

# **SPORTSRACING PROTOTYPE REGULATIONS**

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## SECTION 1 - DEFINITIONS

- 1-1 **SportsRacing Prototype** - Two seater, open automobile constructed especially for speed races.
- 1-2 **Automobile** - Land vehicle running on four non-aligned complete wheels, of which the front two are used for steering and the rear two used for propulsion.
- 1-3 **Land Vehicle** - Locomotive device propelled by its own motive power constantly taking real support from the ground surface with propulsion and steering controlled by the driver on board the vehicle.
- 1-4 **Bodywork** - All those parts of the car which are wholly sprung, in contact with the external air stream, excepting those parts clearly associated with the mechanical function for the engine, the transmission or the running gear. All air intakes shall be considered part of the bodywork.
- 1-5 **Event** - An event shall consist of the official practice, qualifying and the race itself.
- 1-6 **Weight** - Is the weight of the car without the driver and fuel at all times during the event.
- 1-7 **Wheel** - Flange and rim. Complete Wheel. Flange, rim and tire.
- 1-8 **Door** - That part of the bodywork that opens to give access to the driver and passenger compartment.
- 1-9 **Cockpit** - The volume which accommodates the driver and passenger.
- 1-10 **Engine** - Assembly constituted by the cylinder block, cylinders and cylinder heads.
- 1-11 **Cylinder Capacity** - The volume swept by the movement of the pistons inside the cylinders of the engine. In calculations the value of  $n$  is held to be 0.7854.
- 1-12 **Supercharging/Turbo Charging** - Increasing the weight of the fuel/air mixture in the combustion chamber (over the weight induced by normal atmospheric pressure, ram effect and dynamic effects in the induction and/or exhaust system) by any means whatsoever. The injection of fuel under pressure is not considered supercharging.
- 1-13 **Main Structure** - This is the fully sprung part of the structure to which the suspension and/or spring loads are transmitted extending longitudinally from the

foremost front suspension mounting on the chassis to the rearmost rear mounting.

- 1-14 Mechanical Elements** - Elements necessary for propulsion, suspension, steering and braking, together with all the accessories, moving or not, which are necessary for the normal function of the above.
- 1-15 Sprung Suspension** - The means whereby all complete wheels are suspended from the body/chassis by a spring medium.
- 1-16 Telemetry** - The transmission of data between a moving car and anyone connected with the entry of the car.
- 1-17 Semi-Automatic Gearbox** - One which, when the driver calls for a gear change, takes over the control of one or more of the engine, clutch and gear selectors momentarily to enable the gear to be changed.

## **SECTION 2 - REGULATIONS**

- 2-1 Role of the Grand American Road Racing Association** - The following technical regulations are issued by Grand American Road Racing Association.
- 2-2 Permitted Modifications** - All modifications not allowed by these regulations are expressly forbidden.
- 2-3 Vehicle Eligibility** - An eligible vehicle must comply with all of the following technical regulations.
- 2-4 Eligible Engines** – Engines must comply with Section 5.
- 2-5 Regulations & Amendments** - Each year Grand American Road Racing Association will publish changes made to these regulations. All such changes will take effect on the 1st of January following their publication.

Changes made for safety reasons may be introduced immediately by written notice.

- 2-6 Compliance with the Regulations** - It is the duty of each competitor to satisfy the Grand-Am officials that his automobile complies with these regulations in their entirety at all times during an event. Any effort to take advantage of a “loop hole” in these rules will not be tolerated. Any modification and/or components not defined in these rules are not permitted. A car’s construction of which is deemed to be dangerous, will be excluded.
- 2-7 Measurements** - Measurements must be made while the car is stationary on a flat horizontal surface or as provided by the Grand-Am regulations.

**2-8 Electronic System** - Any automatic or electronic chassis control system or function is prohibited. This includes anti-lock brakes, traction control, automatic or semi-automatic transmissions, power actuated clutches, electronically or automatically adjusted final drive differential systems, damper suspension or ride height adjustment, power braking, four wheel steering, moveable ballast. Semi-automatic or automatic gearboxes and differentials with electronic, pneumatic or hydraulic slip control are prohibited. A simple open-loop electronic switch, operated by the driver acting on the electrical system of the engine is not considered an electronic control.

**2-9 New Technology** - Technology, materials, systems or allied technology that are not in current use or accepted technology will not be accepted without authorization of Grand American Road Racing Association.

### **NOTICE**

All model, engine or equipment changes or modifications not governed by Grand-Am must be submitted for consideration of approval, not less than 45 days prior to the date of intended usage in Grand-Am Competition: The applicant will be notified of approval or rejection no less than 15 days before the date of intended use. Equipment will not be considered as having been approved by reason of having passed through inspection unobserved. Any equipment which does not conform to specifications or tolerances contained in the Grand-Am rulebook, will not be eligible for approval during 2001.

## **SECTION 3 - BODYWORK AND DIMENSIONS**

### **3-1 Chassis and Bodywork Dimensions -**

- A. The overall length of the car must not exceed 183 inches.
- B. The overall width of the car including complete wheels shall not exceed 79 inches, when front wheels are in the straight-ahead position.
- C. The overall height of the car measured vertically from the reference plane defined in Section 3-5 to the highest part of the car, excluding the rollover structure shall not exceed 38 inches.
- D. The minimum height of the rollover structure from the reference plane defined in Section 3-5 shall be 40.157 inches at the main hoop and 25.984 inches at the front hoop.

