# **SUPER TWOS**

# 2024 Specifications, Rules & Regulations



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The specifications have been updated to clarify what can or cannot be done within the formula for 2023.

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 ongoing 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.

Super Twos reserve the right to amend the rules at any given time without notice. They are intended for the sole recipient and not for distribution. Drivers and officials will be notified of any changes immediately.

#### Rules are there to be followed. If you are not happy with the rules, PLEASE DO NOT SIGN A LICENSE FORM.

The object is to complete the specified number of laps in the shortest time. No hitting of parked cars, cutting the corners and no deliberate drivers area contact. You may push a car from behind to move it offline but spinning a car or any deliberate fencing are strictly not permitted. Attacking a car from, or on the infield area is not permitted. Actions deemed to be deliberate or dangerous will carry several different types of penalties, this may be being loaded up, a three month ban, banned for a year or even a lifetime ban.

Racing is in an anti-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.

# REVISED RULES FOR 2024 HIGHLIGHTED IN RED PRINT ITEMS MARKED STRIKETHROUGH ARE NO LONGER APPLICABLE

2024 Super Twos Technical Specifications, Issue 1, Dated 14th January 2024.

All previous verbal permissions are hereby superceded by the rules set out below. If you have previously asked if something is ok, and been told it is, then you should now assume it isn't unless the rules below allow it. Any new parts or ideas should be thoroughly tested by the Super Twos formula and the rules amended before use is authorised.

### **VIOLATIONS**

- 1. When referring to the engine, 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. Should a discrepancy occur between the Specifications then the Promotion will exercise its judgement, and that decision will be final.
- 6. Clarification on any one item may be sought from the Promoter.
- 7. Each driver is permitted one car per meeting & each car is permitted one driver per meeting.

## THE CAR

Every Super Twos chassis will be manufactured by approved Super Twos suppliers. Chassis are designed to be as close to identical as possible. Any changes made to Super Twos will be made by Super Twos suppliers. Drivers and officials will be notified immediately.

Drivers are permitted to mend their own cars. However, repairs MUST be to the same standards with similar materials as the Super Two car was as it left the workshop. Super Two scrutineers will check the work and

repairs thoroughly before giving permission to race. This is to check the legality and standard of the work carried out.

Drivers may assemble their own cars. However, all parts MUST be supplied and manufactured by Super Twos. When the self-built car is completed, it MUST be presented to a Super Twos scrutineer for approval before being allowed to race.

### SPECIFIC SUPER TWOS COMPONENTS

Every component of the car must be of original Super Twos stock. You may not buy replacement components from outside sources, unless the rules specifically allow it.

Components purchased must be fully paid within seven days of the invoice date for when taken. IF MONEY IS OWED TO SUPER TWOS YOU WILL NOT BE ALLOWED TO RACE AT THE NEXT MEETING.

### **GEARING**

Only the 10 tooth and 11 tooth sprockets located on the clutch are allowed. (The fan blade must remain standard). On the axle you are permitted to use either 57 tooth or 48 tooth. For gearing recommendations, see "Workshop" on the new 2023 website or ask a scrutineer. The Ten Tooth Sprocket may be used at Yarmouth and Mildenhall with the 57 tooth gear wheel, and at Ipswich and Hednesford with the 48 tooth gear wheel. The 11 tooth sprocket must be used at Aldershot Northampton, Lochgelly and Arlington. The drive chain may be upgraded and is free as long as it is the same size as the original.

### **ENGINE**

The Loncin 420 electric start engines and Launtop 420 electric start engines are the ONLY engines permitted. These will be supplied by Super Twos. ALL engines MUST remain as it leaves the Super Twos workshop. All engines have been tested and sealed by Super Twos. All engines have seals. Engines will be checked for seals during scrutineering. If seals appear to have been tampered a Super Twos scrutineer will ask the driver to remove the engine for further checks. Drivers will not be permitted to race until Super Twos scrutineers are happy the rules are being followed.

Air filters are to remain fitted at all times and standard. There are two types available from Super Twos. During wet weather, reasonable temporary shielding of the air filter (such as a plastic bottle) may be employed to stop water entering the carburettor.

Scutineers engine. At any time, the scrutineer can ask for your engine. A replacement engine "scrutineers engine" will be offered until the scrutineer is satisfied.

If you change an engine at home or at the track, the scrutineer must be informed so the engine seal can be recorded. If you have an engine rebuilt by the engine builder, it is your responsibility to check the scrutineer has the new seal number.

