Submission by Reno Marchesi – Nanny State Laws

Attention Lauren Wells
Parliamentary Officer (Committees)
Select Committee on Personal Choice and Community Safety
Legislative Council
Parliament House 4 Harvest Terrace
WEST PERTH WA 6000
Email – pccs@parliament.wa.gov.au

After having more than 39 years' experience with the WA Department of Transports Technical Section, I believe I am able to offer recommendations that can improve the way business is currently conducted by the Departments Technical Services Welshpool.

1. With the volume of enquires, both telephonic and written being directed at the Technical Services section it is understandable, with the limited staff available, that it is taking up to 9 weeks to process a written reply to industry and members of the public.
   As an example a person may lodge an application to modify his or her vehicle.
   Which is now done on line.
   The application then progresses in a queue until it reaches the top. Where it is then assessed by a technical services staff member. After which a reply is then sent out to the enquirer (Up to a 9 week period)
   The reply letter is sent to the enquirer/owner, commonly known as an approval in principle to proceed with the proposed modifications.
   At this point the enquirer/owner then seeks the services of a DoT approved signatory (Mechanical engineer or an Automotive Engineer)
   Once engaged by the enquirer/owner, the DoT signatory proceeds to inspect the vehicle that has approval in principle from DoT Technical Services Welshpool.
   A report is completed by the signatory and then lodged with the DoT Technical Services Welshpool. There the report joins another queue and a further 9 week wait occurs. (Start to finish takes 18 weeks)
   Eventually the enquirer/owner receives a letter of approval from DoT Technical Services, Welshpool advising the owner to take a copy of the letter of approval together with the vehicle to a DoT Authorised inspection facility for examination.
   Providing it passes an inspection by the authorised examiner, the vehicle is then issued a modification permit for the modified components.
   However prior to receiving a modification permit the authorised inspection facility officer faxes details of his assessment of the modified vehicle to DoT Welshpool audit section.
   This process depending on the day and the volume of audits required to be vetted may take from 15 minutes to a full day or even days for the owner-customer to receive the modification permit.
   This means that the owner must in most cases leave the AIS inspection facility and return at a later time when advised telephonically that the documents are ready for retrieval. A real waste of time particularly if the person has to take time off work.
   Where the vehicle is unlicensed a temporary permit receipt is required. (About $31.00)
   A modification permit fee receipt of $68.90 is required.
   Both of the above items to purchase are time consuming. To obtain either of the above, Namely, temporary permit and modification permit fee receipt.
   (a) Attend a DoT Licensing Branch and wait in a queue for about 30 minutes before being served. Or
   (b) Go on line and wait around the same time before being able to purchase a receipt.
   It is clearly evident from the above process how people become frustrated in dealing with the WA DoT Licensing system that is currently in place.

Recommendation

- There needs to be more research into how a faster method can be employed to obtain temporary permit and modification permits and other time consuming transactions.
- There is currently a DoT Approved Simple Modifications list, whereby a vehicle can be taken directly to an AIS Inspection Facility. However I believe it needs to be expanded to include a vehicle that is covered by an authorised DoT signatory (Mechanical Engineer or Automotive Engineer)
- Where only 1 item of modification is carried out on a vehicle and a report has been provided by an authorised signatory for that item there should be a process in place that enables the vehicle to be taken directly to an authorised Inspection facility. To have to join the queue and wait 9 weeks would appear to be unreasonable.
- Employ more staff in both the Technical Services and audit sections to reduce the 9 weeks now taken to about 10 days maximum turnaround time.

Range of Vehicle Modifications permitted

The normally accepted language spoken in Australia is English and as a Commonwealth of Australia (States and Territories) we unfortunately are not united on many issues.
One being our laws relating to vehicles. Each State and Territory wants to be king of their castle, hence differing Regulations for each jurisdiction.

Vehicle Modifications Guide Lines within WA.

Prior to the introduction of the National Code of Practice for Light Vehicle Construction and Modification (VSB 14 NCOP) it was agreed that Nationally State and Territory Committee representatives would look at formulating a set of uniform guide lines for dealing with vehicle modifications for registered vehicles Australia wide.

[redacted], the then manager Vehicle Safety WA Dot, who was on the national committee agreed to undertake the job of preparing the above document along with support from other members of the committee.

So in 2006 VSB 14 was introduced. What should have been a uniform set of guide lines unfortunately did not eventuate.

