



BANGERS 2020 Rules, Regulations & Specifications

Contents

1. THE FORMULA	2
2. WHO CAN RACE	2
3. WHAT TO DO NEXT	2
4. ELIGIBLE CARS	3
5. INITIAL PREPARATIONS	3
6. PERSONAL SAFETY	3
7. SAFETY EQUIPMENT	N/A
8. VIOLATIONS	5
9. GENERAL RULES OF RACING	5
10. DEMOLITION – TYPE EVENTS	6
11. ROLL BAR	6
12. BODYWORK	7
13. ENGINES	8
14. GEARBOX	9
15. WHEELS & TYRES	9
16. EXHAUSTS	10
17. COOLING SYSTEM	10
18. BRAKES	10
19. FUEL SYSTEM	10
20. BATTERIES & THE ELECTRICAL SYSTEM	10
21. MIRRORS	11
22. PAINTWORK	11
23. SUN VISOR	11
24. FIN PLATES	11
25. STEERING WHEELS	11
26. SPECIAL MEETINGS/EVENTS	12
27. SPECIFICATION & RULE CHANGES	12
28. SAFETY EQUIPMENT	13

1. THE FORMULA

This formula is designed to encourage new drivers to our circuits, to enjoy the atmosphere & thrills of driving on an oval, without the substantial financial investment. It also gives the opportunity to race to those drivers who cannot give the commitment necessary to compete at the very high level of all our other Formulas. The Formula should appeal to all drivers: from complete novice, who may be concerned about contact (they can display a black & white cross on the back of their car until they are confident to race without it), & the more experienced driver, who can use **light contact** to make his/her way through the traffic to the finishing flag.

The object of the racing is to complete the specified number of laps in the shortest time. You may push a car from behind, or spin a car either way but there is no following-in on post and wire tracks (you must not be on the back or side of a car as it hits the fence). 'T-Bones' are also not permitted (Section 9). If at any time the racing is felt to be "processional or roddy" the Starting Marshall will wave a blue flag & then drivers must not overtake another car without attempting to spin the car out.

Racing is in a clockwise direction on a clearly defined circuit with a separate infield. Any wheels passing over the demarcation lines or entering on to the grassed infield areas will mean that the driver will be penalised.



2. WHO CAN RACE

This formula is especially designed to encourage new drivers to Stadium Racing and to enjoy the atmosphere and excitement of driving without a large financial investment, or for drivers who feel they cannot give the commitment required to compete at a very high level in the other various formulas available. All licence applications will be reviewed by the Promoter and it must be understood that applications may be refused if it is considered that the prospective driver is too experienced for this entry level formula.

Day licences are available at a cost of £30 per meeting – a temporary licence form must be completed in full.

3. WHAT TO DO NEXT

1. Check through the fixture list for the Banger fixtures and select a meeting or meetings.
2. Contact the Stockcar Office for a booking-in form which you must complete. Details about payment can be discussed with the Administrator.
3. Return the form to the Racing Administrator as soon as possible, as bookings are on a first come first served basis.
4. When the form has been processed you will be placed on to the booking system.

5. On arrival at the Stadium you must first book in at the pit office and pay any fees applicable.
6. You must then get the car Scrutineered and obtain the Passed Scrutineering Sticker which has to be displayed in a prominent position on the car.
7. Ensure you are familiar with the raceway flags and the rules of racing, as you are now ready to race and will come under all the Rules & Regulations, similar to all the other formulae.

4. ELIGIBLE CARS

1. Any right-hand 2 wheel drive saloon, hatchback or estate car with a steel body with an engine size not exceeding 1600cc, & 1800cc single ohc with either carburettors or Multi Point Injection or Diesel. Exceptions to this rule are the following vehicles which are not permitted: Vauxhall Tigra, Vectra, **Astra Mk4 Coupe**, Ford Mondeo, and any type of Van.
2. **Cars must be made in upto 1600cc form.**

5. INITIAL PREPARATIONS

1. Remove all exterior mouldings, screen glass, lamps, handles *and any spoilers*.
2. Remove all *airbags and charges (if fitted)*, interior trim, the dash if possible & passenger seating.
3. Remove the fuel tank, spare wheel carrier & tow bar if fitted.
4. Remove rear spoiler and side skirts even if factory fitted.
5. Remove all obsolete wiring and interior debris from the car.
6. It is compulsory to pad steering columns with foam and not pipe lagging.
7. It is compulsory to pad the B pillar and roll cage.
8. Read & familiarise yourself with the Banger Rules & Regulations for preparing the race car

6. PERSONAL SAFETY

Drivers are advised that under Health & Safety, they are responsible for their own and their Mechanic's actions. Promoters have had complaints made about Registered Drivers & also Mechanics, consuming large amounts of alcohol at meetings, which could effect their judgement or be detrimental to their health, when medical attention has to be administered by Paramedics, St Johns or Hospital Staff.

Should an incident occur that proves fatal on the raceway and you are involved, it is likely that the Police will want interview you. If you drive, don't drink! Scrutineers and Officials will report to the Clerk of the Course, anybody they believe is under the influence of Drink or Drugs.

Drivers who are thought to be under the influence, may be breathalysed.

Flags as used by the Starting Marshall & Trackside Safety Staff.

- Waved Green Flag – Go, the race has started.
- Waved Red Flag – Stop racing, slow down and stop immediately.
- Chequered Flag – The race winner has crossed the line, continue to race until the Red Flag is shown.
- Held Yellow Flag – Beware, you are approaching a hazard on the track, continue to race with caution.
- Waved Yellow – Slow down to rolling lap speed, hold your position, and do not overtake any other cars. The pace car is entering the circuit to control the pace until the raceway is clear to race.
- A Blue Flag – The race has become processional, you may not pass another driver without attempting to spin them out.
- Black cross on a White board – You have committed an infringement and may be penalised in the results.
- Waved Black Flag - You are disqualified, pull off the track immediately.
- White Flag with a Red Cross – Technical Disqualification, leave the track immediately

Drivers are also reminded that they should line up on the grid with their engines switched off in the correct points order, unless told otherwise.

