



2023 GP2 EVO & STREET EVO Cup REGULATIONS

The ethos of the series.

Here at TSM we believe that the ongoing cost of tuning and refreshing engines is getting too costly, we also believe and have proven in GP2, that a relatively stock engine can be used to produce similar lap times if the chassis is tuned instead. The GP2 EVO and Street EVO series is all about exploring that option with a direct view on preparing riders and bikes for GP2 & GP2 EVO at BSB.

Until now the kind of geometry parts required to tune a chassis have not been permissible in UK racing, primarily due to being bound by the words 'homologated manufactures part', however due to Bemsee's foresight and our development, we have now changed that and can present a new way of going racing. I sincerely hope you will enjoy the benefits of EVO racing and help us show the world how it's done.

Whilst an EVO bike must consist of a stock chassis and swing-arm, it is allowed to use a custom rear suspension linkage that is both adjustable and far better for the purposes racing, the series also uses adjustable offset yokes, rake angle adjusters and swing-arm offsets. These items open a new world of motorcycle set-up, one that uses chassis programs to give you detailed information on your bike's geometry configuration, but it does require a good understanding of geometry to operate effectively. So, to assist we will have a chassis and suspension engineer on hand at every round to help you learn and understand this, we are going to give you the knowledge to take control of your suspension and geometry set-up by taking your knowledge and your ability to make the right changes to a whole new level, a must for those with aspirations of making a career out of racing. For everyone else, we will introduce you to a new level of motorcycle handling and a great understanding of why!

As the series develops, we will look at the regulations frequently and adjust accordingly.

Parts

You are free to source parts from wherever you wish (With the exception of series geometry parts). However, Teams/Riders who chose not to use series parts will not enjoy the respective discounts for any spares they may require from the series organiser, the exception to this will be the mandatory geometry parts. We do this because we want to actively encourage teams to use series parts, more volume means we can push our suppliers for additional support, that support comes directly back to you. The series will also offer a trackside support service on parts, the ambition is to stop you having to invest in parts stock until you need it.

Technical Support

At the beginning of the season, we will prepare you a chassis program file so we have your data on file, this will contain all the information you require to give you a good base line suspension and geometry set up personalised to your bike and rider.

We will have on hand a suspension and geometry engineer for each ten teams in the series. Their job is to guide and assist you with any set-up issues you may have, it is not their job to de-brief a rider to understand the issues, however, if time permits they will of course help. To assist with this, we will run a seminar at the beginning of the season to help you understand the process you should go through in your de-briefs, so that you can give us the information we need to give you good direction, the cost of this seminar is £69.00 per team. We will also run part of the seminar on the geometry parts you are fitting, what they do and how.

In addition to the above, technical support will be available to help diagnose any issues with the bike and a rider's representative who is your go to person for any concerns.

As a series organiser we do not seek to make a profit from you going racing however, we do need to cover our costs. Therefore, there will be nominal charges made by the series organisers to cover the basic costs of us providing the support detailed above. These are shown further down in the costs section.

Machinery & Rider Eligibility

All machines competing in the 2023 Moto EVO & Street EVO Series class must comply with the regulations below. The regulations are additional to the ACU Standing Regulations as laid out in the ACU Handbook.

For the 675: The series is open to riders with a minimum age of 16 who possess a valid National ACU or SACU license, or a Novice - Clubman license if over 17.

For the 765: The series is open to riders with a minimum age of 17 who possess a valid National ACU or SACU license, or a Novice - Clubman license if over 18.

The regulations are as follows and are correct at the time of printing but are subject to any amendments made by the ACU or Bemsee/TSM which will be issued by means of a Bulletin. Engine and frame numbers must not have been tampered with or deleted. New, unstamped components are admissible. Bikes without a frame number are acceptable providing they were originally supplied for racing. Motorcycles must be based upon bikes originally homologated for road use.

Anything that is not authorised and prescribed in these rules are strictly forbidden.