Any driver wishing to have another driver's engine checked by the engine builder may do so at their own cost.

## **SUSPENSION**

All suspension components MUST remain as standard. No modifications are permitted apart from front end adjustments described below.. No self-made parts are permitted. This will be checked by Super Twos scrutineers. Jacking or twisting of the chassis is NOT permitted.

From 2023 no Polly bushes are allowed. Rose joints are free and may be bought elsewhere.

Wishbones must be fitted as intended, (angled to the rear)

New suspension parts will be tagged for authenticity when purchased.

### FRONT END

You are free to make adjustments to camber, caster and steering geometry, using only the adjusters provided. Positive and negative camber will be permitted. Emergency repairs during a meeting will be at the Super Twos scrutineers' discretion.

### REAR AXLE

The rear axle MUST remain central to the car. And equal each side with the aluminium rear hubs in place. No movement of the axle is permitted. The axle will be supplied by Super Twos. This axle has been specifically modified for the Super Twos cars. The block mountings for the rear axle MUST remain in the same position as it leaves the Super Twos workshop. The aluminium hubs MUST remain in the same position. No spacers permitted to change the inside or outside wheelbase. No offset changes are permitted. It is anticipated that all axles will be tagged for authenticity during the 2024 season.

### STEERING

Only the steering rack supplied by Super Twos is acceptable. Rose joints must be 1/2 x 1/2 UNF, but are free to buy elsewhere. Steering rack gaiters are available from Super Twos. Everything to do with the steering rack and steering column are stock items. Pop off/quick release steering wheels are permitted, supplied by Super Twos or other supplier. The steering mounting and steering wheel position can be adjusted to suit the driver. The steering wheel is free.

### **EXHAUST**

There are two allowed exhausts. The original Super Two exhaust or the newer 2022 Simpson race exhaust. Both of these are available from Super Twos. No other types are permitted. All exhausts must remain standard and may not be modified.

### **BRAKES**

The braking system shall remain as standard, as it leaves the Super Twos workshop. No alterations are permitted. The calliper disc and pads are all supplied by Super Twos. Brakes must be in full working order. All master cylinders are to remain the same. However, these can be purchased elsewhere as long as they are near to identical. There are two types of brake pad available from Super Twos. The new floating caliper is permitted but must be supplied by Super Twos.

The brake hose may not be cut or tampered with and Brake bias valves are not permitted.

## **WHEELS**

Only the wheels supplied by Super Twos are permitted, and must be bought from Super twos. New wheels will be tagged in 2024.

Two types of wheels are available, the early trailer type (Now only to be used on shale tracks) and the later Weller type. Either type can be used but only in complete sets, no mixing.

## **TYRES**

Only the tyres supplied by Super Twos are permitted. You may not buy these elsewhere. No modifications are permitted. Rasping and buffing of the tyres between meetings is permitted but this is NOT to be done in the pits at a race meeting. Tyre softening, or any other chemical treatment is forbidden and durometer checks will be carried out at random. There are two tyres available from Super Twos. The Nankang and the Marshall. The Marshall is only permitted on Shale surfaces. Whichever you use, they must be used in sets of four and not mixed. New tyres will be stamped with an identification for 2024

### **BODYWORK**

Super Twos bodywork must be maintained in a well-presented condition. All body panels must be fastened by pop rivets or quick latches for the engine bay panels. Screws may be used to re-fix panels during race meetings for safety purposes. All panels are supplied by Super Twos. Self-made panels may be permitted as long as they maintain the same shape and thickness (0.75mm) as those produced and used by Super Twos. Bonnets can only be purchased from Super twos and not self made, however they may be repaired using similar materials to the original. Bonnets can be fixed by quick release or springs as long as the bonnet is secure.

Rear side panels can have one hole each side, maximum size 100mm. These holes can have a small scoop added. Scoops must not protrude from the body panels by more than 50mm. The new 2024 rear side panels Have slitted vents no greater than 160mm x 100mm where at least one third of the area is metal.

NO modifications are permitted to the Top cover or the fire wall behind the driver's seat. The rear panel may have holes to aid engine cooling, as long as structural integrity is maintained. The rear panel may have spacers fitted at the top to allow venting. These are free to a maximum gap of 75mm.

Extra bodywork to prevent shale and water entering the car is allowed but will be supplied only from Jnr Super Two's only.

## **MIRRORS**

A rear-view mirror or mirrors must be fitted, to give an adequate view both sides. These may be of the wing mirror type or rear view. These are free and any may be fitted.