7. SAFETY EQUIPMENT

7.1 CRASH HELMET

Helmets must be of a minimum standard as directed by British Oval Racing Safety Executive (B.O.R.S.E). These are FIA8860-2004, FIA8860-2010, Snell SA2005, Snell SA2010, Snell SA2015, SFI Foundation 31.1A, SFI Foundation 31.2A. The E2205 European standard helmet may be used in Fibreglass, Carbon or Tri-Composite form only i.e. NO POLYCARBONATE helmets are allowed. It is important that the helmet fits the driver correctly. Shatterproof goggles/visors must be worn although tinted visors are not advisable. Your helmet must display the current ORCi (ORC15) sticker.

7.2 RACING OVERALLS/GLOVES

You must wear Fire retardant, clean, un-torn Racing Overalls that are made of a fire retardant material and are clearly marked fireproof. Mechanics are also required to wear clean overalls and will not be permitted on to the track without them being on, when instructed to do so. It is mandatory to wear fire retardant gloves also clearly marked fireproof.

7.3 A NECK BRACE can be used but not compulsory, so too is a spine support. A forward head restraint can be used but must be to either FIA or SF1 standard.

7.4 BALACLAVA *It is Mandatory to wear fire retardant Balaclavas clearly marked fireproof.*

7.5 WET WEATHER CLOTHING is also recommended and must be worn in addition to, and **not** instead of the racing overalls.

7.6 1kg FIRE EXTINGUISHER

A 1Kg Dry Powder Gauge Fire Extinguisher is highly recommended and if fitted, this should be in a tube with a spring top and should be within easy reach of the driver. Old type BCF (green) type extinguishers are not allowed. All tow vehicles, must carry a minimum of a 2kg fire extinguisher dry powder or gas, which must be within easy reach of the driver and mechanics at all times, especially when refueling.

7.7 DRIVERS SEAT WITH HEAD RESTRAINT

You must have a Driving Seat with a head restraint. The seat should occupy its original position where possible and be suitably supported at shoulder height and on both of the sides and back, with a suitable framework or seat stiffener's.

7.8 SAFETY HARNESS

The lap belt/straps and crotch straps should not pass over the sides of the seat, but through it, in order to wrap and hold the pelvic region over the greatest possible surface. A minimum of a four point buckle fixing must be used with a minimum of 3 floor fixings. A secure part of the floor or cage (including the seat bar), are recommended anchor points. All seatbelt connection points must be visible and no belts pass through any firewall.

Following research made by leading safety harness manufacturers, information has been made available with regard to the best way to fit your safety harness; this will further ensure your safety.

The lap belt crossing should be below the anterior superior iliac spines (bony part of the hip). Under no circumstances should it be worn over the region of the abdomen.

Lap belt/straps must terminate vertically downwards, and not forwards or rearwards of the hip joint.

~~Lap straps should terminate symmetrically about the wearer on either side of the seat, about 20" (500mm) apart. The distance between the seating surface and the anchorage point should be kept to a minimum to prevent submarining. The location of the crotch strap mounting should be to the rear of the driver.~~

~~All belts must connect to the quick release buckle. The abdominal strap fixing point must be on the chassis, roll cage, or floor (for vehicles with no chassis), either side of the driver.~~

~~The shoulder straps must be supported at shoulder height. NASCAR type buckles must be fitted with lever on the right side of the driver. It is advisable to fit a secondary means of detent to prevent overall sleeves accidentally unhooking the buckle during racing. A small section of tube grip elasticated bandage, slid over the hooked buckle, serves the purpose.~~

~~Special attention must be paid to the condition of seat belt fixings once fitted. Information is available, from your Promotion, on the correct procedure to follow when fitting seat belts. Remember - your life depends on them, and belts, once involved in a severe accident, should be discarded and replaced.~~

~~Seat belts can be fitted using chain, the chain must be at least 8mm thick & be solid links.~~

~~**The safety of your seat will be judged by the Scrutineer's and you will only be permitted to race when they are satisfied that you will be as safe as possible in any event.**~~

8. VIOLATIONS

1. When referring to the engine, gearbox, final drive, mechanical or construction Rules & Regulations, the principle will always be: *Unless permission is specifically granted to make modifications (or any variation) nothing may be done to alter or change the Standard Parts in any way.*
2. It is the responsibility of the Driver to prove to the Promotion that the part is legal, by way of written proof of where the part originated. This must be undertaken within 7 days, otherwise the item in question will be deemed illegal, resulting in immediate suspension from racing & referral for disciplinary action. Unless the rules say you can do it, you cannot do it!
3. Presentation of a Vehicle for Scrutineering is a declaration by the entrant that the vehicle is eligible for that event.
4. Car engines & fuel will be checked on a random basis. Violations or refusal to allow an engine check will result in an immediate suspension of all racing facilities.
5. All Car and Engine Specifications will be taken from either the manufacturers Technical Specifications or the Technical Service Data books as published by Glass's Guide.
6. Should a discrepancy occur between the Specifications then the Promotion will exercise its judgement, and that decision will be final.
7. Clarification on any one item may be sought from the Promoter.
8. Each driver is permitted one car per meeting & each car is permitted one driver per meeting.

9. GENERAL RULES OF RACING

1. You must line up in your grid positions with the engine switched off.
2. Grid positions will be allocated on a first come first served basis on track. Race winners will start at the back of the grid for the rest of the meeting. If it is a points series meeting then the top 3 of the points series will start from the back of the grid, along with the Current World Champion & the Track Champion.
3. The definition of a 'T-Bone' is when contact is made with the side of a car between the front and rear wheels. T-boning cars which are against or close to the barrier with excessive force is not allowed. It is also not permitted to t-bone a car which is close enough to the barrier to mean that significant impact with the barrier is inevitable after the hit. Even where cars are not against or near the barrier, the Steward may still consider a hard t-bone anywhere on the circuit to be excessive and may take the appropriate action to discipline the driver.