### **3-2 Overhangs & Wheelbase -**

- A. Front, plus rear overhangs must not exceed 80% of the wheelbase. The difference between the front and rear overhangs must not exceed 15% of the wheelbase.
- B. Maximum front and rear overhang is 39.370 inches.
- C. Minimum wheelbase is 107.874 inches, except Kudzu DLM and DLY at 105 inches.

**3-3 Doors** - Doors are optional.

**3-4 Windshield** - A transparent windshield is optional. Where fitted must be Lexan.

**3-5 Bodywork & Materials -**

- A. The bodywork shall cover all the mechanical elements when viewed from above, see Section 11-2.
- B. Between the front and rear wheel centerlines the bottom of the chassis shall be flat, continuous, rigid, lie on one plane and form an integral part of the chassis/body unit. Except for the rear trailing edge, which must remain flat, the sides may be curved up to the bodywork with a maximum 5-cm radius. Reference plane is the underside of the flat bottom.
- C. Air flow between the bodywork and the flat floor can only be used for cooling.
- D. At the sides the flat bottom may not exceed a longitudinal plane extending through the wheel outer edge.
- E. No openings are permitted in the flat floor except for maintenance panels, clearance for suspension arm travel and air jacks.
- F. No sprung part of the car is permitted below the reference plane.
- G. Material free, except in Section 14.
- H. Any part having an aerodynamic effect, and all parts of the bodywork must be rigidly secured to the entirely sprung part of the car (chassis/body unit), must have no freedom of movement, must be solidly fixed and must remain immobile in relation to this part while the car is in motion.
- I. Any device or contrivance designed to bridge the gap between the sprung part of the car and the ground is prohibited.
- J. Behind the rear wheels the bodywork must descend to the rear axle centerline.
- K. Air extractors (louvers) are permitted:
  - 1. On the rear valance above the axle centerline provided that they do not protrude more than 0.7874 of an inch (20mm) above the bodywork and that no mechanical part or parts of the complete wheel is seen when viewed from the rear.
  - 2. Mandatory on bodywork above each front wheel minimum opening size 25 square inches and they may not protrude more than 0.7874 of an inch (20mm) above the surrounding surface.
  - 3. Either side, wheel arch vents, shall not protrude beyond the perimeter of the car and is contained below a horizontal plane between the two wheel centerlines at any static ride height as viewed from the side.
- L. Air intakes. The only permitted function is for cooling air to the radiators, water or oil, brakes, suspension, engine/compartments, or cockpit ventilation. They must not protrude beyond the perimeter of the car when viewed from above.
- M. Viewed from the side the wheel arches must remain open.

## SECTION 4 - WEIGHT

- 4-1 Minimum Weight** - must not be less than 1985 pounds race ready less fuel and driver except, 275 Cubic Inch Displacement V-6 stock block, 2-valve push rod engine, and a 3 rotor Mazda which may weigh 1700 pounds, a 4 rotor Mazda may weigh 1750 pounds.
- A. The right is reserved by Grand-Am to adjust minimum weights.
- 4-2** Ballast is permitted and must be a solid mass painted white and requiring tools to secure. Mounting bolts must be drilled to enable the fitting of seals.
- 4-3** It is prohibited to add or remove any solid mass or exchange a lighter element during the race.
- 4-4** The weight may be checked at any time during an Event.

## SECTION 5 - ENGINE

- 5-1 Grand-Am SportsRacing Prototype** -
- A. Normally aspirated - maximum capacity 366 cubic inches.
- B. Rotary engines - 3 or 4 rotor.
- C. Turbocharged engines – Maximum capacity 244.5 Cubic Inches.
- D. Titanium is prohibited unless used in the base production engine, except it is permitted for connecting rods, valves, valve retainers and heatshields.
- E. All engines must have visible serial number (duplicate numbered engine will result in a \$10, 000 fine to entrant).
- 5-2 Engine Modifications** – Variable valve timing, variable inlet systems and/or variable exhaust systems are prohibited. Only a direct mechanical linkage between the throttle pedal and the engine is permitted. The use of any ceramic components is prohibited.
- A. Engines are free respecting always Section 5-1 and Section 5-2.
- B. Internal and/or external spraying or injection of water or any substance whatsoever for the purpose of assisting combustion is forbidden (other than fuel for the normal purpose of combustion in the engine).
- 5-3 Normally Aspirated Engines** - The engine air intake system(s) must be complete with an air box with airtight joints, **fitted with two restrictors**. The restrictors must be made of metal with a minimum width of 0.118-inch (3 mm) over the maximum diameter.
- A. All air feeding the engine must pass through the restrictors. No holes or vents in air box allowed.
- B. The right to adjust the restrictor size, is reserved by Grand-Am.
- C. The right to adjust the maximum permitted rpm limits is reserved by Grand-Am.

**5-4 Turbocharged Engines** - The turbocharger(s) must be fitted with metal restrictor(s) 0.118 inch (3mm) long with maximum diameter as detailed in Section 20.