### **NERF RAILS**

Nerf rails MUST remain as standard. They must be welded to the chassis. The nerf rails are supplied by Super Twos as a kit. Super Twos offer a re-fitting service on request. Super twos now offer a bolt on Nerf rail system, but mounts must be fixed to the chassis in the same position as the weld on type.

### F2 DUAL ELEMENT AND SUPERSTOX ROOF WING

Super Twos come equipped with either a Single Element F2 wing, Dual Element F2 wing or a Superstox roof wing as standard. The wing MUST be supplied by Super Twos and remain standard. After damage the scrutineer will decide whether the damaged wing is suitable for racing.

The wing must have the racing number displayed on each side, Black on white or white on black, and be clear to race viewers.

Cars must be fitted with an approved wing to race.

The mounts which support the wing are free and may be adjustable, but must be made of steel and fitted centrally on the roof of the roll cage.

## **ROOF GRADE**

For cars with a Superstox style rear wing your roof grade must be displayed by having 90% of your roof in your grade colour. For cars with an F2 style rear wing you must have a 12 inch square of solid colour relating to your roof grade. Any cars that do not conform to this will be made to start at the back of the grid.

## FUEL AND FUEL SYSTEM

Only Unleaded or Super Unleaded garage forecourt fuel is permitted with a maximum of 101 RON. The use of additives or octane boosters of any description is forbidden. Random fuel tests may be carried out throughout the season. Fuel lines from the tank to the carburettor MUST have a jubilee clip fastening. The fuel line from the tank to the carburettor MUST be a stainless steel, braided hose or a rubber hose with a nylon centre. This is supplied by Super Twos. It may be supplied by an outside source as long as it complies with the Super Twos requirements. It is not permitted to use any type of fuel pump, gravity feed only. A breather pipe must be fitted to the fuel tank with a vertical loop which should limit fuel exiting via the breather but still allow the tank to expel air. The breather must extend to the bottom of the chassis.

The main jet in the carburettor is free, you may change the jet for a different size or drill the original jet. No other changes are permitted and the emulsion tube must remain standard.

### PEDAL BOXES

Pedal boxes may be mounted on a slider. These are supplied by Super Two's.

### FIRE EXTINGUISHERS

Please visit the ORCi website www.orci.co.uk for current safety equipment regulations.

## **BUMPERS / WHEEL GUARDS**

Super Twos come equipped with front and rear bumpers and two (2) wheel guards. They MUST be maintained and in a good condition during race meetings, (repairs must be with identical materials). No sharp edges are permitted. They must be fixed securely with a nut and bolt. Front bumpers must have secondary safety chains each side, chains to be 6mm link size and secure bumper to chassis. New bumpers will be tagged for authenticity for 2024

Wheel guards are to be nylon or spring and in a good condition. You cannot mix nylon with spring. These are free

### BATTERY AND FUEL TANK

The only permitted fuel tank is the tank that is supplied by Super Twos. They must remain in the factory fitted position, located in the rear of every Super Two car. The filler access hole must be covered with a fireproof material and secured when racing.

The battery boxes must remain in the standard position (which is at least 90cm and no more than 95cm, from the front chassis rail on the outside of the chassis) and it MUST be fully enclosed. ALL battery boxes are supplied by Super Twos and MUST be constructed of steel and securely fastened. Enclosed batteries MUST have a piece of non-conductive material on top of the battery to prevent it from shortening out.

## **SEATS**

Seats and seat position are free, but must be of a competition style and securely fitted. The mountings for the seat are free.

## **TRANSPONDER**

All cars must be fitted with a working transponder. These may be fitted on the outside or inside of the chassis, (on the fence side of the car), The centre of the Transponder must be no less than 1500mm from the front chassis rail (where the bumper is mounted).

## **SAFETY**

All Super Twos are constructed using premier quality equipment. Any replacements that are fitted by the owner MUST conform to the Super Twos specifications. Once a Super Two has been purchased it is then the owner's responsibility to make sure the car is maintained to the highest standards and is safe to race.

## SAFETY HARNESS

Please visit the ORCi website www.orci.co.uk for current safety equipment regulations.

### **CRASH HELMET**

Please visit the ORCi website www.orci.co.uk for current safety equipment regulations.

### RACING OVERALLS

Please visit the ORCi website www.orci.co.uk for current safety equipment regulations.

### **GLOVES**

Please visit the ORCi website www.orci.co.uk for current safety equipment regulations.

