

3.10.4 GAS**CLASS DESIGNATION: /G, /GA****CLASS HANDICAP SYSTEM - FULL TREE START****ELIMINATOR:****SUPER STOCK**

Super Stock Eliminator, Gas – Graeme Simms (High Octane Photos)

Class Description;

Cars in Gas are based on stock appearing production cars with almost unlimited chassis modifications including the option for engine setback in some classes. The production body shell must be retained but lightweight panels are permitted. Unlimited engine modifications are permitted in most cases, with Supercharging or Turbocharging allowed in some Gas classes.

Proposed body dimensions for a vehicle competing in this bracket, along with standard dimensions for that model must be forwarded to the ANDRA Head Office by the competitor, before competing, or prior to the issue of, or renewal of the Vehicle Logbook. The onus is on the competitor to supply all relevant body dimensions. Any information found to be incorrect may result in Tribunal Action.

Class Designations;

A/G, A/GA, B/G, B/GA, C/G, C/GA, D/G, D/GA, DD/G, DD/GA, RR/G, RR/GA, E/G, E/GA, F/G, F/GA, G/GA

The suffix A denotes vehicles using OEM planetary transmissions, (refer Definitions, "OEM Planetary Transmission") and torque converters, which will use a different Class Handicap.



Class Details/ Weightbreaks;

Designation	Weightbreak
A/G & A/GA	149.47 kg/litre (5.40 lbs/cube) or more, no power adders, V8 only.
B/G & B/GA	179.92 kg/litre (6.50 lbs/cube) or more, no power adders, V8 only.
C/G & C/GA	207.60 kg/litre (7.50 lbs/cube) or more, no power adders, V8 only.
D/G & D/GA	235.28 kg/litre (8.50 lbs/cube) or more, no power adders, V8 or 6 cylinders only.
DD/G & DD/GA	340.46 kg/litre two valve (12.30 lbs/cube) or more, Supercharged/ Turbocharged or Nitrous Oxide two valve engines or 365.37 kg/litre more than two valves (13.20 lbs/cube) where more than two valves per cylinder are used. Restricted to 6 cylinders or less.
RR/G & RR/GA	340.46 kg/litre (12.30 lbs/cube) or more, Turbocharged Rotary engines only.
E/G & E/GA	262.96 kg/litre (9.50 lbs/cube) or more, no power adders, V8 only.
F/G & F/GA	292.02 kg/litre (10.55 lbs/cube) or more, no power adders. Restricted to V8 or V6 engines fitted with single carburettor of up to four venturis, and non-tunnel ram inlet manifold.
G/GA	179.92 kg/litre (6.50 lbs/cube) or more, no power adders. Restricted to V8 engines using Iron cylinder blocks with a maximum capacity of 410 cubic inches. Tunnel Ram plenum type manifolds not permitted. Minimum weight 997.90 kg (2200 lbs) including driver.

The suffix A denotes vehicles using OEM planetary transmissions (refer Definitions, "OEM Planetary Transmission") and torque converters, which will use a different Class Handicap.

Fuel: All classes restricted to Ethanol, Methanol or Petrol only. Refer Fuel.

Self Starting: Required. Push starts not permitted. Refer Support Group, Self Starting.

Engine: Automobile engine required; however, year, make and model are optional within class limits. Any modifications permitted. No more than one engine permitted.

Engine may be relocated, but not to exceed 10% of the wheelbase as measured from the centreline of rear most front spindle to the centre of the forward most spark plug hole.

Rear engine location permitted, provided the engine used is of the same number of cylinders as the original and fitted in the same location.

Aluminium Alloy Billet, forged or cast engine blocks permitted in AA/G, AA/GA, A/G and A/GA only. Aluminium Alloy (non-billet) engine blocks permitted in all Super Stock Gas classes except G/GA.

Lower Engine Containment Device: Required on all piston engine cars using a Supercharger, Turbocharger or Nitrous Oxide with an ET quicker than 8.999 seconds (1/4 mile) / 5.731 seconds (1/8 mile).

Cylinder Heads: Excepting G/GA, any cylinder head or modification permitted.

