

Queensland Code of Practice: Vehicle Modifications (QCOP)

Code LS11: Gross Vehicle Mass Re-rating

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Queensland Government



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CODE LS11

Gross Vehicle Mass Re-rating

1. Scope

The LS11 modification code specifies arrangements for re-rating of the Gross Vehicle Mass (GVM) rating of a light vehicle that is, a vehicle having current GVM rating that does not exceed 4,500 kg.

Re-rating of GVM under LS11 code is permitted only on the following type of light vehicles:

A light vehicle that is constructed on a ladder type chassis frame with a cabin and/or body mounted on it. Vehicles with integrated frame and body, commonly known as unitary or monocoque construction, are not eligible.

The original equipment manufacturer (OEM) refers to the entity holding the First Stage Identification Plate Approval (IPA). An entity holding the Second Stage Manufacture (SSM) Approval or Registered Automotive Workshop Scheme (RAWS) Approval is not deemed as the OEM.

In cases where the OEM has not specified a GVM rating, the maximum laden mass at which the OEM has shown compliance with the Australian Design Rules (ADRs) is to be taken as the original GVM rating. This information must be obtained from a reliable and traceable source.

The Road Vehicle Descriptor (RVD) continues to be valid under the *Road Vehicle Standards Act 2018* (Cth) and is referenced in the Road Vehicle Regulator (ROVER) system. Note that evidence of the design package for the SSM approval must be supplied. Simply citing the SSM IPA is not deemed sufficient to provide the certification.

1.1 Modifications permitted under Code LS11

Modifications that may be certified under LS11 code are:

- GVM increase of within 110% of OEM rating.
- Restoring the GVM rating to the OEM rating but only after ensuring that all vehicle components are also restored to the OEM specification.
- GVM increase over the rating given by the OEM in following cases:
 - GVM re-rating of an in-service vehicle that is of the same make/model/variant/chassis series as a vehicle having an SSM approval for GVM re-rating.
 - Increase in GVM rating where an additional axle has been installed.
 - GVM re-rating to match the OEM's rating for another variant of the same make/model/chassis series.

1.2 Modifications not permitted under Code LS11

Modifications that must not be certified under LS11 code are:

- Modifications other than those described in Section 1.1.
- Reduction in GVM rating other than.
 - (a) the re-rating to OEM's optional GVM rating for that make/model; or
 - (b) GVM reduction required because of conversion to motorhome.

1.3 Towing Capacity and LS11 Code

- LS11 code must not be used for re-rating of the Gross Combination Mass (GCM) of a vehicle.
- LS11 Code must not be used for re-rating of Towing Capacity of the vehicle.

2.0 General Requirements

The vehicle must be able to safely operate at the re-rated GVM. All affected components including the chassis frame, drivetrain, axles, suspension, brakes, steering, rims and tyres must be assessed individually to ensure that they can safely support the loads resulting from the re-rated GVM.

All work must also comply with the requirements contained in sub-section 2 General Requirements of Section LS of the Vehicle Standards Bulletin 14: *National Code of Practice for Light Vehicle Construction and Modification (NCOP)*.

Increased GVM may affect the warranty provided by the OEM. It is the responsibility of the vehicle operator and the certifying Approved Person (AP) to consider any such effect on the warranty. Any effect this modification may have on the product warranty is outside the scope of this code. The certifying AP must clarify this point to the modifier and the vehicle operator.

2.1 Compliance with applicable vehicle standards

- 2.1.1** The modified vehicle must continue to comply with the ADRs that apply to it.
- 2.1.2** If different or additional ADRs apply to the modified vehicle, it must comply with those ADRs that apply to it.
- 2.1.3** A modified vehicle must also comply with the applicable in-service requirements of the *Transport Operations (Road Use Management—Vehicle Standards and Safety) Regulation 2021* (the Regulation).
- 2.1.4** A modified pre-ADR vehicle must continue to comply with the Regulation.
- 2.1.5** Outlined in Table LS11, are areas of the vehicle that may be affected by the modifications and may require re-certification, testing and/or data to show compliance of the modified vehicle.