However WA did use the NCOP in its entirety along with the Road Traffic (Vehicles) Regulations 2014.

A change of senior staff about 3 years ago at DoT Vehicle Safety and Standards Welshpool introduced a maximum output power of 180 kw per tonne for an engine being fitted to a vehicle that was being modified. Refer letter from DoT at attachments.

To change an existing arrangement that had been acceptable far back as my commencement date March 1971 without justification does not appear sound judgement.

If through research it can be established that statistics show that an early model vehicle, that is modified and fitted with an engine with a capacity in excess of 180 kw per tonne is more represented in accidents than one with less than 180 kw per tonne then yes I would agree to the change.

In 2017 an XA Ford Falcon Coupe was extensively modified. All the modifications carried out were engineered appropriately including brake tests and reports. Refer report for XA Falcon at attachments.

Once the vehicle was duly licensed the owner contacted Shannon's Insurance and advised that he wanted his vehicle insured for $120000.00 and could they give him a cost. $500.00 was the figure. The owner said that's great my wife's Toyota Kluger cost $750.00. Shannon's answer muscle cars are not represented in accidents.

It is my view that the intent of Regulation 235 of the Road Traffic (Vehicles) Regulations 2014 was never intended to be applied as it has been recently.

Looking at Regulation 235 of the Road Traffic (Vehicles) Regulations, namely Regulation 235 (2) Table of Alteration item 1.
Item 1. "*Fitting an engine of greater displacement volume than an engine that was available as an option for the vehicle with the same brakes*"
This clause mentions a greater displacement volume than an engine that was available as an option with the same brakes.
No mention is made for a larger displacement volume engine with upgraded brakes.
If an owner seeks to install a lager capacity engine greater than 180 kw per tonne and engages the services of a brake specialist for advice on what brake system, including master cylinder brake booster, front and rear brakes would be suitable, from an engineering point of view I could not envisage a problem with this modification.
The whole issue revolves around common sense and logic and sound engineering principles.
I was in Castlemaine Victoria a few years ago where a 21 litre merlin spitfire engine was fitted into a 1955 Chevrolet sedan. This type of modification is somewhat crazy, but it was registered, with restrictions applying.

There many other issues that I would like to cover, however It would be my pleasure to attend in person to discuss them if the Committee feels it necessary

Attachments: letter from DoT Welshpool re 180 kw per tonne and a report on XA Falcon (modified)

Name:
Address

Ref:

Phone

Vehicle Make	Ford
Model	XA
Body type	Coupe
Date of manufacture m/y	9/1973
Registration No	NPA
Chassis / VIN	
Engine number	
Compliance plate approval	Pre 3rd edition ADR
Seating capacity	4

Engine Details	OEM	Modified
Year Make	1973 Ford	1969 Ford
Configuration	6 Cylinder	V8
Capacity	4.1 litre	7.5 litre
Induction	Carburettor	Carburettor
Engine Number		
Emissions	ADR 26	ADR 26
Power Kw	127 kw	204 kw

Compliance Plate

Engine number – LHSF engine block

Engine Bay

A OEM 460 cubic inch engine is fitted with a sports camshaft, optional alloy cylinder heads(Torino engine heads), alloy inlet manifold, Pacemaker extractors and a Holley 4 barrel carburettor. ADR 26 emission components connected.
By the fitting of alloy heads and alloy inlet manifold the mass of the engine is reduced by some 40 kgs.
Prior to installing the engine into the car the LHS cylinder head was removed and the bore and stroke dimensions were measured. It is confirmed that the bore size is 4.360 inches and the stroke is 3.850 inches.
Engine Mountings – Supplied by Rod Hatfield Castlemaine to suit 460 CI engine.

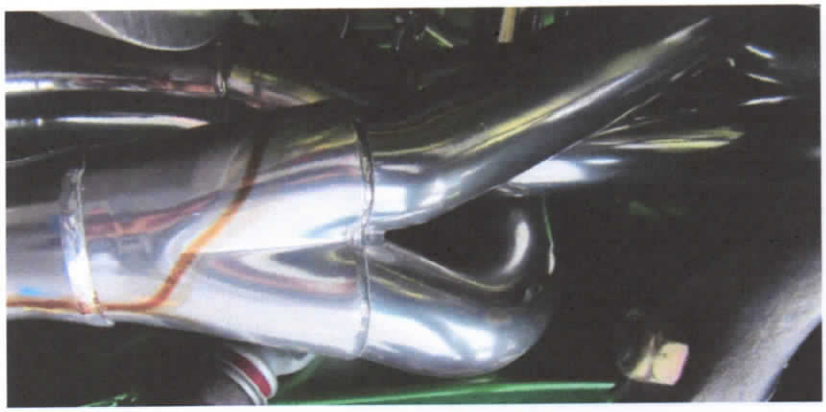
Transmission – Ford AOD 4 speed manual change automatic transmission, using B&M after market shifter. Quadrant on shifter has illumination facillity for night use.
Transmission mounting supplied by Rod Hatfield Castlemaine to suit Ford AOD transmission.
Transmission bolts directly onto the 460 CI engine, without alteration.
B&M shifter

