



CMHAC HILLCLIMB COMPETITION CLASSES

(To be nominated on entry form)

Type 1.

Stock standard two wheel drive production vehicles, with full production trim and standard seats. This includes HSV and FPV style factory vehicles. Vehicles must be either road registered or of an equivalent standard.

Permitted Modifications:

- Decorative additions only such as exhaust tip or body kit.
- Rollover protection is permitted as long as it is not designed to improve chassis rigidity (e.g. by being connected/welded to suspension towers etc.)

Capacity Classes:

- 0 to 1600cc
- 1601 to 2000cc
- 2001 to 3000cc
- Over 3000cc

Type 2.

Production vehicles as described in Type 1 above, with further modifications allowed as detailed below.

Permitted Modifications:

- Air Cleaner is free.
- Exhaust is free-subject to noise restraints as may be prescribed in the Supplementary Regulations issued for each event.
- Wheels and tyre sizes may be changed, provided they retain commercially available road type tyres and fit within the **standard** guards with the appropriate clearances. Road legal tread depth is not compulsory, however at the start of competition the original tread must be clearly visible across the face of the tyre, except on the shoulder where excessive wear may occur due to steering and cornering. This is subject to normal safety issues being met such as no canvas or steel belts being visible. (**Note:** Racing tyres marked "For Racing Only" or "Not for Highway Use", or words to that effect, including slicks or wets, may **not** be used.)
- Springs, shock absorbers and anti-roll bars may be changed provided they remain road legal and use original chassis mounting points. Adjustable spring platforms and camber adjustment devices may be used.
- Driver's seat may be replaced with a sports type seat.
- Rollover protection is permitted as long as it is not designed to improve chassis rigidity (e.g. by being connected/welded to suspension towers etc.)
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Note: No increase is permitted to the intake system (e.g. to carburettor, throttle body, fuel injection, turbo boost or by modification or replacement of the factory Engine Control Unit.) The factory ECU must be retained unmodified.

Due to the obvious difficulty in determining ECU status at scrutineering, the organisers reserve the right to insist on documented proof that boost and ECU remain standard. This may involve the entrant providing a Statutory Declaration or similar statement from a recognised engine tuner being allowed to compete.

Capacity Classes:

- 0 to 1600cc
- 1601 to 2000cc
- 2001 to 3000cc
- Over 3000cc

Type 3.

Production vehicles as described in Types 1 and 2 above, with further modifications allowed as detailed below. Vehicles must be of a standard basically suitable for registration and must retain full glass and not use (non-standard) lightweight panels. However, at the organiser's discretion replacement bonnets of a decorative nature (e.g. carbonfibre or fibreglass) may be used, but only if full interior trim is retained.

Permitted Modifications:

- Passenger seats, heater, carpet and roof lining may be removed but production interior trim (dash, door trims and window winders etc.) must be retained.
- Intake system is free (including turbo/super charging, multiple carburettors, increased turbo boost, intercooler, computer etc.)
- Wheel and tyre sizes are free but must fit within the guards. Only commercially available treaded road-type tyres are permitted, road legal tread depth is not compulsory. However at the start of competition the original tread must be clearly visible across the face of the tyre, except on the shoulder where excessive wear may occur due to steering and cornering. This is subject to normal safety issues being met such as no canvas or steel belts being visible. (**Note:** Racing tyres marked "For Racing Only" or "Not for Highway Use", or words to that effect, including slicks or wets, may **not** be used.)
- Guards may be **slightly** flared in metal or with add-on fibreglass or rubber flares suitable for registration purposes.
- Engine must be from the original manufacturer and fitted with little or no modification to the firewall (e.g. SR20 in Datsun 1200, 13B turbo in early RX7, Gen 3 in early Commodore.)
Note: The original number of rotors/cylinders must be retained and engine must be in the original location and may not be relocated for purposes of weight distribution.
- Full Roll Cages are permitted (including those welded to suspension towers etc. in order to strengthen chassis.)
- Brakes are free.
- Battery may be relocated.
- Engine Control Unit is free.

Capacity Classes:

- 0 to 1600cc
- 1601 to 2000cc
- 2001 to 3000cc
- Over 3000cc

Type 4.

Production based two wheel drive vehicles, which have been extensively modified beyond suitability for registration (commonly referred to as Sports Sedans.) In addition to Types 1-3 above, the following modifications are permissible.

Permitted Modifications:

- Engine may be from **any** manufacturer but must be a production based item (i.e. specialist “racing only” engines such as F1 Ilmor are not permitted.)
- Firewall may be extensively modified to allow engine fitment.
- Engine may be relocated for weight distribution purposes.
- Racing tyres marked “For Racing Only” or “Not for Highway Use”, or words to that effect, including slicks or wets may be used.
- Guards may be extensively widened/flared to allow fitment of larger wheels/tyres.
- Interior may be stripped and modified.
- Lightweight components, panels and non-glass windows may be used.

Capacity Classes:

- 0 to 1600cc
- 1601 to 2000cc
- 2001 to 3000cc
- Over 3000cc

Type 5.

Open wheel racing vehicles only.

Permitted Modifications:

- Any

Capacity Classes:

- 0 to 750cc
- 751 to 1300cc
- 1301 to 2000cc
- Over 2000cc

Type AWD/SV (with sub-classes Type 1-4

All-Wheel Drive (AWD) production vehicles (e.g. Subaru, Mitsubishi, VW, Nissan, Porsche etc.)
and

Special Vehicle (SV) which includes Kit vehicles (e.g. AC Cobra replica, and other low volume, limited compliance vehicles such as Clubmans.)

Permitted Modifications AWD:

As detailed previously for non AWD vehicles Types 1-4.

Permitted Modifications SV:

As detailed previously for non SV vehicles Types 3-4

Note: No provision has been made for SV vehicles to run as Types 1-2.

Capacity Classes:

- 0 to 1600cc
- 1601 to 2000cc
- 2001 to 3000cc
- Over 3000cc

Type AE

Alternate Energy vehicles, currently limited to electric powered vehicles, including solar powered, with a minimum of 3 wheels.

Hybrid powered vehicles capable of running in **electric mode only** may also compete in this class.

Capacity Classes:

- No separate classes have been defined at this stage.

Note: In addition to the above class rules, multipliers apply to rotary engines and turbo/supercharged engines to calculate effective capacity for classification purposes:

- **Rotaries** have the engine capacity multiplied by 1.8
- **Turbo or supercharged** have the engine capacity multiplied by 1.7
- **Turbo or supercharged rotaries** have the engine capacity multiplied by 1.8, then 1.7 (net multiplier equals 3.06)

Examples:

- 13B rotary is $1308\text{cc} \times 1.8 = 2354.4\text{cc}$
- 13B rotary with a turbo is $1308 \times 1.8 \times 1.7 = 4002.48\text{cc}$
- 2 litre motor with a turbo is $2000\text{cc} \times 1.7 = 3400\text{cc}$