

# 2024 BUXTON RACEWAY SUPER BANGER SPECIFICATIONS

**Last Updated:**

**30/12/2023**

## **RACECEIVERS**

In all formulas drivers must have a RACEceiver device fitted, The RACEceiver device for Drivers is being mandated at ORCi tracks all over the country. This small communication device is revolutionising the industry, making the sport safer for both the drivers and officials. It saves time by allowing officials to talk to all the drivers at the same time and lets you get on to more racing. The officials can warn drivers about accidents or debris on the track and to ensure the correct driver is excluded should a black flag be needed.

Suggested Raceceiver is the RACEceiver Fusion+ available at many outlets on the internet, they do not come with earphones, so you will need to supply a set of in-ear earphones with a 3.5mm plug.

You will be told at the drivers briefing which channel will be used.

## **SCRUTINEERING**

Arrival at the Raceway is required minimum 1 (one) hour before the advertised start time to allow scrutineering to be carried out. Please see Section Arrival at the Stadium in the General Rules at the start of the rulebook. You need to present your car to the scrutineering area to be checked, as soon as possible after arriving at the raceway, having first signed in at the Pit Office. The driver must accompany the car complete with race licence, helmet, race overalls, fireproof gloves and fireproof balaclava. If you choose to use a neck collar, this must also be taken to scrutineering.

### **1. General Information**

When referring to the engine or construction rules and 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 in any way the standard parts.

Unless these rules say you can do it, YOU CANNOT DO IT.

Cars, engines and fuel may be checked on a random basis.

As we do not welcome cheats at Buxton, violations will result in an immediate suspension from all racing and any inspection refusal will be treated similarly.

Please Note: That scrutineering checks may not only be made prior to racing, but at any time through a meeting. If any part is suspected of being illegal and you do not agree please make sure you leave it with the Promotion. If you refuse the parts automatically become illegal.

You should note that no fibreglass panels are allowed on Super Bangers. Please also note that BEFORE YOU ARRIVE AT THE STADIUM, ALL GLASS MUST BE COMPLETELY REMOVED AND THE INTERIOR OF THE CAR SHOULD BE CLEARED OF ALL LOOSE TRIMMINGS, COMBUSTABLE MATERIAL AND PASSENGER SEATS.

Super Banger racing at Buxton is for individual point's Championships. No team racing or team colours are allowed. All races are strictly on a "nudge and spin" basis and there will be a zero tolerance on heavy contact including deliberate "follow-ins".

## **2. Cars**

You may use any road going two-wheel drive, steel bodied saloon or estate car minimum length 13 foot (Mk2 Escort), originally manufactured with an engine size of 2000cc, and a maximum of 5300cc. With the exception of the Mk3 Escort which may be used. Should the car have a sunroof, this must be blanked off with metal plate 1 1/2mm thick, and securely fixed. No pick-ups or vans are allowed. It is permitted to convert a Front Wheel Drive car to Rear Wheel Drive and vice versa.

There are two acceptable methods of car construction (double skinned or a space frame style), both of which are fully explained in this section.

All exterior panels may be replaced with sheet steel up to 3mm thick.

It is permitted to use a Saloon Stock style chassis however it is not permitted to run front and rear Saloon Stock style gates / bumpers. This method of car construction must use an F2 style steel bumper front and rear. (See diagram) These bumpers must be 100mm height x 25mm depth x 3 mm wall thickness. The easiest method of construction is to use 2 pieces of 50mm x 25mm RHS. These must be securely welded to the chassis and it is recommended that they follow the contours of the bodywork. All front bumpers are to feature over and under riders on the offside of the car (see diagram) These can be constructed of minimum 3mm wall round tube or box section.

Standard body shell style cars are permitted to use box section OR chassis plating front and rear and may run if desired, the F2 style bumper OR a box bumper that apes the original car silhouette constructed from maximum 3mm wall box section or plate. Both front and rear bumpers must measure 390mm (+/- 10mm) at the centre of the car from the ground.

No interior panel covers allowed. If you have to remove any, please make sure no sharp edges are left.

If any car is suspected of being constructed from materials thicker than the permitted 3mm, the Scrutineers may drill holes as required to enable them to make sure the car complies with these rules. A refusal will make the car illegal.

The maximum width of any car shall be 77 inches to include wheel arches, and the arches must cover all wheels.

