

---

# VIRM: Light vehicle repair certification amendment 7 October 2016

September 2016

## ***List of changes and preview pages***

In this amendment:

- References to the LT307 added and the procedure for using it outlined
- New requirement regarding door intrusion beams
- Welding standards referenced
- Changes to water damage deviation process and component replacement
- Changes to Threshold for requiring repair certification to align with VIRM: Entry certification.

# Contents

<b>List of changes .....</b>	<b>3</b>
<b>Preview pages .....</b>	<b>4</b>
<b>Introduction .....</b>	<b>4</b>
3 Inspection and certification process .....	4
7 Sample certification documents .....	6
8 Definitions and abbreviations .....	6
<b>2 Vehicle structure .....</b>	<b>7</b>
2-5 other pillars and doors .....	7
<b>9 General repairs .....</b>	<b>7</b>
9-1 Water damage .....	7
9-2 Welding .....	9
<b>Technical bulletins .....</b>	<b>9</b>
4 Threshold for requiring repair certification .....	9
6 LT307 Declaring that a vehicle doesn't require repair certification .....	13

# LIST OF CHANGES

Note that links below go to the current VIRM pages.

To view the changes see the [Preview pages](#) following the table below.

SECTION	CHANGE DESCRIPTION
<a href="#">Introduction 3 Inspection and certification process</a>	<ul style="list-style-type: none"> <li>References to LT307 added</li> <li>Document retention requirements updated</li> <li>Items added to 3.3 <b>Establishing whether a vehicle must be repair certified</b></li> <li>'or qualified welding certificate or I-CAR welding certificate to carry out welding repairs to the appropriate standard' added regarding repair instructions</li> </ul>
<a href="#">Introduction 7 Sample certification documents</a>	<ul style="list-style-type: none"> <li>Sample LT307 added</li> </ul>
<a href="#">Introduction 8 Definitions and abbreviations</a>	<ul style="list-style-type: none"> <li>KSDP added</li> </ul>
<a href="#">2-5 Other pillars and doors</a>	<ul style="list-style-type: none"> <li>New Rfr about door intrusion beams and frontal impact occupant protection system added</li> </ul>
<a href="#">9-1 Water damage</a>	<ul style="list-style-type: none"> <li>For a vehicle purchased on or before 7 September 2016 and border checked before 7 October 2016, if there is conclusive evidence to support that the vehicle has not been fully immersed and a deviation from the requirements of Table 9-1-1 is sought this must be presented to the Vehicles team, Technical Services at the Transport Agency and permission may be granted to deviate from the requirements listed the table. Vehicles purchased on or after 7 September 2016 and/or border checked on or after 7 October 2016 must be treated as fully submerged and deviations will not be considered by the Transport Agency.</li> <li>Table 9-1-1 extensively revised</li> </ul>
<a href="#">9-2 Welding</a>	<ul style="list-style-type: none"> <li>Welds must be completed to NZS 1544 (or a certified I-CAR accreditation).</li> </ul>
<a href="#">Technical bulletin 4 Threshold for requiring repair certification</a>	<ul style="list-style-type: none"> <li>Changes made to align with VIRM: Entry certification</li> <li>Addition of sub-frames, suspension arms, doors and frontal impact systems to corrosion damage section</li> <li>References to Technical bulletin 6 added</li> </ul>
Technical bulletin 6 LT307 standard operating procedure	<ul style="list-style-type: none"> <li>New technical bulletin outlining the process for issuing an LT307</li> </ul>

# PREVIEW PAGES

## Introduction

### 3 Inspection and certification process

#### 8. Document retention, incorrect certification, vehicle defects (section 2.3(4) of the Rule)

It is a condition of appointment that a repair certifier:

- a) keeps readily available every LT307, LT308 and copies of all other relevant records and associated documents relating to repair inspections and certification for a minimum period of two years, and
- b) keeps retrievable paper or electronic copies of every LT307, LT308 and all other relevant records and associated documents relating to repair inspections and certifications for a minimum of an additional three years after that, and
- c) advises the Transport Agency as soon as practicable if there is a reason to believe that the inspection and certification of a vehicle has been carried out incorrectly, and
- d) advises the Transport Agency as soon as is practicable after they become aware of a defect in a manufacturer's production run or quality control process that may affect the safety performance of a vehicle that has been inspected and certified.

