WORLD OF MOTORSPORT ZA

P.O. Box 12387, Brakpan North, 1545

18 Main Reef Rd Brakpan (on the premises of Rock Raceway)

Tel: 011-740 1206 / 740 8315 Fax: 086 508 2388 email: womza@telkomsa.net/www.womzasa.co.za

TECHNICAL CONSULTANTS

EASTERN CAPE (South)	DEON BARNARD	082 938 3352	deonbarnard@algoanet.com
	REGGIE DAVEY	082 970 8856	daveyreggie@gmail.com
FREE STATE (Central)	JOHANN PITOUT	082 770 7224	aaapanelbeaters@absamail.com
	MARIUS HEUNIS	082 512 2333	Mheunis13@gmail.com
NORTHERNS REG (North)	TOMMIE WOTHERSPOON	083 330 2612	gilltsr@gmail.com
	CHRISTO KRUGER	082 972 7093	Christo.kruger0068@gmail.com
	ANTON VAN ROOYEN	083 256 2908	loskopoval@webmail.co.za
	GIDEON HAND	083 640 7304	gideonh@sacarbide.com

2018- 2019 WOMZA STOCK / ROOKIE RODS SALOON CLOCKS CLASSES Dirt

INTRODUCTION:

Introduction 1600 STOCK ROD CLASS & ROOKIE RODS:

The Stock Rod and Rookie class is an entry level affordable class and it is a non-contact class;
Cars to be used must be in standard form using original engines and gearboxes as it was produced by the manufacturer;
Only modifications specifically stated shall be allowed.

Competitor age restriction: 1600 STOCK ROD CLASS:

- **Minimum age 13 years old for club level entries only;**
- **Competitor's minimum age - 14 years old are permitted to enter into this class at regional and national level with the approval of their promoter and local TC Representative.**
- **Reference to length and widths in the regulations shall be defined as, length, measure in the direction of, from the front of the vehicle to the back and width being measured from left to right of the vehicle;**

Competitor age restriction: ROOKIE RODS

- **Minimum age 10 maximum age 15 years;**
- **Club level status class only;**
- **All rules applicable to the 1600 Stock Rod regulations are applicable to the Rookie Rod class with the exception of the size in the restrictor plate.**

Anything not specifically mentioned or what is not written, is not permissible

SAFETY:

- Limited contact racing as described;
- Limited contact shall mean nothing more than the coming together of vehicles caused by close racing, minimal shunting and nudging shall be permitted due to close racing;
- Upon contact being made unintentionally or accidentally, the following vehicle shall leave enough space for the leading vehicle to regain its position on the track;

- In limited contact, the intention is to permit minimal contact but the contact shall not be forceful enough to cause the lead vehicle to be placed in a different race line involuntarily;
- Ensure that all joints in construction are welded properly – minimum 75%;
- Sump, gearbox and differential plugs are to be wired securely;
- The installation of Fire extinguishers shall remain optional, however, it is highly recommended to have fire extinguishers fitted in the competitor compartment. All installations must be well secured thus prevent the extinguisher from dislodging upon an impact;
- No "in car" adjustments permitted, except for brake balancing;

SAFETY / TECHNICAL & CONSTRUCTION REGULATIONS

CLASS TECHNICAL REGULATIONS

DESCRIPTION	
SR1	**ELIGIBILITY OF VEHICLE AND BODIES:**
1.1	Any 2 or 4 door sedan or coupe body of which a minimum of 500 or more has been sold in South Africa as recorded by the Auto Data Digest;
1.2	LDV maximum 850kg carrying capacity, the cab loading bin and chassis must be one unit as per manufacturer – LDV Makes and models as specified in GRTC1.3
1.3	Nissan 1400 / Nissan NP200 / Toyota 1200 / Ford Bantam / Mazda Rustler / Proton Arena / Fiat 128 / VW Golf Caddy / Opel Corsa
1.4	Prototypes, special imports or replicas will not be permitted
1.5	All the components of the vehicle must come from the specific car selected except where these regulations allow;
1.6	Space frames and semi space frames are not permitted;
1.7	The body shell and the materials originally used must be retained; excluding body panels
1.8	Body panels (doors, boot, bonnet and front fenders) may be replace by fiberglass panels.
1.9	All body panels that is replaced with fiberglass must have a minimum thickness of 2mm;
1.10	Fiberglass body panels to be solid shape and must follow the silhouette of the vehicle.
1.11	The original tail gate on LDV can be cut away to lighten the car. Is not permitted to cut any holes or replace tail gate with a plate
1.12	Body panels may be cut away to lighten the car';
1.13	Body and panels must remain original and in tact;
1.14	No age restriction to model of vehicle being utilized;
1.15	Front or rear wheel drive vehicles as manufactured permitted;
1.16	All spare parts fitted to the car shall be used without any alterations and modifications as they come from a road going vehicle, except where these regulations allow;
1.17	Wheel and body protectors (side skirts) are not permitted;
1.18	The outside silhouette of all the doors, must remain standard and the driver door may not be cut away for easy access;
ST2.	**Fire Walls/Protector Walls**
2.1	All vehicles must have metal firewalls between the driver's compartment and engine, between driver's compartment and fuel cell or fuel tank;
2.2	All firewalls are to be constructed of metal only;
2.3	Plastic, fiberglass and rubber fire walls is not permitted
2.4	Fire walls will not have any holes, other than where pipes and lead protrude fire wall with precise fitment

