

LETTER OF THE LAW

ENGINEERING AND LEGISLATION WITH JOHN VARETIMIDIS



MODIFIED VEHICLES AND THEIR CERTIFICATION

Most of us have at some time or another owned a vehicle that has been modified in some form, whether it be a highly tuned road/track vehicle or a mild everyday commuting vehicle.

Modified vehicles come in an endless number of configurations, and although you may not be aware that your vehicle is modified, it is common sense to make sure that your vehicle still complies.

All manufactured vehicles are designed and tested to meet current regulations before they are released to the public at the time of first registration. The main governing regulations in Australia are referred to as the Australian Design Rules (ADRs).

The ADRs cover all areas of vehicle design and safety to ensure all manufacturers provide a vehicle that meets the minimum safety and compliance standards. The ADRs do not vary or change from state to state, though most states have a Modified Vehicle Code to ensure modifications are regulated.

By replacing or upgrading a component on your vehicle, you may directly affect compliance with ADRs and, in some cases, require assessment by an independent automotive consulting engineer to ensure the vehicle remains roadworthy.

An engineer is responsible for inspecting your modified vehicle to ensure it maintains compliance and provides evidence to the registering authorities. It is strongly recommended you seek advice before you carry out any modifications or purchase any aftermarket components.

Keep in mind the next time you decide on vehicle modifications that your consulting engineer should be your first contact. Prepare a list of questions, bring along any parts catalogues, photos, magazines and any information on your next project.

Be sure to outline your modifications and take notes on any steps you have to take to maintain your vehicle. A consulting engineer will also carry out preliminary inspections on your vehicle while it is being constructed.

When a vehicle has been approved for certification, a modification plate or engineering certificate is issued to cover the modifications and then passed on to the registering authorities to endorse the adjustment of records on the Certificate of Registration.

The owner of the modified vehicle is now responsible in maintaining the vehicle in the modified configuration. The owner must also have available, upon request, proof of certification to produce to the Police, (RTA) or (EPA).

A certification of a modified vehicle is valid for the registration of the vehicle and provided the vehicle is not modified further. If the owner of a vehicle is planning further modifications, then it is necessary to have the certification updated to include the most current mods.

Modified vehicles that are not certified by an engineer are considered un-roadworthy by the transport authorities. In the event of an insurance claim, particularly if your vehicle has been involved in an accident, your insurance cover can be rejected.

If your vehicle has been certified by an engineer, make sure that your insurance company receives a copy of your engineering certificate or that it is aware of your modifications in your insurance agreement to prevent any complications when an insurance claim is processed.

A LITTLE ABOUT MYSELF

In 2003 I formed my own business, Consulmotive, through almost a decade of experience gained while employed as Senior Consulting Engineer for Lohning International Consulting.

I was directly involved in the certification of modified vehicles and the interpretation, testing and endorsement of vehicle compliance to Australian Design Rules, Australian Standards, Motor Traffic Regulations and many other vehicle compliance codes.

In my experiences, I have found a variety of modified vehicles to be extensive and varied. There are not many limitations to the imagination of some rather ingenious ideas and some complete failures.

Some rather interesting conversions that come to mind would be a six-wheeler Holden cab-chassis one-tonne ute chassis that was equipped with a Statesman body to accommodate the dual rear-axle assembly. The rear of the chassis had been extensively braced and reinforced to accommodate a tow-truck-lifting crane at the rear.

Another interesting project was a re-bodied vehicle, which comprised of a Land Rover chassis that had fabricated body mounts to locate a Holden ute body. The drivetrain incorporated the late-model Chev Corvette engine, transmission and rear axle.

All the suspension was upgraded to accommodate self-levelling air suspension, and the rear tray was adjustable via a hydraulic cylinder to allow the tray to lower and lift. The vehicle was equipped with camping equipment, such as air compressors, electric winch, water tank, welding equipment and so forth.

Not all custom vehicle projects are quite so interesting or successful, however.

One in particular that comes to mind was an LH Torana that came into the workshop. The Torrie's roof had been chopped to form a convertible, the original engine replaced with an Isuzu diesel engine and the boot was fitted with a hand-made particle-board spoiler.

One for the 'Hall of Shame' was a Toyota LandCruiser with a homemade galvanised steel body secured with self-tapping screws and fitted with trailer lights.

Building a modified vehicle does require some planning and a lot of thought. Next time you venture into some wild ideas for your own vehicle, just ask for the right advice and keep your ride safe and roadworthy. Get serious, get legal. **SC**