incorrectly, or
  - c) is insecure, damaged or has significantly deteriorated.

## Performance

### Service brake

25. The service brake cannot be applied in a controlled and progressive manner.

26. When the service brake is applied without assistance from the engine, a vehicle does not stop within 7m from a speed of 30km/h (50% efficiency) except in the following cases:

- a) a heavy vehicle manufactured before 1 February 1977 with a service brake that is designed to act on fewer than 4 wheels does not stop within 9m from a speed of 30km/h (40% average brake efficiency), or
- b) a light tractor manufactured before 1 January 1990 does not stop in a manner that is reasonable for the type of service brake fitted.

27. When the service brake is applied:

- a) the vehicle vibrates under braking to the extent that the control of the vehicle is adversely affected, or
- b) the brake fails to release immediately after the brake pedal has been released, or
- c) the directional control is affected (eg there is swerving to one side, or the brakes on one side apply more slowly than on the other side).

28. The ABS or brake system warning lamp or self-check system, if fitted, indicates a defect in the ABS or brake system (does not apply to brake pad wear warning systems).

### Parking brake

29. When the parking brake is applied:

- a) the vehicle does not stop within 18m from a speed of 30km/h (average brake efficiency of 20%), or
- b) it does not hold the vehicle at rest on a slope of 1 in 5, or
- c) it does not hold all the wheels on a common axle stationary against attempts to drive the vehicle away.

### Note 1 Definitions

**Service brake** means a brake for intermittent use that is normally used to slow down and stop a vehicle. The service brake of a tractor which acts directly on the transmission or the rear wheels only is considered to act on all wheels if the transmission shifts automatically from two-wheel drive to four-wheel drive when the service brake is applied.

**Parking brake** means a brake readily applicable and capable of remaining applied for an indefinite period without further attention. A parking brake may be lever operated, or may be a transmission lock or a service brake that is capable of being locked in the applied position.

### 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 4**

If a brake is fitted with an inspection port plug, this must be removed for inspection of the brake components.

## **Summary of legislation**

### **Applicable legislation**

- [Land Transport Rule: Light-Vehicle Brakes 2002](#)
- [Land Transport Rule: Heavy-Vehicle Brakes 2008](#).

### **Mandatory equipment**

#### **Service brake**

1. Vehicles must have a service brake that acts on the wheels as designed by the vehicle manufacturer, except that a light tractor manufactured on or after 1 January 1990 with a maximum speed of 40km/h or less must have a service brake that acts on the wheels that are intended to provide traction.

#### **Parking brake**

2. A light vehicle must have a parking brake that:
- a) acts on at least one complete axle, or
  - b) if the vehicle has dual wheels on an axle, acts on that axle.
3. A heavy vehicle must have a parking brake.

#### **Permitted equipment**

4. A vehicle may be fitted with a warning system that is part of, or associated with, the use of a brake component or system.

#### **Condition**

5. A brake must be in good condition and within safe tolerance of its state when manufactured.
6. The brake friction surfaces must be within safe tolerance of their state when manufactured, and must not be scored, weakened or damaged to the extent that the safety performance of the brake is adversely affected.

#### **Performance**

7. The service brake must be able to be applied in a controlled and progressive manner.
8. When the brake on a vehicle is applied:
- a) the vehicle or its controls must not vibrate to the extent that control of the vehicle is adversely affected, and
  - b) the braking effort on each wheel must provide stable and efficient braking without adverse effect on the directional control of the vehicle, and
  - c) if the vehicle is equipped with an anti-lock braking system (ABS), the wheels must not lock, other than when the speed of the vehicle falls below the ABS activation parameters set by the vehicle manufacturer.

9. A brake warning system must function correctly (does not apply to a brake pad wear warning system).

### **Service brake**

10. The service brake of a vehicle or vehicle combination that is operated on a hard, dry, level surface that is free of loose material and without assistance from the compression of the engine or other retarders must operate in the following manner:

- a) a service brake must stop the vehicle within a distance of 7m from a speed of 30km/h (average brake efficiency of 50%), with the exception of:
  - i. a service brake, that is designed to act on less than four wheels on a heavy vehicle first registered anywhere before 1 February 1977, must stop the vehicle within a distance of 9m from a speed of 30km/h (average brake efficiency of 40%), and
  - ii. a service brake on a light tractor manufactured before 1 January 1990 must stop the vehicle in a manner that is reasonable for the type of service brake fitted.

### **Parking brake**

11. A parking brake must:

- a) stop the vehicle within 18m from a speed of 30km/h (average brake efficiency of 20%), or
- b) hold the vehicle at rest on a slope of 1 in 5.

Page amended **1 June 2013** (see [amendment details](#)).