All machines must comply with all requirements of Road Racing as specified in the ACU Standing Regulations.

1. Machine Specifications

The following two classes are available for entry and will each have their own podiums.

GP2 EVO. This is open to 675cc/765cc engines. Bikes must be fully faired with the addition of the geometry parts supplied by the series organiser. Series bodywork will be available to those wishing to use it as will series parts.

Street EVO. This is open to 765cc engines. This is essentially a naked bike class and may only use minimal bodywork. This is to include a nose cone; seat unit and belly pan with the addition of the geometry parts supplied by the series organiser. Series bodywork will be available to those wishing to use it as will series parts.

Chassis and Swing Arm. Eligible Models.

Daytona 675/R: (From Vin No **565736**). The chassis and swing arm used must come from the same homologated model however, the engine fitted maybe either the 765RS or 675 GEN 3 (2013 onwards).

Street Triple 765RS: (From Vin No **801978**). The chassis and swing arm used must come from the same homologated model and the engine must remain as supplied with the homologated model.

Daytona Moto 2 Limited Edition: The chassis and swing arm used must come from the same homologated model and the engine must remain as supplied with the homologated model. The use of Traction control or ABS is not permitted. These features must be disabled mechanically.

Engines. Eligible Units by engine No. (All engines must be stock with no modifications)

675 Engine No's start at **565736**

765 RS Engine No's **801978 to 967732**

For clarification of the above rules. The GEN 3 Triumph675/R maybe used as homologated or maybe upgraded to the 765RS engine and electronics if desired. This bike may only enter the GP2 EVO Class.

A 765RS may enter the Street EVO Class in a race prepared format (It must retain its original silhouette), or it may be modified to become a GP2 EVO bike.

Other machines may be considered upon application to the series organiser.

All items not mentioned in the following articles must remain as originally produced by the manufacturer for the imported machine, except where specific changes are required by the ACU Standing Regulations.

2. Minimum Weight

The minimum weight for any machine is 155KG, the combined weight must not be less than 230KG. Any team failing to meet these weight limits must add weight to their machine. This weight limit must include oil & water and a minimum of 1 litre of fuel.

In the final inspection at the end of the race, the checked machines will be weighed in the condition they were at the end of the race. The established weight limit must be met in the condition the

machine finished the race. Nothing can be added to the machine including water, oil, fuel or tyres.

At the time of the event, the weight of the whole machine (including the tank and its contents) must not be less than the minimum weight, combined weight checks will also be carried out. During the practice and qualifying sessions any rider may be required to submit their motorcycle and themselves to technical weight control.

3. Number and Background Colours

Number Plates Racing numbers must be affixed to the front and the two sides of the motorcycle so that both front and side numbers are clearly visible to the public and officials ON BOTH SIDES OF THE TRACK, they must comply with the following regulations:

a) Front Numbers – Numbers must be fitted directly on the front of the fairing not on the side, ALL fairings may be modified to accommodate this.

b) Side Numbers - numbers must be fitted to the belly pan, NOT THE SEAT FAIRING. The figures must be clearly legible and like the background must be painted in colours to avoid reflection from sunlight.

The minimum dimensions of the letters are as follows: Height of figure: Front 160mm Side 120mm Width of figure: Front 80mm Side 60mm Width of stroke 25mm Space between 2 figures 15mm. An easily recognisable form must be used. All other number plates or markings on a motorcycle liable to cause confusion with the number must be removed before the start of a competition. Unless authorised in the Supplementary Regulations or Final Instructions the following colour combinations must be used for the front and side numbers:

Moto EVO GP2 bikes must use a white background with Red numbers. A secondary colour maybe used as a trim line around the numbers

765 ST EVO bikes must use a yellow background with black numbers. A secondary colour maybe used as a trim line around the numbers

4. Fuel

Only fuel which is sold from roadside pumps for use on UK roads, and upon which all tax and duty has been paid, is permitted for all timed practice and races.

