

Correct as at 23rd November 2013. It may be superseded at any time.

Extract taken from: NZTA Vehicle Portal > VIRMs > In-service certification (WoF) > General vehicles > Miscellaneous items

13 Miscellaneous items

13-1 Engine and transmission

Reasons for rejection

Condition

1. The engine or gearbox is insecurely mounted.
2. A driveshaft is bent or severely damaged.
3. A driveshaft flange:
 - a) is insecure, or
 - b) has a bolt or nut missing.
4. A driveshaft support bearing is:
 - a) insecure, or
 - b) worn beyond manufacturer's specifications.
5. A driveshaft universal joint spider (cross) bearing:
 - a) is worn so that the movement in the joint is beyond manufacturer's specifications, or
 - b) caps have loose or missing cap bolts or circlips, or
 - c) is damaged, displaced or the seals between the spider journals and bearing caps are missing.
6. A rubber doughnut-type driveshaft coupling:
 - a) is worn or damaged beyond manufacturer's specifications, or
 - b) is split or delaminated so that its mechanical integrity is affected, or
 - c) securing bolt is loose or missing.
7. A driveshaft slip joint (spline) is worn beyond manufacturer's specifications.
8. The universals in the driveshaft are not fitted in accordance with manufacturer's specifications.

Modifications

9. A modification ([Note 1](#)) affects the engine and transmission ([Note 2](#)), and:
 - a) is not excluded from the requirements for LVV specialist certification (**Table 13-1-1**), and
 - b) is missing proof of LVV specialist certification, that is:
 - i. the vehicle is not fitted with a valid LVV certification plate, or
 - ii. the operator is not able to produce a valid modification declaration or authority card.

Note 1 Definitions

Modify means to change a vehicle from its original state by altering, substituting, adding or removing a structure, system, component or equipment, but does not include repair.

Repair means to restore a damaged or worn vehicle, its structure, systems, components or equipment to within safe tolerance of its condition when manufactured, including replacement with undamaged or new structures, systems, components or equipment.

Note 2

LVV certification is always required for the fitting of a supercharger or turbocharger as a modification, or the upgrading of a supercharger, turbo or wastegate, or the re-chipping of electronic engine control units on turbo vehicles.

Note 3

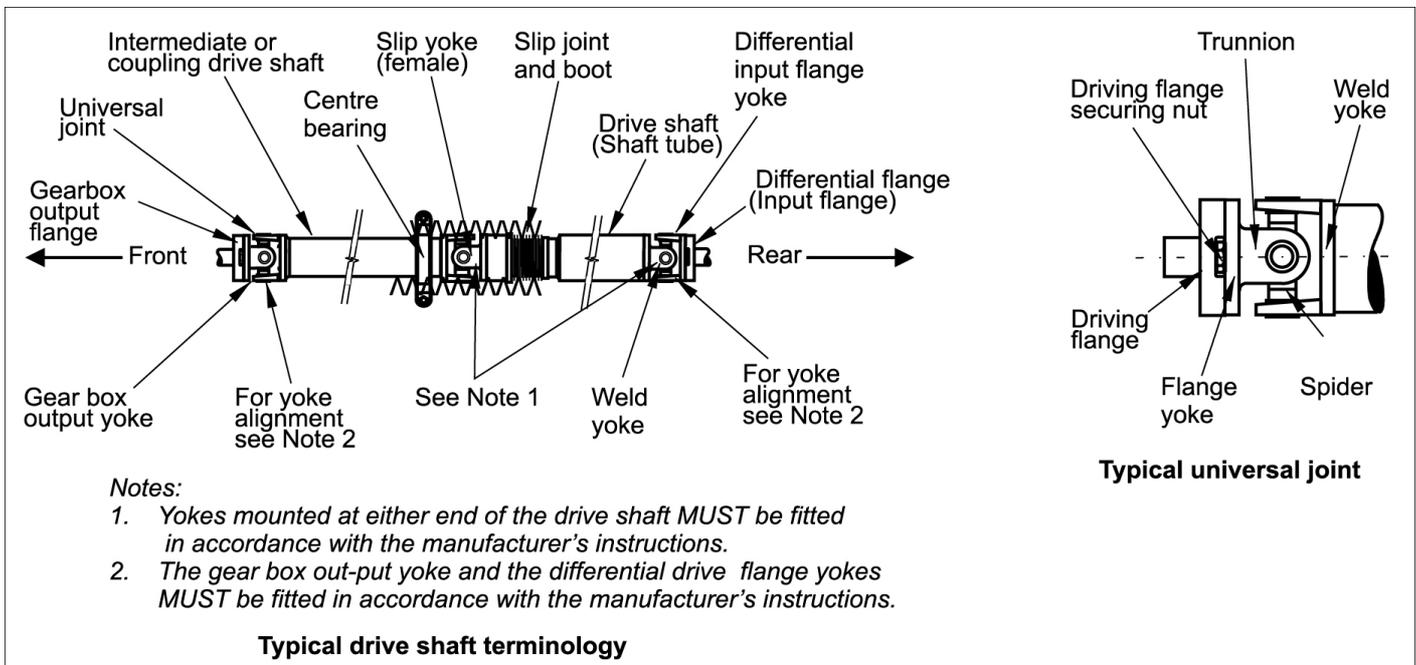
Externally venting wastegates (screamer pipes) are not permitted as they are not adequately muffled and the exhaust gasses passing through the wastegate are not directed through the vehicle's exhaust system. However, wastegates that have their own exhaust system or exhaust pipe exiting behind the passenger compartment are permitted.