Propellor shaft – Re-engineered by Final Drive to suit conversion.

Differential – Ford 9"supplied by RRS Pty Ltd to suit conversion.

Steering – OEM Completely overhauled

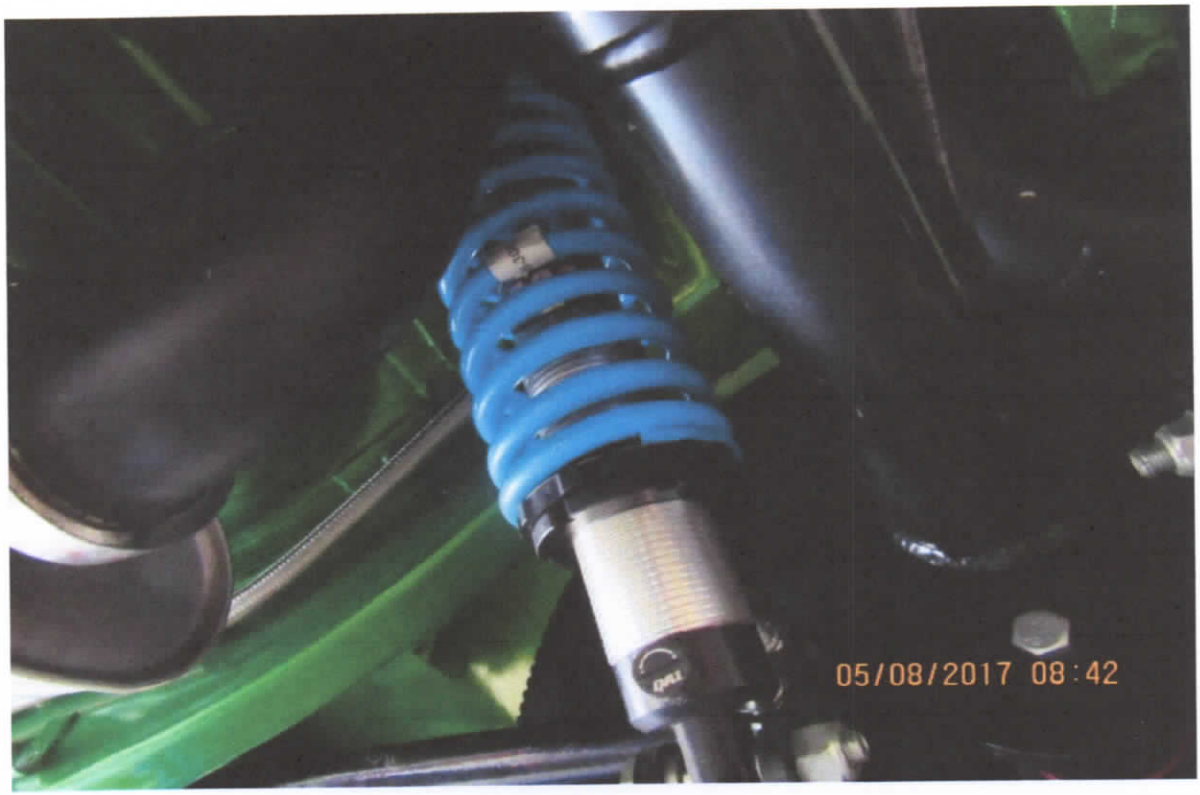
Exhaust System
Consists of Pacemaker extractors, connected to 3" dual under body pipes and balance pipe in turn coupled to twin Lukey mufflers and dual tail pipes exiting at both L&R rear of vehicle.



An authorised sound level meter was used to record a noise reading of 98 dB(A) emitted from the exhaust. The test was carried out in accordance with motor vehicle noise procedures.