SR3.	**VEHICLE CONSTRUCTION**
3.1	Front wheel drive cars cannot be converted to rear wheel drive & vice versa;
3.2	Four-wheel drive vehicles is not permitted
SR4.	**DIMENSIONS AND WEIGHTS**
4.1	All four wheels of the vehicle to fit within the body of the vehicle.
4.2	Weight – The vehicle can be weighed anytime and must comply to a minimum weight of 800kg including driver, excludes weight of fire extinguishers and fuel
4.3	No weight tolerances
SR5.	**BRAKES**
5.1	**Brakes General:**
5.1.1	Brakes are mandatory on all four wheels;
5.1.2	Brake lights are mandatory and operational always;
5.1.3	Brake lights must be red and be mounted in plain sight for competitors to observe without restriction;
5.1.4	Brake lights may not be fitted in the tailgate of the bodywork of the vehicle, additionally all glass or plastic indicators and lights shall be removed from the body of the vehicle;
5.1.5	Brake lights to work off brake pedal operated switch
5.1.6	No ON/OFF switches permitted on brake light system
5.2	**Brake light specifications: -**
5.2.1	Red LED - minimum 200mm length;
5.2.2	Minimum of 75% of the LED's must be operational;
5.2.3	Red light – round, minimum of 50mm in diameter and a maximum of 100mm
5.2.4	Rectangular or square brake lights shall be a minimum of 50mm square with a maximum of 100mm
5.2.5	Brake light appearance shall always remain bright, any dull brake light appearance may be rejected by the scrutineer;
5.3	**Brake Mechanism: -**
5.3.1	Only standard components as originally fitted to the car may be used;
5.3.2	In the event of a vehicle having drum brakes on all four wheels, the front drums may be replaced with disc brakes from the same make but higher specification model, e.g. Datsun with Datsun;
5.3.3	Only original calipers to be used as per manufacturers' specification;
5.3.4	Brake pads or lining material is free, in other words friction material is free;
5.3.5	ABS or any other electronic driving aids is not permitted;
5.3.6	No discs permitted on the rear axle, drums as original specification;
5.4	Brake balancing not permitted
5.5	All Handbrakes to be removed
SR6.	**BUMPERS**
6.1.1	No external steel bumpers, refer to internal bumper regulation;
6.1.2	All piping utilized for the purpose of bumpers shall remain in a single tubular form, it follows, that under no circumstances may any of these pipes be filled in any manner or have additional smaller tubing inserted to the inside of the larger pipe;
6.2	**Internal bumpers**
6.2.1	Internal bumpers – piping material used shall have a maximum outside diameter of 38mm and a maximum wall thickness of 2mm;
6.2.2	The internal bumper shall be shaped in accordance with the vehicle's front silhouette;
6.2.3	Additional radiator protection may be installed internally with no more than 4 mounting points;
6.2.4	Vehicles that are manufactured with steel bumpers must be replaced with plastic or fibre glass bumpers, fitted with a single 38mm x 2mm pipe inside shaped according to the bumper;