The Malcom Girling Rule may only be used on championship races which covert a roof grade e.g. World Championship. This is when a car has deliberately been taken out by breaking the rules of racing within the last 3 laps of the race e.g. a car coming off the infield to stop the leader / a car giving a 'head-on'.

This does not include a lapped car taking out the leader providing the manoeuvre used is within the permitted rules of racing. If the Steward Of The Meeting decides that the Malcolm Girling has

come into effect the result shall go back to when the offence occurred and the leader of the race at that point will become the winner. The Malcolm Girling rule only applies to the driver leading the race.

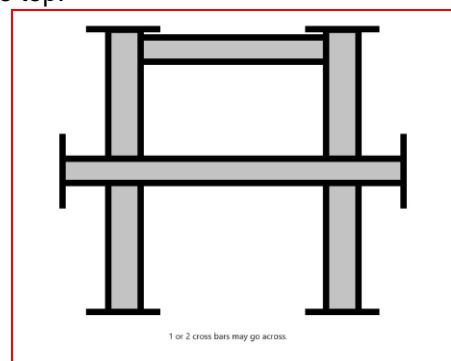
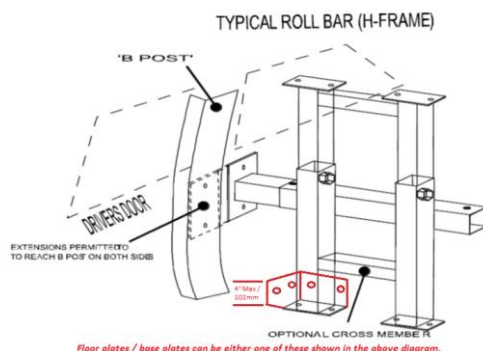
10. DEMOLITION - TYPE EVENTS

The following rules apply to any race where the nature of the event is to win by stopping the opposition. Demolition Derby Rules may only be used when the staging promoter declares (by way of a drivers briefing, letter, or notice on the programme) that these rules apply

1. Attacking from the opposite directions permitted, providing the attack is from the outside of the track i.e. the fence side.
2. You may wait for a car or attack any part of the car except for the driver's area. This area is defined as being from the centre of the OSF wheel to the centre of the OSR door.

11. ROLL BAR

- 1 Roll cages may be adjustable (height and width), however the use of screw adjusters i.e. acrow style are not permitted.
 - 2 The roll cage must be fitted upright or dog-legged, but not leaning back or forward.
 - 3 It is compulsory to pad roll cages, including the B pillar and steering columns must also be padded with as foam as possible.
 - 4 The hoop must be one piece or two uprights and one top bar of a welded construction. This top bar should be as shown at the top of the uprights.
 - 5 A second cross bar is compulsory, a third is optional; these must be welded or bolted to the uprights.
 - THE ROLL BAR MUST NOT HAVE ANY REAR SUPPORTS but may have extensions no further forward than the B post (see diagram below). If used, it is recommended that this is bolted through the B post.
 - 6 It is highly recommended that the frame maybe bolted through both sides of the car.
 - 7 The minimum size for roll bar is 2"(50mm), maximum size 4"(100mm), minimum thickness 3mm. This MUST be box or tube.
 - 8 Crossbars must have a 5" (125mm) square end plate fitted. This must be minimum 6mm thick.
 - 9 The roll bar cross bars must be straight, or extended forward to the B pillar and bolted through the pillar
 - Each upright must have a minimum of two bolts on each side to the floor and two each side at the top. . The maximum size of the base plate is 15" (385mm) x 11" (280mm) These may go up the side of the sill or the rear panel straight up and a maximum of 4" (102mm) high and the same length and width as the base plate/floor plate of the cage, a maximum of 2 bolts through the side.
- 10 You must tie the seat at shoulder level to the roll cage or B pillar, through the seat frame not headrest, you may fit the 2nd cross bar in support of the seat just below the window aperture or weld a frame on the cage to support the seat at the top.