Table LS11 List of items and likely affected ADRs

DETAIL	REQUIREMENTS
Tyre and Rim Selection	ADR 42/...
Braking Systems	ADR 31/...or ADR 35/...
Brake Performance (for non-ADR vehicles)	<i>Transport Operations (Road Use Management—Vehicle Standards and Safety) Regulation 2021</i>

Note: This is not an exhaustive list and compliance to other ADRs may also be affected.

The ADR applicability is according to the vehicle's category and date of manufacture. It is the responsibility of the certifying AP to verify compliance to the applicable ADRs. The certification must include the vehicle date of manufacture in addition to the date of modification.

Sections 2.2 to 2.5 relate to the general requirements applying to different pathways to re-rate vehicle's GVM using LS11 code.

2.2 Pathway - 1 GVM re-rating within 110% of OEM Rating

- 2.2.1** A re-rating of GVM is permitted under this code even if it is not an option by the OEM.
- 2.2.2** At the rerated GVM vehicle must comply with all the applicable standards and must be safe for use on road. Suitability of the chassis, drivetrain, axles, suspension, brakes, steering, rims and tyres must be assessed.
- 2.2.3** Re-rated GVM under this pathway must not exceed 110% of the OEM rating.

2.3 Pathway - 2 GVM re-rating based on SSM approved vehicle

- 2.3.1** The re-rated GVM must be no more than the SSM approved vehicle.
- 2.3.2** All upgraded components relevant to GVM re-rating (for example, brakes, tyres and rims, chassis frame reinforcements etc) must be fitted and identical to those specified on the SSM approved vehicle.
- 2.3.3** Aspects of the modification other than those directly related to GVM re-rating must be certified using the appropriate modification codes or specific approval issued by TMR. For example, suspension lifts, even when they are part of the SSM Approval, must be certified using LS9 and LS10 codes.
- 2.3.4** Use of the SSM approval for this pathway must be permitted, guided and controlled by the entity holding the SSM approval. In addition to the physical modification replicating the SSM approval, all the administrative requirements

specified under the SSM approval must also be met. These requirements may include, but are not limited to the following:

- The vehicle's first Identification Plate Approval number must be identical to that mentioned in the SSM Approval.
- The SSM approval must cover the variant of in-service vehicle that is being modified and certified.

2.3.5 The Road Vehicle Descriptor (RVD) continues to be valid under *Road Vehicle Standards Act 2018* (Cth) and is referenced in the Road Vehicle Regulator (ROVER) system. Note that evidence of the design package for the SSM approval must be supplied. Simply citing the SSM IPA is not deemed sufficient to provide the certification.

2.3.6 The SSM approval number must be recorded on the modification certificate.

2.3.7 The written permission from the SSM approval holder must be retained by the certifying AP as evidence.

2.4 Pathway - 3 GVM re-rating by installation of an additional axle

2.4.1 If an additional axle is fitted to a vehicle (i.e. lazy axle or additional drive axle) the vehicle's GVM rating may be increased.

2.4.2 The fitment of an additional rear axle must be certified using the LB2 modification code. Additional supporting evidence including brake testing and chassis strength analysis at the re-rated GVM must be provided.

2.4.3 If the additional axle does not have load-sharing suspension with adjacent axle or axle group, the re-rated GVM must not exceed 110% of the GVM rating by the OEM.

2.5 Pathway - 4 GVM re-rating based on OEM reference variant

2.5.1 The GVM of a light vehicle may be re-rated to match the OEM's rating for another variant of the same make/model/chassis series.

2.5.2 All components, including suspension, transmission, engine, brakes, tyre and rims must be fitted same as those specified for the reference variant.

3.0 Specific Requirements

The following specific requirements apply to all pathways.