#### 3.3 Establishing whether a vehicle must be repair certified

A vehicle must be inspected for light vehicle repair certification if:

- a) it requires repair certification for entry or re-entry to service, and
- b) it is a vehicle of one of the following classes:  
LC, LD, LE1, LE2, MA, MB, MC, MD1, MD2, or NA (see Table 3-4-1), and
- c) the vehicle shows any of the following conditions:
  - evidence of corrosion in a structural part of the vehicle; this includes evidence of rust bleed
  - corrosion perforation of any non-structural body panel of the vehicle
  - corrosion perforation or any significant pitting of any subframe, steering, or suspension member, including their mounting points
  - damage that affects the integrity of any bonded or welded seams or joints installed by the vehicle manufacturer
  - underbody damage that has caused the splitting of seam welds, distortion of suspension members or mounting points, or tearing of metal structures
  - denting or creasing on sill (rocker) panels or to a depth of more than 25mm
  - denting or distortion to the folds or swages in the sill panel or structure of the inner or outer sill weld seam
  - distortion to the longitudinal chassis rails so as to affect the front or rear crush zones or kick-up areas
  - damage of a cross-member that may affect steering or suspension alignment
  - distortion of a cross-member
  - damage or distortion of any subframe that that may affect steering or suspension alignment
  - cracking of the unitary body in areas affecting a safety component or system
  - damage or deformation to a door intrusion beam that is required for the frontal impact occupant protection system
  - a deployed airbag or seatbelt pre-tensioner
  - there is evidence that repairs have been made to the structure or safety systems of the vehicle or the extent of the original damage is not evident
  - there is evidence that the vehicle has suffered water damage.

### 3.5 Repair instructions

The repair certifier must issue written instructions specifying the repairs to be performed in order for the vehicle to be certified.

The repair certifier and the repairer must take into account manufacturer's instructions where available, including specifications, measurements, tolerances, materials, methods and procedures. It is the repair certifier's responsibility to justify any departure from the manufacturer's instructions.

If the manufacturer's instructions are not available, the repair certifier and the repairer must take into account the instructions of a recognised repair research organisation relevant to the vehicle type, such as R-Car, I-Car, or Thatcham. In this case it is the repair certifier's responsibility to justify any departure from these instructions.

The certifier may certify repairs where no proof of the methods and parts used can be obtained, if he or she determines, on reasonable grounds, that the repairs have returned the vehicle to safe tolerance of its condition when manufactured or modified.

It is the repair certifier's responsibility to ensure that a repair on a vehicle manufactured post-1 January 1990 has been carried out in accordance with the repair instructions that have been issued. This means that the repairer of the vehicle has supplied evidence to the certifier of the following items:

- Relevant industry qualifications (National Certificate in panel beating or another qualification considered to be the equivalent by the NZQA)
- Proof of recognized ongoing industry training (I-CAR, Thatcham, manufacturer courses, etc)
- Current welding certificates (AS/NZS 1554), qualified welding certificate, or I-CAR welding certificate to carry out welding repairs to the appropriate standard
- Relevant welding equipment
- Vehicle hoist and sufficient suitable lighting.
- Calibrated three-dimensional measuring or jig-alignment system
- Up-to-date chassis and measuring training certificates and data sheets
- Workshop equipment appropriate to carry out quality repairs.
- Occupational Safety and Health requirements, and any other relevant Acts, regulations, and local bylaws.

### 3.7 Record of certification (section 6.6 of the Rule)

1. The repair certifier must complete an LT307 or LT308 for any vehicle inspected (as applicable).
2. The repair certifier must retain the top copy of the LT307 or LT308 (as applicable).
3. The repair certifier must provide one copy of the LT307 or LT308 (usually the carbon copy) to the owner of the vehicle (as applicable).
4. The repair certifier must hold all documentary evidence as required by the technical pages of this manual.