- A. Between the restrictor and the charging device a straight airtight diffuser cone must be fitted with 7° of opening minimum, or comply with FIA drawing 254-4.
- B. All air feeding the engine must pass through these restrictors.
- C. Variable diameter inlets, adjustable internal vanes and ceramic components on turbochargers are prohibited.
- D. Cars must not be equipped with any device which allows the boost pressure, or the electronic management system controlling boost pressure, to be adjusted from within the cockpit.
- E. Boost pressure as detailed in Section 20. May be monitored throughout an event, by equipment fitted to the cars. All competitors must install on their cars all monitoring equipment as required by Grand-Am
- F. The right is reserved by Grand-Am to adjust the restrictor size and boost pressure.

**5-5 Charge Temperature** –

- A. Internal and/or external spraying or injection of water or any substance whatsoever is forbidden (other than fuel for the normal purpose of combustion in the engine).
- B. Apart from the intercoolers, any device, system, procedure, construction or design the purpose and/or effect of which is any decrease whatsoever of the temperature of the intake air and/or of the charges (air and/or fuel) of the engine is forbidden. Apart from pipes feeding an air/water heat exchanger, the pipes between the supercharging device, the intercooler and the manifold are free, but their only function must be to channel air.

**5-6 Cooling** - The cooling system is free. No pipes containing coolant may pass through the cockpit.

**5-7 Exhaust** - the exhaust is free except:

- A. Exhaust gases may only exit at the end of the system, which must be at the rear of the car, except for as in 5-7 D.
- B. Exhaust system must remain within the perimeter of the bodywork when viewed from above.
- C. The noise generated by the car must not exceed 110 dba.
- D. Cars with engines forward of the driver, the exhaust may exit the bodywork in front of the rear wheels and below a line five (5) inches above the bottom of the car.

**5-8 Telemetry** - The use of Grand-Am approved telemetry is allowed in the SRP class only (not allowed in SRP II). Data may not be broadcast on frequency 902 to 910.

## SECTION 6 - FUEL PUMPS, TANKS AND LINES

**6-1** The fuel system is free except:

**6-2 Fuel Cell and Foam -**

- A. No part of the fuel tank(s) is allowed more than 26.750 inches from the longitudinal centerline or, outside the area between the front and rear wheel centerlines, of the car. The fuel cells must be separated from the cockpit and the engine compartment by means of a firewall.
- B. Fuel cell must be commercially manufactured and meet FIA Spec. FT3.
- C. All rubber bladders shall have a printed code indicating the name of the manufacturer, the specifications to which the tank has been manufactured and the date of manufacture.
- D. No fuel cell can be used more than five years after date of manufacture, unless inspected and re-certified by the manufacturer for a period of up to another two years.

**6-3 Fittings & Lines -**

- A. All fuel fittings in the fuel cell (including air vents, inlets, outlets, tank fillers, inter tank connectors and access openings) must be metal fittings bonded into the fuel cell.
- B. All fuel lines between the fuel tank and the engine must have a self-sealing breakaway valve.
- C. No lines containing fuel may pass through the cockpit.
- D. When flexible, all lines must have threaded connectors and braid.
- E. All fuel lines must have a minimum burst pressure of 350 PSI at 350 F.
- F. Fuel tank vent lines must have a gravity activated rollover valve.
- G. Fuel pumps must only operate when the engine is running except during the starting process.

**6-4 Fuel Tank Fillers -** All cars must be fitted with fuel tank filler and vents, which may be combined, or single units fitted each side of the car.

- A. Both fillers and air vents must be equipped with leakproof dry break couplings complying with the dead man principle. Therefore not incorporating any retaining device when in an open position.
- B. Fuel tank fillers and vents must not protrude beyond the bodywork or be placed in a vulnerable position.
- C. Cars must be fitted with a self-sealing connector, which can be used to obtain fuel from the tank. This connector must be fitted immediately before the injectors.
- D. Any breather pipe connecting the tank to atmosphere must exit outside the bodywork and must be fitted with a gravity activated rollover valve to control any fuel loss, under any condition.



### 6-5 Fueling -

- A. Fueling the car in pit lane by any other means than by gravity, with a maximum tank height of 6 feet 7 inches above the pit lane where the fueling takes place is forbidden.
- B. During the race only one autonomous supply tank may be used per car.
- C. There must be a breather vent above the tank.
- D. The fueling hose, minimum length 10 feet, maximum inside diameter 2 inches must be provided with a leakproof coupling to fit the filler mounted on the car. All competitors must install a fuel flow restrictor, provided by Grand-Am, in the fuel hose within a minimum 8 inch length of clear hose with the restrictor in contact with the fueling probe. Nothing else permitted in the fuel hose.
- E. A spring loaded cut off valve, situated on the outlet of the supply tank and controlling fuel flow must be manned at all times during fueling.
- F. All hoses and fittings from the supply tank and back may have a maximum inside diameter of 2 inches.
- G. During practice, on pit lane, only an unpressurized container not exceeding 5 U.S. gallons in capacity which is vented and has a leak proof coupling connecting to the filler on the car can be used. Fueling during qualifying is prohibited.
- H. If a meter is used it must be an FIA homologated type. If an external sight gauge is fitted to the tank it must be fitted with isolating valves as close as possible to the tank.
- I. **Fueling on the starting grid, or during qualifying is prohibited.**
- J. The storage of fuel on board the car at a temperature less than 10<sup>0</sup> F below the ambient temperature is prohibited.