5. Tyres

There will be an official tyre manufacturer for the series. Details will be advised shortly. All teams will be limited to two sets of tyres per round, the use of wet tyres is not limited. Scrubs are permitted for all practice sessions. Slicks tyres will be used. Your supplier will be Rod Harwin Racing.

6. Engine

5.01- The engine must remain as originally produced by the manufacturer for the homologated machine. Power outputs are limited to 130BHP as measured on the series organisers dyno. All motorcycles entered will require a run on the series organisers dyno, if the power outputs are within limits the engine will be sealed by the series organiser, only access to the clutch is permissible. Only sealed engines are permitted to be used.

6.1 Fuel Injection System

Throttle bodies and intake track devices must remain as originally produced for the homologated engine.

The Electronic Throttle maybe replaced for an aftermarket model.

Bell mouths must remain as originally produced by the manufacturer for the homologated engine.

The injectors must remain as used on the homologated model.

6.2 Cylinder Head

No modifications are permitted.

6.3 Camshaft

No modifications are allowed to the camshafts. Camshafts may only be used in their original positions, inlet for inlet – exhaust for exhaust.

6.4 Cam Sprockets

No dimensional modifications are allowed, cam timing must remain as originally produced.

6.5 Cylinders

No modifications are allowed.

6.6 Pistons-Rings & Circlips

No modifications are allowed, only homologated pistons may be used (including polishing and lightening).

6.7 Connecting Rods

No modifications are allowed (including polishing and lightening).

6.8 Crankshaft

No modifications are allowed (including polishing and lightening).

6.9 Crankcase and all other Engine Cases

(i.e. ignition case, clutch case)

No modification to the crankcases is allowed (including polishing and lightening).

Engine casing protection covers maybe used. We recommend the GB Racing Product range.

7. Transmission/Gearbox

No internal modifications are permitted. Quickshifter/Blipper are allowed. HM Quickshifter products will be supplied at a preferential rate. These are not a control item.

Only countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed. The sprocket cover can be modified or eliminated.

8. Clutch

All machines must run a slipper clutch. OEM fitted Slipper Clutches are permissible. Slipper clutches will be supplied by the series organiser at a preferential rate if required.

9. Sump, Oil Pumps and Oil Lines

The original sump can be replaced to accommodate an exhaust system. The example of this would be to fit a 675 sump to a 765 engine for the purposes of running an exhaust system that runs down the right-hand side of the bike. (Left side is stock for a 765 ST). This option is aimed at those converting a 675 to a 765.

No pump modifications are allowed. Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of metal reinforced construction with swaged or threaded connectors.

10. Radiator and oil coolers and crankcase pressure switch.

Additional radiators and / or oil coolers are not allowed. Pattern radiators of the same dimensions are allowed. The standard Oil Pressure Switch maybe exchanged for an Oil pressure Sensor. This maybe wired to either a pressure gauge or warning light.

The radiator hoses to and from the engine can be changed but the system must be maintained, with its original tanks.

Protective meshes can be added in front of the oil and/or water radiator(s). Radiator fan and wiring may be removed.

11. Air Box

The air box must remain as originally produced by the manufacturer for the originally imported

machine, but the air box drains must be sealed.

The air filter element may be replaced.

All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox.

12. Fuel Supply

An additional control unit to change the fuel mixture may be installed and must be fitted to the original connectors. (The original wiring loom connectors to the CDI must remain unmodified).

Fuel pump and fuel pressure regulator must remain as homologated.

Fuel lines must be as originally homologated for the bike. Quick release connectors or dry break connectors may be used. Fuel vent lines may be replaced.

Fuel filters may be added.

13. Carburetion-Instruments/Fuel Injection.

The use of aftermarket instruments is permitted for the purposes of recording lap times or engine/suspension data.

14. Exhaust System

Exhaust pipes and silencers may be modified. Replacement full exhaust systems are not allowed, only the standard downpipes with the catalytic convertor removed are allowed. A maximum of 105DBA is permitted. Only the link pipe and exhaust can be modified. Our recommended supplier is MHP Exhausts.

