ASSOCIATION OF AUTHORISING BODIES

NATIONAL AUTOGRASS SPORT ASSOCIATION LTD.

RULES & REGULATIONS

2024 EDITION

CLASS 8

"The Association reserve the right to alter/amend the Rule Book as required, and that the Association has the right to review and amend any Class or Construction Rules at the end of each racing year."

VALID FROM JANUARY 2024
UNTIL FURTHER NOTICE

ALL PREVIOUS EDITIONS ARE INVALID

NEW REGULATIONS ARE MARKED #

IT IS THE RESPONSIBILITY OF THE DRIVER/CONSTRUCTOR TO ENSURE THAT ALL VEHICLES CONFORM FULLY TO THE REGULATIONS AND RULES CONTAINED WITHIN THIS RULEBOOK.

IF THE REGULATIONS AND RULES DO NOT STATE THAT "YOU CAN DO IT" THEN IT MUST BE PRESUMED THAT IT CANNOT BE DONE.

CLASS 8 SPECIAL

Version A4
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FOR GENERAL BASIC CONSTRUCTION RULES (i.e., Basic requirements for all class of "Special" vehicle).
SEE SEPARATE RULE BOOK –SPECIALS - GENERAL

CLASS 8

INDEX PAGE

CLASS 8 SPECIAL.

A single seat-racing rear wheel drive vehicle with a single engine of a maximum cubic capacity of 1420cc.
Constructed in accordance with NASA specified construction regulations for Autograss Racing on an unsealed surface only.

1 **STATEMENT of CONFORMITY.**
Only methods of construction and modifications as listed are permitted. Any further modifications, other than those permitted, are prohibited. Any modifications other than those listed within the Vehicle Construction Rules are specifically excluded.
i.e., If the rules do not "say" that a modification is permitted then it is not allowed.

2. GENERAL – As Specials - General.

3. TECHNICAL NOTES – As Specials - General.

4. ENGINE

4.1 A single normally aspirated engine must be used.
The engine shall be of the type as permitted.
The use of any form of Forced Induction, including Turbochargers, and/or Superchargers is prohibited.
Nitrous Oxide (N2O) Injection is not permitted.

Permitted Engine & Transmission Type, Use & Modification – Restricted.
The engine must be sourced from a NASA permitted "Car" or "Motorbike" must be used (See definitions).
The engine must have a cubic capacity of between the following limits:
Minimum cubic capacity = Free.
Maximum cubic capacity "Car engine" = 1420cc.
Maximum cubic capacity "Motorbike engine" = 1350cc.
It is the Competitors and/or race vehicle constructor's responsibility to contact a Scrutineer to confirm that the engine concerned is eligible before using it in the vehicle.

Prohibited Engines. - See Check Sheet.

4.2 Engine Materials. - Free.

4.3 Cylinder- Head Ports & Valves Modification.
Modifications to cylinder head including valves and ports free.

4.4 Pistons, conrod, crankshaft & flywheel.
Modifications to and type of pistons, con-rods, crankshaft & flywheel free.

4.5 Engine Identification**.**
The original engine manufacturer's engine identification numbers must remain and be legible.

5 ENGINE SEALING & CAPACITY LABELLING.

5.1 Engine Sealing.
The engine must have available at all times provision for the fitting of at least one readily accessible scrutineers wire seal/tag, such that the fitting of the wire seal/tag prevents access to internal engine components.

5.2. Capacity Labelling.
The engine must be fitted with a readily accessible, legible and securely fixed scrutineering "Bore & Stroke & cc Label".
The label shall be permanently marked or stamped with the piston bore size and crankshaft stroke size in millimetres and the engine cubic capacity (cc).

6 ENGINE LOCATION – As Specials – General.

7 TRANSMISSION.

7.1 Gearbox/Transmission. - Free.

7.2 Gear Lever.
A single gear lever or operating device must be fitted to control the operation of the transmission system 'gear change' mechanism for the engine.

7.3 Clutch Type & Operation – Restricted.
Clutch Type – Free.
A single clutch pedal or engagement lever must be fitted to control the operation of the 'clutch mechanism or engaging' drives to the transmission system mechanism from the engine.

7.4 Drive.
Drive must be effected by the two rear wheels only.

7.5 Drive Shafts. - Type free.

7.6 Wheel Hubs.
Material – Must be metal.
Type free.

7.7 Differential Type. - Free.

8 VEHICLE DIMENSIONS AND WEIGHT.

8.1. Wheelbase – Restricted.
Minimum = 1750mm. (1.75mtrs).

8.2 Vehicle Weight – Restricted.
The total weight of the complete vehicle excluding driver at any time is free.

N.B. NASA is considering that a future introduction of a minimum weight limit for Class 8 be introduced.

