

Correct as at 6th June 2026. It may be superseded at any time.

Extract taken from: Heavy vehicle specialist certification > Additional topics > Conversion to RH drive

## 12-2 Conversion to RH drive

Certifier categories: **HVEC** | **HVCD**

### Reasons for rejection

1. A steering system on a motor vehicle, and associated systems and components that could directly or indirectly affect the directional control of the vehicle are not:
  - a) sound and in good condition or provide the vehicle with safe, efficient, convenient and sensitive control,
  - 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.
2. A motor vehicle capable of a speed more than 50km/h and equipped with a 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 that complies with requirement 1.
3. A modification to a steering system or to a system or component that could affect the directional control of a motor vehicle means the vehicle does not comply with requirement 1.
4. A modification to a steering system or to a system or component that could affect the directional control of a motor vehicle is not certified
5. A steering system or a system component that could affect the directional control is modified and:
  - a) the steering system is not compatible with the performance and component specifications of the manufacturer of the vehicle or steering system for the original steering system, or
  - b) the loads and stresses on the steering system and its components are not demonstrably within the design and performance criteria established by their manufacturer for the specific application in which they were originally used.
6. A repair to a steering system, or a repair to a motor vehicle that affects its steering system does not comply with all other requirements in this section.
7. A left-hand drive vehicle has been certified for entry into service, or operation in service, in New Zealand and it is not:
  - a) vehicles of the categories specified in *Schedule 1*, subject to the conditions specified in relation to each category, or
  - b) an individual left-hand drive vehicle that was certified for entry into service in New Zealand before 1 April 2010.
8. A vehicle has been converted from left-hand drive to right-hand drive and:
  - a) if practicable, original equipment has not been used, or
  - b) non-original equipment has been used without approval by the vehicle manufacturer or a vehicle inspector or inspecting organisation appointed to carry out specialist inspection and certification activities, or
  - c) the steering column has been transferred and the transfer has altered the integrity of the column or its collapse mechanism, or

d) except when fixing mountings to the chassis or body of the vehicle, steering components have been welded, and:

- i. the welding is not designed by the vehicle manufacturer or a vehicle inspector or inspecting organisation appointed to carry out specialist inspection and certification activities, and
- ii. no appropriate non-destructive testing has been carried out by a qualified person, or

e) steering performance and characteristics have not been maintained, and

f) the parking brake, auxiliary brake, accelerator or clutch controls have not been transferred to the right-hand side of the vehicle; or

g) new mounting points for the parking brake, accelerator and clutch controls are not of equivalent strength to the original mounting points.

9. A vehicle is converted from left-hand drive to right-hand drive and:

a) the service brake control assembly has not been transferred to the right-hand side of the vehicle, or

b) the service brake pedal assembly have not been transferred to the right-hand side of the vehicle and the motion of the brake pedal is not transmitted to the master cylinder or treadle valve by:

- i. a torque shaft, or
- ii. levers and rods.

10. For a vehicle to which requirement 9 applies, the master cylinder or the treadle valve and the mechanism that transfers the braking effort from the right-hand side to the left-hand side are not protected to ensure that the service brake can be activated only by the driver.

11. A conversion to dual steering has been carried out on a vehicle other than a special purpose vehicle.

12. A special purpose vehicle has been converted to dual steering and:

a) if practicable, original equipment is not used, or

b) non-original equipment has been used without the approval of the vehicle manufacturer or a vehicle inspector or inspecting organisation appointed to carry out specialist inspection and certification activities, or

c) except when fixing mountings to the chassis or body of the vehicle, steering components have been welded, unless:

- i. the welding is designed by the vehicle manufacturer or a vehicle inspector or inspecting organisation appointed to carry out specialist inspection and certification activities, and
- ii. appropriate non-destructive testing has been carried out, or

d) steering performance and characteristics have not been maintained, and

e) new mounting points for the parking brake, accelerator and clutch controls are not of equivalent strength to the original mounting points.

13. A special purpose vehicle is converted to dual steering and:

a) the service brake control assembly has not been replicated on the other side of the vehicle in a way that prevents the hydraulic or pneumatic line pressure from acting on the non-operating master cylinder or treadle valve, or

b) the motion of the brake pedal is not transmitted to the master cylinder or treadle valve by:

- i. a torque shaft, or
- ii. levers and rods.

14. The steering motion on a special purpose vehicle that has been converted to dual steering and is transmitted by chain and sprocket or bevel gear boxes, does not have proper means provided to eliminate backlash.

#### **Note 1**

Notwithstanding requirement 1 of this section any person may operate any motor vehicle having the steering column to the left of the longitudinal centre line of the body of the vehicle if the vehicle:

- a) was purchased from the crown by the owner or any former owner, or
- b) is for the time being exempt from subclause 1 of this regulation by virtue of an exemption granted under regulation 90 of these regulations.

#### **Note 2**

**Gazette 21/8/80, p2457**

Pursuant to subclause 1 of reg 90 of the traffic regulations 1976 the Secretary of transport hereby exempts from the requirements of reg 70 of the said regulations any heavy motor vehicle which is designed and constructed exclusively for road sweeping operations provided that for any vehicle fitted with dual steering the left-hand driving position is only used for the operation of the vehicle during road sweeping operations.

