# **Motor Vehicle Registry Information Bulletin**

# V32(Iv) - Light Vehicle Modifications

### Introduction

The purpose of this bulletin is to assist persons who wish to modify an existing production vehicle, build an individually constructed vehicle (ICV) or street rod for their own use.

Modified vehicles (including ICVs and street rods) may be registered in the NT provided they conform to acceptable safety standards and are approved by the Registrar of Motor Vehicles.

Any approval is specific to a vehicle and does not necessarily set a precedence.

It is recommended that vehicle owners ensure that proposed modifications can be approved in principle prior to carrying out those modifications. Vehicle owners should also check with their insurance company prior to making any alterations to their vehicle as some modifications may affect insurance cover.

Owners of approved modified vehicles intending to move interstate are advised to check with that jurisdiction's registration authority to ensure the vehicle will be acceptable for registration.

Modified vehicles and ICVs may be subject to periodic inspections at Motor Vehicle Registry Vehicle Standards Centres.

# Modification standards for Light Vehicles (not more than 4.5t GVM)

The department uses the National Code of Practice for Light Vehicle Construction and Modification, Vehicle Standards Bulletin (VSB) 14 as a guide when assessing modified vehicles and the construction of ICVs – refer to weblink

https://infrastructure.gov.au/roads/vehicle\_regulation/bulletin/index.aspx

VSB 14 has been endorsed by all state and territory registration authorities.

Vehicle modifications which are not fully described or fall outside the scope of the National Codes of Practice may still be assessed on a case-by-case basis.

The National Guidelines for the Construction and Modification of Street Rods in Australia provides a consistent set of technical specifications for the construction and modification of street rods (pre 1949). The department uses this manual as a guide when assessing street rods.

These standards are publically available on a website hosted by the Commonwealth department responsible for road transport via the following link:

https://infrastructure.gov.au/roads/vehicle\_regulation/bulletin/index.aspx

GPO Box 530, Darwin NT 0801

**Telephone:** 1300 654 628 **Facsimile:** 08 8999 3103

Email: mvr@nt.gov.au Web: www.nt.gov.au



### **Technical Advisory Committee (TAC)**

The TAC assess applications for Significant Modifications, Extensive Modifications, ICVs and street rods. The TAC provides recommendation to the Registrar of Motor Vehicles with regard to approval and any conditions associated with approval.

The TAC comprises representatives from various motor vehicle enthusiast groups, departmental officers and NT Police.

The TAC meets on the first Wednesday of each month (except January), and the closing date for applications is the close of business on the last Wednesday prior to the scheduled meeting.

Applications submitted to the TAC are required to be completed **in full** on the approved form (VS32(Iv) Application to Modify a Light Vehicle – attached) and should include any additional information which will assist with the assessment of the application. Examples of additional information include photographs and certification documentation. There is no application fee. Applicants will be formally responded to in writing notifying of assessment outcomes. When all conditions have been met, a modification certificate will be issued.

## **Approval Processes for Modified Vehicles**

The following is an overview of the various approval processes for modified and individually constructed vehicles. The approval process is specific to the type of vehicle and its modification or construction.

### **Minor Modifications**

Minor modifications may be carried out without obtaining approval. Generally, these modifications may include fitment of optional equipment for the vehicle concerned and would not affect the level of safety, strength or reliability of vital systems such as brakes and steering. Examples may include the fitment of car audio, bullbars, towbars, additional lighting, manufacturer's wheel/tyre options etc.

### **Basic Modifications**

Basic modifications can be defined as modifications that do not affect the level of safety, strength and reliability of vehicle systems and may be assessed and approved at a Motor Vehicle Registry Vehicle Standards Centre without the requirement for written application or assessment by the TAC. Some modifications that require certification under the Code may also be discretionally assessed as a Basic modification.