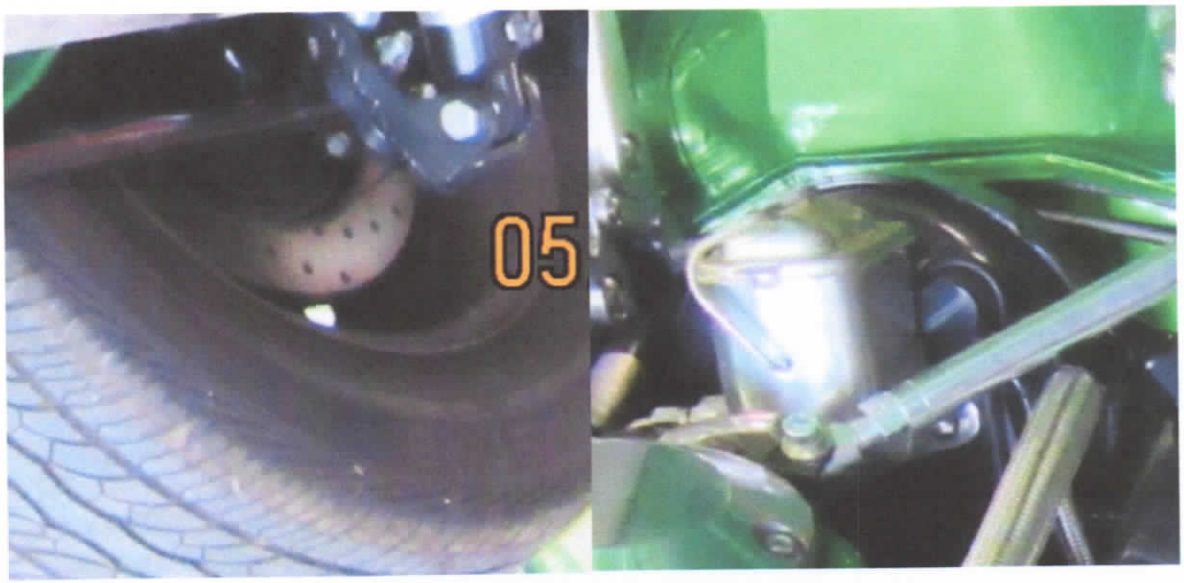
Front suspension - Supplied by RRS Pty Ltd & fitted in accordance with manufacturers installation instructions.

Rear suspension – Supplied by RRS Pty Ltd & fitted in accordance with manufacturers installation instructions.



Brakes – Upgraded to Willwood disc & caliper both front & rear

Rear Willwood rotor. OEM dual circuit master cylinder & booster



Master cylinder resleeved & serviced by Perth Brake Parts.
Brake Booster overhauled by Perth Brake Parts.
Front & rear brakes designed to be compatable with master cylinder used.
A brakes performance test was conducted using a Brake Roller Test Machine.
Results of the brake test are at attachments.
The machine is calibrated twice annually to comply with Australian Standard for Brake Roller Test Machines.

Aftermarket fuel tank – 100 litre
Its manufacturer was Torque Fabrications, Bellevue WA.
Refer below photo

Ford XA GT fuel tank capacity – 122.9 litre.

Dimension

OEM vehicle vehicle height - 1318 mm
Measured vehicle height - 1310 mm
Difference – 8 mm

Tyres & Rims

This vehicle is fitted with RRS Pty Ltd front and rear supension and the manufacturer has provided evidence showing that the suspension is designed to safely have the following tyre and rim combination fitted to the vehicle.
Front tyres – 225/60R15 Front rims – 15 x 7"
Rear tyres – 275/60R15 Rear rims - 15 x 10"

OEM front track - 1524 mm
Measured - 1580 mm As the vehicle is fitted RRS suspension wheel tracks may vary according to RRS suspension specifications. Refer RRS report.
OEM rear track - 1524 mm
Measured - 1520 mm – See above comment on RRS supension.
OEM front eye brow – N/A
Measured front – 290 mm
OEM eye brow rear – N/A
Measured rear – 290 mm

Seat belts & seat belt anchorages

Compliance plate fitted shows conformity with ADR 4 & 5B.
The only change has been the re-webbing of the seat belts
Seats – XR8 front & rear seats are fitted. OEM XA seat anchor points are common to the XR8 seat pick up points. The re-upholstering of the rear seat, by eliminating the middle passenger seat.In its place the rear seat and seat squab have been raised in the form of a, hump separating the two rear seating positions. The rear centre seat belt has been removed. It is not possible to occupy the rear seat centre position. Refer LK1 of VSB14 check list at attachments.
All Seat belts supplied by Seat Belt Solutions
Refer below photo.

