MCUI FIM MiniGP Ireland Series TECHNICAL REGULATIONS

Motorcycles participating in the **FIM Mini GP Ireland Series** must comply with the provisions of these regulations.

As set out in the Sporting Regulations, this Championship is based on the sole use of
Ohvale- GP-0 160 4Speed Motorcycles

During the event a rider may only use one motorcycle, as presented for Technical Control
Except as explicitly authorised by these regulations and by the MCUI/Ohvale Ireland, all the components of the motorcycle must be kept original, therefore as originally produced by the manufacturer. If not specified, the front, side and rear views of the motorcycles will conform to the appearance of the model as originally produced by the manufacturer. The physical appearance of the exhaust system is excluded from this standard.

EVERYTHING THAT IS NOT AUTHORISED AND PRESCRIBED IN THIS RULE IS STRICTLY FORBIDDEN

1. GENERAL
1.1. The weight of the motorcycle in running order shall not be less than values shown below:

GP-0 160 4Speed 65Kg

1.2. SEALING AND ENGINE QUOTA
1.2.1. During the whole season, each rider has the right to use, therefore to seal, a maximum of 3 engines. Riders registered as wild cards are allowed to seal a maximum of 2 engines per event and no more than 3 during the season.
1.2.2. The engines must be presented to the Official Ireland Importer (Ohvale Ireland) already provided with the identification seal affixed by the Ohvale Technical Service or Ohvale Ireland at all events.
1.2.3. Engines needing official sealing, must be presented to Ohvale Ireland at least 1 week prior to any official event and must have the bolts already drilled to be tied as follows:
1.2.4. Categories GP-0 160 4Speed, the seal will be applied to the fixing bolts of the timing cover.
Engines must only be sealed by the Official Ohvale Importer (Ohvale Ireland) as indicated in the following articles.
1.2.5. Each rider has the obligation to seal at least one engine during the technical inspections of the first event to which the rider participates.
Use on the track of an engine without seals or with damaged seals involves the immediate affixing of new seals and is equated with a technical irregularity.
1.2.6. Sealing of additional engines can occur at the end of the current event or in subsequent events, according to the rider's needs, subject to agreement with Promoter / Ohvale Ireland.
1.2.7. The engines are sealed in the rider name, the exchange of already sealed engines among riders can only be done with the knowledge and approval of the Promoter / Ohvale Ireland.
1.2.8. Applying new seals to an engine with missing, removed or damaged seals is likened to sealing of a new engine. Except for the replacement of seals removed during the Technical Inspections, provided the engine to be submitted for substitution seals within the Technical Inspections of the event following the verification.
1.2.9. The use of an engine beyond the permissible amount is penalised with starting from the last position on the grid, in the first race following the sealing request. In a case where more than one rider applying for sealing of an engine above the maximum allowed number, the starting order will be the order in which the request was made for the engine sealing (the last showing up will be in the last position, the last but one showing up before the last one, and so on).
1.2.10. All engine work to be carried out by Ohvale Ireland only.
a) Top End - Cylinder Head
b) Bottom End - Crank Cases
c) Complete Strip/rebuild
1.2.11. In the instance that an engine is to be checked for conformity on a race weekend, following a protest or at the request of the organiser, Ohvale Ireland have the right to seize said engine from the rider after the final race for checks back at Ohvale Ireland HQ.
The engine is to be removed by the riders crew either at scrutineering/parc ferme or it may be taken directly to the Ohvale Ireland truck where it can be taken out by the riders crew.
The bike/engine can not go back to the riders awning. Ohvale Ireland endeavour to return the engine to the rider within 1 week.
Should the check be performed due to an organiser request there will be no charge.
Should the engine have been checked due to a protest and the engine found to be legal the cost will have been covered by the protest. If the engine is found to be illegal, the protest will be refunded and the rider in question will be liable to costs and **have all previous rounds points deducted**.

2. CHASSIS

2.1 - **CHASSIS**

2.1.1. The chassis must be kept original, it is only permitted to fit the chassis anti vibration plate produced in the kit by the manufacturer for the model of motorcycle in use.
The painting of the chassis is free but polishing is prohibited.
The use of covers to protect the swing arm or chassis is prohibited.
2.1.2. The only chassis permitted in the 160 categories are those of the originally produced motorcycle for these engines. No EVO or 12" GP-2 chassis is permitted.