## 7 Sample certification documents

Figure 1. LT307 No repair certification required declaration

The image shows two identical forms side-by-side, representing the 'Repair Certifier Copy' (top) and 'Customer Copy' (bottom). Both forms are titled 'No Repair Certification Required Declaration - Light Vehicle' and include the NZ Transport Agency logo and a serial number 'XXXXXX'. The forms are divided into three main sections: 'Vehicle Details', 'Vehicle Condition Statement', and 'Repair Certifier Statement'. The 'Vehicle Details' section includes fields for Make, Model, Chassis, VIN, Colour, and Odometer reading. The 'Vehicle Condition Statement' section asks the user to state clearly why the vehicle does not require repair certification, with a reference to Technical Bulletin 4. The 'Repair Certifier Statement' section includes a declaration from the repair certifier, their name and phone number, and their ID. The forms also feature a grid of vehicle diagrams for indicating previous repairs, corrosion, or damage, with a note that photos should be retained on file. A large 'SAMPLE' watermark is overlaid across the forms.

## 8 Definitions and abbreviations

<b>KSDP</b>	means key service delivery partner. They are defined as organisations that are contracted or appointed by the Transport Agency to deliver regulatory products or services and who have sufficient market share and/or are of sufficient size and standing within an industry segment to be able to represent and influence the customer expectation of that industry segment.
-------------	---

## 2 Vehicle structure

### 2-5 other pillars and doors

Reasons for rejection	Summary of legislation
7. A door intrusion beam, required for the performance of a vehicle's frontal impact occupant protection system, has been deformed.	

## 9 General repairs

### 9-1 Water damage

**Note 1**

For a vehicle purchased on or before 7 September 2016 and border checked before 7 October 2016, if there is conclusive evidence to support that the vehicle has not been fully immersed and a deviation from the requirements of **Table 9-1-1** is sought this must be presented to the Vehicles team, Technical Services at the Transport Agency and permission **may be** granted to deviate from the requirements listed the table.

Vehicles purchased on or after 7 September 2016 and/or border checked on or after 7 October 2016 must be treated as fully submerged and deviations will not be considered by the Transport Agency.

**Table 9-1-1. Water damaged vehicle safety related components**

Vehicle Components	Options		
	Component to be replaced with non-used genuine components	Component can be replaced with used components of known origin, storage and condition	The original components can be reused after being stripped, inspected and tested by the manufacturer or an approved representative
Seatbelt assemblies	✓	x	x
Seatbelt pre-tensioners	✓	x	x
Airbags <sup>1</sup>	✓	x	x
SRS control module	✓	x	x
SRS sensor(s)	✓	x	x
SRS wiring loom	✓	x	x
SRS relay(s)	✓	x	x
SRS clockspring	✓	x	x
ECU's (engine, suspension, etc.)	✓	x	x
Wiring loom	✓	✓	x
ABS / ESC actuator	✓	x	x
ABS / ESC control module	✓	x	x

Brake master cylinder	✓	✓	✓
Brake booster system	✓	✓	x
Brake calipers / drum parts	✓	✓	✓
Line pressure valves	✓	✓	✓
Brake lamp switch	✓	✓	x
Ignition switch	✓	✓	x
Lamp switches	✓	✓	x
Lamp wiring and connectors	✓	✓	x
Lamp relay(s)	✓	✓	x
Horn, relay and switch	✓	✓	x
Collision avoidance & lane departure sensors	✓	✓	✓
Radar/laser cruise control sensors	✓	✓	✓
Suspension height sensors	✓	✓	✓
Wiper motor and switch	✓	✓	x
Alternator	✓	✓	✓
Starter motor	✓	✓	✓
HVAC system	✓	✓	✓
Gauge cluster (speedometer, tach.)	✓	✓	x
Door locks and latches	✓	✓	✓
Fluids (brake, steering, engine, drivetrain, etc.)	✓	x	x
Lamp assemblies	✓	✓	x
Fly by wire accelerator	✓	✓	x
Throttle cable	✓	✓	✓
Electronic parking brake components	✓	✓	x
Handbrake cable	✓	✓	✓