3.1 Chassis

- 3.1.1** A simplified way to look at the frame requirements for GVM re-rating, is to associate the bending strength of the chassis with the load carrying capacity (i.e. GVM).
- 3.1.2** Chassis modifications must be performed in accordance with section LH5 of NCOP. If the necessary information is not available in LH5 code, then the relevant sections of H code of the Heavy Vehicle Modification Code of Practice (VSB6) may be consulted, as appropriate.
- 3.1.3** When modifications such as fitting of additional or replacement axle(s) with higher load rating are carried out, the vehicle frame must be analysed to ensure that it has sufficient strength to support the re-rated GVM. For calculating chassis strength, VSB6 may be consulted.

3.2 Engine/Transmission

Where re-rating is by Pathway - 4 (comparison with a manufacturer's reference variant), the engine and transmission fitted to the modified vehicle must replicate the reference variant.

3.3 Axle Ratings

Axle loading at the re-rated GVM must be assessed to ensure that the axles are suitable for the increased loading and that the vehicle is safe to operate on road. It is expected that the certifying AP takes full responsibility for the assessment and the resulting rating.

The assessment method must be robust and include combinations of testing, stress analysis, computer simulation and reinforcement or replacement of the axle. The resulting axle load assessment rating, if different and greater than the OEM rating, must be recorded on the Modification Certificate, the Load Capacity Label and updated in the Owner's Handbook.

Approved Persons, in performing the assessment, must comply with the following:

- 3.3.1** The maximum suspension, axle and/or axle group mass limits must be obtained from either:
- the OEM; or
 - the axle and suspension manufacturer; or
 - by engineering analysis where the manufacturer's rating for a vehicle cannot be established; or
 - where the manufacturer's rating for a vehicle cannot be established, a comparison can be made with an OEM rating for a vehicle which has identical:
 - driveline components; and
 - axle ratio; and

- suspension components

3.3.2 Ensure the GVM rating assigned does not result in any axle, axle group or suspension rating being exceeded, unless all aspects of 3.3.3 below are complied with.

3.3.3 Where a manufacturer has published a reduced rating capacity for a component, ensure the reduced rating is applied, unless modified and/or strengthened according to the design package. For example - some vehicles have increased the axle rating over the life cycle of the vehicle. In this case, the relevant rating for the model year of the vehicle being modified must be used in the design package.

The vehicle must be suitable and continue to operate safely at the increased GVM:

- i. For the re-rating of axles, the components in the axle subsystem must be fit for purpose. The vehicle's subsystem and components must be analysed to ensure that the components handle the increased loading. If the components performance deteriorates, the axle subsystem will need to be reengineered with components of a higher rating.
- ii. If the baseline axle rating is exceeded, axle stresses must be analysed to identify maximum stress level and areas of critical stress with:
 - a. standard loading (baseline measurement), and
 - b. increased load condition. The maximum stress level with increased loading must be still within the yield stress limit of the material.

3.3.4 In all other cases, where the critical stress level exceeds the baseline performance the axle assembly must be replaced with a suitable alternative axle or it must be reinforced. Where re-rating is by Pathway-4 (comparison with a manufacturer's reference variant), the axles fitted to the modified vehicle must replicate those fitted by the manufacturer to the reference variant.

3.3.5 The LS11 code must not be used as a stand-alone code for certifying re-rating of any individual components (for example axle, springs or chassis frame) and or vehicle systems (for example braking or drivetrain).

3.4 Tail Shaft

Changes associated with re-rated GVM may place additional load on a vehicle's tail shaft. For example:

- changes to vehicle's ride height which may alter the tail shaft and pinion angles,

- alterations to a vehicle's wheelbase may result in change in tail shaft length,
- changes to engine and/or transmissions may impose increased torsional loading on the tail shaft.

The vehicle's tail shaft strength and its installation must be suitable at the vehicles re-rated GVM.

3.5 Suspension

- 3.5.1** When loaded to re-rated GVM, additional loads are placed on the suspension. Vehicle suspension ratings must be adequate for the re-rated GVM. Suspension must be able to accommodate the axle loads resulting from the common and practical load distribution.
- 3.5.2** Effects of changes in ride height must be carefully considered. For example, jounce and rebound travel, hydraulic brake hose length, vehicle handling and roll stability.
- 3.5.3** If the change in ride height is such that it requires certification under another code (for example, LS9 and LS10), LS11 code does not exempt the need for such certification. Also see general requirements under Pathway-2 for the need to certify modifications related to ride height.