Catalytic converters must be removed (cut off or taken out).

Wrapping of exhaust systems is not allowed except in the area of the rider's foot or an area in contact with the fairing for protection from heat. The Chief Technical Officer shall be the final arbiter of the permissible area of wrapping.

13.1 Secondary Air Injection maybe eliminated, as maybe the lambda sensor by way of an aftermarket eliminator.

15. Electrics and Electronics

15.1 Ignition/Engine Control System.

The central unit (ignition/engine control unit/CDI) must remain the same as the originally imported unit.

Only the standard ECU maybe used in conjunction with an aftermarket fuel module.

The ECU on all models can be re-flashed but only by the series organiser. The Gen3 675 ECU must run its standard RPM, the 765 will have its RPM raised to 13000. This re-flashing process should negate the requirement for a third-party module, but you may still fit one for fuel trimming purposes if you wish.

15.2 Generators

No modifications allowed.

The electric starter must operate normally and always be able to start the engine during the event (including at pre and post-race inspections). The engine must start and run when the electric starter has stopped its procedure.

The addition of a device for infra-red (IR) transmission of a signal between the racing rider and his team, used exclusively for lap timing, is allowed.

The addition of a GPS unit for lap timing/scoring purposes only is allowed.

15.3 Wiring Harness

The original wire-loom must remain as originally produced.

15.4 **Battery**

Battery may be replaced.

16. **Frame and Body**

16.1 **Frame Body and Rear Sub Frame**

The Frame must come from either a Triumph 765 or 675 within the range of the VIN No's stated.

Holes may be drilled in the frame only to fix approved components (i.e. fairing brackets, steering damper mount or rake adjusters).

Engine mounting brackets or plates must remain as originally produced by the manufacturer. Rear sub frame can be replaced with an aluminium item or the series seat unit.

17. **Front Forks**

In order to aid geometry changes, forks maybe modified as follows:

Street EVO Class (765 Naked). Forks maybe modified to accept an open cartridge unit and a fork extension cap if required. The overall length of the fork once modified and as measured from the centre of the wheel spindle to the top of the outer tube should not exceed 745mm. Parts are available from the series organiser.

GP2 EVO Class.

The bike may run the Ohlins FL9060 front forks, these where homologated for the Daytona 675R, or the original units as homologated for the model being used. hese maybe upgraded to an open cartridge unit only.

Dust seals can be modified, changed or removed if the fork is totally oil sealed.

Any quality and quantity of oil can be used in the front forks.

The height and position of the front fork in relation to the fork crowns is free.

The upper and lower fork clamps (triple clamp, fork bridges) must be replaced using parts supplied by the series organiser.

Steering damper may be added or replaced with an after-market damper. The steering damper cannot act as a steering lock limiting device.

Swing arm

Every part of the rear fork must remain as originally produced by the manufacturer (including rear fork pivot bolt).

Rear wheel stand positioning (support) brackets may be added to the swing arm. Brackets must have rounded edges (with a large radius) viewed from all sides. Fastening screws must be recessed.

For safety reasons, it is compulsory to use a chain guard fitted in such a way as to prevent trapping between the lower chain run and the final driven sprocket at the rear wheel.

Series supplied Swing Arm Offsets maybe fitted if required.

18. **Rear Suspension Unit**

Rear suspension unit may be modified or replaced. Series parts are available from the organiser

The rear suspension linkage maybe replaced with parts supplied by the series organiser.

Rear suspension unit spring may be changed.

19. Wheels

Wheels must remain as originally produced by the manufacturer at the time of sale into the dealer/distributor network for the originally imported machine.

No modifications of the wheel-axles or brake calipers are permitted. Wheel spacers can be modified to become captive only. modifications to keep the rear caliper in situ is also permitted..

Any inflation valves may be used.

Wheel balance weights may be discarded, changed or added to.