<sup>1</sup> Refer to [section 5-3 Airbags](#) in this manual



Reasons for rejection	Tables and images	Summary of legislation
<p>3. For a vehicle purchased on or before 7 September 2016 and border checked before 7 October 2016, if there is evidence that the vehicle has not been fully immersed and/or the composition of the water is known and a deviation from the requirements of Table 9-1-1 is sought, this must be presented to the Vehicles team, Technical Services of the Transport Agency and permission may be granted to deviate from the requirements listed in the table (vehicles purchased on or after 7 September 2016 and/or border checked on or after 7 October 2016 must be treated as fully submerged and deviations will not be considered by the Transport Agency).</p>		

## 9-2 Welding

Reasons for rejection	Summary of legislation
<p>8. The weld has not been completed to NZS 1554 or I-CAR compliant standards.</p>	

Reasons for rejection	Summary of legislation
<p>2. Welding must be completed to NZS 1554 or I-CAR compliant standards.</p>	

## Technical bulletins

### 4 Threshold for requiring repair certification

Technical information
<p>The following information gives guidance to vehicle inspectors in determining whether or not a light vehicle (including motorcycles where applicable) undergoing entry certification in New Zealand requires repair certification by a specialist repair certifier.</p> <p><b>Note 1</b></p> <p>Specialist repair certifier in this case means a light vehicle repair certifier or heavy vehicle specialist certifier as applicable to the vehicle class.</p> <p><b>Important:</b> If the vehicle documentation (eg a registration document or invoice) contains the words 'statutory', 'write-off', 'salvage', 'junked' or 'non-repairable' the vehicle <b>must</b> be referred to a specialist repair certifier.</p>

## Damage/deterioration that must be referred to a repair certifier

### Under-body impact damage

A vehicle must be referred to a specialist repair certifier if it has underbody damage as a result of a collision with a substantial object, sufficient to cause the splitting of seam welds, distortion of suspension members or mounting points, or tearing of metal structures, excluding floorpan stiffeners.

#### Note 2

When distinguishing between floorpan stiffening members and cross-members, note that a member that runs through the line of a seat or occupant area will not be an energy absorbing-member (ie its purpose is to reinforce the floorpan), while a member that runs alongside a seat or occupant area should be treated as an energy absorbing-member (ie a chassis rail).

### Denting or distortion

- A vehicle must be referred to a specialist repair certifier if there is any discernible denting or distortion to the folds or swages in the dog leg, sill panel or structure of the inner/outer sill weld seam, other than minor scraping.
- A vehicle must be referred to a specialist repair certifier if rocker panels (outer sills) are dented or creased lengthways along the sill and the depth of the crease exceeds 25mm (see **Figure 4-1-1**).
- A vehicle must be referred to a specialist repair certifier if rocker panels (outer sills) are vertically dented or creased across the sill regardless of the depth of the crease or dent (see **Figure 4-1-1**).

### Crush zones and kick-up areas

A vehicle must be referred to a specialist repair certifier if there is distortion of the longitudinal rails affecting the front and rear crush zones and kick-up areas.

### Crossmembers

A vehicle must be referred to a specialist repair certifier if there is denting or distortion of the crossmember as a result of collision with an object.

### Cracking

A vehicle must be referred to a specialist repair certifier if there is cracking in:

- the unibody or chassis
- any crossmembers and subframes
- a load bearing member, or energy management paths in unibody structures
- the body of a vehicle with a body-over-frame chassis in the energy management paths, engine mounts, suspension mounts, body mounts, pillars, or sills.

### Repaired damage

A vehicle must be referred to a specialist repair certifier if signs of fresh repair, rust prevention or under-sealing to any part of the vehicle structure are evident.

### Supplementary Restraint System (SRS): Airbags and seatbelt pretensioners

A vehicle must be referred to a specialist repair certifier if it has a deployed airbag or seatbelt pretensioner, or there is evidence of repairs to or tampering with airbag module covers. (including colour variations in plastic covers to steering wheels, dash panels, interior trim, or non-original stitching to seat mounted airbags). A vehicle must be reported if the SRS warning light stays illuminated when the engine is running.

#### Note 3

Unless there is evidence that the airbag has been deployed, it is not expected that the vehicle go to a specialist repair certifier if it has a sports steering wheel fitted with no airbag at entry and is failed and requested that the OE steering wheel be reinstated.

If the airbag has not been deployed it is only expected that the original steering wheel be reinstated and an SRS declaration issued in line with **Technical bulletin 3**.