2.2 - **REAR SUBFRAME**
2.2.1. The rear subframe must be kept original. The painting of the rear subframe is free but polishing is prohibited.

2.3 - **FRONT SUBFRAME**
2.3.1. The front subframe must be kept original. Painting of the front subframe is free but polishing is prohibited.

2.4 - **SWING-ARM**
2.4.1. Except as authorised in the following articles, the swing-arm and swing-arm pivot must be kept original.
2.4.2. Replacing the original chain adjusters with the racing ones produced by the manufacturer for the model of motorcycle in use is permitted.
2.4.3. All motorcycles must be equipped with a solid protective chain guard (shark fin) fixed to the swing-arm produced by the manufacturer of the motorcycle.

2.5 - **STEERING PLATES**
2.5.1. The upper and lower fork clamps (triple clamp, yoke), and the steering axle (head pipe) must remain as originally produced by the manufacturer on the homologated motorcycle, as well as the steering lock stops device.
2.5.2. The steering stem must remain in its original position.

2.6 - **HANDLEBARS AND CONTROLS**
2.6.1. Except as authorised in the following articles, the handlebars, the handlebar clamps, the manual controls (throttle control, brake and clutch levers and electric controls), and the handlebar terminal must be kept original.
2.6.2. Handlebars must stay original. They can be repositioned, but a minimum clearance of 30mm must be maintained between the tank and the handlebars, including any accessories attached to it.
2.6.3. It is forbidden to use handlebars without nylon ends.
2.6.4. It is forbidden to repair the handlebars by welding.
2.6.5. The levers on the handlebars (brake and clutch) may be changed for after-market levers but must always have rounded edges and must have a ball-form ending.
2.6.6. In any position of the steering and the front suspension, the levers on the handlebars must not touch any component of the motorcycle.
2.6.7. Throttle controls must be self-closing when not held by hand.
2.6.8. It is mandatory to use a brake lever guard for the model of motorcycle in use, which protects the front brake lever from any involuntary actuations resulting from the contact between two motorcycles.

2.7 - **FOOTREST AND CONTROLS**
2.7.1. Except as authorised in the following articles, the footrests, and foot control must be kept original except they must be fitted with nylon end caps to save damage to the track surface.
2.7.2. Footrests and foot controls can be repositioned only using the setting originally provided by the manufacturer.
2.7.3. Gear shift lever and the linkage can be replaced to use 'race shift' type produced by the manufacturer.
2.7.4. It is forbidden to repair the footrests by welding.
2.7.5. It is forbidden to repair the footrest support by welding.
2.7.6 Foot rests may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.
2.7.7 The end of the foot rest must have at least an 8 mm solid spherical radius.
2.7.8 Non folding footrests must have an end (plug) which is permanently fixed, plastic, Teflon® or an equivalent type material (minimum radius 8mm). The plug surface must be designed to reach the widest possible area. Chief Technical Officer has the right to refuse any plug not satisfying this safety aim.

2.8 - **KICK START LEVER**
2.8.6 In GP-0 160 4 Speed categories, the kick start lever of the original engine must remain mounted and running and be equipped with a system that prevents accidental opening (example: elastic).

3 SUSPENSION

3.1 - **FRONT SUSPENSION**
3.1.1. Except as authorised in the following articles, the fork must be kept original in every component.
3.1.2. It is permissible to replace the original fork with the "+5" fork originally assembled on motorcycles produced from 2019.

3.1.3. Position of the fork stems in respect to the steering plates (yoke) is free (fork height).
3.1.4. Front springs are free.
3.1.5. It is permissible to add the kit pre-load adjusters produced by the manufacturer

3.2 - **STEERING DAMPER**
3.2.1. A steering damper may be fitted.
3.2.2. In no case may the steering damper act as a steering lock limiting device

3.3 - **REAR SUSPENSION**
3.3.1. Except as authorised in the following articles, the rear suspension must be kept original in every component.
3.3.2. Attachments of the Rear Suspension to the Chassis and swing arm, must be kept original.
3.3.3. The original shock absorber may only be used.
3.3.4. The length of the shock absorber, the position of the hydraulic registers, the spring weight and the preload of the mainspring of the shock absorber are free.

