

HILLCLIMB COMPETITION CLASSES -

(To be nominated on entry form)

Type 1.

For stock standard production vehicles, (*Defined by CAMS as mass produced touring cars commercially available to the general public*) with full production trim and standard seats. Includes HSV and FPV style factory vehicles. Vehicles must be either road registered or of an essentially equivalent standard.

Permitted Modifications:

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

Capacity Classes:

- 0 to 1600cc,
- 1601 to 2000cc,
- 2001 to 3000cc and,
- over 3000cc.

Type 2.

For 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.
- Wheels and tyre sizes may be changed, provided they retain commercially available treaded road type tyres and fit within the standard guards with appropriate clearances. The scrutineers will assess acceptable tread depth in accordance with the relevant CAMS NCRs . **(Note:** Racing tyres specifically marked as being illegal or unsafe/unsuitable for road use, such as: “For Racing Only” or “Not for Highway Use”, or words to that effect, including slicks or wets, may not be used). It should be noted that, as at July 2016, Nitto uses a term “*Recommended for competition use only*”. This is not considered by SDMA to be a specific exclusion from road use.
- Springs, shock absorbers and anti-roll bars may be changed provided they remain road legal and use original chassis mounting points. 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 not designed to improve chassis rigidity (eg. By being connected/welded to suspension towers etc).

Notes:

- (i) No increase is permitted to the intake system (e.g. to carburettor, throttle body, fuel injection, intercooler, turbo boost or by modification or replacement of the factory Engine Control Unit). The factory ECU must be retained unmodified.
- (ii) As for Type 1 above, vehicles must be either road registered or of an essentially equivalent standard.
- (iii) Adjustable spring platforms or coilovers may NOT be used.
- (iv) Due to the obvious difficulty in determining ECU status at scrutineering, the organizers reserve the right to insist on documented proof that boost and ECU remain standard. This may involve the entrant providing a Statutory Declaration from a recognized engine tuner before being allowed to compete.

Capacity Classes:

- 0 to 1600cc,
- 1601 to 2000cc,
- 2001 to 3000cc and,
- Over 3000cc.
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Note: For administrative reasons, entries in Types 1 and 2 are usually combined at SDMA competition events.

Type 3.

For production vehicles as described in Types 1 and 2 above, with further modifications allowed as detailed below. Must be of a standard basically suitable for registration, (apart from the permissible modifications specified below). Must retain full glass and must not use (non-standard) lightweight panels. However, at the organiser's discretion, replacement bonnets of a decorative nature (eg carbonfibre or fiberglass) 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 guards. Only commercially available treaded road-type tyres are permitted. The scrutineers will assess acceptable tread depth in accordance with the relevant CAMS NCRs . (**Note:** Racing tyres specifically marked as being illegal or unsafe/unsuitable for road use, such as: "For Racing Only" or "Not for Highway Use", or words to that effect, including slicks or wets, may not be used). It should be noted that, as

at July 2016, Nitto uses a term “*Recommended for competition use only*”. This is not considered by SDMA to be a specific exclusion from road use.

- Guards may be slightly flared in metal or with add-on fiberglass or rubber flares suitable for registration purposes.
- Engine must be from the original manufacturer and fitted with little or no modification to the firewall (eg SR20 in Datsun 1200, 13B turbo in early RX7, Gen3 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.
- Coilovers and adjustable spring platforms are permitted.

Capacity Classes:

- 0 to 1600cc,
- 1601 to 2000cc,
- 2001 to 3000cc and,
- Over 3000cc.

Type 4.

For 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 (ie 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. The engine and transmission layout is free.
- Racing tyres specifically excluded from road use, eg 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.
- Suspension modifications are free.

Capacity Classes:

- 0 to 1600cc,
- 1601 to 2000cc,
- 2001 to 3000cc and,
- Over 3000cc.

Type 5.

For Open Wheel racing cars.

Permitted Modifications:

- Any.

Capacity Classes:

- 0 to 750,
- 751 to 1300cc,
- 1301 to 2000 and,
- Over 2000cc.

Type 6

For Closed Wheel Sports Racing cars, and Group A type Sportscars. (NOTE: This class can include any AWD vehicles deemed unsuitable for Type AWD/SV).

Permitted Modifications:

- Any.

Capacity Classes:

- 0 to 750,
- 751 to 1300cc,
- 1301 to 2000 and,
- Over 2000cc.

Type AWD/SV.

For **All Wheel Drive** (AWD) production cars (eg Subaru, Mitsubishi, VW, Nissan, Porsche etc).

and

Special Vehicles (SV) Kit cars (eg AC Cobra replica, Locost Clubman etc), and other low volume, limited compliance cars (eg PRB/Westfield/Elfin Clubman)

Permitted Modifications:

- Permitted modifications for AWD cars are as detailed earlier in this document for sub-classes (Types 1-4)

- Permitted modifications for SV cars are as detailed earlier in this document for sub-classes (Types 3-4).

NOTES:

- (i) No provision has been made for SV cars to run as Types 1-2.

Capacity Classes:

- 0 to 1600cc,
- 1601 to 2000cc,
- 2001 to 3000cc and,
- Over 3000cc.

Type AE.

For Alternate Energy vehicles. For the introductory year (2010) this class is limited to electric powered vehicles only (this includes solar powered vehicles) Hybrid vehicles running on electric motors only may also compete in this class.

Capacity Classes:

At this stage no capacity/power output classes have been developed.

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

In addition to the forgoing Competition Classifications and Capacity Classes, SDMA reserves the right to reclassify a vehicle and/or to introduce additional classes if it is considered warranted.