Common examples of this would be (but not limited to) the following:

- Engine substitution as per table LA1 of Section LA
- Fitment of super/turbo chargers and other engine modifications as per <u>Section LA</u>
- Transmission and rear axle modification and substitution as per <u>Section LB</u>
- Substitute seating as per Section LK and VSB 5
- Fitment of seat belts as per <u>Section LK</u> and VSB 5

Effective Date: 27 September 2018

- Fitment of child restraint anchorages as per Section LK and VSB 5
- Fitment of roll bars/cages as per <u>Section LK</u>
- Those motorcycle modifications outlined in <u>Section LL</u>
- Fitment of fuel tanks/cells as per <u>Section LM</u>
- The raising of vehicles up to 100mm (overall lift\*) as per <u>Section LS</u>\*\*

- \*Overall lift is measured from the highest point of the vehicle roof to the ground, and includes any lift obtained from suspension modifications, body lift and taller wheels and tyres.
- \*\*Vehicles with an overall lift up to 100mm that incorporates wheel/tyre, body and suspension modifications generally do not require a lane change test but does require a satisfactory wheel alignment report to ensure the steering geometry is within manufacturer's specifications. Vehicles with an overall lift over 100mm requires assessment by the TAC and engineering certification to include a lane change test.

Note - vehicles subject to multiple Basic modifications may still require assessment by the TAC.

### **Significant Modifications and Extensive Modifications**

Significant modifications and Extensive modifications have the potential to seriously affect the safety of the vehicle and may affect the vehicle's strength, structural integrity and handling characteristics. These modifications include all modifications not classed as a Basic modification or a Minor modification, and applications are assessed by the TAC. In some instances, engineering certification may also be required. Further information regarding the NT engineering signatory scheme can be found in the department's <u>Information Bulletin V79 – Northern Territory Engineering Signatory Scheme</u>.

# **Individually Constructed Vehicles (ICVs)**

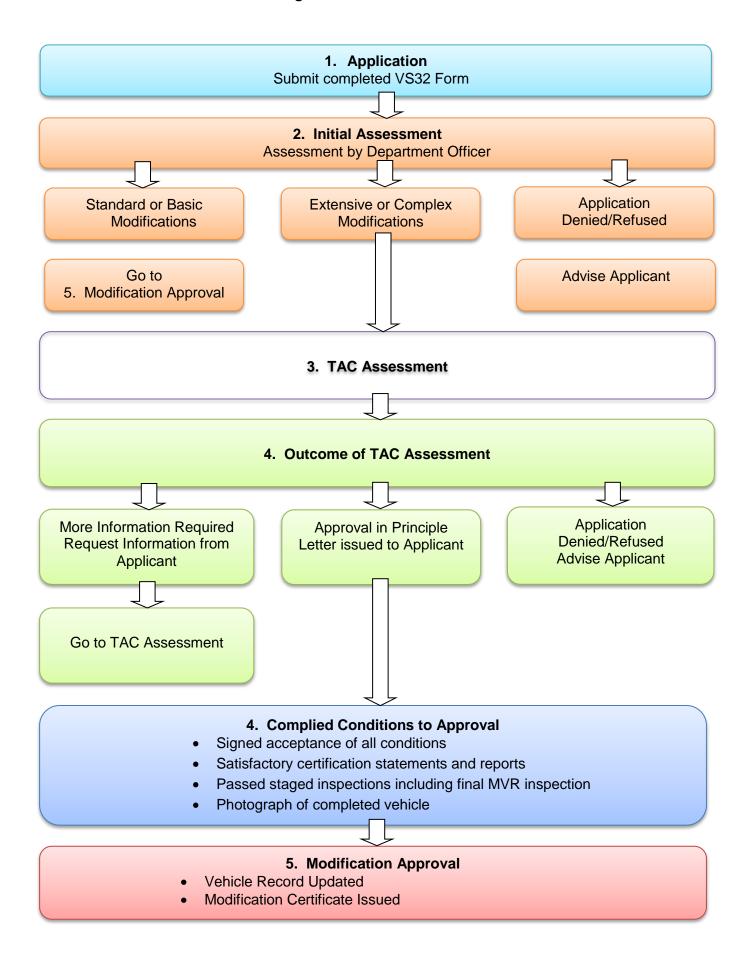
Applications to build an ICV are assessed by the TAC. ICVs are required to be certified by an engineering signatory to all Australian Design Rules (ADRs) applicable to the vehicle's given build date (the build date is taken as the date the vehicle is first assessed by the TAC).

**Note** – some concessions are given from demonstrated compliance with certain ADRs (i.e. crash testing).

# **Commercial Passenger Vehicles**

Formal approval from the Commercial Passenger Vehicle Branch must be sought prior to modifying a Commercial Passenger Vehicle - regardless of the extent of the modification.