In response to DoT's letter to the owner the following items were metioned for attention.

1. LA2 of VSB14 check list refer attachments
2. LA4 of VSB 14 check list refer attachments
3. LT4 of VSB 14 check list refer attachments.
4. Suitability & capability of body structure & drive components to cope with incresed power & torque of 460 CI engine. Ford GT XA Falcon 351 CI engine output power is 224 kw, which is greater than the 460 CI - 204 kw.Some 20 kw more than the 460 CI engine.
5. Ford AOD automatic transmission is a direct bolt onto the 460 CI. LB1 of VSB 14 check list. Refer attachments.
6. Ford 9"differential supplied by RRS to fit XA Falcon Coupe.Refer LB2 of VSB14 check list.
7. Aisat Instrument repairers are attending to this issue and their report will be supplied on the accuracy of the speedometer.
8. LS3, LS4, LS5 & LS6 of VSB 14 check lists refer attachments.
9. Refer RRS report
10. LG1 & LG2 of VSB14 check lists refer attachments
11. Wheel tracks – Refer RRS report
12. Seats & seat belts - Refer page 6 & LK1 of VSB 14 check list at attachments.
13. All lighting is OEM
14. Rear inner fenders have been modified, to enable a wider wheel, however, rear sub-frames are OEM & untouched.
15. After market fuel tank. Refer page 5 & LM1 of VSB14 check list at attachments.

I have personally examined the vehicle described. I hereby certify that the particulars shown in this Report/Certificate are correct and in respect of the vehicle modifications described. The vehicle is sound in its design and construction and meets the requirements of VSB 14 VSB, Western Australian Road Traffic (Vehicles) Regulations 2014, and where applicable, complies with affected Australian Design Rules."

Attachments: LA1, LA4, LT4, LB1, LB2, LS3, LS4, LS5, LS6, LG1, LG2, LK1, LM1, brake test results, RRS reports.

Government of **Western Australia**
Department of **Transport**
Driver and Vehicle Services

Our Ref:
Enquires: (08)92163880

RE: VEHICLE MODIFICATIONS TO: 1980 HOLDEN WB UTILITY
REGISTRATION: UNLICENSED

Thank you for your application of 20 MARCH 2017, seeking approval for modifications performed to the above vehicle.

The Chief Executive Officer (CEO) of the Department of Transport (DoT) has the legal power to set the requirements for the approval of modifications to vehicles in Western Australia. As the delegated Officer of the CEO of Transport I am empowered to make decisions under regulation 235 of the Road Traffic (Vehicles) Regulations 2014 regarding modifications.

The Department of Transport (DoT) has adopted the "*National Code of Practice for Light Vehicle Modifications*" (VSB14). VSB 14 is a set of nationally-agreed guidelines, however it is not implemented into national law and therefore the application of VSB14 in any State or Territory is subject to the discretion of the jurisdiction concerned.

Under this discretion your application was assessed and a decision was made that the fitment of a GM LS7 (7 Litre) V8 naturally aspirated petrol engine, although meeting the VSB 14 Table LA1 would be considered too much of a safety risk on the basis that your vehicle was manufactured in 1980.

That LA section in VSB14 states that an engine may not be a suitable replacement even if its capacity falls within the limits specified in Table LA1. VSB14 recommends maximum capacities rather than power maximums. Excessive power was clearly identified as a major issue at the time VSB14 was implemented 10 years ago. The table was clearly intended to try and limit engine power by restricting engine capacity and was thought to be the simplest way to do that at the time.

It is important to note that the VSB14 limits and requirements were developed in the context of engine performance data prior to 2000 and has not been revised to account for substantial increases in engine performance due to developing technology in recent years.

Vehicle Safety and Standards. Technical Policy and Services
21 Murray Road South. Welshpool WA 6106
Telephone (08) 92163880. Facsimile (08) 92163899

In recent times the DoT application of the code has been called into question. It has been found that the engine size limits alone do not necessarily make a vehicle safe, since the power output for an engine of a given size has increased substantially in recent times has now become a major safety concern, specifically the installation of larger engines to older pre Australian Design Rules (ADR) vehicles.