For G/GA only, any mass produced OEM Cast Iron cylinder head permitted, or any of the following aftermarket Cast Iron cylinder heads are permitted;

- Chevrolet:** GM Cast Iron Bowtie (all), World Products-Sportsman II 011150, Casting # I-037 and S/R Casting # I-052
- Chrysler:** Mopar Performance - W2 (all)
- Ford:** World Products - 053030, Casting # I-056 and # I-057
World Products - 053040, Casting # I-061

For G/GA only, the following Aluminium cylinder heads are permitted;

- Chevrolet:** Part No 14044861-2 (Casting No 14044861)
Part No 14011076 (Casting No 14011077)
Part No 12363410 (supersedes 14011076-7)
Part No 19331427
Brodix Dragon Slayer DS225 P/N: 1320000
Brodix Race Rite RR200 P/N: 1010002 A (Angle Plug) and 1010003 S (Straight Plug)
- Chrysler/Mopar:** Part No P4529335 (Stage V1), Part No 4349600
Brodix B1 BA 195 P/N: 3180000
Trickflow Specialties P/N: TFS-6141T783-C00
Indy 360-1, Indy 360-2
- Ford:** Part No TFS-A460 or M-6049-B460
Part No M-6049-A429 or M-6049-B429
- Ford Cleveland:** Edelbrock Performer RPM P/N: 61629
Trickflow Specialties P/N: TFS-51616203-C00
- Ford Windsor:** Air Flow Research P/N:1492 or 1422
Brodix IKF P/N: 1501000
Edelbrock Performer RPM P/N: 60259
- Holden:** Edelbrock Performer RPM P/N: 61379
Speedmaster P/N: SM 3072

◇ **NOTE: Any cylinder heads not listed may be submitted to ANDRA for approval.**

For G/GA angle milling of cylinder heads permitted. All permitted cylinder heads must have a standard port configuration and valve angle ('configuration' includes valve stem angle and port arrangement).

Inlet and exhaust ports may be enlarged, but no material (metallic or otherwise) may be added to the casting inside the ports or combustion chamber, except in the case of genuine repairs where material may be added with the only purpose to replace the original metal.

Details of all genuine repairs must be submitted to technical@andra.com.au for approval prior to commencement of the repair. Details must include clear images of the type of damage and the intended repair method. Images of the final repaired cylinder head must also be provided to demonstrate that the repair has not significantly altered the configuration of the cylinder heads for purposes of increasing performance. Genuine repairs are defined as a repair for the intent of maintaining original design specifications, and must be localised to the specific area of the fault. Replacement of valve guides and seats is permitted.

Sealing agent, gasket or any other material must not protrude, into any inlet or exhaust port past the original face.

Exhaust flange adaptor plates may be fitted to the original exhaust faces, but no part of the adaptor, header flange, flange gasket, or exhaust may protrude in to the port past its original outside face.

Exhaust: Open exhaust, split manifolds, and/or individual headers permitted, but each individual pipe must be permanently and securely attached to each other with a metal connecting strap to prevent loss.

All outlets must terminate below sill panel level, directing gasses upwards, or to the rear.

Fuel System: Accessory fuel tanks permitted.

Ignition: Any ignition may be used.

Induction System: Excepting F/G, F/GA, G/GA and all Supercharged/Turbocharged classes, any carburettor, mechanical or electronic fuel injection system permitted.

Competitors using EFI must use ANDRA approved/ nominated ECU software. Supercharged/ Turbocharged classes limited to carburettor or mechanical fuel injection.

G/GA limited to mass produced cast inlet manifold, which must be cast in a single piece with only machining of faces, internal porting and welded repairs of minor damage permitted. Tunnel Ram plenum type manifolds not permitted.

One four venturi, 750 cfm Holley carburettor, List No. 0-3310(s)/2 - /7 (Petrol), 0-4779(s) (Petrol), or 0-9645(s) (Methanol).

An "S" suffix after the part number, denoting the finish of the unit will be accepted.

Use of earlier carburettors with list numbers other than those noted may be approved by ANDRA.

Fuel bowl extensions permitted.

Standard choke body, base plate and venturi diameters must be retained along with throttle shafts, blades and screws.

Blending or reshaping of the venturi is not permitted. Annular boosters are not permitted.

G/Gas will also be permitted to use following approved 0-3310 direct replacement carburettors;

Quick Fuel SSR-780-AU-M and SSR-780-AU-V.