20. Brakes Discs

Brake discs can be replaced. Discs must be made from the original homologated material. Light weight rear discs maybe used

A 'wave' type disc or round disc can be used. The outside and inner diameter of the brake disc must remain the same as on the homologated disc.

The thickness of the brake disc may be increased by 20% and must continue to fit into the standard brake caliper without any modification.

The number of floaters is free.

The fixing of the carrier on the wheel must remain the same as on the original disc. Anti-lock system (ABS) must be disconnected and the ABS Unit can be isolated but not removed. The ABS rotor fitted to the wheels can be removed.

Front brake calipers must remain as originally produced by the manufacturer.

The type of brakes pads used is free.

The front master cylinder maybe changed; the rear master cylinder must remain as originally produced by the manufacturers for the originally imported machine.

Front and rear brake fluid reservoirs may be changed with an aftermarket product. Front and rear hydraulic brake lines may be changed. Series parts are available with support.

The split of the front brake lines for both front brake calipers must be made above the lower fork bridge. Quick (or "dry-break") connectors in the brake lines are not authorised.

Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change types.

21. Handlebars and Hand Controls Handlebars.

Handlebars must be of the standard shape and design, hand controls may be relocated. Clip on style bars are permitted on the GP2 EVO bikes.

Throttle controls must be self-closing when not held by the hand.

Throttle assembly may be modified or replaced, but the connection to the throttle body and to the throttle controls must remain as per the originally imported machine.

Clutch and brake lever may be exchanged for an aftermarket copy. A remote adjuster to the brake lever is allowed.

Switches can be changed but electric starter switch and engine stop switch must be located on the handlebars.

22. Footrest/Foot Controls

Footrest/foot controls may be relocated but brackets must be mounted to the frame at the original mounting points. Their two original mounting points of fixture (on foot controls and on the shift shaft) must remain as original.

Foot pegs must be rigidly mounted.

The end of the footrest must have an 8mm solid spherical radius.

23. Fuel Tank

Fuel tank filler cap may be altered or replaced from those fitted to the originally imported motorcycle, by a "screw-on" type fuel cap.

The sides of the fuel tank may be covered by a protective part made of a composite material. These protectors must fit the shape of the tank.

Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250cc made of a suitable material.

24. Fairing/Body Work

Fairing and bodywork including seat may be replaced with any type if it complies with the ACU Standing Regulations.

Two types of bodywork are available from the series organiser.

T1 is for the 765 EVO class which is the naked race bike version. This consists of a seat unit, seat pad, nose cone and belly pan. (Fig 1)

T2 is for the GP2 EVO which is the fully faired version of the 765, this version requires the use of clip-on bars. This consists of seat unit, seat pad, top fairing, belly pan, air scoop, front mudguard, Rear Hugger, front and rear subframe and screen. Examples are shown below. (Fig 2).

Fig 1.



Street EVO class

Fig 2.



GP2 EVO

All bodywork is to be made from Fiberglass and Kevlar, only the front Mudguard and rear hugger may use Carbon Fibre.

The Chief Technical Officer has the right to refuse any bodywork that does not appear safe and cosmetically tidy.

The original combination instrument/fairing brackets may be

replaced. All other fairing brackets may be altered or replaced.

The original air ducts running between the fairing and the air box may be altered or replaced. The original air ducts into the air box must remain as homologated.

Minimal changes are allowed to permit the use of an elevator (stand) for wheel changes and to add a small plastic protective cone to the frame or engine.

Front mudguard maybe replaced. The use of Carbon Fibre or Kevlar composite is allowed. Front mudguard may be spaced upward for increased tyre clearance.

Rear mudguard fixed on the swing-arm may be replaced. The existing rear mudguard under the seat may be removed.

A hugger may be fitted directly onto the swing-arm (it may not cover more than 120 degrees of the wheel)

All exposed edges must be rounded.

Oil Containment

The lower fairing must be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (minimum 4 litres).