4 BRAKE SYSTEM
BRAKES - All motorcycles must be equipped with a brake lever protection, intended to prevent the handlebar brake lever from being accidentaly activated in the case of collision with another motorcycle.

4.1 - **BRAKE DISCS**
4.1.1. The brake discs must remain as originally produced by the manufacturer for the motorcycle.
4.1.2. Floating discs are not allowed.

4.2 - **BRAKE CALLIPERS**
4.2.1. Except as authorised as follows, the front and rear brake callipers, as well as all the fixing points and all anchor pieces, must be kept original.
4.2.2. It is mandatory to mount original brake pads or, alternatively, those brake pads which are included in the Ohvale Ireland kit for the model of motorcycle in use.

4.3 - **MASTER CYLINDERS**
4.3.1. Brake master cylinders (front and rear) and the related pipes must be kept original. Braided brake lines are permissible.
4.3.2. Installation of a protection of the brake master cylinder positioned on the handlebar is authorised to prevent oil leaks if they break after falling.

5 - WHEELS
5.1. Wheel rims and their spindles must be kept original. It is allowed to drill and tap the spindle to add crash protection only. In all the dimensions of the wheel rims should be as indicated below:
Front Wheel 2,50” x 10” - Rear Wheel 3,00” x 10

6 – TYRES
6.1. The only tyres admitted to the championship are those indicated here below:
6.1.1. Front Tyre: Pirelli Slick Diablo NHSTL SC1 DSBK 100/80 x 10
6.1.2. Rear Tyre: Pirelli Slick Diablo NHSTL SC1 DSBK 120/80 x 10
6.2. In the event that the qualifying practices or the races are declared "wet" the use of rain tyres in the measures indicated below will be allowed:
6.2.1. Front tyre: Pirelli Diablo Rain NHSTL SCR1 DB Rain 100/80 x 10
Rear tyre: Pirelli Diablo Rain NHSTL SCR1 DB Rain 120/80 x 10
6.3. For the entire duration of the event it is permitted to use up to a maximum of:
- 1 sets of slick tyres (1 front and 1 rear) for events with a maximum of 3 races.
- Rain Tyres are excluded from tyre allocation and will not be “stickered”
- Tyres will be affixed with “Tyre Stickers” in Parc Ferme after the qualifying session and these must be the only tyres used during the event (unless the session is declared “wet”)
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6.4. The use of tyre warmers is allowed.

7 - TANK AND FUEL SYSTEM
7.1 - TANK
7.1.1. Tank and tank cap must remain as originally produced by the motorcycle manufacturer.
7.1.2. Fuel tank must be filled with spongy fire retardant material (such as "Explosafe").

7.3 - **FUEL LINE**
7.3.1. The fuel circuit, understood as the fuel pipe and devices (fuel tap) between the tank and the carburettor is free.
7.3.2. The addition of fuel filters are permitted.
7.3.3. Use of quick connectors for fuel pipes are permitted.

7.4 - **FUEL**

7.4.1. The only fuel allowed is normal unleaded or super unleaded pump fuel available from public service stations on the island of Ireland.

8 - INTAKE SYSTEM

8.1 - **INTAKE SYSTEM GENERAL**

8.1.1. Except as authorised in the following articles, the fuel system must be kept original.

8.2 - **CARBURETTOR**

8.2.1. It is mandatory to use the carburettors indicated in the following points:
a) Category GP-0 160 4Speed - KF PZ 27 (stock) or the FIM spec Keihin / DELLORTO PHBH 28 kit provided by Ohvale Ireland

8.2.2. Jets and needle are free, all other components must remain standard.

8.2.3. The use of pumps or a power-jet is not permitted.

8.3 - **AIR FILTER**

8.3.1. The air filter is mandatory and must be as indicated in the points below.

8.3.2. It is mandatory to use the standard metallic air filter supplied by the manufacturer.

8.3.3. Use of systems to increase the pressure inside the filter using the dynamic air pressure when the motorcycle is moving is forbidden.