Superchargers: The following overdrive limits will apply;

- Standard Rootes 14/71 - .00322 x cubic inches, 50% maximum.
- High helix Rootes 16/71 - .00285 x cubic inches, 33% maximum.
- High helix Rootes 14/71 - .00300 x cubic inches, 40% maximum.
- Screw type with rotor diameter 215.9 mm (8.5 inch) or less manufactured after 31st December 1994 - .00369 x cubic inches, 72% maximum.
- Screw type with rotor diameter 215.9 mm (8.5 inch) or less manufactured prior to 31st December 1994 - 00408 x cubic inches, 90% maximum.
- Screw type with rotor diameter greater than 215.9 mm (8.5 inch) - .00261 x cubic inches, 22 % maximum.

◊ **The rounding up of overdrive calculations will not be permitted.**

Electronic Management: Electronic gear shifting devices permitted.

Delay Devices: Not permitted.

Upholstery/ Seats: Upholstered driver's seat required. Other trim may be removed, apart from door trims which may be replaced with metal.

Driver Position: The driver shall be in the standard position or to a maximum of the following.

On vehicles over 100 inches (2540 mm) wheelbase the driver may be no closer than 22 inches (559 mm) to the rear axle centreline, measured from the point at which the shoulder harness passes through the backrest.

On vehicles 100 inches (2540 mm) or less wheelbase this measurement shall be 18 inches (457 mm).

Left or right hand drive permitted.

Windshield and Windows: Must be in good condition and may be fully operative. All non-operative windows must be permanently closed.

Polycarbonate of a minimum of 3.0 mm (1/8 inch) thickness may be used in any window to replace original glass.

Other than factory tint, front windscreens must be clear on all vehicles.

Bonnet: Required on all cars in this class. Side panels may be omitted. Injector tubes and Supercharger air scoops may extend through the bonnet.

Bonnet Scoops: Permitted. Refer Body, Bonnet Scoops.

Frame: Frame from radiator to rear of car may be replaced. Any properly reinforced frame accepted. Additional members may be added for strength and/or rollcage installation.

Body: Must be a production car body with dimensions within 25 mm (1 inch) of the manufacturer's specifications except where otherwise stated in these rules.

Chopped tops or body sectioning not permitted, these body dimensions must remain standard. Convertibles, Panel Vans, Utilities (Utes) and Sports Cars may compete.

All competitors utilising a Utility (Ute) type body configuration must ensure that the tailgate remains closed during competition.

Original Steel body shell must be used, and must be permanently attached to frame/ chassis.

Eligible vehicles produced by the factory with OEM composite turrets, bearing the original factory part number may compete; onus of proof is on the competitor.

Fenders may be cut to accommodate tyres.

All cars in this Eliminator must have at least two door with operative mechanical door handles accessible from inside and outside, that permit exit and entry from either side.

On cars that are allowed a 2 inch (50 mm) wheelbase relocation (refer Wheelbase), the body may be lengthened the same amount in the cowl area.

Cars originally FWD that have any axle relocation (refer Wheelbase), may extend the body the same amount from the windshield forward.

Otherwise original profiles must be maintained, and apart from modifications permitted by these Class Regulations vehicles must maintain a stock appearance.

An allowance is made for vehicles to update front clips etc to the next model vehicle of the same model group (eg: VK with VL front, XD with XF front), if this is done the vehicle will be classified as the updated model.

Factory fitted front spoilers for that model and aftermarket front spoilers that do not detract from stock appearance permitted.

Body styles originally fitted with four wheel drive will be considered as front wheel drive.

Front overhang must not exceed 25 mm (1 inch) longer than standard.

Bumpers: Stock front and rear bumpers with over-riders or exact replicas in fibreglass or composite material, with proper bracing are required.

Fenders: Must have four stock production type automobile fenders. Exact duplicates of bolt-on stock fenders made of fibreglass or composite material are permitted.

Rear fenders may be altered for clearance to permit the use of slicks. Where rear axle is relocated, relocation of the front wheel arches is permitted.

Floor: Refer Body, Floors.

Radiator and Grille: Radiator optional. Grilles are required, and may be painted, where the result is an exact reproduction of the original fitting, in both size and appearance.

Airfoils: Single, fixed rear airfoils are permitted on power added vehicles. The airfoil must be securely mounted, and may be no wider than the widest part of the vehicle body.

