



## Vehicle Safety Branch Circular to Industry

# Major Body Modifications to Light Vehicles Guidelines for Modifiers

This Circular to Industry describes how the various assessment and technical requirements apply when a vehicle modifier wishes to perform modifications that affect a light vehicle's body/chassis in a substantial manner. For example, stretched limousine & convertible conversions, roll-cage installations and construction of individual vehicles.

Due to the major nature of these modifications, meeting the required standards can be a complex and costly undertaking and modifiers should inform prospective clients of this.

### *Introduction*

The requirements of Code of Practice CP-105A *Major Body Modifications to Light Vehicles - Including Stretched Limousine & Convertible Conversions* will apply to the practice of performing major body modifications to light vehicles. The requirements apply where the modifications do not require second manufacturer approval to be sought from the Vehicle Safety Standards Branch (VSSB) of the Commonwealth Department of Transport and Regional Services (formerly FORS). This second manufacturer approval requirement usually applies where several new vehicles are similarly modified before first registration.

Because of a revision to the current administrative procedures, the Vehicle Safety Branch will reduce its direct involvement in the assessment and testing of vehicles that are undergoing major body modifications. This role will now be undertaken by Consulting Engineers who will be responsible for certifying that the modified vehicle meets the requirements of the Code of Practice and that vehicles originally manufactured to comply with the Australian Design Rules (ADRs) continue to do so.

### *Continued Compliance with ADRs*

Any significant modifications to a vehicle's body can result in the vehicle no longer complying with the applicable ADRs or with the original design criteria used by the manufacturer. Modifiers have a responsibility to ensure that modifications are performed in a manner in which the structural integrity and ADR compliance of the vehicle are maintained.

### *Modifier Requirements*

Modifiers performing these types of modifications shall carry out modifications in such a manner that the requirements of the Code of Practice are met. Modifiers should familiarise themselves with the technical requirements contained in the Code of Practice and work accordingly.



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Modifiers are encouraged to regularly liaise with the Consulting Engineer, engaged by the owner, so that the modifications may be inspected and chassis tests attended at appropriate times.

Two other complementary bulletins have been produced to inform people involved in the modification process of the new arrangements. Circular to Industry CI-104A *Major Body Modifications to Light Vehicles - Guidelines for Engineer Approval* provides Consulting Engineers with the necessary information for conducting assessments and Information Bulletin IB-105A *Major Body Modifications to Light Vehicles – Information for Prospective Owners* informs vehicle owners of their responsibilities.

Copies of all these documents are available from the Vehicle Safety Branch.

### *Torsion Test Requirements*

The Code of Practice specifies which conversion types require the vehicle's body/chassis to undergo physical tests, to demonstrate that the modified vehicle's body/chassis strength is adequate when compared to that of the original vehicle. Beaming and torsional tests must be carried out on the vehicle before it is modified and again after the modifications.

It is very important that no modifications to the standard vehicle are performed without firstly subjecting it to a pre-modification torsion test or obtaining approval from Transport to use data from a prior pre-modification torsion test on an identical vehicle.

Where an Individually Constructed Vehicle (ICV) is being built with a new or specially designed chassis, the chassis strength requirements pertaining to these vehicles in Code LH5 of the Code of Practice shall be met. ICV manufacturers should be aware of their responsibilities in these cases.

### *Dispute Resolution*

Where a dispute arises over a technical matter, which cannot be resolved by the parties concerned, the Vehicle Safety Branch can be approached for adjudication. The Vehicle Safety Branch will concern itself with the Code of Practice and regulations relating to the design and construction of modified vehicles. Issues such as payments for consultancy fees, conversion work, chassis tests and other commercial considerations will need to be resolved elsewhere.

### *Consulting Engineers*

The Vehicle Safety Branch maintains a list of Engineering Signatories containing the contact details of a number of Consulting Engineers known to have automotive experience. These Consulting Engineers are aware of DPI's requirements in relation to these types of vehicle conversions. A copy of the list is available from the Vehicle Safety Branch.

Once satisfied that a vehicle's conversion or construction meets the requirements of the Code of Practice and that the modifications have been fully and properly carried out, the Consulting Engineer may be able to issue a Modification Plate. Modifiers should check whether the owner's chosen Consulting Engineer is authorised, and willing to issue a



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Modification Plate. A Modification Plate can only be issued by a Consulting Engineer that has been authorised by the Vehicle Safety Branch.

### *Other Related Documents*

The following documents also relate to these modifications. The Code of Practice contains the technical and performance standards. Information documents are also available specifically for Prospective Owners and Consulting Engineers. Copies are available from the Vehicle Safety Branch.

CP-105A  
Code of Practice

*Major Body Modifications to Light Vehicles –  
Including Stretched Limousine and Convertible  
Conversions*

CI-104A  
Circular to Industry

*Major Body Modifications to Light Vehicles  
Guidelines for Engineer Approval*  
(This Circular contains the requirements for  
the optional fitment of a modification plate)

IB-105A  
Information Bulletin

*Major Body Modifications to Light Vehicles  
Information for Prospective Owners*

IB-102A  
Information Bulletin

*Engineering Signatories  
(List of Consulting Engineers)*

### **Vehicle Safety Branch**

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