

Vehicle Standards Bulletin 14

**NATIONAL CODE OF PRACTICE
for
LIGHT VEHICLE CONSTRUCTION
and
MODIFICATION**

**SECTION LT
TEST PROCEDURES**

1st February 2006

National Code of Practice for Light Vehicle Construction and Modification (NCOP)

Warning to Users

Users of the NCOP need to be aware that this document needs to be used in conjunction with the appropriate administrative requirements of the jurisdiction in which they wish to either register a vehicle or to obtain approval for a modification for an already registered vehicle. “Administrative requirements” include, amongst other things, processes for:- vehicle registration, obtaining exemptions, obtaining modification approvals, vehicle inspections, preparation and submission of reports and the payment of appropriate fees and charges.

*If unsure of any of these requirements, or if more information is needed for any other issues or processes, users should contact their relevant registration authority **prior** to commencing any work.*

Users of the NCOP also need to ensure that they refer to the most recent version of the relevant Section/s when working on a job or project. The version is identified by the date on the face page of each Section. On the website, each Section has the version date contained in the Section file name for easy identification.

It is prudent to check for new versions if a job or project is taking a long time to complete.

If they have not already done so, users must also download the Preface and Introduction.

These two Sections provide the necessary background information to assist users in understanding how the NCOP is administered by registration authorities across Australia, on how it is structured, and the meaning of the types of modification codes specified in the NCOP.

Understanding these requirements is important to ensure that the correct processes are followed thereby reducing the likelihood of having work rejected by authorities.

*Many of the Sections refer to other Sections for further information or additional requirements. Users **must** download all relevant Sections. Lack of information due to insufficient downloads will not be accepted as an excuse by authorities.*

If in doubt about any issue concerning or contained in the NCOP, users should seek clarification from the appropriate state or territory registration authority.

Please do not contact the Department of Transport and Regional Services (DOTARS) about the NCOP. DOTARS provides the central NCOP website as a service only.

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1 SCOPE

This Section outlines the minimum requirements to enable certification of tests for light vehicles under individual LT Approval Codes.

The need to conduct any of the individual tests contained in this Section, are specified within other Sections of this *National Code of Practice for Light Vehicle Construction and Modification* (NCOP).

Registration authorities may also require tests to be carried out to these codes for modifications not specifically covered by the NCOP.

2 TEST PROCEDURES (LT CODES)

This Section specifies particular requirements and covers limitations on approvals carried out under individual LT Approval Codes.

Each Code is supplemented with a checklist.

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BEAMING AND TORSION TESTS

CODE LT1

SCOPE

This section outlines the procedure and minimum performance requirements for beaming and torsional testing of motor vehicles. It applies to vehicles that are required to have a torsion test.

GENERAL REQUIREMENTS

Modifications to motor vehicles that involve extensions of the wheelbase or removal of the roof can dramatically reduce the strength of the vehicle structure. Subsequent strengthening may result in extra stiffness in certain areas of the chassis but overstressing in others. Consequently, it becomes necessary to demonstrate that the modified vehicle's beaming and torsional strengths are adequate when compared to the original vehicle.

This specification contains a very simplified test procedure in terms of vehicle structural analysis and, as such, the results of testing may be taken only as a guide to the structural integrity of the vehicle. For this reason the results should not be treated as absolute values.

TEST PROCEDURE

1 VEHICLE SETUP

All hinged panels are to be ajar at all times during testing, i.e. bonnet, boot lid, and doors to be open.

The fuel tank shall be filled to 75% capacity. Alternatively, an equivalent mass to the specified volume of fuel may be applied near the fuel tank.

2 LOADING

If the Gross Vehicle Mass (GVM) of the unmodified vehicle is not known then the vehicle shall be weighed prior to testing. This weighing shall be carried out with the fuel tank filled to 75% capacity. Alternatively, an equivalent mass to the specified volume of fuel may be applied near the fuel tank.

The GVM of the unmodified vehicle is determined by adding the payload capacity of the vehicle to the unladen mass (or weighed mass). In the case of a passenger vehicle, the payload shall be 68kgs for each seating position.

3 JIG

The vehicle to be tested shall be safely supported for loading up to the specified values and mounted through the hubs with its springs and dampers made incompressible or replaced by spacers. Figures 2 and 3 indicate the preferred mounting of the vehicle for beaming and torsional tests. Supports at the fixed end must be able to resist the up-thrust resulting from the applied torsional load. Other methods of supporting the vehicle will be considered provided that the support points are not located within the wheelbase.

4 MEASUREMENT POINTS

The deflections are to be measured at the points shown in Figures 1 and 2. Front and rear points are to be measured on the body member as close as possible to the suspension attachment points, i.e. approximately on the axle centreline. **Measurements at the outside of the mudguard are not acceptable.** Positions 2 and 5 shall be at the extreme ends of the

rocker panels. Positions 3 and 4 shall be approximately equally spaced between points 2 and 5. As an alternative, 3 intermediate positions within the wheelbase are acceptable as a minimum, with a similar positioning.