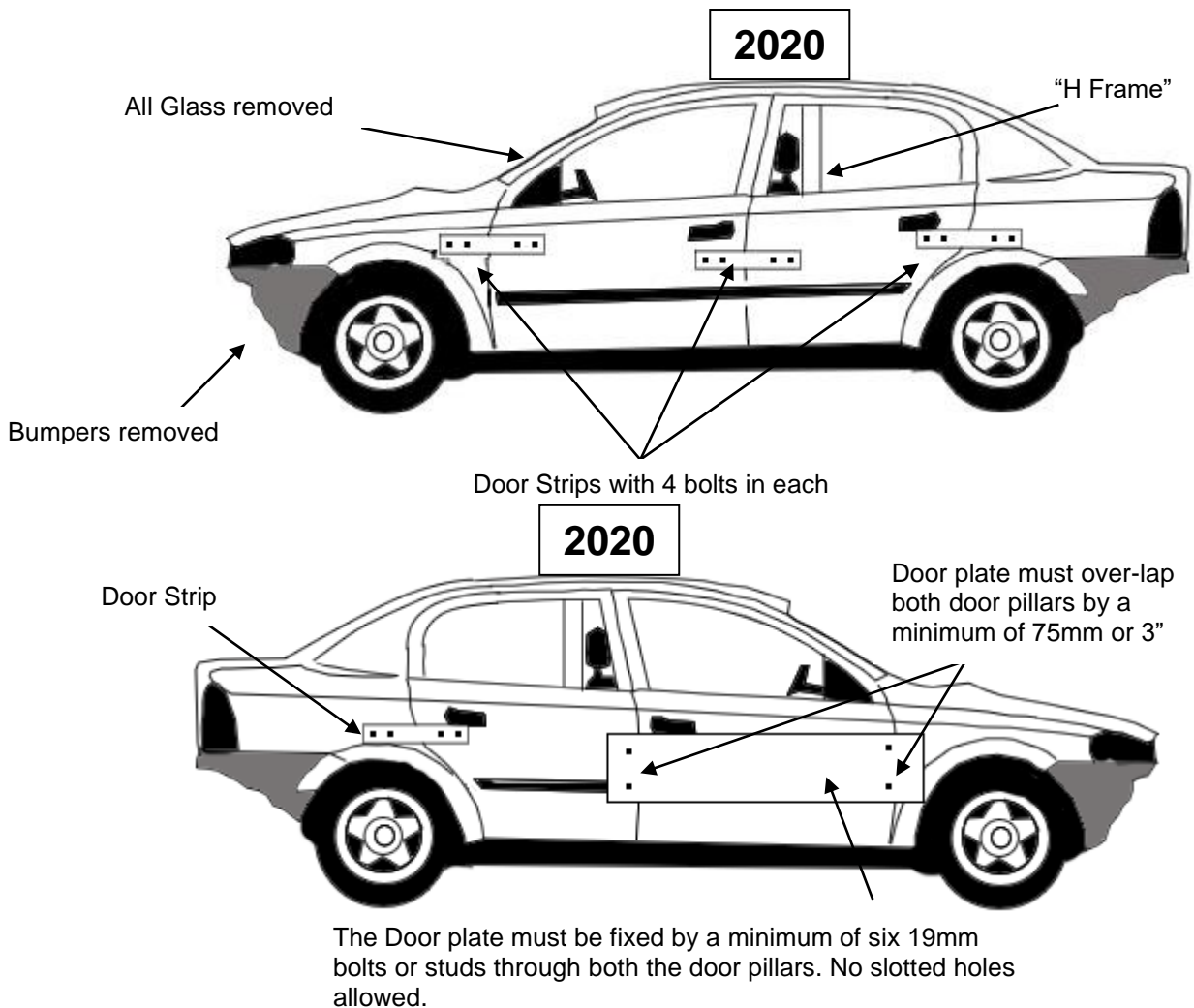


These two diagrams are a guideline to how the frame should be constructed but gusseting or triangulation is accepted.

12. BODYWORK

Doors

1. The Drivers door is only part on the car that can be welded and a piece of box or tube can be welded to the lower window aperture, you are allowed to weld the drivers side rear door lower window aperture with a piece of box or tube no longer than 6" (150mm). No other welding is permitted anywhere else on the car apart from the sun roof plate. If the drivers door is not welded then a bolt maybe used in the B-Pillar on the drivers door.
2. All the other doors must be fastened with either of the following:- (1) strip plates no longer than 300mm or 12" in length, by 75mm or 3" in width. (2) rectangular plates 300mm or 12" in length, by 300mm or 12" in width. These can be fixed with a maximum of four bolts (or five if the roll frame is bolted through the 'B' pillar). The rear door can be held shut with two bolts directly through the panel, if a clamp is not used. No additional bolts in rear arches, wings or pillars.
3. **No bolts above the bottom of the window line.**
4. The tops of the door frames may also be tied with seat belt webbing (only one piece can go through the roof but you may use seatbelt around the pillars) this maybe attached with tex screws or tied. The bottom of the door may have one piece of seatbelt which goes through the floor attached with tex screws or tied. Do not weld these other doors. Tailgates/boot maybe fixed with a maximum of four separate fixings. This does not include the drivers door. The drivers door can be welded or use as much seatbelt as required.



5. A driver's door plate must be fitted & overlap the door pillars by a minimum of 3".
NB. No trench plates are permitted.
6. The plate must be a minimum of 10mm or 3/8", to a maximum of 19mm or 3/4" in thickness.
7. Its depth must be no less then 254mm or 10" & no more then 305mm or 12".
8. The plate must be fixed by either four 19mm fixings or **six 12mm fixings**, through the door pillars with large washers on the inside.
9. The door plate holes must not be slotted.
10. An additional piece of angle iron or box section, not exceeding 76mm or 3" in its width and of any gauge, may be welded horizontally along the length of the door plate. The ends of this

horizontal section must have the ends tapered or cut at an angle so as to prevent getting tangled up in rubbing situations. Any bolt fixings must not protrude this section of metal, they must be flush.

11. A steel plate fitted to the driver's floor-pan is highly recommended. It must be no thicker than 6mm, and must be bolted and/or welded in. This may be modified to rise to the maximum height of the sill of the door side only.

Front & Rear Bumpers

All Rear must be removed, The original front bumper maybe left on but the outer plastic has to be removed, no additional welding or bolting is to used on the front bumper, also no adding of bumpers during the meeting.

Front Wings

The lower part of the wing may be trimmed level to where with the top of where the bumper was but must not be folded or have any additional fixings. They maybe crimped at the lower edge.

Bonnet Fixings

1. Bonnets may be removable but must be securely fixed front and back with bonnet locking pins of some form. If bolts are used a maximum thread size of 16mm, with maximum size of washer 4" or 4". No crush tubes allowed. Bolts must go through inner flitch or slam panel i.e. not through chassis. A maximum of 4 bolts may be used.

Triangular corner plates or straps **can be upto a maximum of 300mm in length of the 90 degree angle of the plate and** may be used to secure the rear of the bonnet by bolting or welding (1/8"thick). Plates or straps must be placed no further than 12" across or down from the back edge and side of the bonnet. In this case you may only use two bolts at the front and two pieces of seatbelt. The seatbelt in the bonnet cannot include tex screws.

Sun Roofs

1. The glass must be removed and replaced with a piece of metal of 2mm, overlapping the aperture all the way round by 100mm or 4". The plate can be either welded or bolted in place. The fixing of this panel will have to meet scrutineering approval.
2. **The sunroof cover must not cover over the roll cage bolts.**

Aerofoils, Wings & Spoilers

1. All aerofoils, wings and spoilers must be removed.

Grilles

1. These must be removed.

Engine Mounts

1. On any car one engine mounting maybe replaced with a steel equivalent of the same size. The steel mounting must pick up on a maximum of three points on the engine block, **this mount can be no longer than 10" inches & must not bolt through chassis.**
2. You are allowed to convert a engine or gearbox original mounting to one solid mounting only.