8.3 Vehicle ride height.
The vehicle ride height is free.

9 STEERING.

9.1 Steering Wheel.
A full circumference steering wheel must be used. It must have a minimum diameter = Free.
Note.
It is the driver's responsibility to ensure that the steering wheel is secure at all times. Steering wheels may be subject to random spot checks of steering wheel fixings whilst on the starting line.

9.2 Steering Wheel Mounted Controls. - Restricted
Steering wheel mounted controls permitted. However they must not impede, entangle, unlock, unfasten, disengage nor prevent the correct reach and or access to and or operation of any safety harness or other driver operated vehicle controls (e.g. Steering. Ignition switch. Cut off switch. etc.).

10 CHASSIS & ROLL CAGE – As Specials - General.

11 CHASSIS PANELS – As Specials - General.

12 SAFETY SHIELDS & GUARDS – As Specials - General.

13 PROTECTION – As Specials - General.

14 SUSPENSION.

14.1 Front Suspension - Type Restricted.
Suspension components must be of metal.
"Inboard" suspension is permitted.
Other types and modifications free.

14.2 Rear Suspension - Type Restricted.
Suspension components must be of metal.
"Inboard" suspension is permitted.
Other types and modifications free.

16 SAFETY HARNESS – As Specials - General.

15 WINDSCREEN/GLASS – As Specials - General.

16 SAFETY HARNESS - As Specials - General.

17 SEAT - As Specials - General.

18 FIRE EXTINGUISHER - As Specials - General.

19 VEHICLE IDENTIFICATION - As Specials - General.

20 ELECTRICAL / INSTRUMENTS.

20.1 Battery Size and number off – Restricted.
Type and capacity of electrical battery free. The use of 2 x 12-volt batteries for 24 volts starting permitted.
The fitting of multiple or extra-large batteries and/or large and or high thickness battery containers may be construed as ballast (For enclosure type see Specials - General 1 Rule 20.6).

20.2 Electrical Battery location.
As Specials General Rule 20.6.

Nose Cone.
The fitting of an electrical battery enclosure/box/container within the nose cone is permitted subject to type of nose cone construction. See Specials - General Rule 10.15.

20.3 Instrumentation & Gauges.
Instrumentation and gauges free.

21 FUEL.

21.1 Carburetion and or Fuel Injection permitted.
Type and capacity free.
Note.
Where carburettors and or injection systems do not have positive fixings to attach them to a manifold or engine (i.e., nuts/bolts), then a steel wire tether must be fitted to retain them in the event of an accident or roll over.

21.2 Fuel pump and regulator type and capacity free.

21.3 Fuel filter type, number and capacity free.

21.4 Fuel Tank - Nose Cone.
The fitting of a fuel tank within the nose cone is not permitted.

22 COOLING SYSTEMS

22.1 Radiators & Coolers.
Number and type free.

22.2 Water Radiators and expansion/header tanks and Oil radiator's location – Restricted.
Water Radiators and expansion/header tanks and Oil radiators and tanks must be positioned to the rear of the rear roll cage uprights and be below the top face of the rear brace bars and be within the shaded area shown on Specials - General Fig.18.
i. Water Radiators must have radiator protection bars fitted.
ii. Oil radiators and tanks depending upon their location may be required to have protection bars fitted.
See PROTECTION – Rules 22.8 & 22.9.

22.3 Oil Sump.
Modifications to the engine oil sump free.

22.4 Oil Pump.
Type and modification – Free.

23 BRAKES.

23.1 Front Brakes.
Type is Free.

23.2 Rear Brakes.
Type is Free.
A brake calliper may be fitted such that it is either "Inboard" or "Outboard".
Note.
The nearside and offside brake device must not be on the same side of the axle "Drive box" or "Differential" or centreline.
See Fig. 32.

23.3 Handbrake/Start line braking handbrake
As Specials General – Rule 23.5.

23.4 Brake proportioning - Restricted.
As Specials General – Rules 23.1 & 23.7.

24 WHEELS.

24.1 Type.
Type and width of road wheel is free.

24.2 Diameter – Restricted.
Maximum permitted wheel diameter is 17".

24.3 Wheel Offset/Inset.
Free.

24.4 Modification – Restricted.
Modification of a proprietary manufactured wheel other than machining to suit "Beadlock" conversion is prohibited.