3.6 Brakes

- 3.6.1** A vehicle's braking performance is directly affected by changes to its GVM. Therefore, the vehicle's braking system must be assessed to determine if the performance of the original system is adequate for the re-rated GVM or the braking system requires to be modified.
- 3.6.2** If a modified braking system is required, it must be designed, installed and certified appropriately.

3.7 Steering

- 3.7.1** The entire steering system under Pathway-4 must be identical to that fitted by the vehicle manufacturer to the reference variant.
- 3.7.2** If the steering system is modified or a new steering system is fitted, it must be certified under the LS section of NCOP.

3.8 Tyres and Rims

- 3.8.1** The tyres and rims must be selected to comply with the requirements of the relevant ADR at the re-rated GVM.

- 3.8.2** The load carrying capacity of all tyres and rims must not be exceeded when the vehicle is loaded to the re-rated GVM, and the load is distributed in a practical way.
- 3.8.3** The sum of the load carrying capacities of the tyres fitted must be at least equal to the re-rated GVM. The same applies to the load carrying capacities of the rims.
- 3.8.4** The load capacity of the tyres (and rims) on each axle must be adequate to support the potential maximum mass on that axle.
- 3.8.5** If re-rated GVM and axle masses require a different tyre and rim combination, a new tyre placard must be fitted to indicate the revised tyre and rim specifications for the vehicle at the re-rated GVM.
- 3.8.6** The revised tyre size and load rating must also appear on the modification plate and in the owner's handbook. A tyre and rim assessment report must be retained.
- 3.8.7** If different tyres and rims are specified, their size must be no more than necessary to support the re-rated GVM.
- 3.8.8** The effect of alternate tyres on speedometer/odometer accuracy must be considered.
- 3.8.9** It must be ensured that, with the alternate tyres, the vehicle's ESC performance, if ESC is fitted, is not affected.

4.0 Owner's Handbook and Load Capacity Label

The vehicle operator must be adequately informed of the changes.

4.1 Owner's Handbook

- 4.1.1** To inform the vehicle operator about the vehicle's load capacity and tyre & rim requirements, the vehicle's handbook must be updated. The update must provide specific details of the tyres, rims and the load capacity
- 4.1.2** Of particular importance, is any sliding reduction in legal towing mass as the tow vehicle is loaded to its re-rated GVM and/or vertical load on tow ball (ball weight).
- 4.1.3** If the vehicles handbook is not available, this information must be provided in written form to the owner of the vehicle.
- 4.1.4** A copy of all the information provided to the vehicle owner must retained as part of the evidence of this certification.
- 4.1.5** Re-rated GVM must be shown on the modification plate fitted.

4.2 Load Capacity Label

- 4.2.1 A Load Capacity Label must be fitted to display information as explained below.
- 4.2.2 The Load Capacity Label must be made of durable material and letter size and contrast should be similar to the tyre placard.
- 4.2.3 The Load Capacity Label must be fitted to the vehicle, as close as practicable, to the vehicle's tyre placard.

Load Capacity Label

Item	Information
SSM Approval Number (if applicable) ¹	
Re-rated GVM ²	kg
GCM Rating by Original Vehicle Manufacturer (if available) ³	kg
Maximum Allowed Front Axle Rating ⁴	kg
Maximum Allowed Rear Axle/s Rating ⁵	kg
For further information regarding towing capacity and operation please refer to the vehicle owner's handbook.	

Explanatory Notes

1. Applicable only if GVM re-rating is based on SSM approval. If not applicable, indicate XXXX
2. Re-rated GVM certified under LS11 code
3. GCM rating, if published by the OEM in owner's handbook or on OEM website. If not published, indicate XXXX
4. Front axle rating as published by the OEM in owner's handbook/OEM website, or if assessed by the AP, the re-rated axle load.
5. Rear axle rating as published by the OEM in owner's handbook/OEM website, or if assessed by the AP, the re-rated axle load.