The minimum depth of the door panels/side panels of the car is 445mm measured from sill/bottom rail to the bottom of the door window aperture. (See diagram)

Flared wheel arches must not present any sharp edges, which could damage cars or injure persons.

## **3. Engines**

A Super Banger is a car with a minimum engine size of 2000cc, and a maximum of 5300cc. Engine transplants are allowed. Modifications may be made to the engine and carburettors are free. Engines may be moved from their original position, remaining under the bonnet, so long as they are securely fixed and there is a firewall between the engine compartment and the driver.

Self-starters must be fitted to all cars and must be in working order. Fuel injection is permitted.

If fuel injection is used it must conform to the fuel system specs as described in section 3a.

### **3a. Fuel System**

Fuel injected engines may be converted to carburettors. You may use any carb setup available. Adapter plates may be used to aid fitment of inlet manifolds. Additionally, carburettors may be replaced as per the fuel injection conversion rules as stated.

Vehicles fitted with fuel injection can be used providing they are fitted using the standard Super Banger fuel system and the fuel pump is replaced with a standard High Pressure Facet type (external) electric pump

which must be fitted inside the car near to the fuel tank, covered by the same panel or box as the fuel tank. Additionally, a fuel return pipe must be fitted by way of a 'Y' piece in the feed line or an extra pipe returning to the fuel tank.

IMPORTANT A non-return valve must be fitted to the fuel tank breather pipe.

#### **4. Exhausts**

All exhausts are free and if run through the inside of the car it must be covered. No overhead exhausts. It is essential that an effective silencer[s] is fitted to the satisfaction of the Scrutineer/Steward.

Cherry bomb silencers are not permitted.

#### **5. Gearboxes and Rear Axles**

Gearboxes and Rear Axles are free.

#### **6. Suspension**

Suspension may be modified.

#### **7. Wheels and Tyres**

Tyres must be those manufactured for road use with the exception of the GITI compete GTR2 and Zestino Gredge 07R and 07RS. Rally Race, Slicks, Yokohama, Hoosier or similar tyres are NOT ALLOWED. Tyres cannot be re-capped with any type of racing compound, or re-cut. The Board of Control reserves the right to review the regulations relating to tyres at any time and to prohibit the use of any tyres not considered to be within the spirit of the regulations. Hub caps, overriders and wheel balancing weights must be removed. All wheel nuts must be fully tightened. The maximum width of any wheel shall be 8J. Aluminium wheels are allowed. No wheel spacers are permitted. Double tyre side walls are allowed.

The Toyo Proxie R888 may not be used. Competition type tyres, those specifically designed as "track day tyres" and similar are NOT permitted in Super Banger Racing.

MAXSPORT TYRES ARE NOT PERMITTED.

The above tyre rule is in force until the 30<sup>th</sup> June meeting, after that meeting the ONLY tyre that can be run will be the HIFLY HF805 86VXL in 195/50R15 size.

The meeting commencing the 28<sup>th</sup> July all cars will be running the HIFLY tyres ONLY.

Tyre buffing is NOT permitted.

The use of tyre softener is NOT permitted.

#### **8. Brakes**

Brakes must be effective on all four wheels.

#### **9. Roll Cage**

For driver's safety a roll cage must be fitted and must remain within the confines of the car. All components must be welded. The cage must have a minimum of four uprights and two cross bars to produce two hoops as a minimum. These may be braced from front to rear. They should be made of metal box or tubing, minimum 32mm (1.25") outside diameter with a wall thickness of 3mm minimum. The cage must incorporate "Chicken Bars" along the driver's door. All roll cage bars must be securely fixed to a base plate, which in turn must be bolted or welded to the floor and roof of the car. The plates should be made from steel and be 4" square and have a minimum thickness of 5mm. Reinforcement of the drivers side floor pan with a strong metal plate is mandatory, minimum thickness is 2mm /maximum thickness is 4mm. None

space frame cars e.g. those using a standard body shell must reinforce or replace the drivers floor plate to the above specifications.

A roof plate must be fitted above the drivers head welded to the 4 post cage, minimum thickness 3mm. A bar must be positioned behind the drivers seat to give it support should it collapse. The bar should be positioned. Between the two rear down bars at shoulder height. Scaffold clips can no longer be used.

Strengthening is allowed within the confines of the car.