6.2.5	Only plastic or fibre glass bumpers not exceeding 3mm thick may be fitted externally for cosmetic purposes only, no steel stiffeners;
6.2.6	No piping to protrude outside of bodywork;
SR7	**STEERING AND SUSPENSION**
7.1	Only standard and original components of manufacturer shall be permitted;
7.2	Either a single strut tower top or a single control arm per side may be slotted with tolerance of 25mm (not both) **for the purpose of (CC&A) camber/castor/alignment adjustments only**, **NO** extended or shortened control arms;
7.3	Coils springs may be cut
7.4	Coils springs may be replace by standard production vehicles, Competition or drop coil kits is not permitted
7.5	Shocks as per manufacture specification that is freely available over the counter eg., Armstrong, Monroe, Gabriel is permitted, No competition shocks
7.6	Gas shocks as per 7.5;
7.7	Clip-on steering wheel (no homemade clip-on device)
SR8	**EXHAUSTS:**
8.1.1	Exhausts and silencer boxes mandatory and must comply to prescribed noise levels; Maximum decibels 108, measured 1metre away at 5000rpm;
8.1.2	Branches is permitted
8.2	**Exhaust Fitment**
8.2.1	Exhaust outlet must face downwards underneath the vehicle;
8.2.2	All piping shall be secured with saddles, preventing exhaust pipes from coming free in the event of it breaking off;
8.2.3	Exhausts fitted below the floor pan shall have saddles fitted at +- 33% and 66% of the exhaust length to retain the exhaust in the event of exhaust breaking.
8.2.4	Saddles are to be bolt on type;
8.2.5	Exhaust systems installed above the floor pan with tailpipes passing out through the side of the vehicle, shall do so at a maximum height of 450mm measured from the ground to the top of the pipe with the vehicle parked on a level floor, with driver seated and tyres measured at racing pressures;
8.2.6	Exhaust systems installed above the floor pan may not protrude more than 50mm beyond the body silhouette;
SR9	**FLYWHEELS**
9.1	Flywheel to keep to standard specification, no lightening of flywheel
SR10	**FUEL**
10.1	Only normal service station pump fuel permitted
SR11	**FUEL MANAGEMENT AND CARBURETION:**
11.1	No modifications to the fuel system will be permitted. Only a single (one) twin choke downdraught carburetors to be used;
11.2	No fuel injection systems or management systems will be permitted;
11.3	Weber carburetors with a maximum of 38mm twin choke may be fitted to a standard manifold by means of a freely available aftermarket adaptor plate without any modification by drilling or welding or filing to the carburetor or manifold, only bolt on adaptor plates will be permitted;
11.4	Jets sizes Open
11.5	Side draughts not permitted

11.6	No match porting on manifolds
11.7	Carburetors are to be kept standard no modifying to carburetors shall be permitted;
11.8	Restrictor plates must be fitted between the intake and the carburetor;
11.9	19mm round hole on the first stage, 23mm round hole on the second stage on 1600 Stock
11.10	18mm round hole on the first stage, 23mm round hole on the second stage on Rookies
11.11	Restrictor plate may not be thicker than 3mm;
11.12	Electrical low pressure fuel pump permitted.
11.13	10mm distance plate between carburetor and restrictor plate is permitted. The plate can't form a venturi affect.
11.14	Any production electronic distributors is permitted; (VW distributor can be used on Datsun for example)
11.15	Two parallel springs on carburetor
11.16	The compulsory Restrictor Plate must be fitted between the carburetor and the inlet manifold. Mounting holes may be slotted to accommodate a different bolting pattern.
11.17	Any Competitor who fails to race with a restrictor plate will be excluded from the event
SR12	**ENGINE**
	General
12.1	Any 8 valve single camshaft engine may be utilized up to 1600cc, fitted to the same body series.
12.2	A14 or A15 Nissan is specifically allowed to replace the A12 engine with all other rules applicable to that engine;
12.3	**NO** modifications permitted, internally or externally unless is specify in the rules;
12.4	Engine blocks may be re-bored to the recommended manufacturers' standard specification, plus max. 60 thou/ for wear reconditioning only using standard replacement pistons, (no high compression or performance pistons);
12.5	All machining to engine components shall be standard and normal reconditioning procedures;
12.6	Cylinder head may be machine to a max off 0.5mm off the original specification
12.7	The maximum compression ratio allowed is as per original specification plus 0.5mm machine increased.
12.8	No modification to the fuel system will be permitted;
12.9	Air Cleaners and air boxes are open
12.10	Removal of alternators or charging system is permitted
12.11	Consumable items such as filter elements and spark plugs are open
12.12	No multi-valve cylinder head engines to be used. Only 2 valves per cylinder engines;
12.13	Only single overhead cam engines and OHV pushrod, 4 cylinder, 4 stroke engines permitted;
12.14	Camshafts is open
12.15	No changing of rocker ratios;
12.16	No engines with forced induction will be permitted e.g. turbo- or supercharged;
12.17	No machining or material removal from cylinder head ports/combustion chambers, valves, crankshaft, conrods, pistons and flywheels, NO match porting; accept for head skimming as per 12.7
12.18	One conrod and one piston must be without any shaving and/or drilling and/or grinding/filing marks;
12.19	Spot machining of the crankshaft and flywheel are permitted for balancing purposes only;
12.20	Weight of engine components must be kept to standard specifications; no lightening will be permitted;
12.21	No engines with forced induction will be permitted e.g. turbo- or supercharged;
12.22	No motorcycle engines permitted;
12.23	Only 1.6 fuel injection heads on the VW Golf engine may be used; 1.4 VW head not permitted.
12.24	Radiators are open but can only be mounted where original radiator situated
SR13	**TRANSMISSION**
13.1	Only original gearboxes as fitted to the specific model in standard form may be used;
13.2	Rear axles/final drives must be the original standard unit;
13.3	Ratio of final drives is open