13. ENGINES

1. The engine must remain as it was produced in its standard form.
2. The air filter may be removed or replaced.
3. The carburettor body & Venturi's must not be altered or modified from the standard design.
4. Multi point injection can be used, but you may also remove the injection system and replace it with a single carburettor set-up (Weber 32/36 are permitted) or Diesel. No twin carburettor set-ups except the twin carburettor set-up on a Honda / Rover.
5. Hondas Are not allowed to run the weber carb.
6. All twin cam Honda engines are banned.
7. Engine changes are not permitted – eg V-Tec in a Rover, but you may change the seventh generation Honda civic engine to a maximum 1500cc earlier Honda engine but must remain on

the original gearbox. Mk2 onwards Nissan Primera & Almeria can also use the early Mk1 engine model related.

8. **The Vauxhall Astra 1.6 Mk4 engine maybe fitted to any 1.6 Vauxhall engine.**
9. **The Ford Zetec 1.6SE maybe fitted to any Fiesta or Focus, if swapping a focus engine, this engine must have the plastic manifold at the front.**
10. **This rule is under constant review and maybe changed during the season.**
11. **The standard ECU that was manufactured with the engine must be used.**
12. An oil filter guard is permitted on forward facing oil filters. It must be made from flat plate being a maximum of 4" x 4" diameter and a maximum of 6mm thick, secured back to the engine using 2 pieces of 1" box section. The plate must not come forward of oil filter more than 1" and be mounted on the engine as close as possible to oil filter. The object of this is to prevent oil fires and not to strengthen the car therefore if the scrutineers believes the guard to be excessive you will be asked to remove it.
13. A clutch guard is permitted on front of the engine/gearbox if fitted forward facing of the engine, with a maximum size as follows:- 6" x 4" and a maximum thickness of 6mm. This must be secured to the engine/gearbox only.
14. **Homemade Thermostat housing are permitted but must be no bigger than the original size.**
15. **Distributers externally can be modified but the internals must remain standard.**
16. **No cambelt covers are allowed.**

14. GEARBOX

1. The Transmission must be kept as produced for the model in its standard form.
2. You may not lock the differential, or any type of slipper or power lock differential cannot be used even if fitted as standard.
3. **You may used cables to enable gear change.**

15. WHEELS & TYRES

1. No tyres can be under a **60 profile**. This rule does not come into effect until 1st July 2019.
2. All four wheels must be of the same diameter.
3. Wheels must be the same offset per axle.
4. All wheel fixings must be in place.
5. All wheel weights & hub caps must be removed
6. Any standard road wheel steel or alloy can be used up to a width of 6". Astra is allowed 6.5J
7. No Weller rims permitted.
8. Only conventional tyres may be used. Tyres must read a minimum of 60 on a durometer at any time.
9. Tyre Gaiters are permitted.
10. You are not allowed to use the following:

Racing tyres. Mud & Snow tyres, Alpine tyres, knobbly or any type of competition tyre, Town & Country tyres, 7.3 Avon Turbo Speeds, Colway Competition tyres, **Goodyear F1 Eagle**, Tread cut tyres or tyres with the markings erased.

Decisions on which tyres are permitted will be at Scrutineer's discretion.

11. Suspension. All suspension must remain standard to the car which is being raced. No re-valving or oil on shock absorbers and no changing or lowering of the springs is permitted. Camber is not permitted on any wheel whether the car is fresh or used. The scrutineers discretion is final. **No welding of the legs to hubs.**
12. Front and rear springs can only be tied in with either chain or seatbelt.

This is a new list of upto date tyres which are also banned from Bangers detailed below:-

AVON • ACB 10 Sport • CR6ZZ (Including Sport) • Turbospeed CR28 Sport • CR500 • ZZR	GOODYEAR • EAGLE F1 HANKOOK • Z209 • Z210	NANGKANG • NS-2R PIRELLI • P Zero Trofeo • P Zero C • CA67 • CF67
BRIDGESTONE	KUMHO	

<ul style="list-style-type: none"> • Potenza S007 RFT <p>CONTINENTAL</p> <ul style="list-style-type: none"> • ContiForce Contact <p>DMACK</p> <ul style="list-style-type: none"> • Trackday <p>DUNLOP</p> <ul style="list-style-type: none"> • Formula R D83J • Formula R D84J • Formula R D93J • Direzza 02G • Direzza 03G • CR 311 • Sport Maxx Race • SP Sport R7 <p>FEDERAL</p> <ul style="list-style-type: none"> • 595 EVO • 595 RSR • FZ 201 	<ul style="list-style-type: none"> • Ecsta V700 (inc V78) • Ecsta V70A • Ecsta TW01 • Ecsta TW02 • Ecsta C03 <p>MARANGONI</p> <ul style="list-style-type: none"> • Zeta Linea Sport <p>MAXXIS</p> <ul style="list-style-type: none"> • Maz1 Drift <p>MAXSPORT</p> <ul style="list-style-type: none"> • RB4 Intermediate • RB5 <p>MICHELIN</p> <ul style="list-style-type: none"> • Pilot Sport Cup • Pilot Sport Cup 2 • TB 15 • TB 15 (f & r) 	<ul style="list-style-type: none"> • P Zero Corsa • P7 Corsa Classic • P Zeri Torfeo R12 <p>SILVERSTONE</p> <ul style="list-style-type: none"> • FTZ Sport RR • FTZ Wet Tyre • S575 • S585 <p>TOYO</p> <ul style="list-style-type: none"> • R888 • R1-R <p>YOKOHAMA</p> <ul style="list-style-type: none"> • All Tyres
---	---	---

In addition to the above table No “run flat” tyres, no 1B rated ‘Track-day’ tyres, no Rally tyres or competition type or cut tyres.

16. EXHAUSTS

1. Silencers maybe changed but no cherry bomb type are permitted. Any car that seems to be too noisy will not be permitted to race. This is at the scrutineer and Steward Of The Meetings discretion.
2. No competition type systems are allowed.
3. Extra fittings are permitted.
4. Ineffective or systems that become insecure while racing will require you to pull off the circuit, as you will be excluded from the results & get a black flag.