### 6-6 Fuel Capacity -

- A. Maximum fuel capacity is 24 U.S. gallons.
- B. Any device, system, procedure, construction or design, the purpose and/or effect of which is any increase whatsoever, even temporarily, of the total fuel storage capacity beyond the maximum (Section 6-6(A)) is prohibited.
- C. The right is reserved by Grand-Am, to adjust the fuel capacity.

## SECTION 7 - ELECTRICAL EQUIPMENT

- 7-1 Provided the regulations in this Section are complied with the electrical system is free.
- 7-2 **Batteries** - must be securely mounted, sealed, and insulated, 12-volt systems only.
- 7-3 **Starting** - A starter must be fitted and be in working order during an event. The driver must be able to operate the starter when seated normally.

## 7-4 Lighting Equipment

- A. The car must be fitted with:
1. Front: At least two front headlights the center of which must be symmetrical to the longitudinal centerline of the car separated by a minimum of the front track measurement.
  2. Rear: Two red rear tail and stoplights (with a minimum of one working at all times) located symmetrically to the longitudinal centerline of the car separated by the minimum of the rear track measurement.
  3. A high intensity red rear rain light minimum 21 watt situated in center rear of the car.

## 7-5 Grand-Am reserves the right to view any/all data collected by a team/entrant at anytime. Each car shall have provisions for a data recorded supplied by Grand American. These provisions consist of:

AN-3 female hose connection for manifold pressure / vacuum sensor. This port may be in the cockpit, or in the engine compartment in a relatively cool location. If in the engine compartment, there must be access for a cable from the pressure sensor the data recorder.

Provisions for mounting the recorder box. The recorder must be mounted in the cockpit where it is accessible for downloads during pit stops, or a remote download cable from the box to an accessible location must be installed. The box is about 2.6 x 4.5 x 1.2 inches in size, and the connectors are all on one of the 2.6" x 4.5" faces.

Electrical connector and wiring for the data recorder. The specified signals from the vehicle electrical system must be wired to the specified connector, positioned where the box will be mounted. Teams may make their own harness using Switchcraft # EN3C8F weathertight connector, or they may purchase a harness kit from Corsa Instruments (734-761-1545). Signals are as follows:

Pin Number	Signal
1	Ground
2	Throttle position sensor (0-5 or 0-12v analog)
3	Not used
4	Power in, nominal 12 volts from vehicle
5	Vehicle Speed (pulse train, minimum 0-5v)
6	Engine RPM (pulse train, minimum 0-5v)
7	Ground
8	Not used

## SECTION 8 - TRANSMISSION

- 8-1** Maximum six forward speeds and one reverse gear. Electronic selection systems and automatic transmissions are prohibited
- A. Mechanical sequential gear change is permitted.
  - B. Four wheel drive systems are prohibited.
  - C. The transmission must be designed that should the car is stopped or engine stalled, it can be freely pushed or towed.
  - D. Driver operated Flat Shifting via a button on the shifting lever is permitted
  - E. Reverse gear must be operational.
- 8-3** Conventional design multiple disc clutch mandatory.
- 8-4** Differential - See Section 2-8. Viscous differentials are not considered to have hydraulic slip control provided outside control is not possible when the car is in motion.

## **SECTION 9 - SUSPENSION AND STEERING**

- 9-1 All Wheels** - Cars must have four- (4) wheel Independent Suspension.
- 9-2 The Springing Medium** - must not consist of bolts located through flexible bushings or flexible mountings. Otherwise free, respecting the following regulations - see Section 2-8.
- 9-3 Chromium Plating** - of the suspension members is prohibited.
- 9-4 Suspension Members** - must be made from homogenous metallic material.
- A. The modification or control of springs and shock absorber adjustment from inside the cockpit is prohibited.
  - B. Front A-frames (wishbones) must have anti-intrusion bars fitted.
- 9-5 The Steering** - is free except,
- A. There must be a continuous metal linkage between the steering wheel and the steered front wheels.
  - B. A quick release steering wheel is mandatory.
  - C. A round or d-shaped complete steering wheel is required.
  - D. Four wheel steering is prohibited

## **SECTION 10 - BRAKES**

- 10-1.** The Brake System must meet the following requirements.
- A. The brake pedal must operate all four wheels through a Dual Master Cylinder System.
  - B. Anti-lock brake and Power Brake systems are prohibited.
  - C. Only one Brake Caliper per wheel.
  - D. All Brake lines must comply with FIA Article 252.3.2.
  - E. Carbon Brakes, rotors and pads are prohibited.

- F. MMC or Alloy Beryllium (80 gp/99 Newton) Calipers are prohibited.
- G. Only magnetic cast iron or cast steel rotors allowed.
- H. Liquid and/or gas cooling of the Brake calipers/rotors are not permitted.
- I. Brake Fluid Re-circulating System is allowed.
  - 1. Traction control is not permitted.
- J. Brake Rotor Hats (bells)- may be aluminum alloy or ferrous material only. Titanium is prohibited.

