# **Vehicle Standards Bulletin 14**

NATIONAL CODE OF PRACTICE
for
LIGHT VEHICLE CONSTRUCTION
and
MODIFICATION

# **PREFACE**

Version 2.0 January 2011

This page is blank.

# **PREFACE**

#### **BACKGROUND**

The original version of the *National Code of Practice for Light Vehicle Construction and Modification* (NCOP) was approved in principle by the Australian Motor Vehicle Certification Board Working Party members at a meeting held on 28 November 2005. The document was finally endorsed at a teleconference held on 17 January 2006. It was subsequently posted on the Department of Infrastructure and Transport (DIT) website in February 2006 as Vehicle Safety Bulletin N° 14 *National Code of Practice for Light Vehicle Construction and Modification* (VSB 14).

The underlying principles governing this document are in accordance with the national transport reform process that seeks to reduce barriers to trade and inconvenience to both industry and the public in the operation and registration of vehicles across Australian State and Territory borders.

In August 2006 the Australian Transport Council endorsed the inclusion of VSB 14 in the Australian Vehicle Standards Rules (AVSR) as a source of guidance for vehicle modifications. The consolidated amendments to the AVSR published in 2007 reflect this decision in Part 3 Australian Design Rules.

Each jurisdiction has adopted the AVSR in its legislation, either by reference or incorporation in regulations, and there may be variations in some the rules or rule numbers. For the purpose of clarity, the terms *Australian Vehicle Standards Rules* and *(AVSR)* will be used throughout VSB 14 to indicate both the AVSR and the variation used by each jurisdiction.

VSB 14 has been prepared in consultation with industry, user groups and government agencies with an interest in light vehicle construction and modification.

However its adoption as an integral part of the registration process is the individual responsibility of the Registration Authority of each jurisdiction.

#### **INTENT AND PURPOSE**

VSB 14 has been prepared to provide guidance for those who intend to manufacture an Individually Constructed Vehicle (ICV) or to carry out light vehicle modifications. Its ultimate aim is to ensure that each completed vehicle is safe for use on the road and that the level of safety afforded by a vehicle to its passengers and other road users is not compromised by any modifications.

One of the principal aims of the VSB 14 project is to provide a nationally acceptable set of technical specifications that ensure that the manufacture of ICVs and the modification of production vehicles comply with the applicable requirements of the Australian Design Rules (ADRs) and the AVSR.

Compliance with VSB 14 requirements will help ensure that work undertaken satisfies the regulatory requirements of jurisdictions.

#### SCOPE

VSB 14 applies to both the construction of ICVs and the modification of production vehicles. It may be used by individuals and businesses involved in vehicle modifications and construction.

#### VSB 14 does not:

- contain an exhaustive list of modifications. (The appropriate Registration Authority must be contacted for information about modifications that are not included in VSB 14);
- cover the construction or modification of trailers; or
- cover the technical requirements for vehicles that are manufactured for supply to the Australian market as these vehicles must be certified by their manufacturers under the appropriate schemes administered by the Australian Government under the Motor Vehicle Standards Act 1989 (MVSA).

#### RELATIONSHIP WITH THE LAWS OF AUSTRALIAN JURISDICTIONS

Subject to Federal laws and the laws of the States and Territories of Australia, VSB 14 defines standards of practice for the design and manufacture of ICVs and the modification of production vehicles. Other procedures may be acceptable subject to adequate technical justification.

Nothing in VSB 14 is to be regarded as in any way limiting the powers and duties of the Minister, Chief Executive Officer or Road Transport Authority of the jurisdiction in question, or any agent or employee of that Officer, under the appropriate legislation of that jurisdiction.

Where any ADR, any Rule of the AVSR or any Australian Standard is referred to in VSB 14, the appropriate ADR, Rule or Australian Standard should be read in full to avoid misinterpretation.

Each jurisdiction may have a different title for its adopted version of the AVSR and there may also be differences in rule or clause numbers.

Vehicle owners, registered operators, modifiers or builders must seek advice from the appropriate jurisdiction if in doubt about any of the above issues.

#### **ADMINISTRATION**

VSB 14 provides a set of uniform technical specifications for the construction of ICVs and the modification of production vehicles that can be used consistently across Australia. Individual jurisdictions have their own administrative procedures and requirements for the registration of new vehicles and for the approval of modifications. Owners and registered operators must familiarise themselves with the provisions of the jurisdiction in which the vehicle is to be registered and garaged.

Most Registration Authorities operate schemes whereby suitably qualified and experienced persons, usually called *signatories*, are accredited to, or registered with them for the purposes of inspecting and certifying modified vehicles. *Signatories* can also provide guidance on registration and their advice should be sought on more complex modifications or when developing an ICV.