### Flow Chart of Processes for Modified Light Vehicles





GPO Box 2520, DARWIN NT 0801
Phone: 1300 654 628
Fax: (08) 8924 7009
Email: vehiclestandards.mvr@nt.gov.au
Website: www.nt.gov.au

Official Use Only					
Date Received					
File Reference	TAC				
Vehicle Id					
MOVERS Mod File Ref:					

# Application to Modify a Light Vehicle (not over 4.5t GVM)

		<b>Detai</b> Comp		Name									Given	Nam	ne/s	s / Tra	dir	ng A	۱s							
					Postal Address																					
Contac	ct Name	•																								
Contac	ct Numb	er																								
Email															Pos	stcode	e									
	logido	nt/Co	mnon	v (mu	ot ho N	IT Do	oidont	/Compar					NT D	ivoro	Lio	onaa	NI.	uml	or /	A D N I	which	ovor i	0.000	licable		
INI	Yes	111/00	ilipali	y (IIId:		VI IVE	sideili	Сопра	iy <i>)</i>			Γ	INT DI	IVEIS	LIC	ence	INC	um	Jei /	ADIN	WHICH	ever i	s app	licable		
	165			IN	<u> </u>							L														
	Notes for Guidance  (1) This application form should be read in conjunction with MVR Information Bulletin V32(Iv) – Light Vehicle Modifications (2) Please attach any drawings, sketches, engineering approvals, kit approvals, photographs or any other information that you consider will assist in assessing this application. The more information you supply with this application, the less likelihood of delays (3) Applicants should NOT commence work until they receive written approval in principal (4) If original equipment detail is not known, write "As Original" in appropriate fields or "tick" the appropriate box																									
Vehi	cle De	etails																								
Regist	ration N	lumber										St	State Compliance Plate Approval No													
Vehic	cle Ma	ake									- r	Vehicle Model														
VIN /	Chas	sis N	umbei	r				1										В	ody	Туре						
Engi	ne Nu	mber																N	lonth	and	Year c	of Mar	nufact	ure		
																						,	/			
GVM	(kg)						GC	CM (kg)										-								
Man	ufactı	ırers	Safet	y Opt	ions -	Is the	vehic	le fitted v	vith an	y of the	follow	ing sa	fety fe	ature	es?											
	ESC	C (Elec	ctronic	c Stab	ility Co	ontrol)			SF	RS (Su <sub>l</sub>	ppleme	entary	Restra	aint S	Syst	em)				EBS	(Elect	ronic	Brake	e Distrik	oution)	
ABS (Anti-Lock Braking System)  Other (please s				pecify	)																					
Adaptive Hand or Foot Controls  Dual Control Fitment Operation Additional Information																										
	Pus	h/Pull	Hand	l Cont	rol		Ac	celerator			Cabl	е														
	Spir	nner K	ínob				Bra	ake			Mecl	nanica	ıl													
							Clu	ıtch			Hydr	aulic														
	Othe	er									Elec	ronic														

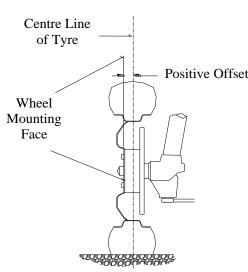
Section 1: Vehicle Rating		Original 🖵				Proposed		
GVM								
GCM								
Comments								
Section 2: Engine		Original				Propose	∌d	
Capacity/Cylinders		ml		Cyl		ml		Cyl
Make						_		
Year of Manufacture								
Type (inline, V8, Rotary)								
Fuel Induction	Naturally Aspirated	Turbo Charged	Supercharged	Fuel Injected	Naturally Aspirated	Turbo Charged	Supercharged	Fuel Injected
New Engine Number		N/A				•		
Engine Weight (kg)								
Fuel Type								
Comments								
Section 3: Transmission		Original				Propos	ed	
Туре								
Comments			_				_	
Section 4: Driveline		Origina	. 🗆			Propos	ed	
Туре								
Comments								
	I							

Section 5: Front Suspension	n Original 🗖	Proposed
Туре		
Comments		
Section 6: Front Axle	Original	Proposed
Туре		
Comments		
Section 7: Rear Suspension	Original	Proposed
Section 7: Rear Suspension	Original 🗖	Proposed
	Original	Proposed
Туре	Original  Original	Proposed
Type		
Type  Comments  Section 8: Rear Axle		
Type Comments Section 8: Rear Axle Type		
Type Comments Section 8: Rear Axle Type		
Type Comments Section 8: Rear Axle Type		