5 BEAMING TEST SEQUENCE

- Step 5.1 - With the unmodified vehicle mounted securely, load the vehicle in accordance with Step 5.3 below to settle the apparatus and to check that it is functioning correctly. No readings of deflection need be taken for this pre-load.
- Step 5.2 - Remove loading applied in Step 5.1 and “zero” all gauges.
- Step 5.3 - A load equivalent to twice the payload (i.e. 68kg x 2) shall be applied at each seating position. Other means of distributing an equivalent overall load within the passenger compartment of the vehicle will be considered provided the distribution of the load is similar to that resulting from applying the loads at the seating positions.
- Step 5.4 - Record deflections
- Step 5.5 - Remove loading
- Step 5.6 - Record deflections again and check that vehicle has returned to substantially the same “zero” position as recorded in Step 5.2. If there is any significant variation, consideration should be given to repeating Steps 5.2 to 5.6.

6 TORSIONAL TEST SEQUENCE

- Step 6.1 - With the unmodified vehicle mounted securely, load the vehicle in accordance with Step 6.5 below to settle the apparatus and to check that it is functioning correctly. No readings need be taken for this pre-load.
- Step 6.2 - Remove loading applied in Step 6.1 and “zero” all gauges.
- Step 6.3 - Calculate the required turning moment to be applied using the formula:
- $$0.25 \times \text{GVM} \times \text{wheel track.}$$
- (To calculate this, multiply 0.25 x GVM in kg x 9.81 x wheel track in metres, to obtain turning moment in units of Newton metres - Nm).
- Step 6.4 - Calculate the required loading force at the lever arm position to apply the turning moment determined in Step 6.3, correctly applying any necessary conversion of units, multiplication by constants etc.
- Step 6.5 - Apply this loading force in a gradual and controlled manner.
- Step 6.6 - Record deflections
- Step 6.7 - Remove loading
- Step 6.8 - Record deflections. Check that vehicle has returned to substantially the same “zero” position as recorded in Step 6.2. If there is any significant variation, consideration should be given to repeating Steps 6.2 to 6.8.

7 MODIFIED VEHICLE TEST PROCEDURE

The modified vehicle is to be tested in the same manner, and with the same loads used above. Where vehicles have changes to the number of seating positions (such as limousines) the original beaming load must be evenly distributed over each seating position. The turning moment applied in the original torsion test is to be reapplied to the modified vehicle.

8 DATA RECORDING

Test data, loads, etc. are to be recorded on the standard test reporting form no. LT1.

A graphical plot of the average of the absolute deflections of the left and right hand sides respectively at each measuring location along the wheelbase with the applied load, and again with the load removed, shall be provided for both the unmodified vehicle and the modified vehicle. A plot of each vehicle's angular deflection at each measuring location along the wheelbase, with the load applied and after the load has been removed, shall also be provided.

Beaming deflection plots are to be reduced to a zero datum line through points "R" and "F" to eliminate the contribution of jig movement etc. to absolute values.

Angular deflections are to be similarly reduced by subtracting the rotation measured at the "fixed end" axle line from each absolute rotation value.

Validity of Torsional Test Results

A torsional test that, upon analysis of results, shows that the "fixed end" is rotating by more than 20% of the angular rotation of the end that is being rotated shall be null and void. Further measures shall be taken to reduce any angular rotation of the "fixed end" to less than 20% of that of the end being rotated. The test shall then be repeated.