Table 13-1-1. Modifications that do not require LVV certification

Fitting of or modification to:	LVV certification is not required provided that:
Substitution of engines	<ul style="list-style-type: none"> • when compared with the OE engine, the replacement engine: <ul style="list-style-type: none"> – is of the same or less cubic capacity, and – has equal or less weight, and – has the same or less power output, and – uses the same fuel (petrol, diesel, LPG, CNG), and – uses the same unmodified attachment points and system (ie bolts-in), and – uses the same family of block and cylinder head from the same vehicle manufacturer, and – is of the same configuration.
Minor modifications to OE engine	<ul style="list-style-type: none"> • the modifications result in not more than 20% more power than the OE engine, which may include the fitting of: <ul style="list-style-type: none"> – extractor or free-flow exhaust manifolds, or big bore exhaust systems – changed intake manifolds – changed or multiple carburettors – modified fuel injection systems – changed ignition systems – alternative cold air box induction systems. • See (Note 2).
Gearbox substitution	<ul style="list-style-type: none"> • the OE gearbox cross-member has not been heated, cut or welded, and • the OE gearbox cross-member mounting to the OE body or chassis members is unchanged, and • no replacement gearbox cross-member is used, and • the OE driveshaft(s) is unmodified, and • no substantial modifications have occurred to the floor or gearbox tunnel area, other than provision for gear-shift mechanism.
Change from 4WD to permanent 2WD (removal of drive train components in 4WD vehicles)	<ul style="list-style-type: none"> • the vehicle was originally manufactured with selectable 4WD and a solid/live front axle.

Fitting of or modification to:	LVV certification is never required:
Any modification for the purposes of law enforcement or the provision of emergency services	<ul style="list-style-type: none"> in-service requirements for condition and performance must be met.

Figure 13-1-1. A typical driveshaft assembly



Summary of legislation

Applicable legislation

- [Land Transport Rule: Vehicle Standards Compliance Rule 2002](#), section 7.4

Condition and performance

- The vehicle must be safe to be operated.
- The components and materials must be fit for their purpose and within safe tolerance of their state when manufactured or modified.

Modifications

- A modification that affects the engine and transmission must be inspected and certified by an LVV specialist certifier, unless the vehicle:
 - is excluded from the requirement for LVV specialist certification (**Table 13-1-1**), and
 - has been inspected in accordance with the requirements in this manual, including those for equipment, condition and performance.

13-2 Fuel system

Reasons for rejection

Condition

- There is a noticeable fuel leak from the fuel system.
- The security of the fuel tank is affected by:
 - corrosion damage ([Note 1](#)), or
 - cracking or other damage, or

- c) insecure or loose tank mountings.
- 3. A fuel line is insecure or loose so that it is likely to be damaged during normal use of the vehicle.
- 4. A fuel pipe is severely damaged or excessively corroded.
- 5. A fuel hose is damaged or perished.
- 6. The fuel pump is insecure.
- 7. The fuel filler cap or capless fuel filler seal is missing, insecure or likely to allow fuel spillage when the vehicle is in normal use.
- 8. The fuel tank is fitted with a 'temporary use' fuel filler cap.