## Corrosion damage

- **Corrosion damage** is where the metal has been eaten away, which is evident by pitting. The outward signs of such corrosion damage are typically displayed by the swelling of a panel between spot welds, or lifting or bubbling of paint. In extreme cases, the area affected by the corrosion damage will fall out and leave a hole.

A vehicle must be **specialist** repair certified if there is corrosion damage in:

- any structural area, as indicated in the shaded areas of **Figure 4-1-2**
- sub-frames
- steering
- suspension member, including their mounting points.

A vehicle must be **specialist** repair certified if there is rust heave.

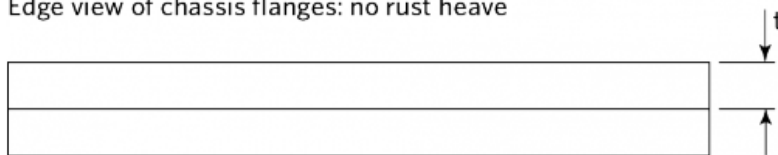
### Note 5

Corrosion damage includes any signs of 'rust bleed'.

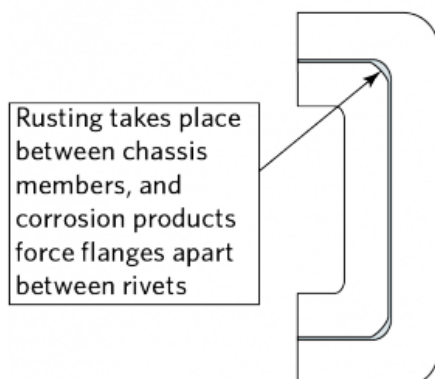
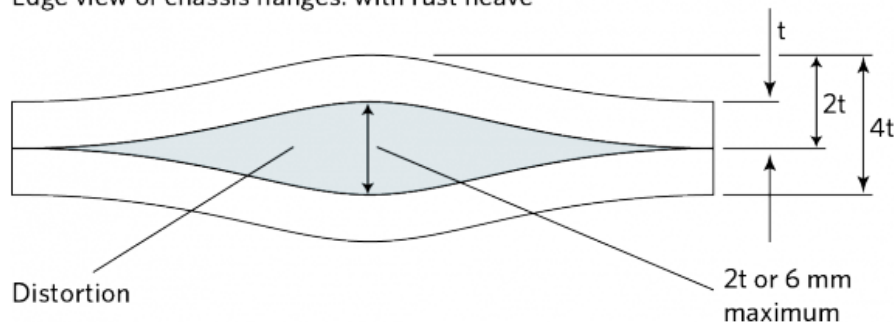
- *Repair* of corrosion on **doors, bonnets, hatches and boot lids** within a 150mm circle around the outside of hinge or latch components will require **specialist** repair certification. These 'no corrosion' zones are circled in **Figure 4-1-3**.
- *Replacement* of these parts will not require **specialist** repair certification, provided the inspector is satisfied that safety systems are not affected (eg side intrusion beams, burst proof locks, frontal impact systems).

**Figure 4-1-4. Rust heave limits**

Edge view of chassis flanges: no rust heave



Edge view of chassis flanges: with rust heave



Apply similar criteria (twice material thickness or 6 mm maximum) for corrosion in other parts of structural members

## Inspection

A list of specific types of damage follows. It explains the extent to which damage is allowed before a vehicle must be reported.

### Underbody impact damage

A vehicle does not require **specialist repair certification** if it has minor underbody impact damage as a result of 'grounding' the vehicle or some scraping of the sill seams.

A vehicle does not require **specialist repair certification** if there is crushing or tearing of floorpan stiffening members (**Note 5**), provided it does not affect any internal cross-members designed for side-impact protection.

### Note 6

When distinguishing between floorpan stiffening members and cross-members, note that a member that runs through the line of a seat or occupant area will not be an energy absorbing member (ie its purpose is to reinforce the floorpan), while a member that runs alongside a seat or occupant area should be treated as an energy absorbing member (ie a chassis rail).

### Denting or distortion

A vehicle does not require **specialist repair certification** if rocker panels (outer sills) are dented or creased lengthways along the sill to a depth of less than 25mm.