## **SECTION 11 - WHEELS AND TIRES**

- 11-1 Measurements** - taken horizontally at wheel center height.
  - A. Maximum width for complete wheel and tire assembly cross section is 16".
  - B. Maximum complete wheel diameter = 28.5"
  - C. Minimum rim diameter 16" / maximum diameter 18"
- 11-2** The complete wheel above the axle centerline must be covered by the bodywork when viewed from above.
- 11-3** Must be homogenous metallic material. Minimum wheel weights: Front: 18 lbs. Rear 20 lbs.
- 11-4** Four wheels are required, and must be the same diameter.
- 11-5** The method of wheel attachment is free except: only Hex Lug or Wheel Nuts allowed (Spline Drive Nuts not permitted) wheel nuts must be secured by a spring clip colored 'dayglo' red/orange unless an alternative approved method is used.
- 11-6** On board air jacking system is permitted but on board compressed air bottles are prohibited.
- 11-7** Pressure control valves on the wheels is prohibited.

## **SECTION 12 - COCKPIT**

- 12-1** The cockpit shall be designed to ensure the maximum driver protection in the event of impact or inversion. It must be possible to fit two seats of equal size (excluding shoulder supports) symmetrical to the longitudinal centerline of the car. Lines carrying fuel, lubricant or coolant is prohibited in the cockpit. Brake lines must be continuous with no connections within the cockpit.
  - A. The soles of the drivers feet, when seated in the normal driving position with his feet on the pedals in the inoperative position, shall not be situated forward of the vertical plane passing through the center line of the front wheels.

- B. The following items are permitted in the cockpit, outside the two protected areas, provided they do not hinder driver exit and removal, or present any danger to the driver:
  - 1. Safety equipment and structures
  - 2. Toolkit
  - 3. Seat (s)
  - 4. Driving controls
  - 5. Electronic equipment
  - 6. A driver cooling system
  - 7. Pneumatic jacks
  - 8. Batteries, suitably boxed
  - 9. Ballast
  - 10. Ventilation equipment

**12-2 Survival cell** The chassis structure must include a survival cell extending from behind the fuel tank to a plane at least 5.90 inches (15 cms) in front of the soles of the drivers feet, resting on the pedals, the pedals in the inoperative position.

- A. An impact absorbing structure must be attached to the forward part of the survival cell. This structure need not be an integral part of the survival cell but must be solidly attached to it.
- B. Two volumes of equal dimensions, defined by flat rectangular surfaces, symmetrical to the longitudinal centerline of the car must be provided for the legs of both occupants. Measurements of the volumes will include right angles only and extend from the vertical plane of the steering wheel to the vertical plane of the pedals: Width: 12.99 inches (33 cms) minimum. Height: 11.81 inches (30 cms) minimum.
- C. The only components that may intrude into these volumes will be:
  - 1. Steering column and its joints.
  - 2. Suspension wishbone mountings, but only if they do not present any danger to the driver.
- D. All surface area materials adjacent to the driver must present anti-penetrant barriers.
- E. The chassis body structure must provide a lateral protection at least 19.625 inches high from the floor up to and along the total length of the cockpit opening. The vertical external planes of the lateral protections must be separated by a minimum 35.433 inches.

**12-3 Cockpit Opening** - The cockpit opening must be a minimum 35.433 inches width by 27.599 inches longitudinally including windshield and maintained over 80% to provide for radii. Nothing may be above the cockpit except the rollover structure. Bodywork adjacent to the driver's head must be protected with suitable, fire resistant, high density padding material.

## **SECTION 13 - SAFETY EQUIPMENT**

### **13-1 Fire Extinguishers –**

- A. It is mandatory that all racecars have built in fire extinguishing equipment, actuator within the driver's reach, minimum capacity 10 pounds Halon 1211 or equivalent, with discharge nozzles at the cockpit, fuel cell, and engine compartment.
- B. All teams must have in their garage and/or pit area at least 2 fully charged 10-pound minimum dry chemical fire extinguisher.

**13-2 Safety Belts** – A six- (6) point driver restraint system: Lap belt and shoulder harness must be a minimum three (3) inches wide. System must be dated by the manufacturer and must not be used beyond three (3) years after that date.

**13-3 Rear View Mirrors** - must be fitted on each side of the car with a minimum surface area of 100 cm<sup>2</sup>. The mirrors must be visible from the rear of the car and must provide adequate rear vision for the driver. They must not protrude outside the periphery of the car when viewed from above.

**13-4** Where a separate seat is fitted it must comply with FIA 3855-92. All seat areas must have a base pad in fire resistant material to protect the driver's spine. A headrest must be fitted which cannot deflect rearwards more than 4 cm when a force of 85 daN is applied. The headrest must have a minimum continuous surface of 400 cm<sup>2</sup> and be covered with a fire resistant material. There must be no protruding parts or fixings. The headrest must be positioned so it is the first point of contact for driver's helmet, when seated normally, in the event of an impact projecting the head rearwards.

**13-5 Master Switch** -

- A. The driver when seated normally with the safety belt fastened and the steering wheel in place must be able to cut off all electrical circuits by means of a spark proof circuit breaker switch. The switch must be located on the dashboard and must be clearly marked by a symbol showing a red spark on a blue triangle.
- B. There must also be an exterior switch, which is capable of being operated from a distance with a hook, and must be clearly marked by a symbol showing a red spark on a blue triangle.

**13-6 Towing Eyes** - Rigid steel towing eyes with an minimum diameter of 3.149 inches (80 mm) and a maximum of 3.937 inches (100 mm) and a minimum .196 inch (5 mm) thick, must be securely mounted to the chassis, front and rear. Towing eyes must be painted contrasting color: red, yellow or orange.