No part of the airfoil may be higher than the highest point of the roof or extend more than 6 inches (152 mm) behind the rear most part of the body, not including bumpers or parachute packs. Maximum surface area of 5484 cm² (850 sq inch).

One spill plate permitted on each side to a maximum area of 774 cm² (120 sq inch). Vehicles originally fitted with airfoils, may use the OEM airfoil in the original location, subject to approval by ANDRA.

Aerodynamic devices developed for other motor sport uses will not be considered OEM.

Spoilers: Factory fitted aerodynamic devices for the body used, fitted in the original location are acceptable.

Fabricated rear spoilers to be no longer than 355 mm (14 inches), measured from the body line to spoiler transition point to the tip and must not be moulded into the rear deck lid.

Must be painted to match paint scheme.

Must be no lower than horizontal. Maximum overall height of spill plates is 152 mm (6 inches), attached so that a maximum of 25 mm (1 inch) extends above the top of the spoiler.

Roof mounted spoilers prohibited. Air foils prohibited. Any adjustment or movement during a run is prohibited.

Street Equipment: Optional.

Headlights must be original size and in original location but need not be operative.

A minimum of one operative tail light required.

Painted on or adhesive stickers (simulated) headlights are permitted.

Night Lighting: Required.

Ballast: Permitted.

Rear Axle: Spools permitted. FWD cars may be converted to RWD. Four wheel drive not permitted.

All power added Sedans quicker 7.500 seconds (1/4 mile) / 4.777 seconds (1/8 mile) are required to use fully floating rear hubs.

Wheelbase: RWD cars with wheelbase less than 105 inches (2667 mm) may move front wheels forward up to 2 inches (50 mm) for engine installation (refer Body).

FWD vehicles may move front wheels a maximum of 100 mm (4 inches) forward for engine installation (refer Body).

Rear axle may be moved forward up to 100 mm (4 inches) from the standard location to facilitate tyre clearance.

Maximum variation left to right is 25 mm (1 inch).

Wheelbases on all vehicles must be within 50 mm (2 inch) of standard regardless of changes.

Cars with a wheelbase between 79 inches (2006 mm) and 89 inches (2260 mm) are restricted to a maximum of power added sixes or fours up to 250 cubic inch (4096cc) capacity, or single four barrel V8s up to 310 cubic inches (5079cc), and such cars must have a 4 or 6 point rollcage and wheelie bars.

There are no restrictions on vehicles above 89 inches (2260 mm) wheelbase.

Clutch: Multi-Stage/ Lock-Up clutches prohibited.

Clutch must be manually operated by the driver's foot.

Electronics, pneumatics, hydraulics or any other device may in no way affect the clutch system, and the throwout bearing must release all fingers, levers or stages simultaneously.

Staged or variable release clutches of any description prohibited.

Flywheel: Refer Drivetrain, Flywheel.

Transmission: Aftermarket or OEM automobile transmissions of any year, make, model or ratio are required in all classes.

Transmission must remain in conventional location determined by engine used.

Clutchless transmissions up to five forward speeds in all Gas classes permitted to use manual transmissions.

Automatic transmissions using a clutch in place of the torque converter are acceptable in manual classes.

All automatic classes limited to automotive based OEM planetary transmission of up to three speeds using a torque converter.

Wheels/Tyres: Fenders may be cut to accommodate tyres.

Rear track width can be no greater than half of the tyre protruding past a 2 inch (50 mm) flared guard.

Brakes: Four wheel hydraulic brakes required as a minimum.

Suspension: Each car must have suspension front and rear and be equipped with at least one effective shock absorber per wheel.

Excessive lightening of suspensions and steering parts by cutting or machining is prohibited.

Raising or lowering permitted.

Traction Bars: Traction bars if used may not be longer in overall length than one half (1/2) of the wheelbase of the car on which they are installed, and no portion of them may extend lower than the level of the lower edge of the rear wheel rim.

Parachute: Compulsory on all vehicles exceeding 140 mph (224 kph). Dual parachutes with separate shroud line attachments mandatory on vehicles exceeding 200 mph (320 kph).

Rollcage/ Bar: Required. Refer Rollcage.

Racing Harness/ Belts: Required. Refer Driver and Rider Protection, Seat Belts/ Harnesses.

Licence Requirement: Group 2 UDL as a minimum.

Technical Inspection and Vehicle Logbook: Required.