

## APPENDIX 2 – FIM MINI GP CANADA CUP, TECHNICAL REGULATIONS SUPPLEMENT

### A2-1.0 INTRODUCTION

The FIM MiniGP Canada Cup Championship (FMGPC) is a manufacturer-specified championship limited to:

- **Ohvale GP-0 160 4 Speed (ages 10-14) using Pirelli Tires and Motul Oil. Participants for the championship are eligible when they turn 10 years old up to and including the year, they turn 14 years old.**

Motorcycles participating in the FMGPC National must comply with the provisions of this regulation.

If the Technical Director requests parts for compliance or dispute, the manufacturer (Ohvale importer) is required to deliver to FMGPC the part(s) and / or documentation relating to approved motorcycles.

Motorcycles in this championship may only use parts or kits specified and/or provided by the Ohvale manufacturer. Except as explicitly authorized by this regulation 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.

**EVERYTHING THAT IS NOT AUTHORIZED AND PRESCRIBED IN THIS RULEBOOK IS STRICTLY FORBIDDEN.** If a change to a part or system is not specifically allowed in any of the following articles, then it is forbidden.

### A2-1.1 GENERAL

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

- GP-0 160 4 Speed 65 Kg
- GP-0 160 EVO 4 Speed 67.5 Kg

#### **A2-1.1a Sealing and Engine Data**

- Only factory sealed engines certified by Ohvale may be used in the FMGPC Championship among all classes.
- During the whole season engines may be sealed or torn down at the direction of the technical staff at any time and checked for compliance.
- A factory sealed engine is defined as an engine purchased, brand new, from Ohvale or an official Ohvale dealer.
- Competitors are permitted to have a **maximum (3) engines/seals per season**. If a competitor uses any engine beyond that allotment, then that competitor will have to start from the back of the grid for that event.
- Serial numbers on the seals will be recorded by technical staff. Sealed engines may be torn down for inspection when they are removed from service or after a race event. If inconsistencies are found that competitor will have their results voided retroactively to the first event that engine was put into service.
- Any change in engine during the race weekend should be reported immediately to an official so the engine seal may be properly recorded. Failure to do so could result in disqualification.

#### **A2-1.1b Engine Compliance and Protests**

- All competitors are subject to random teardowns to check for engine compliance even if engine has been sealed. Failure to comply with will result in disqualification for that event.
- If a competitor wishes to protest another competitor's engine, they must pay a **\$500 fee**. If the engine is found to be legal, that competitor forfeits the **\$500 fee**. If the engine is found to be illegal, the offending competitor must pay back the **\$500 fee** and they will be disqualified from that event. All other protests and appeals will be conducted per Section 7 – Protests and Appeals
- Engine tags will be tracked from the start of the season, at every round, for every competitor. If, during a random teardown, any violations are discovered, it will result in the cancellation of any results from events in which that engine was used.
- An Engine is considered used at the moment the motorcycle with that engine crosses the transponder signal reception point on track.

## **A2-1.2 CHASSIS**

### **A2-1.2a Frame**

- The frame must be the originally fitted part with no modification allowed. Painting of the frame is free, but its polishing is prohibited.

### **A2-1.2b Seat Post Frame**

- The seat post frame must be the originally fitted part with no modification allowed. The painting of the seat post frame is free, but its polishing is prohibited.

### **A2-1.2c Front Fairing Frame**

- The front fairing frame must be the originally fitted part with no modification allowed.

### **A2-1.2d Swingarm**

- Except as authorized in the following articles, the swing-arm and swing-arm pivot must be the originally fitted part with no modification allowed.
- Original chain tensioner registers may be replaced with the racing ones produced by the manufacturer for the model of motorcycle in use.
- All motorcycle must be equipped with a solid protective chain guard (shark fin) fixed to the swing-arm produced by the manufacturer of motorcycle.

### **A2-1.2e Steering Plates**

- The upper and lower fork clamps must be the originally fitted part with no modification allowed, including the steering lock stops device.
- It is allowed to fix a protector on the upper fork bridge, for the sole purpose of protecting the upper front forks. The design is free, but the final decision of the safety came from the FIM Technical Director / Chief Technical Steward.

### **A2-1.2f Handlebars and Controls**

- Except as authorized 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 produced by the manufacturer for the model of the motorcycle in use.
- Handlebars and manual controls (clutch and brake levers) must stay original. It is allowed to replace the original clutch lever with the optional part produced by the manufacturer for the model of motorcycle in use. They can be repositioned, but including any accessories attached to it. It is forbidden to enter the track without ball end inserts in the handlebar ends.
- It is forbidden to repair the handlebars by welding.
- The control levers on the handlebars (brake and clutch) must always have rounded edges and must have a ball-form ending.
- In any position of the steering and the front suspension, the control levers on the handlebars must not touch any component of the motorcycle.
- Throttle controls must be self-closing when not held by hand.
- A brake lever guard is required.