- A. When a lifting area is located on the main hoop, it must be clearly identified with dayglo orange/yellow surround.

## **SECTION 14 - SAFETY STRUCTURES**

**14-1** The use of magnesium sheet less than .118 inch (3 mm) thick is prohibited.

- 14-2 Rollover Structure** - Front and rear rollover structures are mandatory.
- A. Must be made of minimum CDS 2 or alloy steel seamless tubing
  - B. The main hoop must have a minimum tube diameter of 1.750 inches, X .090 inch wall thickness.
  - C. The front rollover structure must be at least 25.984 inches from the reference plane and be symmetrical to the longitudinal centerline of the car. No part of the steering wheel, whatever it's position, is allowed higher than the rollover structure.
  - D. The rear rollover structure must have a minimum horizontal width at the top of 19.625 inches and a minimum width at the bodywork level of 34.4 inches. The minimum height from the reference plane must be 40.157 inches. Two rearward facing braces connected to the top of the hoop. A diagonal reinforcement bar from the top of the hoop (drivers side) and connected as a minimum to the middle point of the chassis/body unit. The front and rear structure must be separated longitudinally by a minimum 29.921 inches. This structure must be capable of withstanding the loads in accordance with FIA Article 258A.15.2: W = SR1: 1050 kgs W = SR2: 900 kgs
  - E. The drivers helmet must not be less than 5 cm from a plane connecting the front and rear hoops.
  - F. Streamlining or fairing the rear rollover structure is permitted no more than .7874 inch (20 cms) horizontally and provided the transverse plane passing through the roll bar tubing center remains symmetrical. The fairing must not cover the rollbar mounting area over the main structure.
  - G. It is forbidden to drill holes in the rollover structure for any purpose.
- 14-3** Cars must be equipped with a firewall between the engine to the cockpit. Holes in the firewalls for the passage of controls or wires must be completely sealed.

## **SECTION 15 - AERODYNAMICS**

- 15-1** The only device permitted for exerting rear Down Force is the rear wing. It must be a fixed, adjustable wing at the rear of the car. This wing may comprise two parts and may not be adjustable from within the cockpit. Must be contained within a volume 6 inches (vertically) x 16 inches (horizontally) x the width of the car and be mounted at the rear wheel so that no part, including the end plates, is higher than 38 inches above the reference plane. End plates must not be integral with the bodywork and maintain at least 3.93 inches (100 mm) clearance from the bodywork.
- 15-2** Forward of the front wheel centerline no bodywork element having a wing profile is permitted.
- 15-3** Additional aerodynamic devices may be added to the front bodywork:
- A. Forward of the front wheel centerline.

- B. Outboard of the longitudinal centerline of the front wheels provided that:
1. They do not obstruct the driver's view.
  2. They are firmly secured.
  3. They remain within the maximum prescribed bodywork dimensions Section 3-1.

**15-4** Skirts and diffusers are prohibited.

**15-5** No bodywork panel/diffusers are allowed between the inside faces of the rear wheels below a horizontal plane connecting the centerlines of the rear axles to the rear extremity of the car.

### **SECTION 16 - OIL SUPPLY**

**16-1** Providing the following regulations are complied with the oil system is free.

**16-2** Oil tanks are not permitted: in the cockpit, more than 26 inches from the longitudinal centerline of the car, aft of the gearbox, or in a vulnerable area. The oil tank must be surrounded by a .3937 inch (10-mm) thick crushable structure.

**16-3** When the cars lubrication system includes an open breather it must vent into a catch tank, minimum capacity of 2 quarts. The tank must have a drain.

**16-4** All lines carrying lubricants are prohibited from the cockpit. The lines must comply with FIA Article 253.3.3.2.

### **SECTION 17 - FUEL**

**17-1** Grand-Am reserves the right to require the use of an official fuel.

**17-2** **The Official Fuel is TOSCO "76" Competition 100 Racing Gasoline.**

**17-3** Official fuel must be used exactly as supplied.

**17-4** Only air may be mixed with the fuel as an oxidant.

**17-5** Grand-Am has the right to sample a competitor's fuel at any time.

**17-6** The term fuel wherever used shall be understood to mean TOSCO "76" Competition 100 Racing Gasoline.

### **SECTION 18 - ELIGIBILITY**

**18-1** All cars, chassis, and engines produced and raced before January 1, 1999 is free from regulation in regards to availability or selling price.



**18-2** Manufacturers or constructors of all cars, chassis, and engines produced after January 1, 1999 must respect the following regulations in regards to availability and selling price to be eligible for competition in the Grand-Am SportsRacing Prototype championship. It is the sole responsibility of the individual purchasers of cars, chassis, or engines to satisfy themselves of the ability and willingness of their suppliers to establish and maintain eligibility.