The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing. All engine cases containing oil and, which could be in contact with the ground during a crash must be protected by a second cover made of composite material. TSM recommends and offers a discount to entrants on GB Racing products. All these devices must be designed to be resistant against sudden shocks and all devices must be fixed by bolts onto the engine covers/cases.

The chief technical officer has the right to forbid any covers, if the evidence shows the cover is not effective All exposed edges must be rounded.

25. Fasteners

Standard fasteners may be replaced with fasteners of any material and design. The strength and design must be equal to or exceed the strength of the standard fastener it is replacing.

Fasteners may be drilled for safety wire.

Fairing/body work fasteners may be changed to the quick disconnect type. Aluminium fasteners may only be used in non-structural locations.

26. The following items may be altered or replaced from those fitted to the originally imported motorcycle:

Any type of lubrication, brake or suspension fluid may be used.

Painted external surface finishes and decals.

Material for brackets connecting non-original parts to the frame (or engine) cannot be made from titanium or fibre reinforced composites.

Tachometer – NB this must be working so that noise limits may be measured.

27. The Following Items May Be Removed:

Emission control items (anti-pollution) in or around the airbox and engine (O2 sensors, air injection devices).

The Following Items MUST BE removed

Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings must be covered by suitable materials.

Rear-view

mirrors. Horn.

Number plate
bracket.

Tool box.

Helmet hooks and luggage carrier

hooks Passenger foot rests.

Passenger grab rails.

Safety bars, centre and side stands must be removed (fixed brackets must remain). Catalytic convertor.

ABS

Traction control

Catalytic Convertor

28. The following items MUST BE altered

Motorcycles must be equipped with a functional ignition kill switch or button mounted at least on one side of the handlebar (within reach of the hand while on the hand grips) that can stop a running engine. It is recommended that machines be equipped with a red light on the instrument panel. This light must flash in the event of oil pressure drop. All drain plugs must be wired.

External oil filter(s) screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases, oil lines, oil coolers, etc.)

29 Transponders

The transponder to be used for timing purposes must be AMB/Mylaps TranX 260 or TranX Pro transponders, or other compatible equipment. The Chief Technical Officer will refuse any machine that does not have a correctly positioned transponder attachment.

The transponder should be positioned on either side of the machine in the area of the swinging arm pivot; it should not be covered by metal or carbon fibre.

Positive attachment of the transponder bracket consists of a minimum of tie wraps.

Velcro or adhesive alone will not be accepted.

The Transponder retaining clip must also be secured by a tie wrap. This is the responsibility of the team and rider and no responsibility will be accepted by the organisers for failure to comply.

Timekeepers have the right not to time any machine where the transponder is incorrectly fitted, not attached or lost and the Clerk Of The Course will not accept this reason for a rider failing to produce a qualifying time in accordance with the regulations.

30 Power Limit

The maximum permitted power output shall be 130 bhp (DIN) as measured on the nominated control dyno at the rear wheel.

Whilst some may choose to gain an advantage in their interpretation of the rules, such attempts will be considered against the spirit of the Championship unless previously agreed by the series organiser. If you have an idea that you feel would either improve costs or performance of the bikes, please consult the riders representative (Paul Tovey) first with your idea, if accepted it will be added to the rules by way of a bulletin.

Series Service Fee

To cover the costs of personnel to support these events and the cost of running a circuit-based parts service, TSM will make a charge of £149.00 per round per rider. This fee covers the costs of providing a Chassis engineer, suspension engineer and technical support staff over the three days. This fee is not mandatory, if you do not require these services, you do not need to pay this fee.

The fee will be collected

Preferred Suppliers List

All parts orders must be ordered via email to tony@tonyscottmotorsport.com. Telephone orders will not be accepted.

Brand	Discount
K-Tech	12%
Ohlins	10%
Triumph Parts	15%
Tony Scott Motorsport	35% Selected Parts
EBC	TBC
Bike Torque Racing	15%
HEL	25%
HM Quick shifter	20%
SES Race Products	10%