Figure 1

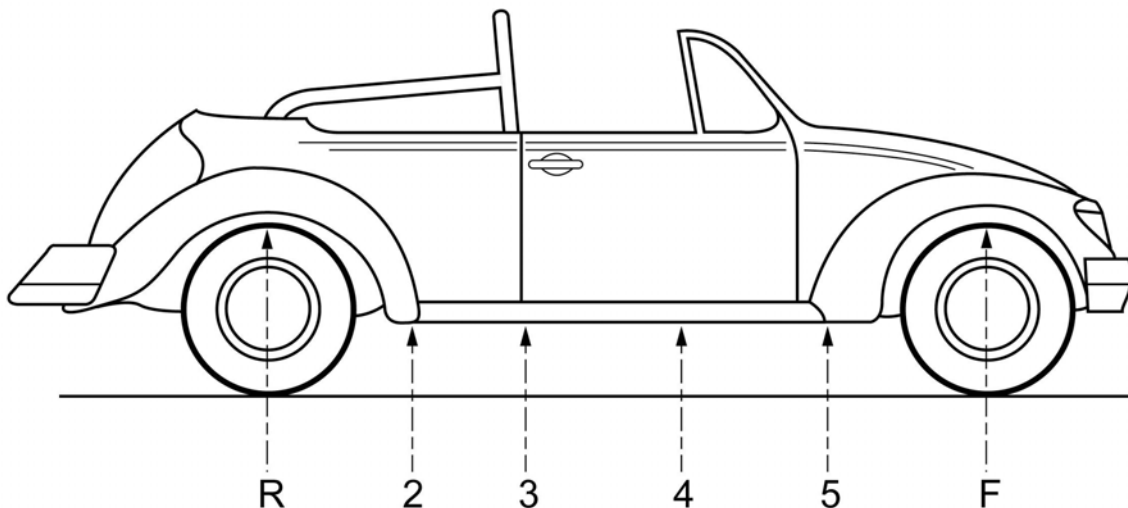


Figure 2

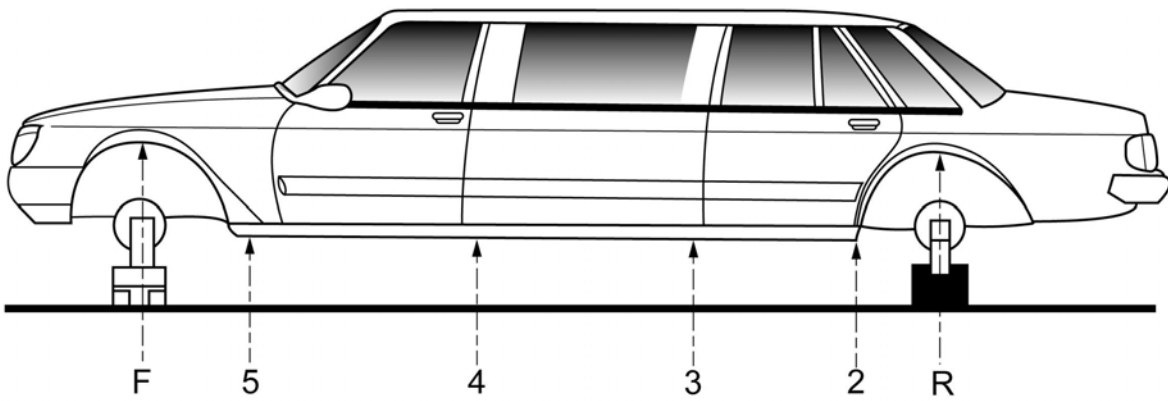
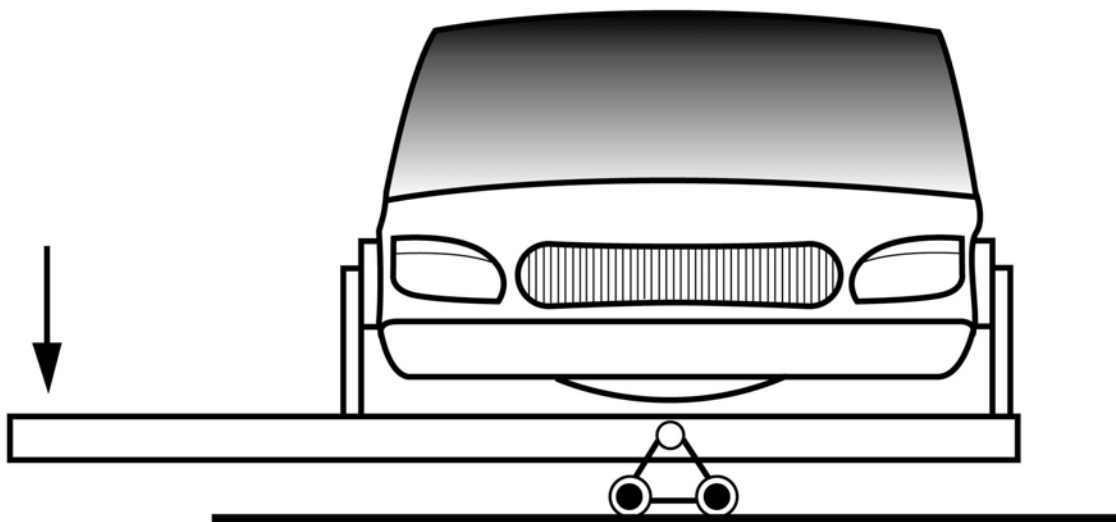


Figure 3



Rollers or similar to allow transverse movement of hinge point as vehicle rotates.

Note: All hinged panels shall be ajar during testing.

9 ACCEPTANCE CRITERIA

Convertible and Cabriolet Vehicles

Beaming strength criteria

The average deflection of left and right hand sides from the datum line "RF" (under the maximum applied load) at any measuring position for the modified vehicle shall not be greater than 1.5 times the deflection recorded for the unmodified vehicle.

Torsional strength criteria

The reduced angular deflections (under the maximum applied load) at any measuring position for the modified vehicle shall not be greater than 1.5 times the reduced angular deflection recorded for the unmodified vehicle at the same measuring position.

Extended Wheelbase Vehicles

Beaming strength criteria

The beaming deflections (reduced to a zero datum line) of the modified vehicle when compared to that of the unmodified vehicle shall not have increased in a proportion greater than the proportional increase in wheelbase.