### **A2-1.2g Footrest and Controls**

- Except as authorized in the following articles, the footrests, and foot control must be the originally fitted part with no modifications allowed.
- Footrests and foot controls can be repositioned only using the setting originally provided by the manufacturer.
- Gear shift pedal and his leverage can be replaced to use one of "overturned" type (GP Shift).
- For OHVALE GP-2 190 DAYTONA it is allowed to replace the original gear shift rod with the optional part to be used with the quick shift system produced by the manufacturer for the model of motorcycle in use.
- The rear brake lever peg may also be positioned on the first lowering slot in the front part of the lever.
- It is forbidden to repair the footrests by welding.
- It is forbidden to enter the track with footrests having the plastic material plugs in poor condition or without a mounted end plug.

### **A2-1.2h Start lever**

- Must be the originally fitted part with no modifications allowed.
- GP-0 160 4Speed the starting lever of the original engine must remain mounted and running and be equipped with a

system that prevents accidental opening (example: elastic).

### **A2-1.3 FRONT SUSPENSION**

- Except as authorized in the following articles, the fork must be the originally fitted part with no modification allowed.
- It is permissible to replace the original fork with the "+5" fork originally assembled on motorcycles produced from 2019.
- Position of the fork sleeve respect to the steering plates is free.
- The fork spring preload system and / or the cartridges that are included in the specific kit provided by the manufacturer for the motorcycle model in use may be used.
- The settings of the hydraulic adjusters, the spring coefficient (k), the preload of the main springs and the amount and type of oil are free.
- Position of the hydraulic registers preload of the main springs are free.
- Front suspension cartridges/internals may only be replaced with kits specified by the manufacturer.
- The manufacturer specified cartridges are as follows:  
Homologated front suspension cartridges (GP-0 160)
  - Andreani Cartridge 105/OV1E
  - K-Tech cartridges 20IDS

### **A2-1.4 STEERING DAMPER**

- Steering Damper (For 2024 only the Steering damper provided by the official supplier will be allowed)
- Steering damper may be added or replaced with an aftermarket damper.
- In no case may the steering damper act as a steering lock limiting device

### **A2-1.5 REAR SUSPENSION**

- Except as authorized in the following articles, the rear suspension must be the originally fitted part with no modification allowed.
- Links and mounting points of the rear suspension to the chassis and swing arm, must be the originally fitted part with no modification allowed.
- The length of the shock absorber, the position of the hydraulic registers, the elastic coefficient (K) and the preload of the main spring of the shock absorber are free.
- The manufacturer specified cartridges are as follows:  
Homologated suspension cartridges (GP-0 160 only)
  - Ohlins S36PRIC1
  - K-Tech Razor-R

### **A2-1.6 BRAKE SYSTEM**

#### **A2-1.6a Brake Disks**

- The brake discs must be the originally fitted part with no modification allowed.
- Only the OHVALE 160 models are allowed to replace the original disc using the 190mm floating disc kit produced by the manufacturer for the model of motorcycle in use.

#### **A2-1.6b Brake Calipers**

- Except as authorized in the following article, the front and rear brake calipers must be the originally fitted part with no modification allowed.
- Brake caliper bolts must be safety wired or have a secondary retention method. The use of clips is permitted.
- Front and rear brake pads may be changed.

#### **A2-1.6c Master Cylinders**

- The front and rear brake master cylinders must be the originally fitted part with no modification allowed.
- Installation of a protection of the master cylinder positioned on the handlebar is authorized to prevent oil leaks in a crash.

#### **A2-1.7 WHEELS**

- For the 160 classes wheel rims and their spindles must be the originally fitted part. The dimensions of the wheel rims should be as indicated below:
  - Front Wheel 2.50" x 10"
  - Rear Wheel 3.00" x 10"

#### **A2-1.8 TIRES**

- The only tires admitted to the FIM MiniGP Canada Cup Championship are those indicated here below:
- OHVALE GP-0 160 4-Speed
  - Front tire: Pirelli Slick Diablo NHSTL SC1 DSBK 100/80 x 10
  - Rear tire: Pirelli Slick Diablo NHSTL SC1 DSBK 120/80 x 10
- If the qualifying practices or the race are declared "wet" it is allowed the use of rain tires in the measures indicated below:
- OHVALE GP-0 160 4-Speed
  - Front tire: Pirelli Rain Diablo NHSTL SCR1 DB Rain 100/90 x 10
  - Rear tire: Pirelli Rain Diablo NHSTL SCR1 DB Rain 120/80 x 10
- It is specified that when mounting the tire on the wheel rim it is mandatory to respect the direction of travel indicated by the manufacturer.
- Only tires supplied at the track by the official tire service are permitted. No external tires even if they comply with the above are allowed without the permission of the official tire supplier / service.
- The use of tire warmers is allowed on the starting grid.