17. COOLING SYSTEM

1. Radiators are free & may be moved to any position in the engine bay.
2. Electric cooling fans may be wired through a separate switch.
3. A bulkhead water tank maybe fitted, must not go further forward on the passenger side than the centre line of the turret, driver side must not go forward at all, meaning NO U-shaped tanks. These must not be bolted to the turret and bulkhead bolts must not be connected to door plates or floor plates.

18. BRAKES

1. The standard manufacturers system must be used & work on all 4 wheels.
2. The handbrake must also be operational.

19. FUEL SYSTEM

1. The tank must be Steel & have a maximum capacity of 9 litres. No converted fire extinguishers are allowed.
2. The fuel tank may be fitted to the “H frame” or behind the driver in the passenger area.
3. Fuel caps must be of a metal screw type, no push fit types are allowed
4. The fuel outlet must be from the top of the tank.
5. The tank must have a positive means of fixing.
6. A breather pipe must be fitted which must incorporate a one – way valve. The pipe must terminate through the floor as to prevent spillage if inverted.

7. All fuel lines must be of good quality rubber or be metal covered, no rigid metal piping is allowed.
8. Only roadside fuel can be used Petrol or Diesel. No additives are allowed.
9. If an electric pump is fitted a cut off switch must be in close proximity of the driver.
10. Multi point injection can be used with a return back to the tank or a t-piece fitted in the fuel line between the fuel tank and the fuel pump but the electrical isolation switch (cut off switch) must be fitted in the N/S/R window area of the B post, for easy access of Safety Marshalls.
11. You may also remove the Single or Multi-point injection system and replace it with a conventional carburettor if it's available from the manufacturers range. If you have doubts about the legality of the change, please phone the Stockcar Office for confirmation. **Weber carbs are not permitted on Hondas.**
12. With carburettor fuelled cars, a manual shut-off tap must be fitted within reach of the driver when strapped in the car, but with fuel injected cars, the fuel flow must be controlled by the pump cut off switch. Immersed fuel pumps are permitted.
13. **Twin choke weber jets are free but the linkage must not be joined together.**

20. BATTERIES & THE ELECTRICAL SYSTEM

1. The Battery must be securely fixed & covered with a rot proof material, if it is not of the sealed cell type.
2. If battery is mounted on the floor it must be secured in a box the maximum size is to be 18" x 12" or equivalent. If the battery is not mounted on the floor, please refer to Section 11 Point 5.
3. The batteries must be a minimum of 152mm or 6" away from the fuel tank.
4. No seatbelt straps must interfere or come into contact with the battery.
5. A battery master switch must be fitted in the rear left-hand window and clearly marked "ON-OFF" or have an electrical danger decal. The cut-off switch must break the earth connection lead **& this must kill all the power to the car.**
6. A self-starter motor must be fitted & working at all times.

21. MIRRORS

1. The Interior mirror may be fitted.
2. Maximum mirror size is 152 x 100mm or 6"x4" and if glass, it must be covered in a clear plastic film to stop the glass fragmenting.

22. PAINTWORK

1. The external appearance of the car must look bright & professional at all times; drivers of scruffy looking cars will be told to improve their appearance & may not be allowed to race.
2. Sign writing must be professional and be approved by the Promoter. **Any signwriting determined to be offensive by the promotion / scrutineers must be removed. Failure to do so will result in further action.**

23. SUN VISOR

1. A Sun visor 165mm or 6" in depth may be fitted with your name upon it only on the front windscreen aperture.

24. FIN PLATES

1. Fin plates must be fitted above the roof line
2. Fin plate numbers must be 229mm or 9" high by 38mm or 1½" in width, plain black numbers on a plain white background only. Please ensure they are correct. **No Holographic numbers or backgrounds. In 2020 this rule will be enforced. A driver will be issued a written warning on the first offence. A second offence will result in the driver not been permitted to race at the event until the issue is rectified.**

25. STEERING WHEELS

1. Steering wheels and columns maybe changed.

26. SPECIAL MEETINGS/EVENTS

1. On meetings where Vauxhall Zafiras are not permitted you are not allowed to use the Opel equivalent.

27. SPECIFICATION AND RULE CHANGES

The Promotion may at any time make amendments to the Specifications for the following reasons:

- In the interests of Safety
- Reduce costs for the driver
- In areas that are detrimental to the future of the formula
- If an unnecessary advantage has been deemed.

28. SAFETY EQUIPMENT



2020 Safety Equipment Specification Regulations **v2020.01 (Published)** **Issued: 6th February 2020**

Text highlighted in bold, red, italics, indicates a change from the previous version of this document.

Definitions used in these Regulations

FHR	Frontal Head Restraint (including HANS, Hutchens, Defender and similar type devices)
BORSE	British Oval Racing Safety Executive
Junior Drivers	Drivers aged 15 and under

General Notes

- It is the competitor's responsibility to ensure that they and their team comply with all Safety Equipment Specification Regulations **at all times** (including scrutineering, practise, and racing).
- Any necessary changes to the Safety Equipment Specification Regulations during the course of a season will be notified to competitors through the official ORCi / WatchItRaceIt website (orci.co.uk / watchitraceit.co.uk), and individual formulas' own approved communication channels. Change advisories received from any other source should be checked against these official sources for authenticity and accuracy.
- Proposals for any change(s) to the Safety Equipment Specification Regulations **MUST** be submitted in writing to the ORCi through one of the following channels:
 - Mail: ***ORCi Secretary, PO Box 530, Hoddesdon, EN11 1RR***
 - Web: Use the online contact form at <http://orci.co.uk>
 - Email: safety.rules@orci.co.uk
- Proposed changes will be considered by BORSE and an official response duly made as appropriate.
- Competitors must **NOT** use unapproved items, or make modifications to existing items, that do not meet the current Safety Equipment Specifications Regulations, whether they believe they have a case for them or not. A process for approval exists and should be followed by all competitors.

900 General

900.01 All Safety Equipment Specification Regulations apply to all competitors in all ORCi and ORCi affiliated formulas unless otherwise stated.

900.02 All safety equipment must be worn/engaged at all times when on track during racing, practise or test sessions, and at ANY other time when moving at a speed greater than walking pace (4mph).