Torsional strength criteria

The ratio of the torsional rigidity of the modified vehicle to that of the unmodified vehicle must not be lower than the ratio of the wheelbase of the unmodified vehicle to that of the modified vehicle.

Individually Constructed Vehicles

The structure of the ICV/kit car body/chassis shall be such that there are no abrupt changes in the strength and stiffness of loaded sections. Abrupt changes in section must be avoided as they will produce stress concentrations and result in cracks and fatigue failure. Manufacturers should inform themselves in this respect or seek qualified assistance.

Torsional rigidity should be at least 4,000 Nm per degree over the wheelbase unless the vehicle has been professionally designed to operate at lower stiffness levels.

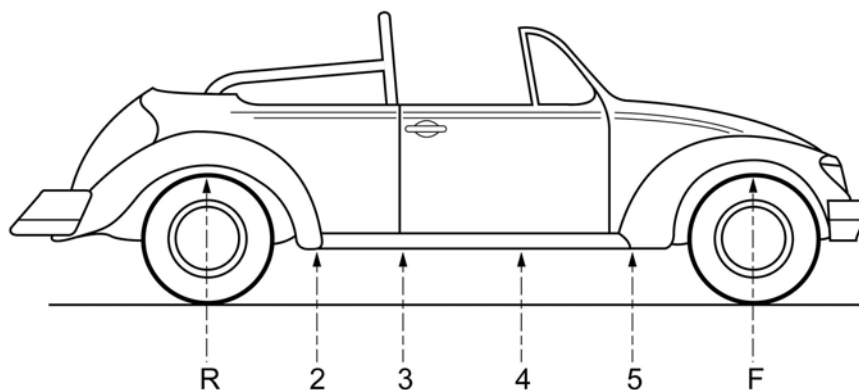
In any event the manufacturer of the ICV is responsible for the strength of the completed vehicle.

Uniformity of Body/Chassis Rigidity - All Vehicles

A key indication that a vehicle body/chassis will be likely to suffer from excessive flexing and fatigue cracking can be obtained from plots of the tested body/chassis deflections and rotations versus the position of the measurement points along the wheelbase. Where this plot does not exhibit essentially a straight-line, the body/chassis can be predicted to be susceptible to the aforementioned problems. A signatory shall make an assessment of these plots and be satisfied that all safety concerns are addressed.

REPORTING FORM

BEAMING AND TORSIONAL TESTING - LT1



Gauge Positions

Longitudinal Dimensions			Transverse Dimensions		
R - 2	.....	(mm)	RR - LR	.....	(mm)
R - 3	.....	(mm)	R2 - L2	.....	(mm)
R - 4	.....	(mm)	R3 - L3	.....	(mm)
R - 5	.....	(mm)	R4 - L4	.....	(mm)
R - F	.....	(mm)	R5 - L5	.....	(mm)
			RF - LF	.....	(mm)

BEAMING TEST

Gauge	Deflection-Load applied (mm)					Deflection-Load removed (mm)				
	Position		Average			Position		Average		
	Left	Right	Left	Right	Average	Left	Right	Left	Right	Average
			red*	red*	red*			red*	red*	red*
R			0	0	0			0	0	0
2										
3										
4										
5										
F										

**Deflections reduced to datum line through points "R" and "F".*

TORSIONAL TEST

Gauge Position	Load applied (mm)				Load removed (mm)			
	Deflection		Rotation	Rotation reduced *	Deflection		Rotation	Rotation reduced *
	Left (mm)	Right (mm)	(°)	(°)	Left (mm)	Right (mm)	(°)	(°)
R				0°				0°
2								
3								
4								
5								
F								

*Rotations reduced by subtracting rotation in rear plane LR-RR.