The ADR over the years led to significant advances in vehicle safety, particularly for the vehicle occupants. As the vehicles power increased so did the safety features required by the ADR and others incorporated into the vehicle by the vehicle manufacturer.

There is a limit to the amount of power a vehicle can safely handle, if a vehicle is too powerful it would need a lot of electronic systems to prevent it from becoming uncontrollable. This deficiency in VSB14 is currently under review at the highest level within the Department.

With this in mind as the CEO's delegate any applications for older vehicles which involve excessive power increases above the original will be assessed on their merits on an individual basis.

Until an outcome is reached following the review and exercising the delegated discretion I have to make decisions under regulation 235 of the Road Traffic (Vehicles) Regulations 2014, I decided to decline this particular application.

A decision under Regulation 235 of the *Road Traffic (Vehicles) Regulations 2014* to refuse to approve modifications to a vehicle is not a decision that the Department is obliged to reconsider under the *Road Traffic (Vehicles) Act 2012* or related Acts and regulations. A decision under that regulation is also not subject to a right of review in the State Administrative Tribunal (SAT), unlike some other types of decision made under this legislation. It is open to you to seek your own advice on whether other avenues of appeal or review are available to a decision of this kind.

Should you require any further assistance or seek further clarification, please do not hesitate to contact the Coordinator on telephone number [redacted]

Yours sincerely

[redacted]

[redacted]

Manager Vehicle Operations

3 /4 / **2017**

Per:

Vehicle Safety and Standards. Technical Policy and Services
21 Murray Road South. Welshpool WA 6106
Telephone (08) 92163880. Facsimile (08) 92163899

Modified penalty: 5 PU.

235. Alteration of vehicles

(1) In this regulation —

alcohol interlock has the meaning given in the *Road Traffic (Authorisation to Drive) Act 2008* section 5A(1);

derivative of a car means a motor vehicle of the same make as a factory produced car and in which the forward part of the body

form and the greater part of the mechanical equipment are the same as those in the car.

(2) A person must not, without the approval of the CEO, alter a car or a derivative of a car from —

(a) the manufacturer's specifications; or

(b) its form when it was first licensed, in regard to any part of its construction, equipment or fittings that was effected, manufactured or constructed in accordance with an ADR by making an alteration mentioned in the Table.

Penalty: a fine of 16 PU.

Modified penalty: 2 PU.

Table of alterations requiring approval

	Alteration
1.	Fitting an engine of greater displacement volume than an engine that was available as an option for the vehicle with the same braking system.
2.	Making modifications to braking systems which include the fitting of smaller diameter brake drums, or narrower brake drums or brake shoes which reduce the swept area of braking surface or which reduce the weight of the brake drum or disc.
3.	Fitting any wheel rim with more than a single weld around the circumference, or which does not conform to one of the dimensional standards for wheel rims set down in the Tyre and Rim Standards Manual issued by the Tyre and Rim Association.
4.	Widening the wheel track of front or rear wheels by more than 25 mm beyond the maximum specified by the vehicle manufacturer.
5.	Fitting spacers between wheels and hubs additional to any provided by the vehicle manufacturer.

	Alteration
6.	Fitting wheel nuts which do not engage the thread of the wheel studs for at least the same length as the nuts provided by the vehicle manufacturer, or wheel nuts which do not match with the taper on the wheel.
7.	Fitting tyres other than those appropriate to the wheel rim as specified in the Tyre and Rim Standards Manual issued by the Tyre and Rim Association.
8.	Making modifications to an axle, axles or suspension which reduces the available suspension travel from static conditions to full bump position to less than two-thirds of that provided by the vehicle manufacturer.
9.	Making modifications to an axle, axles or suspension so that any part of the vehicle other than the tyre or rim will contact a road surface in the case of the deflation of any tyre.
10.	Welding or heating any axle, stub axle, steering arm or steering knuckle support.
11.	Lengthening or shortening the chassis frame, or the body structure in the case of a vehicle of mono (chassis-less) construction.

(3) A person must not, without the approval of the CEO, alter a motor vehicle or trailer not being a car or a derivative of a car from —

(a) the manufacturer's specifications; or

(b) its form when it was first licensed, in regard to chassis, frame, wheels, suspension, steering, brakes, axles, engine, body structure or exhaust system.

Penalty: a fine of 16 PU.

Modified penalty: 2 PU.

31/10/2018