5.0 Limitations

Section 1.2 of this code provides information about which types of modifications are not permitted to be certified under the LS11 code. In addition, the following limitations apply.

5.1 Electronic Stability Control

If the vehicle is fitted with Electronic Stability Control (ESC) system by the OEM, the following requirements must be met:

- 5.1.1 ESC system must not be disabled.

- 5.1.2** It must be ensured that the modifications being certified do not reduce effectiveness of the ESC system.

6.0 Additional Modifications and Changes to Vehicle Category

- 6.1** If additional modifications are made that are not essential for GVM re-rating and have not been separately assessed, all such modifications must be assessed separately and certified using appropriate codes or specific approvals. For example, a change to ride height, requires certification under LS9 and LS10.
- 6.2** If the vehicle's category has changed due to the GVM re-rating, the vehicle must comply with the vehicle standards that apply to it. Certification of such compliance using the appropriate additional code(s) must be provided. For example, the LO1 code.

7.0 Use of LS11 code to provide design certification for GVM re-rating

The LS11 code may now be used to provide design certification for GVM re-rating of vehicles of a particular make/model/variant/chassis series. Design certification may be provided for any of the re-rating pathways discussed in Section 2.2 to 2.5 of this code.

The design certification must be comprehensive enough so a suitably qualified and accredited AP holding a relevant trade-based code is able to follow the instructions, inspect & certify a modified vehicle of that same make/model/variant/chassis series and generate the necessary evidence to show that the requirements of the LS11 design certification are met.

When the LS11 code is used to provide design certification, the AP providing the design certification, may not inspect the modified vehicle(s) and is not required to fit an LS11 modification plate on the vehicle(s). Also, the checklist completed as part of the LS11 design certification will not refer to any vehicle by its Vehicle Identification Number.

Below are the minimum outputs of a design certification provided under LS11 code:

- (a) a Design Package
- (b) a Certificate of Modification and
- (c) a completed Checklist.

All these outputs must be preserved as records of the certification and must be made available, on request, for audit and enforcement purposes.

Below are more details about each of the outputs:

7.1 Design Package

This output must result in a set of documents that clearly and comprehensively address the following four requirements:

- 7.1.1** Scope of what is eligible

Design package must clearly identify which make/model/variant/chassis series it applies to. If its applicability is restricted to specific build years that also must be mentioned. Reference must be made to Identification Plate Approval Number, eligible typical VIN(s), eligible variants/chassis series.

Since the certification under the LS11 code is being provided on in-service vehicles, the condition of the vehicle is important when providing the certification. The design package must include instructions about what is to be inspected and the acceptance criteria to decide that the vehicle is in a safe and serviceable condition at the point of certification. Condition of the shock absorbers, suspension, frame, tow equipment and brakes are key areas to inspect. Absence of cracks, deformations, leaks and structural damage due to previous overloading, accidents or rust are critical.

The design package must include a template checklist for use by the AP certifying the physical modification. The checklist will be completed by the AP who certifies the physical modification, to confirm that the vehicle was inspected and was found in safe and serviceable condition at the point of certification.

7.1.2 Evidence package

The design package must include all the test reports and engineering calculations that validate the re-rating, when modified as prescribed. Test reports must be from approved test laboratories, have unique test facility identification number (TFIN) and be signed and dated. All test reports must make unambiguous reference to the specific make/model/variants of the vehicle or component to which they apply. The test reports must contain the criteria or standard against which testing is performed and clear conclusion about pass or fail outcome according to the relevant criteria or standard.

Engineering calculations must be legible and must include assumptions, if any. They must be compiled under a unique identifier document that is dated and signed.

If any evidence is sourced from a third party, the evidence package must include a written permission from that party for use of its reports as evidence.

For reasons of commercial confidence or sensitivity, sometimes the LS11 certifier may choose not to include all the test reports in the design package to be supplied to the client. In such cases the design package must still include a full list of all the test reports and the calculation sheets (using their unique identifiers) and provide written assurance to the client that the full evidence package will be made available, on request, for audit and enforcement purposes.