#### **FUTURE DEVELOPMENTS**

This document needs to be recognised as being a *live document* and hence will need to be revised from time to time to include future developments arising from regulatory changes, improvements in technology and the development of alternative designs.

The document may also be revised to improve its editorial content.

#### **FUTURE REVISIONS**

Future revisions are the responsibility of the Australian Motor Vehicle Certification Board Working Party (the Working Party). Revisions, other than those of a legal or editorial nature, will be processed in consultation with relevant user groups.

The Working Party may consider applications from individuals concerning recommended revisions to VSB 14. However, it is preferable that these are submitted after consideration by the appropriate user groups. In any event, the Working Party will consult widely before making a final decision on any proposed amendments to VSB 14.

#### **NOTICE TO USERS OF VSB 14**

Vehicle owners, registered operators, builders and modifiers of vehicles need to be aware that compliance with this VSB 14 does not guarantee that a vehicle will be acceptable for registration in the case of an ICV, or for continued registration in the case of a modified registered production vehicle. If, for example, an ICV does not handle or brake satisfactorily or has any other feature that renders the vehicle unsafe or not roadworthy, it will not be accepted for registration.

Builders and owners need to keep abreast of changes to legislation and vehicle registration policy in their jurisdiction, particularly in cases where a project is expected to take some years to complete. Changes to legislation before a vehicle is completed may mean that certain vehicles cannot be registered without appropriate modifications. Similarly, regulations pertaining to vehicle modifications, vehicle standards or registration policy may change causing certain vehicle modifications to become unacceptable in the future.

#### **SECTION LZ APPENDICES**

A new Section titled Section LZ Appendices has been included in Version 2.0 of VSB 14.

This Section provides information that is applicable to all Sections and the individual certification codes within each Section. Having this information in one place reduces repetition, improves consistency and aids in keeping Section sizes smaller.

### **ACKNOWLEDGMENT (VERSION 2)**

The second version of VSB 14 was prepared and developed in consultation with a large number of individuals, industry groups, user groups and government agencies with an interest in light vehicle construction and modification.

Members of the Australian Motor Vehicle Certification Board Working Party wish to thank all the organisations, user groups and individuals across Australia who assisted in the review of VSB 14. The assistance offered in accomplishing this task has been greatly appreciated.

Members of the AMVCB WP also wish to acknowledge the key role played by:

Project Consultant John Dombrose, JD PERTH.

Members of the AMVCB WP during the final approval process:

Barry Hendry VicRoads (Vic)

Dan Leavy RTA (NSW)

Harry Vertsonis RTA (NSW)

Peter Hunter TAMS (ACT)

Rickman Smith DTEI (SA)

Alan Everingham DTMR (Qld)

Michael Ross DTMR (Qld)

Simon Saunders DPI (NT)

Bill Muirhead DPI (NT)

Tony Beard DIER (Tas)

Rex Middleton DOT (WA)

John Marcolina DOT (WA)

Others assisting in the process included Dr Gray Scott (representing VicRoads), Rex Scholar (DIT), Barry Craig (RTA NSW), John Wilson (DIER (Tas)) and Wayne Lo (DPI NT).

## **ACKNOWLEDGMENT (FIRST EDITION)**

The first edition of VSB 14 was prepared and developed in consultation with a large number of individuals, industry groups, user groups and government agencies with an interest in light vehicle construction and modification.

To this end, the members of the Australian Motor Vehicle Certification Board Working Party wish to thank all the organisations, user groups and individuals across Australia who assisted in the development of this National Code of Practice. The assistance offered in accomplishing this task has been greatly appreciated.

Members of the AMVCB WP also wish to acknowledge the key role played by:

Project Consultant Mr Richard Larsen, Loadsafe Australia P/L.

Additional Diagrams Mr Michael Winter, Wintercreative.

Final Editing Ms Mong Lien Ha.

The project was managed by Mr John Dombrose on behalf of the AMVCB.

Members of the AMVCB WP during the final approval process:

Barry Hendry National Transport Commission

Dr Gray Scott VicRoads (Vic)

Harry Vertsonis RTA (NSW)

Rod Paule DUS (ACT)

Roland Earl DTEI (SA)

Robert Gibson Queensland Transport (Qld)

Simon Saunders DPI (NT)

Tony Beard DIER (Tas)

Rex Middleton DPI (WA)

John Dombrose DPI (WA)

Previous AMVCB members involved in the process included Mr Jorge Montano (NSW), Mr John Hollins (NT), Mr Rickman Smith (SA), Mr Geoff Doyle (Tas), Mr James Hurnall (Qld), Mr Angus Draheim (Qld) and Mr Russell Hoelzl (Qld).