13.4	The differential may be locked by means of welding the gears together e.g. locked diffs;
13.5	No limited slip diffs will be permitted;
13.6	Standard clutches only;
13.7	Pressure plate must remain standard;
SR14	**WHEELS AND TYRES**
14.1	Double wheels not permitted
14.2	Any 13" or 14" rims may be used with a maximum width of 8J;
14.3	15" will be permitted see 14.4 noted below;
14.4	Tyres may be a maximum width of 205 and not less than a 60% profile, except with the 15" 50 profile;
14.5	Only freely available road tyres from any general tyre dealer is allowed;
14.6	Normal road legal tyres, new or re-treaded are permitted; slick or semi slick tyres will not be permitted;
14.7	No purpose built or manufactured race tyres are permitted; Rally tyres not permitted
14.8	The regulation of purpose built or manufacturing of tyre shall include **NO grooving;**
14.9	Tyre walling bearing the following inscription is not permitted, "for racing purposes only/ not road legal / not for highway use";
14.10	All tyres have to be presented at scrutineering;
SR15	**WINGS:**
15.1	Wings are not permitted;

QUICK INDEX 1600 STOCK ROD SALOONS

1600 STOCK RODS GUIDELINES		Fuel pressure regulator	✓
Aftermarket ignition systems	✗	Homemade Steering mechanism	✗
Air boxes.	✓	Spoilers	✗
Altered camshaft drive	✗	Multi valve	✗
Altered rocker ratios not permitted	✗	Limited slip diff.	✗
Removal of alternators or charging system is permitted	✓	Weber - down draught 32, 32-36, 36dcd, 38	✓
Aluminum fly wheel	✗	Mechanical and electrical fuel injection.	✗
Standard bore and stroke	✓	Normal road legal tyres	✓
Any compression ratio	✗	Slicks, semi slicks	✗
Exhaust Branches	✓	Electronic distributor	✓
Camshaft profiling	✓	Lock diff	✓
Wings	✗	Ratios	✓
Retread tyres	✓	Octane booster	✗
Electric Fan	✓	Fuel additives	✗
Battery original postion	✓	Disc brakes on rear axle	✗
Tyres protruding outside body	✗	Cutting of body panels	✓
Electric fuel pump	✓	Replace body panels with fiberglass panels	✓
Electric water pump	✗	Clip-on steering wheel	✓
Forced induction (turbo - supercharger)	✗	LDV vehicles	✓
Wheel arhes	✗	Fuel injection pump	✗