Section 9: Braking System	Original 🗖	Proposed
Master cylinder make		
Master cylinder type (ie Dual/Single)		
Brake booster unit make		
Brake booster unit type		
Front brakes disc/drum		
Rear brakes disc/drum		
Handbrake		
Proportioning valve details		
Comments		
Onation 40, Otavina		Proposed
Section 10: Steering	Original 🗖	Proposed
Box/Rack		
Column		
Comments		
Section 11: Front Wheels	Original	Proposed
Diameter		
Rim width Rim offset (Positive/Negative)		
Material		
(Steel/Magnesium/Alloy/other)		
Comments		

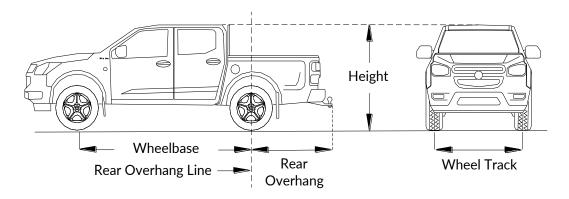
Section 12: Front Tyres	Original $\Box$	Proposed
Size / Rating		
Construction (Radial/x ply)		
Comments		
Section 13: Rear Wheels	Original	Proposed
Diameter		
Rim width		
Rim offset (Positive/Negative)		
Material Steel/Magnesium/Alloy/other)		
Comments		
Section 14: Rear Tyres	Original	Proposed
Size / Rating		
Construction (Radial/x ply)		
Comments		
	Wheel Rim Offset	
N	egative Offset	Positive Offset
Centre Line		Centre Line
of Tyre —	_	of Tyre
	Negative Offset	Positive Offset
	Tregulite Office	

# Centre Line of Tyre Negative Offset Wheel Mounting Face



Section 15: Wheel Track	Original 🗖	Proposed
Front	mm	mm
Rear	mm	mm
Comments		

### Wheel Track - Wheelbase - Overall Height



### Note:

- Wheel Track is measured from the centre of the tyre to the centre of the opposite tyre on the same axle
- . Wheelbase is measured from the centre of the front axle to the centre of the rear axle (rear overhang line)
- . Rear Overhang is the distance measured from the rear overhang line to the rearmost part of the vehicle
- · Overall height is measured from the ground to the highest rigid point of the roof (excluding vehicle accessories)
- For further information on vehicle dimension limits including load, refer to Information Bulletin V13 Vehicle Dimension Limits <a href="https://nt.gov.au/\_data/assets/pdf">https://nt.gov.au/\_data/assets/pdf</a> file/0007/374335/v13-vehicle-dimensional-limits.pdf

Section 16: Wheelbase and O	verall Height Original	Proposed
Wheelbase	mm	mm
Rear Overhang	mm	mm
Overall Height	mm	mm
Comments		

Section 17: Chassis & Body	Original $lacksquare$	Proposed
Details of proposed changes:		
Details of proposed materials to be used:		
•		
Section 18: Seating	Original 🔲	Proposed
Seat Type – Front		
Manufacturer		
Seat Type - Other		
Manufacturer		
Seat attachment method		
Comments		
	·	

Section 19: Seat Belts	Original	Proposed
Seat Belt Type – Front		
Manufacturer/Standards Approval No.		
Seat Belt Type - Other		
Manufacturer/Standards Approval No.		
Seat belt attachment method		
Comments		
	or harness belt assemblies, ensure that you supply the ma I number in the space provided.	nufacturer's name and contact details as well as the
	is required to collect information for Registrations, Licenses an orthern Territory Government's Privacy Statement and the <i>Infor</i>	
Declaration the undersigned, hereby decla pplicant's Signature and Dat	are that the information contained in this application is, to the be	est of my knowledge, true and correct.
Note: Where an agent i the vehicle owne	is representative of the vehicle owner, written a	authorisation of authority is required from

# Completed applications may be:

Submitted in person: to Any Motor Vehicle Registry Office

By Mail: Vehicle Standards Officer

**Department of Infrastructure, Planning and Logistics** 

GPO Box 2520 DARWIN NT 0801

Via E-mail: vehiclestandards.mvr@nt.gov.au