## **BALACLAVAS**

Please visit the ORCi website www.orci.co.uk for current safety equipment regulations.

### **NECK BRACE**

Please visit the ORCi website www.orci.co.uk for current safety equipment regulations.

<u>A neck brace or other approved head and neck restraint are compulsary for drivers under the ORCI for safety reasons</u>

## **REAR LIGHTS**

In wet conditions, All cars are to be fitted with a single rear flashing light, to be fitted at least 1000mm from the floor on the fence side roll cage upright. These are only available from Super Twos

## TRACK RULES

You MUST conform to the track rules of the promotion(s) Super Twos race under.

## **FLAGS**

This is to remind drivers of the flag signals as used by the Starting Marshall and Safety Marshalls on track.

- Waved green flag go, the race has started.
- Waved red flag stop racing slow down & stop.
- Chequered flag 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.
- Waved yellow flag slow down to 15mph, hold your position, and do not overtake any other cars.
- Waved blue flag shown to a driver who must hold his racing line. Driver must either hold a line on the inner part of the track or the outer part of the track, not weave between both.

- Blue & white flag give up your track position, you have not taken notice of the Blue flags.
- White flag with a Blue spot oil on the track.
- Waved black flag you are disqualified, pull off the track immediately.
- Black cross on a white board you have committed an infringement and may be penalised in the results.
- White flag with a red cross technical Disqualification, leave the track immediately.

### TRACK LIMITATIONS

The following is not permitted:

- 'Following in'
- Turning right into the catch barrier
- Deliberate spinning
- Drivers may push to pass other cars

Novice drivers will be issued with a black and white cross which is to be placed behind the seat. The black and white cross signifies NO CONTACT and is to establish confidence in new or novice drivers. A yellow and black cross will be issued to drivers preferring LIMITED CONTACT, again to establish driver and racing confidence.

Super Twos reserve the right to test new parts or designs during race meetings, This will be carried out in a controlled manner and not be to the detriment of other drivers.

REMEMBER, IF IT DOESN'T SAY YOU CAN, THEN YOU CAN'T. (IF IN DOUBT TALK TO A SCRUTINEER) IF IT SAYS IT IS FREE, YOU CAN BUY IT OR MAKE IT WHERE YOU LIKE, OTHERWISE ASSUME IT IS FROM SUPER TWOS ONLY.

## All Race meetings

The scrutineer will collect £3.00 from each adult driver and £2 from each

### Silver top

The Silver top points will be run up to the meeting before the National championship. The points will then be zeroed. Each driver has a joker card and may choose any meeting to double the points they score. This must be decided before practice on the day by either writing it in the facebook group chat or speaking to Duncan Adams who will post it for them. New drivers joining the formula, must wait for one grading session before they can legally play their Joker Card. The driver with the most points from the previous season will be the Silver top and may add "Superstar" flashing lights to their car.

#### **Minor Championships**

East Anglian, Midland and Southern Championships will be run in graded order. The Shale Championship grid will be made up according to the points scored from the qualifying rounds and heats on the day. There will be no grade change for the winner.

#### **English Championship**

The two heats will be run in graded order, with points scored being used to determine the grid positions for the final. The winner will become English Champion and become Superstar grade with flashing lights. A St Georges Cross should be painted on the roof

#### **British Championship**

The two heats are run in graded order with the grid positions being pulled out of the hat for the British. The winner will become British Champion and become Superstar grade with flashing lights. A black / white chequer should be painted on the roof

#### **Best in Britain**

The grids for the two heats will be out of the hat and then reversed, with points scored being used to determine the grid positions for the final. The winner will become Best in Britain Champion and become Superstar grade with flashing lights. A Union Jack should be painted on the roof

#### **National Championship**

The National Championship will be the first race. The grid will be formed from the points scored at all the previous meetings (points chart).

The winner will become National Champion and become Superstar grade with flashing lights. The roof should be painted gold.

#### Championship notes

For the English, British and National Championship races there will be no hire cars. Only drivers who own a car may enter these races, unless they are permanent hire drivers. They may race in the heats. At meetings where a championship is being run, The championship race will always be considered the final (for points purposes) regardless of when it is run.

Fuel will be provided for Championship races. Each driver will need to have a drained tank ready for filling by an official. The cost will be advised prior to the meeting. (dependent on current fuel prices) payable ONE WEEK in advance to Super Twos. No payment no race! After Each major Championship race, the top four cars will be thoroughly scrutineered, as the Scrutineer sees fit.