Loading Details

Beaming Deflection

Vehicle Mass kg

Number of Seating Positions

Total Load Applied kg

GVM (or Vehicle Tare Mass + Load) kg

Torsion

Vehicle Track - Front

Rear

Load Applied kg

Moment Arm
(from vehicle centre line) m

Applied moment Nm

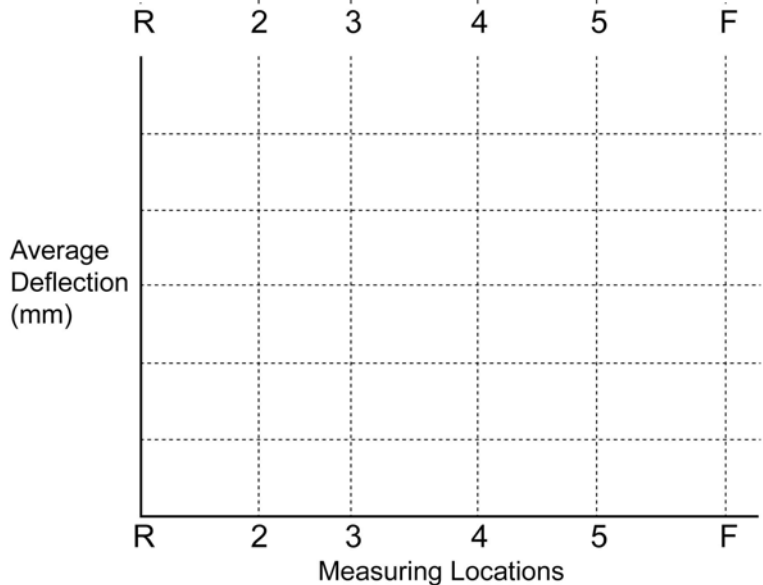
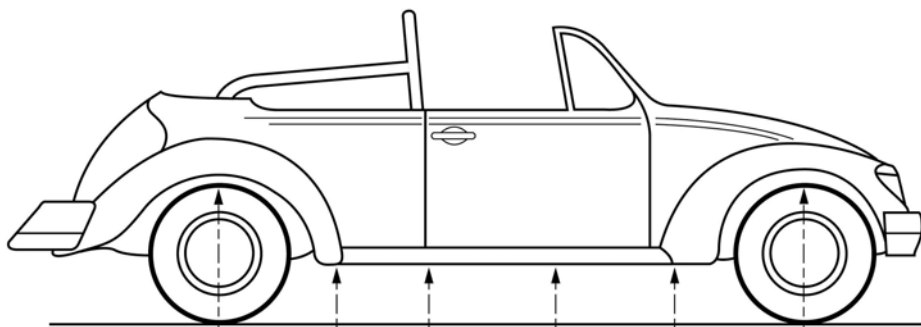
Make Model Year of Manufacture

Chassis No. or VIN

Vehicle Modifications

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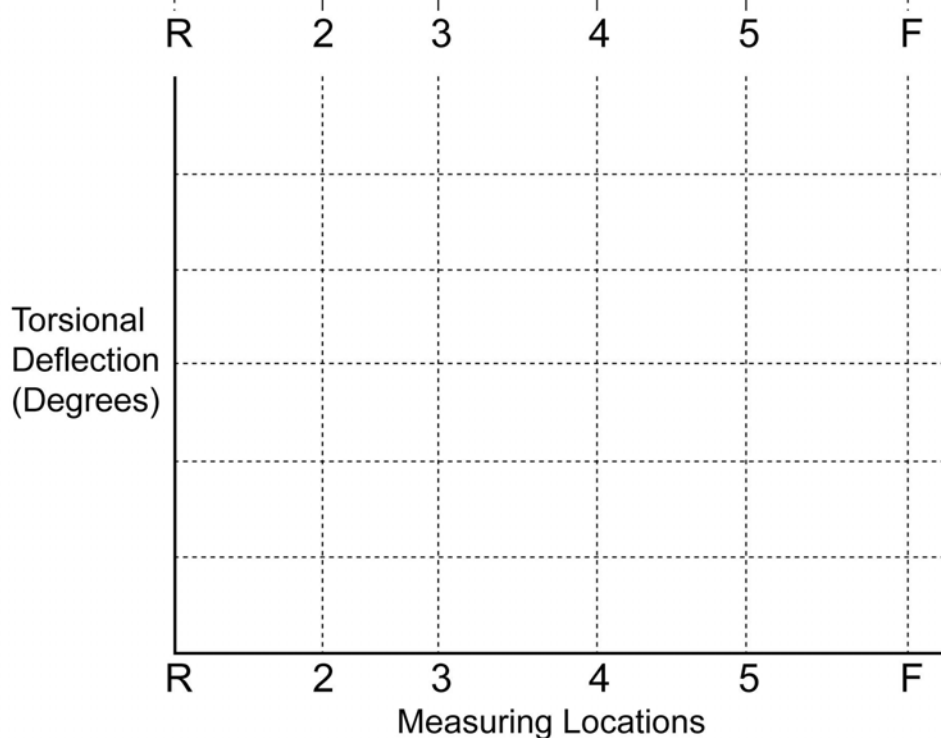
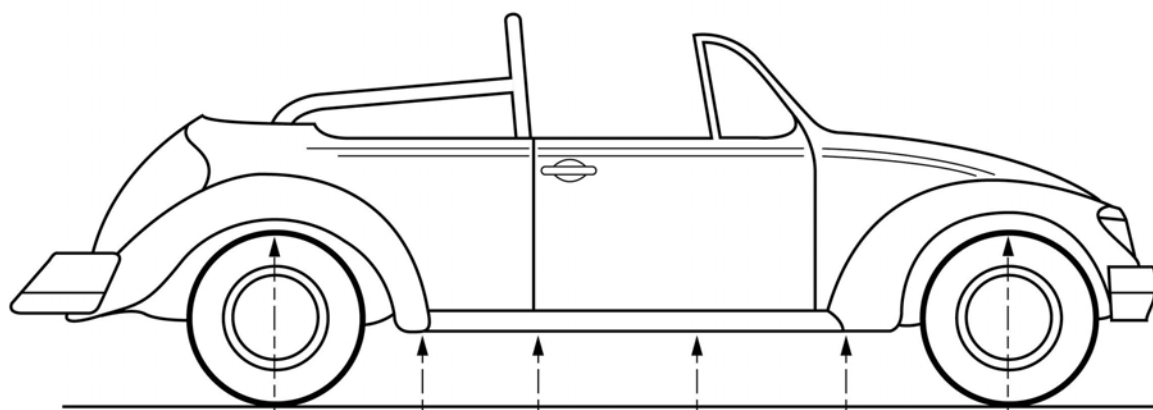
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(Spaced between R and F in plot in same ratio as of positions along tested vehicle wheelbase).