- A. To establish eligibility, a statement of selling price and specifications, including a list of spares and their prices, must be filed with Grand-Am prior to participation in Grand-Am events.
  - 1. Selling price of a complete SportsRacing Prototype may not exceed \$660,000.00. Selling price of a complete SportsRacing Prototype II may not exceed \$216,000.00.
  - 2. Selling price of a complete SportsRacing Prototype without engine may not exceed \$535,000.00. Selling price of a complete SportsRacing Prototype II without engine may not exceed \$169,500.00.
  - 3. Selling price of a complete SportsRacing Prototype engine (excluding wiring, airbox, and restrictor (s) shall not exceed \$125,000.00. Selling price of a complete SportsRacing Prototype II engine (excluding wiring, airbox, and restrictor (s) shall not exceed \$46,500.00.
- B. To maintain eligibility, complete SportsRacing Prototype cars, chassis (without engine), or engines must be delivered by their manufacturer within four months of order placement to a Grand-Am licensed entrant upon an agreed financial structure, including proof or security of purchasers ability to consummate the transaction.
  - 1. Cars and engines must be ready to race.
  - 2. Engines supplied must be built from all new parts.
- C. Any manufacturer or constructor-introduced updates must be made available to all competitors within one month of their first use at the published spares price level.
- D. Once a manufacturer or constructor of complete cars or chassis has produced six total cars or chassis for sale, they are relieved from responsibility to produce additional examples of the same model. Introduction of a new model will create a new obligation.
- E. Once an engine manufacturer has produced engines for sale and installation six chassis, they are relieved from responsibility to produce additional examples of the same unit in order to maintain eligibility. Introduction of a new model will create a new obligation. Engines produced or sold for use, as spares do not count against the six-unit requirement.

**18-3** Upon proof submitted to Grand-Am by a licensed entrant that a manufacturer has failed to adhere to the above requirements in either delivery or pricing, Grand-Am will revoke the eligibility of the specified car, chassis, or engine for two races.

- A. If the manufacturer of complete cars or chassis fails to re-establish eligibility within thirty days of revocation, then all points earned by teams using those cars or chassis will be forfeited.
- B. If the manufacturer of an engine fails to re-establish eligibility within thirty days of revocation, then all points earned by teams using those cars or chassis will be forfeited.

**18-4** Eligibility will be re-established upon proof that outstanding orders have been filled. Forfeited points are not available for restoration.

## **SECTION 19 – DETAILED CAR BODY REQUIREMENTS**

### **19-1 Identification and Markings -**

- A. Numbers will be assigned by Grand-Am.
  - 1. Numbers at least 12 inches high X 2-inch stroke must be on both sides of the car, or on the wing end plates. Block type numbers minimum 8" X 1.250" stroke on the front nose vertical area and 6" X 1" on the rear panel are required.
- B. Decals and Advertising -
  - 1. Grand-Am may refuse to permit, or may restrict or assign the size or placement of decals, identification, and advertising of any kind on a car for any reason. All Grand-Am members agree to accept Grand-Am's decision in this regard.
  - 2. Grand-Am may refuse to permit a competitor to participate in an Event if Grand-Am determines that any advertising, sponsorship or similar agreement to which the competitor (or a car owner, driver or crew member related to the competitor) is or will be a party to, is detrimental to the sport, to Grand-Am, or to the Promoter for any reason, including without limitation the public image of the sport.
  - 3. All decals or adhesive-backed emblems supplied by manufacturers for advertising or identification on the racecars are limited in size to the area of a 32 square inch rectangle. Decal sizes will be determined by multiplying the full width and full length of any decal, regardless of the decal shape. Only decals of participating manufacturers will be permitted.
  - 4. Advertising slogans and designs are subject to approval by Grand-Am.
  - 5. Grand-Am will designate an area for:
    - a. Decals, advertising or identification of series sponsors.
    - b. Decals, advertising or identification of contingency program sponsors.
    - c. Such other decals, advertising or identification as Grand-Am may in its sole discretion permit or require.

## **SECTION 20 – RESTRICTOR SIZES**

**20-1 Restrictor Sizes – SportsRacing Prototype -**

MINIMUM WEIGHT 1985 POUNDS					
NORMALLY ASPIRATED			TURBOCHARGED		
Capacity CC	Restrictors MM Two	Capacity CC	Restrictors MM Two	Boost Pressure Mmb	
4 Valve Engines		All Engines		2 Valve	4 Valve
**6000 *	31.7	4000	32.4	1700	1500
**5500	32.1	3800	32.4	1790	1580
5000	32.7	3600	32.4	1900	1670
4500	33.1	3400	32.4	2010	1770
4000	33.4	3200	32.4	2130	1880
5 Valve Engines		3000	32.4	2270	2000
4000	35.0				

\*\* These two 4 valve engine sizes will not be an option effective 1-1-02

- BMW V12 with variable valve timing. Variable valve timing mechanism must be disabled (locked up) to achieve a fixed cam timing duration. Restrictor size 31.2.

**Porsche B2K/10 with a 3200cc twin turbo, 6-speed synchronized sequential shift and a minimum weight 2150 pounds and 36.0 restrictors.**

MAZDA 3 and 4 rotor normally aspirated engines – NO RESTRICTORS ARE REQUIRED. Turbocharged 3 rotor, one 51.0 mm or two 36.0 mm restrictor @ 3410 mmb boost pressure. Turbocharged 4 rotor, one 51.0 mm or two 36.0 mm restrictor @ 2630 mmb boost pressure.

V8-STOCK BLOCK NORMALLY ASPIRATED CAM IN BLOCK 2 VALVE PUSH ROD ENGINES		
Capacity CID	Restrictors MM Two	
366	33.2	Restrictor sizes for other 2 valve types or rotary engines on application to the Technical Director with full engine details.