#### **Note 3**

A modification to a steering system or to a system or component that could affect the directional control of a motor vehicle must be certified.

#### **Note 4**

Dual steering conversions may only be carried out on special purpose vehicles such as street sweepers, weed sprayers, road markers, refuse collection and the like.

All of the relevant requirements also apply to dual steering conversions except where the left-hand steer position is being added, i.e. the vehicle is originally right-hand steer. The steering motion may be transferred by way of chain and sprocket or bevel boxes.

## **Summary of legislation**

### **Applicable references**

- AS 3990: 1993 Mechanical Equipment — Steelwork
- AS/NZS 1554 Welding
- AS/NZS 2980 Qualification of welders for fusion welding of steel
- BS 5400
- BS 7608.

## Applicable legislation

- [Land Transport Rule: Heavy Vehicles 2004](#)
- [Land Transport Rule: Vehicle Dimensions and Mass 2002](#)

### Steering systems 2001 (Sections 2 and 3)

1. A steering system on a motor vehicle, and associated systems and components that could directly or indirectly affect the directional control of the vehicle must be:
  - a) sound and in good condition and must provide the vehicle with safe, efficient, convenient and sensitive control,
  - 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.
2. A motor vehicle capable of a speed more than 50 km/h and equipped with a 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 that complies with requirement 1.
3. A modification to a steering system or to a system or component that could affect the directional control of a motor vehicle must not prevent the vehicle from complying with requirement 1.
4. A modification to a steering system or to a system or component that could affect the directional control of a motor vehicle must be certified
5. If a steering system or a system component that could affect the directional control is modified:
  - a) the steering system must be compatible with the performance and component specifications of the manufacturer of the vehicle or steering system for the original steering system, and
  - b) the loads and stresses on the steering system and its components must be demonstrably within the design and performance criteria established by their manufacturer for the specific application in which they were originally used.
6. A repair to a steering system, or a repair to a motor vehicle that affects its steering system must comply with all other requirements in this section.
7. No left-hand drive vehicle may be certified for entry into service, or operation in service, in New Zealand except:
  - a) vehicles of the categories specified in *Schedule 1*, subject to the conditions specified in relation to each category, or
  - b) an individual left-hand drive vehicle that was certified for entry into service in New Zealand before 1 April 2010.

## Heavy Vehicles Rule

### Section 6.5

8. If a vehicle is converted from left-hand drive to right-hand drive:
  - a) if practicable, original equipment must be used, and
  - b) non-original equipment must not be used unless approved by the vehicle manufacturer or a vehicle inspector or inspecting organisation appointed to carry out specialist inspection and certification activities, and
  - c) the steering column must be transferred without altering the integrity of the column or its collapse mechanism, and

d) except when fixing mountings to the chassis or body of the vehicle, steering components must not be welded, unless:

- i. the welding is designed by the vehicle manufacturer or a vehicle inspector or inspecting organisation appointed to carry out specialist inspection and certification activities, and
- ii. appropriate non-destructive testing is carried out by a qualified person, and

e) steering performance and characteristics must be maintained, and

f) the parking brake, auxiliary brake, accelerator and clutch controls must be transferred to the right-hand side of the vehicle, and

g) new mounting points for the parking brake, accelerator and clutch controls must be of equivalent strength to the original mounting points.

9. If a vehicle is converted from left-hand drive to right-hand drive:

a) the service brake control assembly must be transferred to the right-hand side of the vehicle, or

b) the service brake pedal assembly must be transferred to the right-hand side of the vehicle and the motion of the brake pedal must be transmitted to the master cylinder or treadle valve by:

- i. a torque shaft, or
- ii. levers and rods.

10. For a vehicle to which requirement 9 applies, the master cylinder or the treadle valve and the mechanism that transfers the braking effort from the right-hand side to the left-hand side must be protected to ensure that the service brake can be activated only by the driver.

### **Conversion of a vehicle to dual steering (section 6.6)**

11. A conversion to dual steering may be carried out only on a special purpose vehicle.

12. If a special purpose vehicle is converted to dual steering:

a) if practicable, original equipment must be used, and

b) non-original equipment must not be used unless approved by the vehicle manufacturer or a vehicle inspector or inspecting organisation appointed to carry out specialist inspection and certification activities, and

c) except when fixing mountings to the chassis or body of the vehicle, steering components must not be welded, unless:

- i. the welding is designed by the vehicle manufacturer or a vehicle inspector or inspecting organisation appointed to carry out specialist inspection and certification activities, and
- ii. appropriate non-destructive testing is carried out, and

d) steering performance and characteristics must be maintained, and

e) new mounting points for the parking brake, accelerator and clutch controls must be of equivalent strength to the original mounting points.

13. If a special purpose vehicle is converted to dual steering:

a) the service brake control assembly must be replicated on the other side of the vehicle in a way that prevents the hydraulic or pneumatic line pressure from acting on the non-operating master cylinder or treadle valve, or

b) the motion of the brake pedal must be transmitted to the master cylinder or treadle valve by:

i. a torque shaft, or

ii. levers and rods.

14. The steering motion on a special purpose vehicle that has been converted to dual steering may be transmitted by chain and sprocket or bevel gear boxes, if proper means are provided to eliminate backlash.