7.1.3 Work instructions for modification

The design package must include clear and comprehensive work instructions on how to modify the vehicle, what parts to be used, the sequence of actions to be performed, precautions to be taken and what process controls to be applied.

The work instructions must include details of any (non-destructive) testing and inspections to be carried out to ensure that the modification standards are met.

The work instructions must be easy to understand, unambiguous and should include sufficient pictorials such as photos and graphics.

The work instructions must include the contact details of the LS11 certifying AP if enquiries arise needing further clarification during the physical modification and/or its certification process.

7.1.4 Checklist for the modifier and the certifier

This checklist should not be confused with the one that LS11 certifying AP needs to complete and keep. The design package must include template checklist(s) to be completed by the vehicle modifier and the certifier of the physical modification. These may be separate or one combined checklist. The checklist(s), when completed, should provide evidence that the modifier and the certifier of the physical modification have understood and followed the work instructions and the intent of the design package has been met. The LS11 certifying AP may ask for copies of completed checklists from the modifier and the certifier of physical modification as part of his/her own quality assurance or risk management practice. The completed checklist will be retained by the AP who certifies the physical modification.

This checklist should also not to be confused with the checklist that the certifier of the physical modification is required to complete as part his/her certification of the modification under the relevant code.

7.2 Checklist for the modifier and the certifier

The LS11 certifying AP must issue a Certificate of Modification to his client for the LS11 design certification provided. This is like any other Certificate of Modification, except that in this case the Certificate of Modification will not make reference to any specific modification plate number or vehicle by its VIN. Instead, it must include for example the SSM Approval Number as the basis of the design certification and the unique identification number of the Design Package provided to the client, respectively.

7.3 Modification Checklist

The LS11 certifying AP must complete the checklist provided at the end of this code and must retain it as part of his/her records to show that the certification met the objectives of this code.

Checklist LS11

CODE LS11: Gross Vehicle Mass Re-rating

Form No: LS11

Provide an answer to each of the following (Y=Yes, N=No)

Modification Certificate Number:		
1	Suspension	
1.1	Is the vehicle's suspension suitable for the re-rated GVM?	<input type="checkbox"/> Y <input type="checkbox"/> N
2	Chassis	
2.1	Is the chassis frame suitable for the re-rated GVM?	<input type="checkbox"/> Y <input type="checkbox"/> N
3	Axles	
3.1	Are the axles suitable for the re-rated GVM?	<input type="checkbox"/> Y <input type="checkbox"/> N
4	Engine/Transmission	
4.1	Is the engine/transmission suitable for the re-rated GVM?	<input type="checkbox"/> Y <input type="checkbox"/> N
5	Braking System	
5.1	Has a brake test been carried out on the modified vehicle to ensure compliance with ADR 31/.. or 35/.., whichever is applicable? (If re-rating using Pathway-2 or Pathway-4, response can be Y)	<input type="checkbox"/> Y <input type="checkbox"/> N
5.2	Is the vehicles brake system suitable for the re-rated GVM?	<input type="checkbox"/> Y <input type="checkbox"/> N
6	Tyres and Rims	
6.1	Does the Modification Plate record the correct tyre and rim sizes and load ratings for the modified vehicle?	<input type="checkbox"/> Y <input type="checkbox"/> N
6.2	If a revised tyre placard is required, has it been fitted to the vehicle and a copy attached to this checklist? Indicate Y if a revised tyre placard is NOT relevant.	<input type="checkbox"/> Y <input type="checkbox"/> N

[Continued on the following page]