#### **A2-1.9 FUEL TANK AND FUEL SYSTEM**

##### **A2-1.9a Fuel System General**

- Except as authorized in the following articles, the fuel system must be kept original.
- The only fuel allowed is commercially available pump gas.

##### **A2-1.9b Fuel Tank**

- Tank and tank cap must be the originally fitted part with no modification allowed.
- Fuel tank must be filled with spongy fire-retardant material (such as "Explosafe").
- Fuel tank can have heat reflective material attached to its surface.

##### **Fuel Line**

- The fuel circuit, understood as the set of ducts and devices between the tank and the carburetor, is free.
- Replacement of the fuel cock is not permitted.
- The addition of fuel filters is not permitted.
- Only the kit quick connectors for fuel pipes, sold and homologated by the Manufacturer, is allowed.

#### **A2-1.10 INTAKE SYSTEM**

- Except as authorized in the following articles, the intake system must be kept original.
- Carburetor (2024 GP-0 160 4Speed DELL'ORTO PHBH 28 BD will be compulsory)
- It is mandatory the use of the carburetors indicated in the following points:
- Category GP-0 160 4 Speed
  - KF PZ 27
  - KEIHIN PE 28
  - Dell'Orto PHBL 28 BD
- Main and pilot jets are free.
- Air Filter (For 2024 GP-0 intake duct will be compulsory)
- The air filter is mandatory and must be the originally fitted part with no modification allowed.
- For OHVALE GP-0 160 4Speed it is recommended to replace the intake duct of GP-0 motorcycle models manufactured from Model Year 2016 onwards (GP-160 model) with the one originally mounted on motorcycles

manufactured from My2022 onwards (GP-0 160 EVO model). (2024 GP-0 intake duct will be compulsory)

## **A2-1.11 ENGINE**

### **A2-1.11a Engine General**

- Except as expressly permitted in the following articles, the engine must remain completely original.
- The only engines allowed are those indicated in the points to follow:
  - Category GP-0 160 4 Speed                      ZONGSHEN W155
- Bore and Stroke must remain original.
- Is mandatory to use the right-side engine lateral cover included in the kit included in the specific kit for the model of motorcycle in use supplied by the manufacturer.
- It is mandatory to run the engine exhaust lines into a recovery tank with a minimum capacity of 250cc.
- For Sealing Quotas see section A2-1.1a

### **A2-1.11b Cylinder Head**

- The cylinder head must be the originally fitted part with no modification allowed.
- No resurfacing of the head allowed only light cleaning permitted and squish valve must comply with >0.60mm
- Spark plug is free. None of the parts of the spark plug, beside electrodes, can protrude out the interior of the combustion chamber.

### **A2-1.11c Camshaft and Valves**

- Camshaft must be the originally fitted part with no modification allowed.
- Timing driven sprocket must be the originally fitted part with no modification allowed.
- Chain timing and the timing chain tensioner must be the originally fitted part with no modification allowed.
- Valves, valve seals valve guide and oil seals must be original. Only normal maintenance provided by the service manual is allowed.

### **A2-1.11d Piston**

- The piston be the originally fitted part with no modification allowed.
- Any modification to ring set, pins and their holders is prohibited.

### **A2-1.11e Connecting Rod**

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

### **A2-1.11f Crank Shaft**

- The crankshaft must be the originally fitted part with no modification allowed.

### **A2-1.11g Crank Case**

- The engine crankcase must be the originally fitted part with no modification allowed.
- It is allowed to make holes on the flywheel cover to help the cooling of the internal parts, according to what has been reported in the homologation documents.
- It is forbidden to repair engine covers by applying any material.

## **A2-1.12 TRANSMISSION**

### **A2.112a Primary transmission**

- The primary transmission be the originally fitted part with no modification allowed.

### **A2-1.12b Clutch**

- The clutch must be the originally fitted part with no modifications allowed.

### **A2-1.12c Gearbox**

- The gearbox must be the originally fitted part with no modification allowed.
- Final transmission
- Final transmission (pinion, crown, and chain) may be modified or replaced.
- Original chain pitch must be maintained.

## **A2-1.13 OIL COOLING AND LUBRICATION SYSTEM**

- The oil cooler must be the originally fitted part with no modification allowed.
- The oil circuit must be the originally fitted part with no modification allowed.