900.03 Clothing that does not conform to the standards below may only be worn underneath the mandated safety equipment. For example, hooded tops must only be worn underneath a race-suit/overall, and the hood **MUST** be tucked inside.

901 Helmets and Goggles/Visors

901.01 Helmets

901.01.01 A helmet conforming to at least one of the approved standards **MUST** be worn.

901.01.02 Helmets **MUST** meet or exceed the **MINIMUM** standard as directed by BORSE.

The current approved standards permitted for all drivers are:

~~FIA 8860-2004 (This standard will NOT be permitted after 31st December 2019)~~

- FIA 8860-2010
- FIA 8859-2015
- **FIA 8860-2018**
- **FIA 8860-2018 ABP**

~~Snell SA2005 (This standard will NOT be permitted after 31st December 2019)~~

- Snell SA2010
- Snell SAH2010
- Snell SA2015
- Snell EA2016
- **Snell SA2020 (From 1st October 2020*)**
- SFI Foundation 31.1A
- SFI Foundation 31.2A
- SFI Foundation 31.1
- ECE R22.05 (in Fibreglass, Carbon or Tri-Composite form ONLY)

(*Note: The SA2020 standard is currently scheduled by the Snell Memorial Foundation to take effect from 1st October 2020, and thus is not valid until that date.)

The following approved standards are permitted for Junior drivers only in addition to those above:

- Snell CMR 2007
- Snell CMS 2007
- Snell CMR 2016
- Snell CMS 2016
- SFI 24.1

901.01.03 The use of polycarbonate helmets is NOT permitted.

901.01.04 The helmet **MUST** fit the competitor correctly, according to the manufacturer's sizing/fitting guidelines.

901.01.05 All helmets **MUST** display **a new green "ORC20 Approved"** serial numbered helmet sticker, as per Illustration 01. Older **blue 2015, and** red 2010 stickers are NOT valid (Illustrations 02 **and** 03).



Illustration 01



Illustration 02



Illustration 03

(Note: A programme of re-validation and issuing of the new green stickers will be undertaken by ORCi appointed officials during the 2020 season. This programme will take some time to implement, and therefore the blue ORC15 Approved sticker

will remain temporarily accepted until the programme has been completed. Helmets to the SA2005 and FIA 8860-2004 standards must NOT be used/presented, as per 901.01.02 above, as they are no longer permitted.)

901.02 Goggles/Visors

- 901.02.01** Shatterproof goggles or a shatterproof visor **MUST** be worn with the helmet at all times.
- 901.02.02** The use of tinted visors is **NOT** advisable.

902 Clothing

902.01 Race-Suits/Overalls

- 902.01.01** A flame resistant race-suit/overall **MUST** be worn.
- 902.01.02** Flame resistant race-suits/overalls **MUST** be manufactured from Proban, or material of a higher specification, e.g. Nomex.
- 902.01.03** Flame resistant race-suits/overalls **MUST** be clearly marked with the relevant SFI, FIA or equivalent standard, or the manufacturer's statement of protection.
- 902.01.04** Race-suits/overalls **MUST** be maintained in a clean and tidy condition.
- 902.01.05** Race-suits/overalls manufactured/certified to Karting standards, including, but not limited to, the CIK-FIA Level 1 or Level 2 standards, are **NOT** permitted as they do **NOT** provide the appropriate level of heat/flame protection.

902.02 Gloves

- 902.02.01** Flame resistant gloves **MUST** be worn.
- 902.02.02** Flame resistant gloves **MUST** be clearly marked with the relevant SFI, FIA or equivalent standard, or the manufacturer's statement of protection.

902.03 Balaclavas

- 902.03.01** A flame resistant balaclava **MUST** be worn.
- 902.03.02** Flame resistant balaclavas **MUST** be clearly marked with the relevant SFI, FIA or equivalent standard, or the manufacturer's statement of protection.

902.04 Undergarments

- 902.04.01** Flame resistant socks and undergarments provide a high degree of protection and are highly recommended to all competitors.

902.05 Wet-Weather Protection

- 902.05.01** Any wet-weather clothing must be worn in **ADDITION** to the required flame resistant race-suit/overall specified above.

903 Head/Neck Restraint

903.01 All Junior Formulas (Competitors Under The Age Of 16)

- 903.01.01** An FHR or neck-brace **MUST** be worn.
- 903.01.02** If a neck-brace is used, it **MUST** be of the complete-circle type, i.e. it must form a complete circle around the competitor's neck with no gaps.
- 903.01.03** The use of "U" shaped, or "horseshoe" neck-braces is **NOT** permitted.

903.02 ORCi Saloon Stock Cars, Lightning Rods And Stock Rods

- 903.02.01** The use of an FHR or neck-brace is recommended.

903.03 Other Formulas

- 903.03.01** The use of an FHR or neck-brace **MUST** be in accordance with the regulations laid down by the governing body for each formula, e.g. BriSCA F1, NHRPA, Stoxkarts Ltd., Spedeworth, etc.
- 903.03.02** Where no specific FHR/neck-brace regulations exist for each formula, the use of an FHR or neck-brace is recommended.

904 Safety Harness

904.01 Usage

- 904.01.01** A full safety harness **MUST** be used in accordance with the specifications below.
- 904.01.02** All mandated straps **MUST** be used at all times.

904.02 Type And Design

- 904.02.01** **ALL Formulas, EXCEPT Banger Type Formulas** - the harness **MUST** comprise of a **MINIMUM** of 2 shoulder straps, 2 lap straps, and an anti-submarine strap (also referred to as a sub-strap, or crotch-strap) in a **MINIMUM** 5-point design.
- 904.02.02** **Banger Type Formulas ONLY** - The use of a sub-strap in Banger type formulas is not recommended, and therefore in Banger type formulas the harness **MUST** comprise of a **MINIMUM** of 2 shoulder straps and 2 lap straps in a **MINIMUM** 4-point design.
- 904.02.03** Shoulder straps with a sternum protection latch are highly recommended.