NOTES

.....
.....
.....



Test witnessed by:

Signature:

Engineer IEAust Member No:Date:

CHECKLIST**BEAMING AND TORSIONAL TESTING****APPROVAL CODE LT1**

(N/A= Not Applicable, Y=Yes, N=No)

1.	TEST PROCEDURES			
1.1	Has the Gross Vehicle Mass (GVM) of the unmodified vehicle been ascertained, by reference to manufacturer's data or by calculation? (In the case of a passenger vehicle, the payload shall be 68kg for each seating position)		Y	N
2.	JIG MEASUREMENTS			
2.1	Is the vehicle to be tested mounted through the hubs with springs or dampers etc. made incompressible or replaced by spacers?		Y	N
2.2	Are the deflections to be measured at the points shown in Figures 1 and 2?		Y	N
3.	BEAMING AND TORSIONAL TEST PROCEDURE			
3.1	Has the unmodified vehicle been tested in accordance with the details outlined in the <i>General Requirements</i> section?		Y	N
3.2	Has the modified vehicle been tested in the same manner as the unmodified vehicle? Note: All hinged panels are to be ajar at all times and fuel tank filled to 75% capacity during testing.		Y	N
4.	DATA RECORDING			
4.1	Have all test data, loads etc. been recorded on the standard testing reporting forms?		Y	N
4.2	Has a graphical plot of the average of the deflection on the left and right hand sides of each measuring location along the wheelbase with the load applied and again with the load removed been provided for the vehicle, where applicable?		Y	N
4.3	Has a plot of the vehicle's angular deflection at each measuring location along the wheelbase with the load applied and again with the load removed also been provided, where applicable?		Y	N

[Continued overleaf]

FORM No: LT1

4.4	Have any beaming deflection plots been reduced to a zero datum line through points "R" and "F" to eliminate the contribution of jig movement etc. in absolute values?		Y	N
4.5	Have any angular deflections been similarly reduced by subtracting the rotation measured at the vehicle "fixed end" axle line from each absolute rotation value?		Y	N
5.	ACCEPTANCE CRITERIA			
5.1	Do the beaming deflections of the modified vehicle meet the acceptable criteria guidelines?		Y	N
5.2	Do the torsional deflections of the modified vehicle meet the acceptance criteria guidelines?		Y	N
5.3	Are the plots of the beaming and torsional deflections along the wheelbase of the modified vehicle to the satisfaction of the Chartered Engineer?		Y	N

NOTE: If the answer to any question is **No (N)**, the testing cannot be approved under Code LT1.

Make.....Model.....Year of Manufacture

Chassis No. or VIN

Vehicle Test Condition (tick boxes)

As originally manufactured
(Pre-modification)

Post modification

Design Approval Details:

If the vehicle was tested in modified form, indicate Drawing Nos. to which it was constructed or the Signatory who approved the design.

Design Approval (Signatory)

Signatory Employer (if applicable)

Date of Design Approval:.....

Drawing / Design No:

Construction or Modification Approval Details:

Vehicle Constructed or Modified by

Examined and Approved by (Signatory)

Company (if applicable)

Signed.....Date.....

LANE-CHANGE MANOEUVRING TEST**CODE LT2****1 SCOPE AND FIELD OF APPLICATION**

The intent of these testing procedures is to subjectively determine the road holding ability and handling characteristics of vehicles that are required to be tested by other Sections of the National Code of Practice for Light Vehicle Construction and Modification (NCOP). Testing is usually called for when vehicles are modified in such a way as to cause a significant change in a vehicle's centre of gravity, and/or a significant change in the way a vehicle handles.

These tests are applicable only to vehicles with a Gross Vehicle Mass (GVM) up to 3.5t.

The test must be carried out by experienced drivers. Since these are subjective tests, it is not sufficient for the driver to have negotiated the test successfully - the driver must also be confident that the vehicle was safe to drive.

The test procedure is based on the test described in the following International Organization for Standardization (ISO), International Standard.

ISO Technical Report 3888-1:1999- Passenger cars - Test Track for a Severe Lane-Change Manoeuvre – Part1: Double lane change test

The procedure consists of driving a vehicle through a set track that simulates a lane-change manoeuvre. The vehicle is driven from its initial lane to another lane (parallel to the initial lane), then returning to the initial lane. The length of each track section remains constant whilst the track width is a function of the test vehicle width.