#### **10. Drivers Seat**

A seat with a head restraint must be fitted. The seat must be securely mounted at shoulder height to the crossbar or to the roll cage/roll bar and bolted or welded securely to the floor in at least four places.

At any point during a meeting the safety officer can refuse you to race if your seat is not secured properly or the fixing are rusted/corroded.

#### **11. Petrol Tanks**

The original fuel tank must be removed and replaced with a 3mm thick steel fuel tank, ALUMINIUM FUEL TANKS ARE NOT PERMITTED, maximum capacity 3 gallons, with a fuel outlet at the top of the tank. The tank must feature a secure screw-on metal cap and a breather pipe which must terminate below the tank and must be sealed with an 'O' ring under the cap.

The tank must be fully covered by either a metal panel or within a box of metal construction.

It must be fitted, clear of the body with adequate protection, to the rear of the car, NOT behind the driver, and must be securely bolted in place. An effective petrol shut off tap must be fitted, within easy reach of the driver when they're strapped in, and clearly marked on/off. Any fuel lines, which pass through the inside of the car, must be made of metal. Maximum length of flexible fuel pipe for joining purposes is 6 inches.

Only standard pump fuels up to and including 100 octane rating is permitted (Unleaded, 4 star or LRP). No Avgas (Aviation Fuel). No special mixes or Methanol blends, Nitrous Oxide or Octane Boosters are permitted. In tank fuel pumps may also be used but are not recommended.

No fire extinguishers may be converted into fuel tanks.

IMPORTANT A non-return valve must be fitted to the fuel tank breather pipe.

#### **12. Batteries**

The battery must be firmly secured to avoid movement and covered with a rubber or plastic sheet to avoid spillage should the car roll. An electrical cut off switch must be fitted, to the earth lead, and clearly marked from the outside of the car. The switch must be fitted to the rear nearside corner of the car and be suitably marked ON/OFF. Batteries should be fitted on, under or behind the roll bar but not in the foot well or behind the driver.

The use of AGM (Absorbed Glass Mat) type batteries, which are often mistakenly referred to as gel-type batteries, e.g. Varley Red Top, and Odyssey Extreme, is permitted.

#### **13. Radiators**

The Radiator must be fitted at the front of the car, any suitable CAR OR VAN type Radiator may be used.

#### **14. Ballast**

No ballast of any type may be used.

## 15. Tow Bars & Fixing Brackets

These MUST be removed.

## 16. Strut Bracing

This is permitted as long as it is across the centre line of the suspension legs.

## 17. Interior Mirrors

Interior Mirrors are allowed.

## 18. Numbers and Roof Colours

Numbers must be painted on both sides of the car either white on black or black on white. Size to be 305mm x 51mm (12" x 2"). A roof fin is compulsory. Maximum size 305mm x 408mm (12" x 18"). The words "Buxton Raceway" should appear somewhere on the car and all cars should be presentable.

The whole roof or first 12" of the roof must be painted in the driver's correct grade colour. The Reigning Points Champion has the option of using racing number "1" but must paint the whole of their roof silver.

## 19. Safety Harness

A 5-point safety harness must be fitted and must be anchored on at least four separate anchor points. The minimum width of the harness straps shall be 3" (75mm), except for the crutch strap, which should be minimum 1 ½" and maximum 2". – (No homemade harnesses are allowed). This must be fitted to a low point separate from the seat mountings to a strong point on the floor with a minimum 8mm (5/16") diameter bolts. The crutch strap must be fitted rearward of the front edge of the seat. Shoulder pads are strongly recommended.

## 20. Padding

Suitable padding shall be applied to any vulnerable places around the drivers' head or elbow area and it should be placed around any sharp edges on the steering column, to prevent knee injury.

## 21. Safety Equipment

HELMETS & SAFETY EQUIPMENT

### Overalls

Drivers must wear bright coloured racing overall type clothing of flame retardant Proban or a higher specification material and marked accordingly. Overalls must be maintained in a clean and tidy condition when in view of the public. If wet weather clothing is used this must be worn in addition to, over the top of and not instead of the regulation overall type clothing described above.

### Helmets

Helmets must be of a minimum standard as directed by British Oval Racing Safety Executive (B.O.R.S.E). These are, Snell SA2010, SFI Foundation 31.1A, SFI Foundation 31.2A. The E2205 European standard helmet may be used in Fiberglass, 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 sticker.