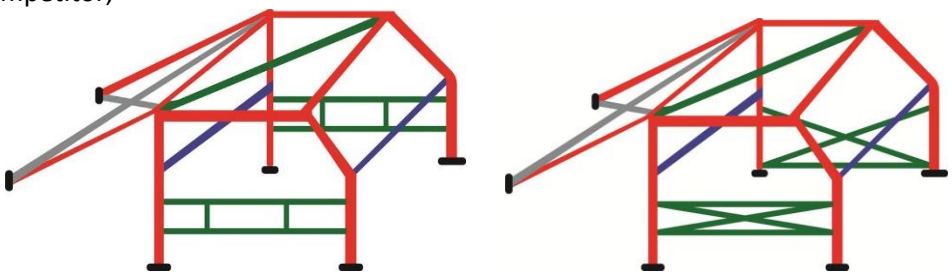
TECHNICAL CONSTRUCTION SALOONS REGULATIONS

2018/2019 STOCK RODS

TCS 1.	**PROTECTIVE CLOTHING**
1.1	Full fire-retardant race overalls are compulsory.
1.2	Minimum requirement is a Level 1, single layer race suit;
1.3	The composition of the suit even if small percentages are used may not be of a polyester, nylon or synthetic material;
1.4	Mechanic overalls will not be permitted;
1.5	Two-piece race suites not permissible;
1.6	No pushing up of sleeves permissible whilst racing;
1.7	Fire retardant gloves are compulsory;
1.8	Open fingertip gloves are not permitted;
1.9	It is mandatory for Competitors racing with methanol to wear balaclavas;
1.10	Neck braces/donut type shall be mandatory for all competitors;
1.11	All helmets will be in a good condition; it will be highly recommended that full face helmets are used for Oval Track Racing;
1.12	The only helmet that will be approved must bear the SABS or of a higher standard and a type that is suitable for highway usage;
1.13	The Scrutineer may condemn a helmet or confiscate a helmet until after a race meeting, if, the visor is cracked, the helmet has a visible crack and if the helmet straps are in any way sub-standard;
1.14	Recommended washing instructions of race suites: No Bleaches, No fabric softeners, no machine washing, no tumble drying, no ironing – hand wash only and drip dried – this method preserves the agents within the fabric.
TCS2.	**SAFETY REGULATIONS**
	Applicable to all classes and vehicles
2.1	All sump, gearbox and differential drain and filler plugs have to be drilled and wired;
2.2	Oil filters have to be clamped or strapped;
2.3	A radiator water catch tank of a minimum capacity of 1 litres shall be fitted to the cooling system;
2.4	A sealed radiator system will be exempted from the above regulation, for example Golf systems;
2.5	All joints and seams in the construction of the vehicle shall be properly mitered and be welded;
2.6	Methanol – it shall be mandatory that all methanol storage containers (Jerry can) be marked by a spray of paint or sticker, the letter **M** or in full Methanol, the colour to be used shall be red or orange;
2.7	All flammable items such as dashboards, plastics, carpets, upholstery and hood lining must be removed;
2.8	All bitumen cladding on the interior of the vehicle has to be removed;
2.9	All lights and windows must be removed from the vehicle, only the rear side windows may be replaced with clear lexan;
2.10	Under no circumstances may a vehicle compete without a secured bonnet, the purpose of this is to prevent the bonnet dislodging and secondly preventing, burns of any nature towards a competitor;
2.11	Bonnets shall be constructed and fit in such a manner that no open gaps will display when closed;
2.12	All piping (brakes and fuel) and wiring must be installed above the floor board or chassis;
2.13	All saloon vehicles shall be able to self start and self starters have to be in a working condition;
TCS3.	**BATTERIES**
3.1	It shall be mandatory for batteries to be bolted down;
3.2	Battery shall be bolted down by way of a cross bar or cross bracket;
3.3	Cross bar to be made of a flat bar with a minimum 5mm thickness; or
3.4	Square bar of 8mm x 8mm or round bar of a minimum 8mm in diameter;
3.5	The hold down bolts shall be a minimum of 8mm in diameter;
3.6	No side clamps or straps will be permitted to hold down the battery;
3.7	Batteries shall be covered by a nonconductive material to prevent short circuiting in the case of an accident;