Modification

- 9. A modification affects the fuel system, and:
 - a) is not excluded from the requirements for LVV specialist certification (**Table 13-2-1**), or
 - b) is missing proof of LVV specialist certification, that is:
 - i. the vehicle is not fitted with a valid low volume vehicle certification plate, or
 - ii. the operator is not able to produce a valid modification declaration or authority card.

Note 1

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 corrosion damage will fall out and leave a hole.

Table 13-2-1. Modifications that do not require LVV certification

Fitting of or modification to:	LVV certification is not required provided that:
Fuel system changes and modifications	<ul style="list-style-type: none"> • no structural modifications have occurred to the vehicle during the installation or modification, and • the filling location remains the same as at original manufacture, and • the fuel type (petrol, diesel) has not changed (other than a change to LPG/CNG).

Fitting of or modification to:	LVV certification is never required:
Any modification for the purposes of law enforcement or the provision of emergency services	<ul style="list-style-type: none"> • in-service requirements for condition and performance must be met.

Summary of legislation

Applicable legislation

- [Land Transport Rule: Vehicle Equipment 2004](#).

Condition and performance

- 1. Fuel tanks, fuel lines and associated components must be:
 - a) securely mounted, and
 - b) made of suitable materials, and
 - c) in good condition, and
 - d) free from significant leaks, and
 - e) positioned so that the risk of mechanical damage or heat gain is minimised.

Modification

2. A modification that affects the fuel tank and fuel lines must be inspected and certified by a Low Volume Vehicle Specialist Certifier, unless the vehicle:

- a) is excluded from the requirement for LVV certification (**Table 13-2-1**), and
- b) has been inspected in accordance with the requirements in this manual, including those for equipment, condition and performance.

13-3 LPG/CNG fuel system

Reasons for rejection

Mandatory equipment

1. A vehicle that is equipped with an LPG or CNG fuel system that is in working order does not have a current alternative fuel inspection certificate (**Note 1**) (**Note 2**) (**Figure 13-3-1**).

Condition

2. An LPG or CNG fuel system component is:

- a) loose, or
- b) significantly corroded, distorted or cracked.

3. A gas line:

- a) shows signs of corrosion damage (**Note 3**), such as pitting, or
- b) is bulging, or
- c) is insecure, or
- d) is damaged, eg cut or crimping.

4. There is a noticeable gas leak.

5. There is corrosion damage, distortion or fracture within 300mm of a tank mounting

Note 1 Definitions

Alternative fuel inspection certificate means evidence of vehicle inspection relating to the periodic in-service inspection and certification of an LPG or CNG fuel system.

Alternative fuel installation certificate means an inspection and certification document relating to the installation of an LPG or CNG fuel system. It is not required for the issue of a WoF or CoF.

LPG/CNG fuel system means a fuel storage and conducting system that is used to provide liquid petroleum gas (LPG) or compressed natural gas (CNG) for the purpose of propulsion of a vehicle.

Note 2

An LPG or CNG fuel system with all the necessary components is deemed to be in working order, whether or not it is charged. A system that has had the filler connection removed is deemed to be not in working order.

Note 3

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.

Figure 13-1-1. Alternative fuels certificate label



Summary of legislation

Applicable legislation

- [Land Transport Rule: Vehicle Standards Compliance 2002](#)
- [Land Transport Rule: Vehicle Equipment 2004.](#)

Mandatory equipment

1. A motor vehicle equipped with an LPG or CNG fuel system that is in working order must display a current alternative fuel inspection certificate.

Condition

2. An LPG or CNG fuel system must be in safe working condition.

Modification

3. The installation of an LPG or CNG fuel system is not a modification that requires certification by a LVV specialist certifier.

4. A modification to an existing LPG or CNG fuel system must be inspected and certified by an approved LPG or CNG fuel inspector or inspecting organisation.