# Managing Speed Event (hill climb classes)

Classes are set at the national speed event classes, (State hill climb events use these classes)

Very limited modifications allowed under street registered classes,

Only going into basic details for differences between street registered standard, Street registered limited modifications, Improved production and sports sedans, and touch briefly on time attack,

Other classes are used such as prod sports and touring, yet similar to improved production and can read threw regulations if that's to your interest, and more wild classes like formula libre that become rather obvious if that's where you're competing.

### Road rego, standard

Exhaust can be changed yet same configuration, number of mufflers, pipe diameter.

Wheels and tyres need to remain the same size,

Can remove the spare tyre, rear seat, change front seats, fit additional lights.

Yet that's basically it.

### Road rego limited modification

allows for minor modifications

Steering wheels changed,

Carpet and underlay removed

Rolling guards

Strut braces fitted

Sway bars removed or upgraded

Bushes changed to other rubber/poly types remaining the same size, meaning cant replace rubber joints with spherical.

Camber kits are allowed

Shocks and springs can be changed yet need to retain original mounts

Tyre/rim can increase diameter by 2" and width by 1"

Brakes need to retain standard diameter

Diffs can have higher capacity covers fitted

Gearboxes need to retain standard ratios or optional ratios for that vehicle.

Turbo cars can be retuned, need to maintain all intake as factory, and exhaust needs to stay standard until after the turbo.

Rotarys can be ported, yet bridge port and peripheral ports are prohibited.

Aspirated cars can change injectors yet need to maintain the same number and location,

Can be retuned.

Manifolds can be ported and polished

Cams can upgraded

Carbys need to maintain the original number of venturis

Can not swap between efi and carb

Engine swaps are not permitted

No body modifications (spoilers etc unless oem option)

# Improved production

allows further although still limited modifications

Can do engines swaps provided same number of cylinders and same manufacturer,

If forced induction needs to have a restrictor fitted unless is the factory turbo system with factory intake and less than 2% increase in factory displacement,

Trans tunnels can be modified to fit different transmissions,

Guards can be flared up to 100mm total increase in body width (200mm max flare if not increasing body width)

Chassis can be seam welded

Air dams and spoilers fitted within the limits of the regulations

Fuel tanks can be changed

Differentials can be changed provided solid axle cars retain original mounting points

A lot more freedoms (although not unlimited) with interior and suspension modifications

Doors can have side intrusion bars removed provided the vehicle has a cage with side intrusion protection.

If unregistered requires a cage and harness.

# **Sports sedans**

Requires roll cage

Body panels can now be replaced with fibreglass/carbon ones provided still to the factory style,

Can remove all interior trim, yet still needs some sort of door trim (flat panel)

Significantly greater suspension freedoms than even improved production (change suspension tyres)

Vehicles need to be manual

Engine swaps from basically any make now allowed with maximum capacity limits

6l for aspirated

- 3.5l for forced induction
- 3.4l aspirated rotary

2l turbo rotary

With limit of 35 psi max boost and a 9000 rev limit below 3.5l engine and 8500 for over 3.5l

#### Other

Failing to meet the above classes have limited other options, especially the cage requirements.

Basically open class time attack has a lot more freedoms in terms of engine modification limits and does not need roll cage if still road registered.

However that class isn't used that often at events and there are only a few competitors in those classes and it increases the costs of permits for the event that in turn increases your entry fees for an event so isn't really feasible at club level often.