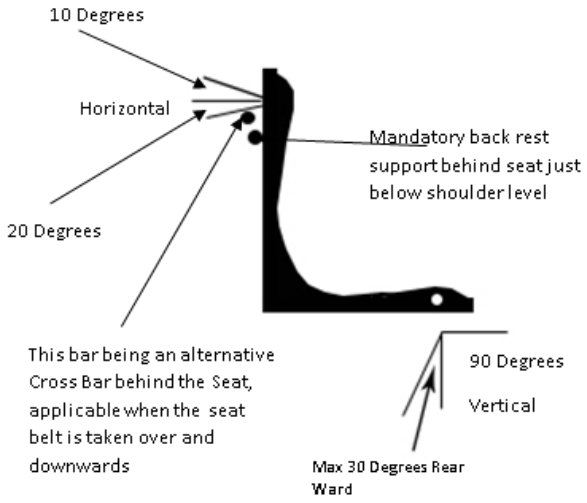
3.8	Batteries fitted in the competitor's compartment shall be mounted in a leak proof compartment, eg., boat battery box;
3.9	The use of battery box compartment shall still require the battery to be bolted down inside the box, in all instances the cover of the battery box must be secured, by way strapping;
3.10	Batteries may be kept in their original positions and be affixed correctly;
3.11	In all instances batteries should be easily accessible for scrutineers to inspect;
TCS4.	**COMPETITION NUMBERS ON VEHICLES DISPLAYS**
4.1	Mandatory number placing on Wing Plates: -
4.2	Wing Plates – White Back, black number or Black back with mandatory white or Day Glo colour only -
4.3	Minimum size, 300mm height with a 50mm font stroke;
4.4	No other stickers or advertising permitted on wing plate;
4.5	Absence of wings, the number shall be displayed as the above spec on the "C" Pillar
4.6	Competition number to be displayed on the front doors of the vehicle;
4.7	Competition number to be displayed on the Roof of the vehicle, showing towards the outer side of track;
4.8	Competition numbers to be a minimum size of 300mm in height with a readable 50mm Font stroke;
4.9	Competition numbers to be contrast to the colour of the vehicle;
4.10	Competition number and competitor's name to be displayed on the visor – visor height is generally 120mm in height;
4.11	**General Graphics and/or Sign writing on vehicles: -**
4.11.1	Only vinyl lettering or professional sign writing applications will be permitted;
4.11.2	Club Prefixes are mandatory to be displayed together with the number;
4.11.3	Advertisements/sponsors must not scramble the number of the vehicle;
4.11.4	Advertisements and slogans may not be of discriminatory manner;
4.11.5	Numbers 1, 2 and 3 will be reserved for WOMZA Final Championships only;
4.11.6	No longer may clubs use 1,2 or 3 for Club Champions or zero numbers;
4.11.7	Only, rear side windows (which are to be replaced with clear lexan or polycarbonate) may be sign written, no more than 50% of the window may be covered with sign writing;
4.11.8	No lights (LED) are permitted on the outside on the frame including wings.
4.11.9	No lights (LED) are permitted inside cockpit.
4.11.10	Lights (LED) are permitted on wheels and underneath of car.
TCS5.	**ENGINE POSITIONS:** **n/a**
TCS6.	**FUEL TANKS AND FUEL PIPES:**
6.1	Normal vehicles (tin-top) may not retain the original position of their fuel tanks, shall be removed from the original position;
6.2	It is highly recommended that properly designed and manufactured racing fuel tanks are used or bag type fuel cells which reduces the risk of fuel spillage from accident damage;
6.3	The wall thickness of metal fuel tanks shall be no less than 1mm;
6.4	A fuel tank breather, which shall vent externally, must be fitted to all fuel tanks.
6.5	A non-return valve shall be fitted to the breather.;
6.6	The non-return valve may not be airtight;
6.7	The fuel tank cap shall be the non-vented type;
6.8	The fuel tank shall be mounted in the boot-space of the car behind the fire wall;
6.9	Fuel tanks must be mounted in a separate compartment to the competitor;
6.10	Fuel tanks must be securely mounted to the boot floor or the chassis of the vehicle with bolts or metal straps;
6.11	

6.12 6.13	A fire wall must be constructed to separate the competitor from the fuel tank and fuel pumps as well as the filler and breather system; The fuel lines must run above the floor; The section of the fuel line running inside the vehicle past the competitor compartment must be of a steel material and may not have joints
TCS 7.	**KILL SWITCH**
7.1	All vehicles shall have kill switches made of non-flammable material fitted;
7.2	Kill switches to be marked red;
7.3	The fitment of the kill switch fitted shall be within the competitors reach and his sight when strapped in;
7.4	External switch shall be situated outside of the vehicle for Officials to easily reach;
7.5	If the internal kill switch cannot be reach by an official easily, it shall be mandatory for an additional external kill switch to be fitted;
7.6	The effect of the Kill switch/es is to isolate the battery power from the rest of the vehicle and to shut the engine off with immediate effect, resulting in the break of the ignition and electric fuel pump circuits, simply said to cut all power and fuel supply simultaneously;
TCS8	**MIRRORS**
8.1	Only one mirror mounted inside of vehicle permitted;
8.2	Maximum size of mirrors 100mm x 200mm;
8.3	One Exterior mirror permitted;
8.4	Exterior to be fitted within the width of car on the competitor driving side;
8.5	Maximum size of exterior mirror 150mm in diameter, width and/or height;
TCS9	**MUDFLAPS**
9.1	Mandatory on all dirt saloon classes;
9.2	Mud flaps to be fitted behind the rear wheels of rear wheel drive cars;
9.3	Mud flaps to be fitted behind the rear wheels and behind the front wheels of front wheel drive vehicles;
9.4	Mud flaps must be positioned directly behind the wheels and not more than 100mm from the back face of the wheels;
9.5	Distance of mud flap from ground level with driver seated, measured from the bottom of the mud flap to ground level is maximum 100mm and minimum 50mm, with the competitor seated and wheels inflated to racing pressures;
9.6	Mud flaps to cover the full width of the tyre and must be fitted as close to the tyre as possible;
9.7	Mud flaps not to drag on the ground;
9.8	Mud flaps must be made up of a firm but flexible material, metal material may not be used;
9.9	Mud flaps may under no circumstance be manufactured from rubber car mats
9.10	Mud flaps should be fitted in such a manner that it forms part of the body;
9.11	Mud flaps may not be part of or be fitted to bumpers;
TCS10.	**OIL SAFETY CONTROL**
10.1	Oil filters are either to be clamped or strapped;
10.2	Sump, gearbox, axle's drain and filler plugs are to be drilled and wired;
10.3	An oil catch tank, with a minimum capacity of 1 litres, capable of accepting surplus oil and fumes from the engine shall be fitted; (ENGINE BAY OR CAN IT BE FITTED INSIDE CAR)
10.4	The catch tank shall be connected to each breather outlet by means of a flexible pipe or similar conveyance, designed to feed the oil or fumes to the tank;
10.5	The catch tank is to be emptied between races;
TCS11.	**PROP SHAFT/DRIVE SHAFT/RUNNING GEAR PROTECTION**
11.1	**General Prop shaft protection hoops:**
11.1.1	Drivers must be protected from open running prop shafts by two steel bands, with a minimum width of 50 mm;