### Cross-members

A vehicle does not require **specialist repair certification** if it has minor jacking damage to a cross-member, provided there is no indication of loss of steering or suspension alignment.

### Repaired damage

A vehicle with repaired damage does not require reporting if repairs are only to correct cosmetic damage to the outer body panels, provided the vehicle inspector is able to discern the extent of the damage and confirm that none of the vehicle manufacturer's seams or joints have been disturbed during the repair.

## Vehicles flagged for damage at the border

When a Border Inspection Organisation identifies damage on a vehicle during the border check, the vehicle will be flagged as damaged on LANDATA. If the vehicle inspector determines that the damage does not exceed the threshold for requiring repair certification, an application must be made to remove the damage flag. See **Technical bulletin 6: LT307 Declaring that a vehicle doesn't require repair certification**.

A 'Request to remove border damage flag' form is available from the **light vehicle repair forms page**. The vehicle inspector must complete this form and give it to the inspecting organisation supervisor authorised to remove damage flags. Before removing the flag, the inspecting organisation must check **BIS photos for correlation with repair forms (LT307/LT308)**.

## 6 LT307 Declaring that a vehicle doesn't require repair certification

### Information

The use of the LT307 is actioned when when damage flagged by a border inspection organisation (BIO) or entry inspector is deemed by a repair certifier to be not as significant as originally thought.

Certifiers that are using this form to reverse a damage flag on a border entry vehicle must understand the BIO threshold for applying a damaged flag and **VIRM: Entry certification inspection threshold for repair certification**, and carry out a thorough inspection of the vehicle in question.

To issue an LT307 the certifier must first determine that **no further work is required** to the entire vehicle.

If any remedial work is required to a vehicle for entry purposes, then an LT308 must be issued after remedial work has been completed.

The LT307 is to be used solely to reverse a request for an LT308 by BIO or an entry inspector or to use when a marginal vehicle is referred by a KSDP for assessment where the damage may be marginal/non-structural.

### Responsibilities

The repair certifier is solely responsible for the outcome of the inspection; filing and supplying supporting evidence is required for Transport Agency auditing purposes.

### Procedure

- When a vehicle is presented to the repair certifier it is their responsibility to insure that a thorough inspection is carried out to the area of concern. The repair certifier is only able to issue an LT307 after the vehicle has completed the compliance entry inspection.
- If during the repair certifier's inspection, the repair certifier identifies other areas of concern that would require an LT308, then an LT308 must apply.
- The repair certifier may request the stripping of the vehicle to do a thorough inspection.
- The vehicle must be hoisted for the inspection (a two-post hoist is preferred for underbody inspections.)
- The repair certifier may require a trammel check and/or a four wheel alignment as part of the inspection.
- On completion of the inspection, only if the repair certifier can issue an LT307 without performing any repairs what so ever, then and only then, is it permissible for the repair certifier to issue an LT307. (eg if inspecting surface rust and the certifier requires only that the area need to be treated with rust converter or cavity wax, then a LT308 must apply)
- The repair certifier ID code, the area inspected, and a note that an LT307 was issued, is to be entered into the gnote screen on LANDATA by the repair certifier.

### Applicable references

#### VIRM: Light vehicle repair certification

Refer to applicable sections depending on individual situation.

- [Technical bulletin 4: Threshold for requiring repair certification](#)
- [Technical bulletin 5: Threshold for lifting border damage flag](#)

#### VIRM: Border inspection of imported used vehicles

- [Reference material 1: Guidelines for the detection of reportable damage on imported used vehicles \(excl motorcycles\)](#)
- [Reference material 10: Inspection of motorcycles](#)

### Requirements

Photographs of the inspection and a copy of the LT307 are to be kept on file.

The repair certifier is to take photographs of the inspection, note any measurement checks, keep copies of any wheel alignment reports, [Declaration form for SRS and/or ABS inspections form](#) and trammel measurement.

When filling out the LT307 the repair certifier must use wording similar to the VIRM: Light vehicle repair certification: [Technical bulletin 4: Threshold for requiring repair certification](#) and [Technical bulletin 5: Threshold for lifting border damage flag](#)

The repair certifier is to keep copies of the LT307 on file.

### Flow chart steps.