6.3	Do the tyres and rims fitted conform to the modification plate and the tyre placard?	<input type="checkbox"/> Y <input type="checkbox"/> N
6.4	Are load ratings of the tyres and rims adequate for the vehicle's re-rated GVM and the potential axle masses?	<input type="checkbox"/> Y <input type="checkbox"/> N
7	Electronic Stability Control System (if fitted)	
7.1	Is it ensured that the ESC system is not disabled?	<input type="checkbox"/> Y <input type="checkbox"/> N
7.2	Is it ensured that the ESC system is not made less effective due to modifications carried out for GVM re-rating?	<input type="checkbox"/> Y <input type="checkbox"/> N
7.3	If the GVM re-rating involves other modifications that require verification of the ESC operation, is such verification provided?	<input type="checkbox"/> Y <input type="checkbox"/> N
8	Load Capacity Information	
8.1	Is the load Capacity label attached to the vehicle?	<input type="checkbox"/> Y <input type="checkbox"/> N
8.2	Has the vehicle's handbook been amended, and a copy of the relevant modified content attached to this checklist?	<input type="checkbox"/> Y <input type="checkbox"/> N
9	Re-rating based on Manufacturer's Optional GVM (complete if applicable otherwise GO TO 10)	
9.1	Does the re-rated GVM match an alternative option for the same make, model produced by the vehicle manufacturer?	<input type="checkbox"/> Y <input type="checkbox"/> N
9.2	Are all components relevant to the GVM re-rating (brake, engine, transmission, suspension, chassis, tyres and rims etc) identical to the original vehicle manufacturer's alternative specification?	<input type="checkbox"/> Y <input type="checkbox"/> N
10	Re-rating based on SSM Approval (complete if applicable otherwise GO TO 11)	
10.1	Has the SSM approval holder provided written approval to use that SSM design and a copy of the same attached to this checklist?	<input type="checkbox"/> Y <input type="checkbox"/> N
10.2	Does the re-rated GVM match that of the SSM approval?	<input type="checkbox"/> Y <input type="checkbox"/> N
10.3	Are all components relevant to the GVM re-rating (brake, suspension, tyres and rims, etc) identical to the SSM design?	<input type="checkbox"/> Y <input type="checkbox"/> N

[Continued on the following page]

10.4	Have you attached a copy of the SSM Road Vehicle Descriptor (RVD) to this checklist?	<input type="checkbox"/> Y <input type="checkbox"/> N
11	Re-rating based on fitment of an additional axle (complete if applicable otherwise go TO 12)	
11.1	If the re-rated is GVM more than 110% of the OEM rating, does the additional axle share load within its group? (Respond Y if the re-rated GVM is within 110% limit)	<input type="checkbox"/> Y <input type="checkbox"/> N
12	Complete only if LS11 code is used to provide Design Certification	
12.1	Is a comprehensive design package provided?	<input type="checkbox"/> Y <input type="checkbox"/> N
12.2	Does the design package have a unique identification number?	<input type="checkbox"/> Y <input type="checkbox"/> N
12.3	Does the design package clearly describe which make/model/variant/chassis series is covered?	<input type="checkbox"/> Y <input type="checkbox"/> N
12.4	Does the design package include guidance on what to inspect and criteria to decide if the vehicle is in safe and serviceable condition for re-rating?	<input type="checkbox"/> Y <input type="checkbox"/> N
12.5	Does the design package include a complete Evidence Package that forms the basis of this certification?	<input type="checkbox"/> Y <input type="checkbox"/> N
12.6	Does the design package include comprehensive work instructions including work to be done, precautions to be taken, control of processes and tests to be conducted?	<input type="checkbox"/> Y <input type="checkbox"/> N
12.7	Does the design package include a checklist for the modifier of the vehicle?	<input type="checkbox"/> Y <input type="checkbox"/> N
12.8	Does the design package include a checklist for the certifier of the modified vehicle?	<input type="checkbox"/> Y <input type="checkbox"/> N
12.9	Does the design package meet all the requirements of this code?	<input type="checkbox"/> Y <input type="checkbox"/> N

Note: If the answer to any question is **N (No)** the design cannot be certified under LS11 code.

[Continued on the following page]

CERTIFICATION DETAILS																				
Make						Model						Year of Manufacture								
VIN*																				
Chassis Number (If applicable)																				
Brief Description of Modification/s																				
Vehicle Modified By																				
Certificate Number (If applicable)																				
Vehicle Certified By (<i>Print</i>)																				
Signatory's Employer (If applicable)																				
Signatory's Signature											Date									

*Or the Unique Design Package Number, if providing LS11 design certification