11.1.2	These bands shall at least be 5mm thick and be bolted or welded to the chassis;
11.1.3	These bands are to prevent a broken shaft from lifting and coming into the cockpit area;
11.1.4	The one band shall be a maximum of 150 mm behind the front yoke measured from the front of the prop shaft;
11.2	**Prop shafts running below chassis:**
11.2.1	Vehicles shall have a collar/hoop that would prevent the front end of the running gear (prop shaft or torque tube) to lodge into the track should it break while the vehicle is in motion;
11.2.2	The hoop should be approximately 25% along the distance of the shaft as measured from the front of the prop shaft;
TCS12.	**RADIATOR SAFETY CONTROL**
12.1	Radiators applicable to all classes – a water catch tank with a minimum capacity of 1litres shall be fitted to the cooling system, exempted will be sealed water systems;
12.2	Under no circumstances may a water catch container be replaced with a pipe allowing steam or water (overheating) being directed outwards;
12.3	All joints that are not flared shall be double clamped, flared pipes may have one clamp only;
12.4	All piping to and from the radiator, other than the joints and the overflow pipes shall be of steel or aluminum or copper;
12.5	All piping to and from the radiator, other than the joints and the overflow pipes shall be of steel;
12.6	The pipes must be mounted securely between the firewall and the radiator and at a height not higher the sissy bar;
12.7	All joints are to be enclosed by a rubber sock and all hoses are to be double clamped;
12.8	Radiator shield protectors are mandatory with the following regulations applicable;
12.9	A fitment of a shield in lexan or Perspex shall be fitted to protect the competitor from a burst water pipe;
12.10	The shield could be made up in two designs namely:
12.11	A straight up shield covering and protecting the competitor in full whilst seated, this to be the full range of the radiator and competitor;
12.12	An upright shield with a hood covering the top of the radiator to form an airflow tunnel so not to restrict air intake, being the full width of the radiator, protecting the competitor whilst seated;
TCS13.	**SAFETY/ROLL CAGES**
13.1	The safety cage know as a roll cage is a structural framework designed to prevent serious bodyshell deformation and bodily harm in the case of collision or a car turning over;
13.2	It is compulsory for all vehicles to have a fully constructed roll cages;
13.3	Great care must be taken that roll cages are constructed in the fashion, that in an event of an accident, no metal piping could break off causing bodily harm. The roll cage has to be designed so to protect the competitor; 
13.4	The example shall be a mandatory minimum requirement;
13.5	The cross bar behind the driver seat (blue) shall be mounted flush directly behind the backrest of the seat in order to support the backrest. This cross bar shall be just below the shoulder of the driver when seated;
13.6	Additional cross bars may be added to the cage;
13.7	Where the roll cage has lost strength due to bends, triangulated bracing to reinforce the cage would be necessary;