The lane-change testing must be conducted under the guidance of a Chartered Engineer with proven experience in the automotive area. The lane-change track must be negotiated by skilled drivers with automotive road testing experience.

Copies of the ISO standard are available from Standards Australia or SAI Global.

2 TESTING CONDITIONS – Applicable to both tests

2.1 Lane-change track dimensions

The dimensions of the track are specified in the ISO standard. Track length dimensions remain the same whilst track width varies according to the width of vehicle under test.

2.2 Marking of the lane-change track

The lane-change track shall be marked with cones as specified in the ISO standard. The track limits shall be tangential to the base circles of the cones.

2.3 Track surface

The surface shall be sealed, dry and as hard and as planar as possible.

Longitudinal deviation from horizontal shall not be more than 1 degree.

Transverse deviation from horizontal shall not be more than 2 degrees.

2.4 Ambient conditions

Wind speed shall not exceed 3 m/s.

2.5 Vehicle *Test Tare Mass*

The test vehicle must be equipped with all optional equipment that is likely to increase the tare mass of the vehicle. The vehicle must also have full complements of:

- lubricants
- coolant (if needed)
- washer fluid
- fuel (tank to be filled to at least 90% of the capacity specified by the manufacturer)

If offered as standard equipment, the following equipment must also be included in the vehicle

- spare wheel
- fire extinguisher
- wheel chocks
- standard tool-kit

The mass of a vehicle equipped as described above, is the “**test tare mass**”.

2.6 Test Mass

The vehicle shall be tested under either one of two loading conditions, unless the Engineer is of the opinion that both tests should be carried out.

In no case must the permissible axle loads be exceeded.

Masses must be placed in such a way as not to substantially alter the vehicle's moment of inertia around the vertical axis.

2.6.1 Vehicle Test Mass 1

Test Tare Mass according to 2.5 above, to which the driver mass is to be added. When tested at this mass a driver being of least 68 kg mass will fulfil this requirement. Alternatively, additional load mass will have to be added to the vehicle to achieve a combined mass of load mass and driver of 68 kg.

2.6.2 Vehicle Test Mass 2

Test Tare mass according to 2.6 above, plus:

- 68 kg x number of seats in passenger compartment, and
- 13.6 kg x number of seats, uniformly distributed over the luggage compartments.

Loading of the passenger compartment shall be such that wheel loads obtained correspond to wheel loads obtained with loading each seat with 68 kg at its "H" point. Masses used for loading may be placed on the passenger compartment floor.

3 TEST PROCEDURES

3.1 Test

The test must be conducted by an experienced and skilled driver.

To ensure the safety of all concerned, the driver must commence testing at a speed not exceeding 80km/hr. Test speeds can then be incrementally increased up to the maximum test speed as the driver and engineer deem it safe to do so.

Maximum test speed shall be the lower of the following:

- The maximum speed the vehicle is capable of travelling in top gear, or
- The maximum speed the vehicle is allowed to be driven either by a limitation in regulation, condition of registration, condition of permit or posted speed limit for the vehicle in question, or
- 110km/hr

4 SUBJECTIVE ASSESSMENT

Further to the above test, a subjective report assessing the overall handling characteristics of the subject vehicle must be prepared by the test driver. The assessment shall cover the general handling of the vehicle up to legal speed limits.

CHECKLIST
LANE-CHANGE MANOEUVRING TEST
APPROVAL CODE LT2

(N/A= Not Applicable, Y=Yes, N=No)

1.	TESTING CONDITIONS			
1.1	Has the vehicle been tested on a lane change track with the dimensions and gradients complying with the requirements outlined in Sub-section 2 <i>Testing Conditions</i> ?		Y	N
1.2	Has the vehicle been tested with the mass of the vehicle complying with the requirements outlined in Sub-section 2.6 <i>Testing Conditions - Test Mass</i> ?		Y	N
2.	TEST PROCEDURES			
2.1	Has the vehicle been tested in accordance with the test procedures outlined in Sub-section 3 <i>Test Procedures</i> ?		Y	N
3.	ASSESSMENT			
3.1	Did the vehicle successfully complete the course without dislodging any cones?		Y	N
3.2	Was the driver satisfied the vehicle was safe to drive?		Y	N
3.3	Has an assessment report been prepared?		Y	N

NOTE: If the answer to any question is **N (No)**, the testing cannot be approved under Code LT2.

Make.....Model.....Year of Manufacture

Chassis No. or VIN

Vehicle Modified By

Test Approved By (Signatory).....

Signatory Employer (if applicable).....

Signed Date

EMISSION IM240 TEST

CODE LT3

SCOPE

This section outlines a procedure and its minimum requirements for testing gaseous emissions of motor vehicles that, according to their date of manufacture and ADR category, are required to comply with ADR37/00 or later. It applies to vehicles that are fitted with modified engines or to vehicles fitted with engines that have not been certified to the Australian Design Rule applicable to the modified or individually constructed vehicle.