336	34.1	
312	35.2	
V6-275	OPEN	

RILEY & SCOTT MK111 5 SPEED TRANSMISSION CARS			
Capacity CID	Restrictors MM Two	GM 18° Style Motors	
		CID	MM
366	33.6	366	34.7
336	34.7	336	35.8
312	35.8	325	37.0
Judd 245 CID 4-Valve V-10	34.0		

## SECTION 21 – SPORTSRACING PROTOTYPE II

**21-1** The regulations for SportsRacing Prototype II are as above with the following exceptions:

- A. Minimum wheelbase is 99.4 inches (252.5 cms).
- B. Bodywork construction materials are free. The chassis can not be constructed of composite material (carbon/fiberglass/kevlar) and must respect Section 14.
- C. Carbon fiber is permitted for construction of rear wing. Effective 1-1-02 the rear wing must be no wider than the outer wheel/tire edges at the rear axle centerline.
- C. Type 1 Engine: cars minimum weight is 1588 pounds. Effective 1-1-02 the minimum weight is 1600 pounds
- D. Type 1 Engines must be normally aspirated and have no more than 6 cylinders with a minimum displacement of 164.7 cubic inches and no larger than 183 cubic inches.
  - . 1. Engines must have reciprocating pistons.
  - . 2. Two stroke engines are prohibited.
- F. Type 2 Engines are Mazda Three (3) rotor engines
- G. Type 1 Engine maximum fuel capacity is 16 gallons.
- H. Carbon clutches are prohibited.

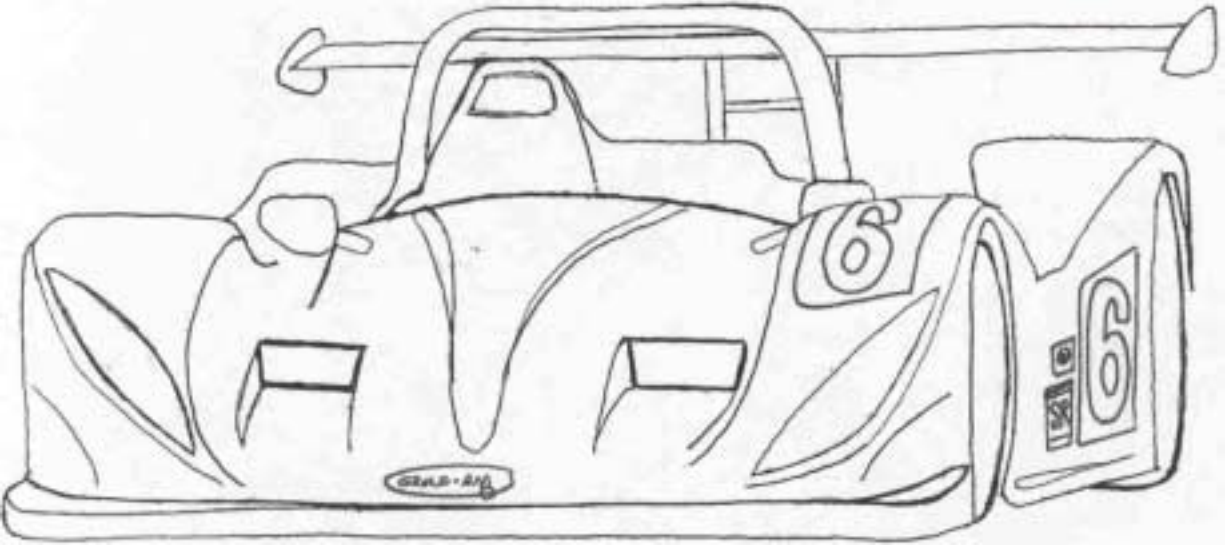
- I. Brake rotors must be magnetic cast iron or steel, with a maximum diameter of 12.992 X 1.259 inches thick (330 mm x 32 mm). Cross drilling of the rotors is prohibited.
- J. Calipers must be aluminum alloy, two piece bolted construction, with a maximum of four (4) pistons. MMC materials prohibited.
- K. Front wheel rim widths are 10.5 inches maximum.
- L. Rear wheel rim widths are 11.5 inches maximum.
- M. Wheels must be 18-inch diameter. Effective 1-1-02 all cars must comply with K.L.M. wheel rules
- N. Type 1 Engine air restrictors are single: 38.0 mm, or Twin: 27.2 mm.
- P. Type 2 Engine cars: minimum weight is 1700 pounds, with 16-inch diameter X 12.5-inch maximum wide wheels (for the 2001 season), 20-gallon fuel capacity, and a single 46-mm restrictor.

## **SECTION 22 - FINAL TEXT**

- 22-1** The final text is the Grand American Road Racing Association regulations, which will be used, should any dispute arise over their interpretation.

## APPENDIX

### REQUIRED RACE CAR IDENTIFICATION/DECAL PLACEMENT



#### SRP, SRP II

- Car Numbers: Each Side: Min. 12" high by 2" stroke numbers, in a clear space, either between the axles or on the wing end plates.  
Front: Min. 8" high by 1-1/4" stroke numbers visible when viewed from the front.  
Rear: Min. 6" high by 1" stroke numbers visible when viewed from the rear.
- Series Decals: Front: Grand-Am series logo decal visible when viewed from the front.  
Rear: Grand-Am series logo decal visible when viewed from the rear.  
Each Side: Grand-Am Category decal and 76 Official fuel decal in front of and adjacent to the side numbers (if located on the side).