

Correct as at 28th June 2026. It may be superseded at any time.

Extract taken from: In-service certification (WoF and CoF) > Unclassified vehicles > Brakes

## 8 Brakes

### 8-1 Service brake and parking brake

#### Reasons for rejection

##### Mandatory equipment

1. A self-propelled vehicle does not have a service brake or parking brake.
2. A self-propelled vehicle with a brake system that uses compressed air is not fitted with:
  - a) an air compressor, or
  - b) an air reservoir, or
  - c) a pressure gauge, or
  - d) a pressure warning device.
3. A trailer does not have a required service brake, parking brake or breakaway brake as set out in Table 8-1-1.

##### Condition

##### Service brake

4. There is corrosion damage (Note 3) within 150mm of a brake component mounting point.
5. The **service brake pedal**:
  - a) is insecure, or
  - b) is spongy (indicating air in the system), or
  - c) creeps, or
  - d) has non-slip surface which has deteriorated to such an extent that the brake cannot be safely applied, or
  - e) has excessive travel.
6. A **vacuum hose or pipe** (including connections) is:
  - a) insecure, or
  - b) leaking, or
  - c) damaged (cracked, chafed, twisted, stretched or corroded, eg showing signs of pitting or a noticeable decrease in the pipe's outside diameter).
7. The **brake vacuum servo** (brake booster) is:

- a) not functioning fully or adequately, or
- b) leaking, or
- c) insecure.

8. The **brake master cylinder** is:

- a) leaking brake fluid, or
- b) insecure, or
- c) excessively corroded.

9. 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.

10. 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) corroded, eg there are signs of pitting or a noticeable increase in the pipe's outside diameter.

11. 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 an external sheathing that 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).

12. A **brake calliper**:

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

13. 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.

14. A **wheel cylinder**:

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

15. An **ABS system component** is damaged, insecure or missing.

16. 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.

17. **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.

18. A **service brake component** shows signs of heating or welding after original manufacture.

19. A **compressed air brake component**:

- a) is missing, or
- b) is damaged or has deteriorated, or
- c) is seized or has wear beyond manufacturer's wear limits, or
- d) is leaking, or
- e) does not operate correctly or as intended by the vehicle manufacturer.

### **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.

## **Performance**

### **Service brake**

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

25. When the service brake is applied without assistance from the engine:

a) the self-propelled vehicle does not stop within 7m from a speed of 30 km/h (average brake efficiency of 50%),  
or

b) the combined effort of the trailer and towing vehicle brakes does not stop the vehicle combination within 7m from a speed of 30km/h (average braking efficiency of 50%), or

c) the vehicle or vehicle combination does not stop within a distance from 30km/h (or the vehicle's maximum speed if this is less than 30km/h) that is appropriate for the vehicle's design, taking into account the vehicle manufacturer's operating limits.

26. 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).

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

### **Parking brake**

28. When the parking brake is applied:

a) it does not hold the vehicle at rest on a slope of one in six (ie a 17% or 9o slope), or

b) it does not hold all the wheels on a common axle stationary against attempts to drive the vehicle away.

### **Breakaway brake**

29. The breakaway brake does not automatically and immediately apply when the trailer is disconnected from the vehicle.

## 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 vehicle 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. Lever-operated vehicles do not normally have a dedicated service brake, but the vehicles slow down as the lever is operated, and stop when it is in neutral position.

**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.

**Breakaway brake** means a service brake or parking brake fitted to a trailer that ensures, under all conditions of use, that, if the trailer is unintentionally disconnected from its towing vehicle, the brake will automatically and immediately apply and will remain applied for at least 15 minutes.

**Direct trailer service brake** means a service brake fitted to a trailer that allows the driver of a towing vehicle, from their driving position, to directly and progressively regulate the trailer brake effort.

**Indirect trailer service brake** means a service brake fitted to a trailer where the action of the driver of a towing vehicle applying the brakes of that vehicle results in a reaction by the trailer that is used to progressively regulate the trailer brake effort.

**Laden weight** means the weight of the vehicle and its load for the time being carried.

## Note 2

**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.

## Note 3

Hose end fittings that can be undone using hand tools are unacceptable.

## Note 4

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

**Table 8-1-1. Trailer brake requirements**

Type of brake required	Laden weight of the trailer		
	2000kg or less	2001–2500kg	2501kg or more
Service brake	Not required, but if fitted must act on each wheel of at least one axle	Required: either direct or indirect service brake that must act on each wheel of at least one axle	Required: direct service brake that must act on each wheel of at least one axle
Parking brake	Not required	Not required	Required, acting on at least one complete axle
Breakaway brake	Not required	Required, unless fitted with an appropriate coupling and two safety chains	Required

## Summary of legislation

### Applicable legislation

- [Land Transport Rule: Light-vehicle Brakes 2002](#)
- [Land Transport Rule: Heavy-vehicle Brakes 2006](#).

### Mandatory equipment

1. A self-propelled vehicle must have a service brake and a parking brake.
2. A trailer must have a service brake, a parking brake and a breakaway brake, as specified in Table 8-1-1.
3. A vehicle with a brake system that uses compressed air must be fitted with an air compressor, air reservoir, pressure gauge and pressure warning device.

### 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.
5. A trailer may be fitted with a type of brake that is not required to be fitted to the trailer.

### Condition

6. A brake must be in good condition and within safe tolerance of its state when manufactured.
7. 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

8. The service brake must be able to be applied in a controlled and progressive manner.

9. When the brake 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.

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

### **Service brake**

11. The service brake of a vehicle 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) the service brake must stop the vehicle or vehicle combination within a distance of 7m from a speed of 30km/h (average brake efficiency of 50%), or
- b) the service brake must stop the vehicle or vehicle combination within a distance from 30km/h (or if the vehicle's maximum speed if this is less than 30 km/h) that is appropriate for the vehicle's design, taking into account the manufacturer's operating limits.

### **Parking brake**

12. A parking brake must hold the vehicle at rest on a slope of 1 in 5 or as appropriate for the vehicle's design taking into account the manufacturer's operating limits.

13. A trailer breakaway brake must automatically and immediately apply when the trailer unintentionally disconnects from the towing vehicle, and must remain applied for at least 15 minutes.