This approval Code does not apply to after-market suppliers of engine management systems, turbochargers, superchargers and other equipment that may affect a vehicle's compliance with the ADRs who may wish to obtain type approval for their products. Suppliers of this equipment will need to carry out the appropriate ADR emission tests applicable to the vehicle's date of manufacture and ADR category.

GENERAL REQUIREMENTS

The procedures for conducting the emission tests are outlined in the IM240 Test Procedures. These procedures are complex and are held by the test providers.

IM240 test reports will only be accepted from organisations or agencies that are approved by Department of Transport and Regional Services (DOTARS), NATA certified or otherwise approved by a registration authority in Australia.

SPECIFIC REQUIREMENTS

The vehicle must not exceed the maximum gaseous emission levels specified below: The emission ADRs to which a vehicle must comply are listed in the ADR applicability tables in Section LO.

Note: ICV builders must consult the jurisdiction in which they intend to register their vehicle for additional information with respect to emission requirements and the date of manufacture that the jurisdiction will determine for that particular vehicle.

For vehicles required to comply with the Second Edition Australian Design Rule ADR 37A

- Emission levels as specified in ADR 37

For vehicles required to comply with the Third Edition Australian Design Rule 37/00

- Emission levels as specified in ADR 37/00

For vehicles required to comply with the Third Edition Australian Design Rule 37/01 and later emission ADRs.

- Emission levels as specified in ADR 37/01

CHECKLIST
EMISSIONS IM240 TEST
APPROVAL CODE LT3

(N/A= Not Applicable, Y=Yes, N=No)

1.	TESTING EQUIPMENT			
1.1	Is the test facility a “recognised” test facility. (I.e. Recognised by either DOTARS, NATA or a registration authority).		Y	N
2.	TESTING			
2.1	Has the engine been tested in accordance with the requirements outlined in the IM240 test procedures?		Y	N
3.	RESULTS			
3.1	Are the results within those required for the vehicle according to its ADR category and date of manufacture?		Y	N
4.	MARKING & TAMPER-PROOFING			
4.1	Are there any visible indications that the vehicle’s emission equipment as supplied by the manufacturer have been removed or tampered with?		Y	N

NOTE: If the answer to any question is **N (No)**, the testing cannot be approved under Code LT3.

Engine Make.....Model.....Capacity.....Year of Manufacture

Management System Details

Engine Tested By

Emission Test Approval Number (if applicable)

Test Approved By (Signatory)

Signatory Employer (if applicable)

Signed Date

NOISE TEST

CODE LT4

SCOPE

This section outlines a procedure and its minimum requirements for testing noise emissions of motor vehicles using a stationary noise test. It applies to both modified and individually constructed vehicles.

GENERAL REQUIREMENTS

The procedures for conducting the stationary noise test are contained in the National Transport Commission (NTC) document: *National Stationary Exhaust Noise Test Procedure for In-Service Motor Vehicles – April 2000* - ISBN: 0 642 54456 5 (referred to hereinafter as the *Noise Test Procedure*)

This document may be downloaded from the NTC website. The following links provide a simple pathway to the document.

[www.ntc.gov.au/Publications/NTC Reports/Reports-2000/April 2000](http://www.ntc.gov.au/Publications/NTC%20Reports/Reports-2000/April%2000)

SPECIFIC REQUIREMENTS

The vehicle must not exceed the maximum noise levels specified in the Australian Vehicle Standard Rules for the ADR category of the vehicle and its date of manufacture.

The need for a noise test will be specified in other Sections of this National Code of Practice for Light Vehicle Construction and Modification.

**CHECKLIST
NOISE TEST
APPROVAL CODE LT4**

N/A= Not Applicable, Y=Yes, N=No)

1.	TESTING EQUIPMENT			
1.1	Does the sound level meter comply with the requirements outlined in Section 2 <i>Measuring Instruments</i> of the <i>Noise Test Procedure</i> ?		Y	N
2.	TEST SITE			
2.1	Is the background noise level at least 10dB (A) below the noise level being measured?		Y	N
2.2	Does the test site comply with the requirements outlined in Section 3 <i>Test Site Ambient Requirements</i> of the <i>Noise Test Procedure</i> ?		Y	N
3.	TEST			
3.1	Does the microphone positioning comply with the requirements outlined in the relevant <i>Microphone Position</i> section of the <i>Noise Test Procedure</i> ?		Y	N
3.2	Has the noise been tested in accordance with the requirements outlined in the relevant <i>Vehicle Operation and Noise Measurement</i> section of the <i>Noise Test Procedure</i> ?		Y	N
4.	RESULTS			
4.1	Does the noise level exceed the maximum level specified in the Australian Vehicle Standard Rules?		Y	N

NOTE: If the answer to any question is **N (No)**, the test cannot be approved under Code LT4.

MakeModelYear of Manufacture

Chassis No. /VIN

Vehicle Tested By

Noise Test Approval Number (if applicable).....

Test Approved By (Signatory)

Signatory Employer (if applicable).....

Signed Date