13.8	All welding points to be welded 100% and the less accessible areas no less than 75%;
13.9	Round tubing shall have a minimum outside diameter of 38mm and a minimum wall thickness of 2mm;
13.10	A maximum of two 8mm inspection holes on the left hand and right hand side of the cage shall be made for easy inspection;
13.11	Where the driver's helmets could meet the safety cage, a non-flammable padding should be provided for protection;
13.12	Sissy bars shall be fitted in such a manner that the competitor's hips and knees are completely protected when he/she is strapped into the seat. The sissy bars should be constructed in such a manner that in an event of a T-bone incident the other vehicle would collide with the sissy bar;
TCS14.	**SEATS - Race Seats**
14.1	Race seat minimum specifications for oval track racing: Race seat shall have holes where seat belts can be let through, one on each side of the seat for lap belts and two on the back rest at shoulder height for the belts to exit to its mounting points;
14.2	It is highly recommended to fit a FIA approved seat;
14.3	Only bucket race seats permitted, no adjustable back rest reclining road car or race styled seats will be permitted;
14.3	No fibre glass seats may be used;
14.4	Seat are to be mounted against support bar across just below shoulder level.
14.5	Aluminum seat permitted;
14.6	Aluminum seat wall thickness – minimum of 2.5mm;
14.7	Steel seat permitted;
14.8	Steel seat wall thickness, minimum of 2.00mm;
14.9	Steel framed seats permitted;
14.10	Carbon fibre seat is permitted
14.11	Carbon fibre seat wall thickness, minimum of 3.00mm
14.12	Carbon fibre seat are to be mounted with a support bar across the back with tear plates of 100 mm x 100mm, behind the backrest of the seat, just below shoulder height;
14.13	Vehicles that have cracked/torn and broken seats shall automatically be excluded from the event, without any further negotiations;
14.14	Race seat need to be bolted with four 8mm(minimum) bolts at bottom of race seat or with two 8mm(minimum) of the center of seat. The Seat backrest also need to be bolted to the support bar with two 8mm(minimum) bolts.
TCS15.	**SEAT BELTS**
15.1	Quick release seat belt and shoulder harness are mandatory;
15.2	Seat belts must have a minimum of four points;
15.3	No hand stitching or homemade alterations permitted to belts;
15.4	Only SABS or International standard belts permitted;
15.5	Safety belts and driver seats must be secured to the roll cage or frame (not to the floor pan);
15.6	**Fitment of Seat Belts:**
15.6.1	The shoulder belt will exit through the backrest of the seat horizontally to the rear mounting point with a maximum of 10degrees upwards and maximum of 20degree downward from the exit point;

15.6.2	The lap belts will exit through the side hole fitment of the seat, and form a vertical line to the mounting points with a maximum of 30degrees rearward;
15.6.2	The crotch belt application – it shall exit though the seat downward vertical viewed from the side with a maximum of 20degree rearward towards the mounting points;
15.6.3	If the fitment of the shoulder belt cannot fit as above, the fitment of the shoulder belt may be taken down to the chassis, but must be supported with a crossbar behind the back rest of the seat at the same height of the seat belt exit holes for the crossbar to function as a support for the belt going down for the bar to take the downward pressure of the shoulder belt and not the seat back rest;
15.6.4	Existing vehicles that have seat belts and seats mounted to the floor pan must be supported by 50mm x 50mm washers or 75mm x 2mm in diameter tear plate;
15.6.5	See drawing for belt installation;



TCS16.	**SPACE FRAME / PURPOSE BUILT / SEMI-SPACE VEHICLES**
	n/a
TCS17	**TOW HOOKS**
17.1	All vehicles are to install tow hooks to the front and back of the vehicle;
17.2	These may not protrude beyond the bumpers of the vehicle;
17.3	It should be clearly marked in red, yellow or orange for tow-vehicle crew to tow the vehicle with the least delay;
TCS18.	**WEIGHTS**
18.1	Vehicles which require to increase vehicle weights shall do so by fitting ballasts:
18.2	Ballasts, is a non-functional material added to increase vehicle weight.
18.3	Any ballast must be permanently fixed to the structure of the vehicle by means of bolting, wiring and strapping of ballasts is prohibited;
18.4	All ballast must be clearly marked by a contrasting colour to the interior of the vehicle;
18.5	Championship events – once vehicles have been weighed the Scrutineer shall have the right to wax seal ballasts;
18.6	Fitted fire-extinguishers shall be removed or it's weight reading shall be taken into consideration and be excluded for weighing purpose;
18.7	No weight tolerances will be permitted;
18.8	A vehicle may be weighed at any time during the event and remains the responsibility of the competitor to ensure the vehicle in which he is competing complies to the class weight regulation;
TCS19	**WELDING**
19.1	All joints and seams in the construction of the vehicle are to be properly mitered and shall be welded.
19.2	All visible welding shall be 100%.
TCS20.	**WHEEL AND BODY PROTECTOR**
	n/a
TCS21.	**WINDSCREENS AND GLASS WINDOWS**
	n/a