

Correct as at 30th May 2026. It may be superseded at any time.

Extract taken from: Heavy vehicle specialist certification > Brakes > Brakes (Hydraulic)

## 5-3 Brakes (Hydraulic)

### Reasons for rejection

1. A vehicle fitted with an hydraulic brake does not, comply with the requirements in the Heavy-vehicles Brake Rule.
2. The volume of the hydraulic fluid supplied by the master cylinder or booster cylinder of an hydraulic brake during a single stroke is not sufficient for the effective operation of the wheel brakes, even if all wheel brakes are worn to the permitted wear limit or are in the permitted maximum out-of-adjustment position.
3. A passenger service vehicle first registered in New Zealand on or after 10 February 1978, has a parking brake acting solely through the transmission and is fitted with an hydraulic service brake, does not have a dual or tandem master cylinder that allows:
  - a) one of those cylinders to actuate the brakes on the front wheels of the vehicle and the other cylinder to actuate the brakes on the rear wheels of the vehicle, or
  - b) each circuit to activate the brake on at least 1/3 of the wheels.
4. A vehicle of class NB or class NC first registered in New Zealand on or after 1 November 1990, that has a parking brake acting solely through the transmission and is fitted with an hydraulic service brake, does not have a dual or tandem master cylinder that allows:
  - a) one of those cylinders to actuate the brakes on the front wheels of the vehicle and the other cylinder to actuate the brakes on the rear wheels of the vehicle, or
  - b) each circuit to activate the brake on at least 1/3 of the wheels.
5. A passenger service vehicle first registered in New Zealand on or after 1 September 1954, fitted with a brake that is operated by pump-generated hydraulic pressure, is not fitted with the following devices that provide to the driver a signal that is clearly audible and readily visible from the driver's normal driving position to ensure that, at all times, the driver is aware immediately that the hydraulic pressure is less than the pressure necessary for the safe operation of the vehicle:
  - a) an audible warning device, and
  - b) either:
    - i. a warning lamp, or
    - ii. a suitable pressure gauge that is able to indicate both the maximum and minimum pressures being used.
6. A passenger service vehicle with more than nine seating positions first registered in New Zealand on or after 10 February 1978, which utilises vacuum to boost the force supplied by the driver to apply the brakes and is fitted with a vacuum reservoir, is not equipped with:
  - a) a warning device to give a continuous signal audible to the driver if the vacuum in the reservoir is less than 25kPa or its equivalent, and
  - b) a vacuum gauge to indicate to the driver, in kilopascals or other units, the vacuum available in the reservoir.

7. A powered vehicle with an hydraulic service brake has been fitted with an additional rear axle that does not have the same type of braking system as the original axle or does not have an air operated disc brake as a service brake.
8. A vehicle that is modified by fitting an additional axle, removing an axle, replacing an axle with one that is not of the same make and model, or replacing the brake of an axle with one that is not of the same make and model has not been referred to a HV certifier with the Brakes category HVEK).

## Summary of legislation

### Applicable legislation

- [Land Transport Rule: Heavy Vehicle Brakes 2006](#)

1. A vehicle fitted with an hydraulic brake, whether or not the operation of the brake is assisted by compressed air, vacuum or other means of energy, must comply with the requirements in this section.
2. The volume of the hydraulic fluid supplied by the master cylinder or booster cylinder of an hydraulic brake during a single stroke must be sufficient for the effective operation of the wheel brakes, even if all wheel brakes are worn to the permitted wear limit or are in the permitted maximum out-of-adjustment position.
3. A passenger service vehicle first registered in New Zealand on or after 10 February 1978, or a vehicle of class NB or class NC first registered in New Zealand on or after 1 November 1990, that has a parking brake acting solely through the transmission and is fitted with an hydraulic service brake, must have a dual or tandem master cylinder that allows:
  - a) one of those cylinders to actuate the brakes on the front wheels of the vehicle and the other cylinder to actuate the brakes on the rear wheels of the vehicle, or
  - b) each circuit to activate the brake on at least 1/3 of the wheels.
4. A passenger service vehicle first registered in New Zealand on or after 1 September 1954, fitted with a brake that is operated by pump-generated hydraulic pressure, must be fitted with the following devices that provide to the driver a signal that is clearly audible and readily visible from the driver's normal driving position to ensure that, at all times, the driver is aware immediately that the hydraulic pressure is less than the pressure necessary for the safe operation of the vehicle:
  - a) an audible warning device, and
  - b) either:
    - i. a warning lamp, or
    - ii. a suitable pressure gauge that is able to indicate both the maximum and minimum pressures being used.
5. A passenger service vehicle with more than nine seating positions first registered in New Zealand on or after 10 February 1978, which utilises vacuum to boost the force supplied by the driver to apply the brakes and is fitted with a vacuum reservoir, must be equipped with:
  - a) a warning device to give a continuous signal audible to the driver if the vacuum in the reservoir is less than 25kPa or its equivalent, and
  - b) a vacuum gauge to indicate to the driver, in kilopascals or other units, the vacuum available in the reservoir.
6. A powered vehicle with an hydraulic service brake may be fitted with an additional rear axle that has an air operated disc brake as a service brake.