- 904.02.04** The harness **MUST** incorporate a quick-release buckle (including rotary buckles, and NASCAR lever-latch type buckles), to which all straps **MUST** be connected.
- 904.02.05** Where a NASCAR lever-latch type buckle is used, it is advisable to fit a method of protection to prevent race-suit/overall sleeves from accidentally unhooking the buckle during racing. A small section of “Tubegrip” elasticated bandage, slid over the hooked buckle is sufficient for this purpose.
- 904.03 Harness Strap Width – ALL Adult Formulas (Competitors Aged 16 And Over)**
- 904.03.01 Shoulder and Lap/Pelvic Straps**
Applies to: ALL Harnesses (Unless Specified Below) – The shoulder and lap/pelvic straps of ALL harnesses **MUST** measure at least a **MINIMUM** of 3in/75mm in width, unless explicitly stated below. This applies to, but is not limited to:
- ALL non-homologated harnesses
 - ALL harnesses with NASCAR lever-latch type buckles
 - ALL harnesses homologated to SFI standards
 - ALL harnesses homologated to FIA standards that do not meet the alternate FIA criteria below
- 904.03.02 Anti-Submarine Strap(s)**
Applies to: ALL Harnesses – The anti-submarine strap **MUST** measure at least a **MINIMUM** of 1¼in /44mm in width on ALL harnesses.
- 904.03.03 Lap/Pelvic Straps Exception**
Applies to: Only FIA Approved Harnesses with Lap/Pelvic Straps less than 75mm/3in in width – The use of narrower lap/pelvic straps is permitted on FIA approved harnesses **ONLY**. The harness **MUST** meet **ALL** the following criteria:
- The harness **MUST** be certified/homologated to the current FIA standards: 8853/98 or 8853-2016
 - The shoulder straps **MUST** measure at least a **MINIMUM** of 2.75in/70mm in width (unless used in conjunction with an FHR device – see below).
 - The lap/pelvic straps **MUST** measure at least a **MINIMUM** of 2in/50mm in width.
 - The FIA identification/homologation/date labels **MUST** be intact and visible to scrutineers on **ALL** sections of the harness.
 - The harness **MUST** be within its visibly stated validity period.
- 904.03.04 Shoulder Straps Exception**
Applies to: Only Harnesses Used with an FHR Device – Where an FHR device is used by a competitor, it is permitted to use shoulder straps that narrow below the minimum specification (stated above) in order to ensure the correct fitment of the harness/FHR device combination.
- This exception applies to the shoulder straps **ONLY**.
 - Any such straps **MUST** be manufactured by a recognised industry supplier **AND** be specifically designed for use with an FHR device.
- 904.04 Harness Strap Width – ALL Junior Formulas (Competitors Under The Age Of 16)**
- 904.04.01** The shoulder and lap/pelvic straps **MUST** measure at least a **MINIMUM** of 2in/50mm in width.
- 904.04.02** The anti-submarine strap **MUST** measure at least a **MINIMUM** of 1¼in /44mm in width.
- 904.05 Installation**
- 904.05.01** The harness **MUST** be securely mounted to the floor, roll-cage, and/or chassis of the race car.
- 904.05.02** Harness manufacturers specify their own installation requirements depending on the design of their harnesses. Therefore, harnesses **MUST** be installed according to the manufacturer’s recommended best practice using only approved mounting components/methods.
- 904.05.03** All the major manufacturers have installation information on their websites, and competitors are advised to refer to this when fitting harnesses to their racecars. Useful websites include (addresses correct at time of publication):
- Manufacturer’s Websites**
- www.willans.com
 - www.schrothracing.com
 - www.tr-s-motorsport.com
 - www.racequip.com

Safety Standards

- www.sfifoundation.com
- www.fia.com/homologations

- 904.05.04** Key general guidelines from manufacturers for the installation of harnesses state that:
- Strap lengths should be kept as short as possible to avoid excessive stretching under impact.
 - Shoulder straps should be supported at or just below shoulder level.
 - Shoulder straps should be prevented from moving sideways, such that they may drop off a competitor's shoulders under severe impact/stretching.
- 904.05.05** It is recommended that any seat apertures, through which the straps pass, are lined to prevent chaffing of the straps.
- 904.06 Condition and Maintenance**
- 904.06.01** Special attention **MUST** be paid to the condition of straps and fixings once installed.
- 904.06.02** The harness **MUST** be maintained according to the manufacturer's recommended best practice, and where possible kept free of dirt, oil and grease that could degrade any materials.

905 Window Nets

905.01 Requirement

- 905.01.01** A quick-release fabric window net **MUST** be fitted in the driver's side door window aperture of all saloon car formulas, with the exception of Banger type formulas.

905.02 Specification/Installation

- 905.02.01** The width of the netting holes must **NOT** exceed a **MAXIMUM** size of 3in/75mm wide.
- 905.02.02** The window net **MUST** be fitted such that it hangs down level with the steering wheel.
- 905.02.03** The window net **MUST** be flexible and easily removable, independent of any movement of the driver's-side door.

906 Fire Extinguishers

906.01 Requirements

- 906.01.01** A fire extinguisher, meeting the specifications below, **MUST** be carried in the competitor's tow-vehicle/transporter at all times.
- 906.01.02** The fire extinguisher **MUST** be within easy reach of the competitor and team members at all times, especially when re-fuelling the racecar.

906.02 Specification

- 906.02.01** The fire extinguisher capacity **MUST** be at least a **MINIMUM** of 2Kg.
- 906.02.02** The fire extinguisher **MUST** be of a dry powder or gas type.
- 906.02.03** Old type BCF (green) fire extinguishers are **NOT** permitted.

For further information contact:

**Spedeworth House
Hollybush Industrial Park
Hollybush Lane
Aldershot
GU11 2PX
Tel: 01252 322 920**

e-mail: info@spedeworth.co.uk

REVISED RULES FOR 2020 IN BOLD/ITALIC PRINT

ITEMS MARKED ~~STRIKETHROUGH~~ ARE NO LONGER ALLOWED

2020 Banger Technical Specifications, Issue 3, Dated 2nd March 2020.