9 – ENGINE

9.1 - **ENGINE GENERAL**

9.1.1. Except as expressly permitted in the following articles, the engine must remain completely original.

9.1.2. The only engines allowed are Category GP-0 160 4Speed - ZONGSHEN W150G

9.1.3. Bore and Stroke must remain original.

9.1.4. It is mandatory to use the clutch cover protection plate supplied by Ohvale Ireland.

9.1.5. It is mandatory to run the engine breather pipes into a recovery tank with a minimum capacity of 250cc.

9.1.6. All oil cavities – sump plug, oil filler cap and oil filter MUST be lock wired

9.2 - **ENGINE HEAD**

9.2.1. Except as authorised in the articles to follow, Any type of machining for the removal of material (including polishing) and application of material (including surface treatment) is prohibited.

9.2.2. Intake and Exhaust ports must remain original.

9.2.3. Valves, valve seats, valve guides, tappets, oil seals must be original. Only normal maintenance provided by the service manual is permitted.

9.2.4. The valve springs, collets and valve plates must remain original. Valve spring shims are not allowed.

9.2.5. It is allowed to rectify the head plane to restore the surfaces according to what is indicated in the technical homologations deposited by the manufacturer.

9.2.6. The volume of the combustion chamber and the height of the squish must comply with the values indicated in the following table:

Category Volume (cc) Squish* (mm)
Category GP-0 160 4 Speed 13.5 +/- 0.4 0.60
*no allowance is admitted on the height of the squish.

9.2.7. Spark plugs are free. None of the parts of the spark plug, beside electrodes, can protrude out the interior of the combustion chamber.

9.3 - **VALVE TIMING**

9.3.1. Any modification of the camshaft is prohibited.

9.3.2. Timing drive sprocket, must be kept original. Any modification or increase of the diameter of the fixing holes is not allowed.

9.3.3. Chain timing and the timing chain tensioner must be kept original.

9.4 **- CYLINDER**

9.4.1. Cylinder must be kept original.

9.4.2. Any surface treatment of the inner wall of the cylinder is prohibited.

9.5 – **PISTON, Gudgeon Pin**,

9.5.1. Any modification to the piston, or gudgeon pin including polishing and lightening, is prohibited.

9.5.2. Any modification to the piston ring set, pins and their holders is prohibited.

9.6 - **CONNECTING ROD**

9.6.1. Any modification to the rod, including lightening and polishing, is prohibited.

9.7 - **CRANK SHAFT**

9.7.1. Engine shaft must remain original, any modification included lightening, balancing and polishing is prohibited.

9.8 - **CRANK CASE**

9.8.1. The engine crankcase and engine crankcase covers must remain original, even with regard to colour and surface finishing. It is only allowed making holes on the flywheel cover to help the cooling of the internal components, according to what has been reported in the homologation files.

9.8.2. It is forbidden to repair the crankshafts and engine covers by applying material.

10 – TRANSMISSION

10.1 - **PRIMARY TRANSMISSION**
10.1.1. The gears of the primary drive (on the crankshaft and on the clutch) must be kept original.

10.2 - **CLUTCH**
10.2.1. On motorcycles in the GP-0 160 4 Speed category's, all components of the clutch (clutch bell, clutch inner drum, hub clutch, pressure plate, drive friction discs, outer friction discs, push plate and springs) must be kept original.

10.3 - **GEAR BOX**
10.3.1. On GP-0 160 4 Speed category's any change to the gearbox, understood as the assembly consisting of the gear selection system and drive forks, primary and secondary shafts and their gears transmission is prohibited.
10.3.2. Any kind of treatment on the surface for reducing friction (including polishing and super finishing) is forbidden.

10.4 - **FINAL TRANSMISSION**
10.4.1. Sprockets and chains are free.

11 - COOLING AND LUBRICATION SYSTEM

11.1 - **OIL COOLER**
11.1.1. The oil cooler must remain original.

11.2 - **OIL CIRCUIT**
11.2.1. Any modification to the oil pump is prohibited.
11.2.2. The oil pipes that connect the engine to the oil cooler must be kept original. The engine breather must be put into a tank with a minimum volume of 250cc.
11.2.3. The oil inlet and discharge plugs, the delivery and return pipes to the oil cooler and the oil filter cover screws must be perfectly sealed and secured with lock wire to prevent accidental opening.

12 - ELECTRICAL SYSTEM

12.1 - **WIRING AND ELECTRIC CONTROLS**
12.1.1. The main wiring must be kept original.
12.1.2. The electric controls on the handlebar can be repositioned, but not replaced or removed.
12.1.3. It is mandatory to keep the ignition kill switch mounted on the right side of the handlebar.