## Adult Helmets (Drivers aged 16 and over)

**New** – Helmets certified to the following newer standards are permitted for use in all ORCI formulas. These are ADDITIONAL permitted standards to those currently allowed.

Snell EA2016

[For Elite Automotive sports]

FIA 8860-2010	[Updated version of 8860-2004]
FIA 8859-2015	[Premium Helmets]
SFI 31.1	[Updated/merged version of 31.1A and 31.2A]

### **Gloves**

All drivers must wear fire proof gloves, minimum Proban.

### **Balaclava**

The use of Balaclava's is mandatory for all Buxton Raceway Formulas.

### **Drivers Harness**

The national ORCI Safety Equipment Specifications is now the place to find central, up to date info on what safety items you need. Find it at <https://t.ly/QtHoP>

### **Fire Extinguishers**

A one kg Dry Powder gauge fire extinguisher is highly recommended and if fitted, 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 2 kg fire extinguisher, dry powder or gas, which must be within easy reach of the driver and mechanics at all times, especially when refuelling.

## **22. Points Scoring**

Super Banger Points scoring were brought into line with our other formulas the points will be awarded as follows:

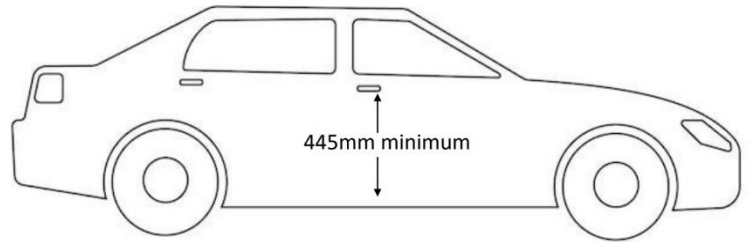
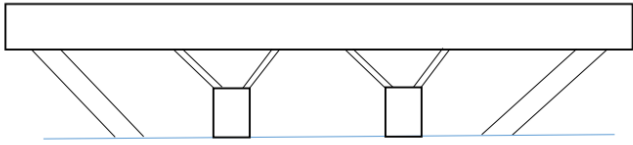
Heats or All-comers: 10, 9, 8, 7, 6, 5, 4, 3, 2, 1

Finals & Championships: 20, 18, 16, 14, 12, 10, 8, 6, 4, 2

## **23. Do You Need any Further Assistance or Guidance?**

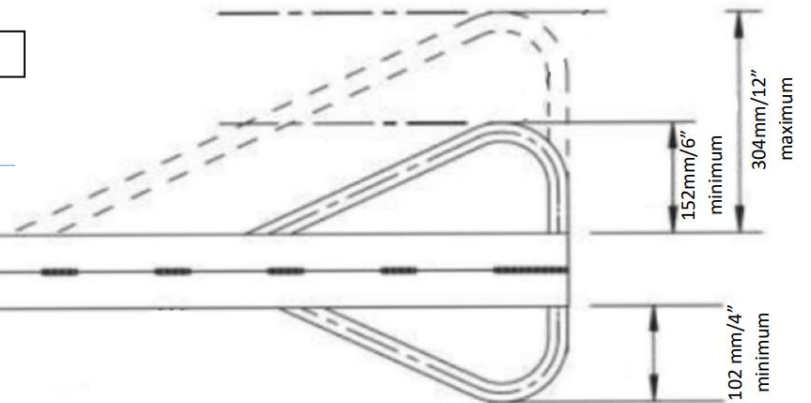
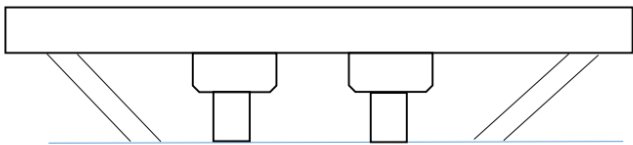
All queries connected with car construction or any other aspect of Super Banger Racing should be directed to either Dave Cope on 07815 574 123, or James Osborne 07720 438238. Please WhatsApp or Facebook message.

## Diagrams;



Bumpers must not extend beyond the bodywork of the car.

These are the recommended mounting methods, please follow the contours of the car where possible.



390mm (+/- 10mm) from ground to bumper centre line at the centre of the car.