24.5 Beadlock Wheels.
Beadlock type wheels may be used but the "Beadlock rim" fixing bolts must have either "Button head" or "Countersunk head" bolts only. Hexagon head "Beadlock rim" fixing bolts prohibited. The fixings must not protrude beyond the wheel rim. All "Beadlock rim" fixing bolts must be present and correctly fitted.

24.6 Wheel Spacers
The fitting of wheel spacers is permitted.
Wheel spacers must be fit for purpose. The use of over large or excessively sized spacers prohibited.

25 TYRES.

25.1 Tyre Size (All Axles) – Restricted.
Maximum size – 225/70 x 17.

26 EXHAUST & SILENCING.

26.1 Exhaust systems are free.

27 BALLAST.

27.1 The use of specified “Ballast” is permitted.
Ballast must be as specified. Other forms of “Ballast” are prohibited.

Ballast Location – Restricted.
Ballast must be located centrally, between nearside and offside chassis floor limits, at the non-drive part of the vehicle.
It must be fitted at either and/or both of the following permitted locations:
i. Adjacent to the vehicle front between the foot pedals and most forward part of the chassis.
ii. Adjacent to the driver’s seat – either beneath the seat and/or rear of the driver’s seat,

27.2 Ballast shall be constructed of steel and be in “Plate” form to the following dimensions.
Overall size limit maximum = 200mm L x 150mm W x 75mm Total Thickness.
Ballast may be removable and or adjustable.

Adjustment shall be by means of the use of individual steel plates.
The maximum thickness of any individual plate is 10mm thickness. i.e. the number of individual ballast plates is free subject to the maximum total overall thickness of 75mm.
Maximum weight of ballast = 15 Kg.

27.3 Ballast Fixing/Mounting
The ballast must be fixed to a ballast mounting base plate and be held down by a ballast top plate.
The ballast mounting base plate and ballast top plate must be constructed of steel and be 200mm L x 150mm W with a minimum thickness of 10mm and a maximum of 14mm thickness.

The ballast mounting plate must be fixed (Bolted/welded) to the vehicle chassis. It is not permitted to be fixed to vehicle floor or panelling/bodyshell.
If bolted then a minimum of 4 No 10mm Diameter HTS (Minimum grade 8.8) must be used. If welded there shall be a minimum of 4 x 25mm stitch welds.

The individual ballast plates must be fixed to the mounting base plate and held in place by a ballast top plate by means of a minimum of 2 No. 12mm Dia HTS (Minimum grade 8.8) bolts & full nuts (Type - Plain with spring washer or Nyloc). A minimum of 10mm thread must protrude from the top of the Ballast top plate at all times. See Specials General Fig. 34.

28 CHECK SHEETS.

PERMITTED AND PROHIBITED ENGINES.
The lists of permitted and prohibited engines are not fixed.
NASA reserves the right via an appointed Official and or Scrutineer to permit, reject and or prohibit an engine as being suitable or unsuitable for Class 8 Autograss racing at any time.
It is the Competitors and/or race vehicle constructor’s responsibility to contact a Scrutineer to confirm that the engine concerned is eligible before using it in the vehicle.

Permitted Engines.
Those that comply with NASA “Engine” Definition and class cc limit.
“Car” engine.
“Motorbike/cycle” engine.

Prohibited Engines.
Rotary Engine.
“Motorbike/cycle conjoined” engine. e.g., “RPE” or “Powertec” or similar V4, V6 or V8).
“Motorbike/cycle” engine and or “Motorbike/cycle conjoined” engine fitted with forced induction.
Any engine fitted with a form of forced induction.
Any engine fitted with Nitrous Oxide (N2O) Injection

FIGURES.

All as SPECIAL - GENERAL.

Additional Figures applicable to class 8:-

FIGURE 31a – ENGINE SEALING.

See Figures 31a - SPECIALS - GENERAL.

FIGURE 31b – ENGINE SEALING.

See Figures 31b - SPECIALS - GENERAL.

The construction rules in this book are intended for use by Autograss cars taking part in Autograss events as defined by the NATIONAL AUTOGRASS SPORT ASSOCIATION on a natural surface and are not necessarily considered safe for other forms of motor sport.

Drivers are advised that if they intend using their cars at events, other than events as defined by the NATIONAL AUTOGRASS SPORT ASSOCIATION They should ensure that their cars comply with the organiser's construction rules.