12.2 - **ENGINE IGNITION AND CONTROL**
12.2.1. Except as authorised in the following articles, the engine ignition and control system (rotor, stator engine control unit and coil) must be kept original.
12.2.2. At any time of the event, the Promoter or Ohvale Ireland has the right to request the replacement of any components of the engine ignition and control system mounted on the motorcycle. The refusal to proceed with the replacement is equated with a technical irregularity.
12.3 - ELECTRICAL INFRASTRUCTURE - N/A

12.4 **- ENGINE CONTROL SENSORS**
12.4.1. The use of electronic shift assistance systems (quick-shifter) is prohibited.

12.5 - **ADDITIONAL EQUIPMENT**
12.5.1. With the exception of what is authorised below, any electrical or electronic components (sensor, control unit, display) that are additional or not originally mounted on the motorcycle, are forbidden.
12.5.2. Use of electronic equipment with IR (infrared) technology, GPS or radio timing detection is allowed.
12.5.3. It is allowed to mount one or more systems (dashboards, displays, etc.) to display the parameters indicated in the points below:
- RPM - Oil temperature - Lap Time - Engine Hours
12.5.4. Integrated dashboards with electronic tracing function, geolocation and data acquisition, is allowed. The data acquisition must be just limited to the channels listed below: - RPM - Oil temperature - Lap Time - Engine Hours - Position and speed (by GPS signal).
12.5.5. All motorcycles must mount the rear safety light included in the specific kit for the model of motorcycle in use. The team must ensure that the light is switched on whenever the Race Director declares a wet race or practice.
12.5.6. The presence of cables or electronic components or of not clear origin are not allowed and is considered as a technical irregularity.

13 BODY WORK

13.1 **- FAIRING GENERAL**

13.1.1. Except as authorised in the following articles, the fairing, the seat, the front and rear mudguard and all the superstructures that make up the motorcycle body, must be kept original.
13.1.2. Colour and graphics are free.
13.1.3. Specific graphics are required for the FIM Mini GP Ireland Series - details of logos and positions TBC
13.1.4. The use of carbon fibre components is not permitted except tank and seat protectors.

13.2 **- FAIRINGS**
13.2.1. Except as authorised in the following articles, the fairing must be kept original.
13.2.2. The wind shield must remain original. The wind shield can be coloured and not transparent in order to accommodate the front race number.
13.2.3. It is permitted, as well as recommended to mount protective frill's or wire mesh to protect the oil cooler.
13.2.4. The original fairing brackets/bolts can be replaced with quick-release attachments.
13.2.5. The lower fairing must have a perfect seal in order to contain lubricant leaks in the event of engine failure.
13.2.6. The lower fairing can incorporate a hole of up-to 14mm in the bottom of the front lower area. This hole must remain closed in dry and wet conditions and only opened to allow for water removal after track riding.

13.3 **- MUDGUARDS**
13.3.1. The front fender must be kept original.
13.3.2. The distance between the front mudguard and the tyre may be increased.
13.3.3. The rear mudguard must be kept original.

13.4 **- SEAT**
13.4.1. Seat foam can be changed/replaced

13.5 - **NUMBER PLATE AND RACE NUMBERS**
13.5.1. The colours of the number boards and race numbers are as follows
Category Plate Number
GP-0 160 4Speed Black Red
13.5.2. Front and side race numbers must have a minimum height of 90 mm and be a bold font.

14 - EXHAUST SYSTEM
14.1. The exhaust system must be kept original.
14.3. The maximum permissible noise level is 97 dB / A at a speed of 5500rpm.

15 - SCREWS, BOLTS AND FIXING ELEMENTS

15.1 - **GENERAL**
15.1.1. Bolts and fairing fixing elements are free but must have the same size as the originals and with a strength equal to or greater than the original. Fairings fixing elements may be replaced by fast fixing ones.
15.1.2. The use of titanium or aluminium (replacing stainless) bolts and titanium or carbon fibre and / or kevlar fasteners is prohibited.

15.2 - **ENGINE BOLTS**
15.2.1. The original engine bolts can be replaced with another one of equal size and strength equal to or greater than the original.
15.2.2. Where required it is permissible to drill holes for the passage of the binding threads, but any modification to lighten the bolts is prohibited.
15.2.3. Resetting the threads with the use of helicoil is permitted.