- The engine breather must be routed into an overflow tank with a minimum volume of 250cc.
- 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 a binding wire to prevent accidental opening.

#### **A2-1.14 ELECTRICAL SYSTEM**

##### **A2-1.14a Wiring and electrical controls**

- The main wiring harness must be the originally fitted part with no modification allowed.
- The electric controls on the handlebar can be repositioned but must be the originally fitted part with no modification allowed.
- It is mandatory to keep the ignition kill switch mounted on the right side of the handlebar.

##### **A2-1.14b Engine ignition, generator, alternator, and starter**

- Except as authorized in the following articles, the engine ignition, generator, alternator, and starter must be the originally fitted parts with no modification allowed.
- At any time of the event, the Chief Technical Steward 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.

##### **A2-1.14c Engine Control Sensors**

- The use of electronic shift assistance systems (quick shifter) is prohibited.

##### **A2-1.14d Additional Equipment**

- Except for what is authorized in the following articles, any electrical or electronic components (sensor, control unit, display) that are additional or not originally mounted on the motorcycle, are forbidden.
- Use of electronic equipment with IR (infrared) technology, GPS or radio timing detection is allowed.
- 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
  - Shift Light
  - Gear Position
- 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 (GPS signal)
- All motorcycles must have a rear safety light installed. The team must ensure that the light is switched on whenever Race Direction declares wet race or practice.
- The presence of cables or electronic components or of not clear origin are not allowed and is considered as a technical irregularity. The Chief Technical Director has the final decision.

#### **A2-1.15 FAIRINGS**

##### **A2-1.15a Fairings General**

- Except as authorized in the following articles, the fairing must be kept original.
- Color and graphics are free.
- Championship series logos and sponsorship decals to be placed as per the Canadian Participants guide.
- The use of carbon fiber components is not permitted.
- All logos and designs on competitors' motorcycles are subject to final approval by FMGPC officials.

- Except as authorized in the following articles, the fairing, the saddle, the front and rear mudguard and all the superstructures that make up the motorcycle body, must be the originally fitted part with no modifications allowed.
- Only on the motorcycles of the categories GP-0 160 4Speed and GP-0 190 Daytona it is permissible to modify the fairing as indicated in the following points:
  - Replace the original front fairing and or fairing with those originally fitted on motorcycles produced from 2019.
  - Fit the aerodynamic "wings" including the specific kits for the model of motorcycle in use.
  - The windshield must remain original. Only the lower half of the windshield can be tinted and not transparent to accommodate the table and the front race number.
  - The size and shape of the cooling holes of the oil cooler are free. It is recommended to mount protective grilles or wire mesh to protect the oil cooler.
  - The original fairing brackets can be replaced with quick-release attachments.
  - The lower fairing must have a perfect seal to contain lubricant leaks in the event of engine failure.
  - The lower fairing must incorporate a hole of 14 mm in the bottom of the front lower area. This hole must remain closed in dry conditions and must be opened only in wet race conditions, as declared by the Race Director.

**A2-1.15b Mudguards**

- It is permissible to replace the original fender with the original one fitted on motorcycles produced from 2019.
- The distance between the front mudguard and the tire may be increased.
- The rear mudguard must be kept original.

**A2-1.15c Seat**

- Saddle seat foam can be changed.

**A2-1.16 NUMBER PLATE AND RACE NUMBERS**

- The colors of the race numbers are as follows:

<u>CATEGORY</u>	<u>BACKGROUND</u>	<u>NUMBER</u>
Category GP-0 160 4 Speed	YELLOW	BLACK

- Numbers made from material such as duct tape are prohibited.
- Front and side race numbers must have a minimum height of **5 inches**.
- Background must extend a minimum of 1" beyond numbers.

**A2-1.17 EXHAUST SYSTEMS**

- The exhaust system, in all categories must be the originally fitted part with no modifications allowed.
- The maximum permissible sound level is 97 dB / A at a speed of 5500 rpm. All exhaust systems to be fitted with the manufacturer's supplied DB killer.

**A2-1.18 SCREW/BOLTS AND FIXING ELEMENTS**

- Bolts and fairing fixing elements are free but must have the same size as the originals and with a strength class equal to or greater than the original. Fairings fixing elements may be replaced by fast fixing ones.
- The use of titanium or aluminum bolts and titanium or carbon fiber and / or Kevlar fasteners, if not originally on the motorcycle or part of the specific kit for the model of motorcycle in use is prohibited.
- The original engine bolts can be replaced with another one of equal size and with a strength class equal to or greater than the original.
- Where required it is permissible to drill holes for the passage of the binding threads, but any modification tending to a lightening is prohibited.
- Resetting the threads with the use of helicoil is permitted.