



## **TECHNICAL REGULATIONS**

## GROUP 4, FRONT OR REAR WHEEL DRIVE ONLY (2WD)

#### 1. DEFINITION

This is the premium group of racing in Guyana, intended to run multiple types of race cars in close competition while creating a thrilling experience for spectators. The premise of creating close racing is based on formulating a **similar** power to weigh ratio for different types of highly modified production-based chassis and purpose-built race cars.

Production based Chassis is defined as vehicles where the body structure of the vehicle between the front and rear windscreens must be identified as having been derived from series produced vehicle generally available for purchase by the public, of which 2500 units were manufactured in any one production year. The engine/gearbox must remain in the same general location and orientation (kept in the front of the car vs. moved to the rear) but can be repositioned within the general location. Production cars outside of the scope defined shall be classified as purpose built.

Purpose-built Chassis is defined as a purpose-built race car. The body structure may be custom/purpose built and cockpit must remain enclosed, fitted with a roof, and front and rear windscreen. There must be separate compartment for engine and cockpit. All wheels and tyres must be covered when viewed from above. Formula cars, and/ or Open Wheel Cars are prohibited. Chassis may be built of any Metal and/ or Composite Material. Factory-built Production Race Cars shall be classified as a Purpose-built Chassis.

These rules shall be valid for the Competition Season Years 2024 - 2026.

The G.M.R & S.C shall have the right to make *minor* amendments to hone and perfect rules for fair racing from one racing meeting to another.

#### 2. CRITERIA

- I. Closed Wheel Race Cars Only
- II. Formula / Open Wheel Race Cars Prohibited





## 3. CHASSIS & BODYWORK

- I. Chassis shall be constructed of Metal and / or Composite Material.
- II. Purpose-built vehicles with enclosed cockpit and steering on the left or right are allowed. I.e.: No center steering wheel positions allowed
- III. Chassis shall be as per specifications above.
- IV. Unlimited lightening or substitution of panels or body structure may be carried out (regarding Weight Limitations) provided that in the opinion of the scrutineers an unsafe condition is not produced.
- V. Driver's compartment shall be sealed from the engine compartment, wheel arches and fuel cell.
- VI. Front and rear windscreen may be substituted with an approved polycarbonate material such as LEXAN.
- VII. Open Wheel Chassis, or open cockpit / Platforms modified to Closed Wheel Specifications are prohibited. IE: installing covers on an open wheel car, or a roof on an open cockpit as designed from factory is prohibited.

## 4. ENGINE

- I. Engine Modifications and Swaps are Free.
- II. 4 liters Naturally Aspirated maximum allowable cubic capacity.
- III. 2 liters Forced Induction maximum allowable cubic capacity.
- IV. Rotary Engines are considered to be the following cubic capacity:
  - a. 12A Mazda Rotary engines are 1.146 liters
  - b. 13B Mazda Rotary engines are 1. 308 liters
  - c. 20B Mazda Rotary engines are 1.962 liters
- V. 0.25 % variance in total declared Cubic Capacity will be allowed due to measurements/maintenance purposes.

#### 5. INTAKE

I. Air Intake Systems and Filters are Free

#### 6. TRANSMISSION

I. Transmissions, Gearboxes, Transaxles, Axle Modifications and Swaps are Free.





II. Transmission, Gearbox, Transaxle *major* location change (i.e. Front to Rear, Rear to Front, Mid to Rear, etc) will deem the Chassis as Purpose Built.

# 7. COOLING

- I. Cooling Systems are Free.
- II. Use of Commercial Automotive Coolant is Prohibited.

## 8. EXHAUST

I. Exhaust Systems are Free

## 9. SUSPENSION AND RUNNING GEAR:

- I. Suspension Modifications and Substitutions are Free
- II. Adaptive and Electronically Adjustable Suspensions are Prohibited
- III. Traction Control Systems are Permitted.
- IV. Launch Control Systems are Permitted.

#### 10. BRAKES:

- I. Brake Systems including Carbon Brakes are Free
- II. Antilock/ Antiskid Brake Systems are Free

#### **11. STEERING MECHANISMS**

- I. Driver Assist Technology is Prohibited
- II. Torque Vectoring is Prohibited
- III. Four Wheel Steering is Prohibited
- IV. Drive by Wire is Permitted

#### **12. ELECTRONIC CONTROLS**

- I. Electronic Controls are free, except those expressly forbidden in 11. Steering Mechanisms.
- II. GPS/ Location Assisted Throttle Management Systems are Forbidden.





#### 13. RIMS & TIRES

- I. Maximum tire width shall be 325mm.
- II. Maximum rim diameter shall be 19 inches.
- III. A maximum of **8 Competition tires** of any make or compound are allowed for use for Qualifying and Racing per event. The Competitor shall be responsible for ensuring that their tyres are scrutineered and marked with the official identification marks before attempting to enter qualifying/race events. Use of unmarked tyres will result in disqualification.
- IV. Rain tires are free.
- V. In exigent circumstances, **One** additional Competition tire will be allotted to a competitor, if any of the 8 Slick tires scrutineered, are punctured, damaged or for any other reason, which, in the opinion of the Scrutineers renders such tire unusable. This damage must not have happened during competition, and tyres will be replaced with like kind (i,e. Used with Used, New with New).
- VI. Rims/ Tyres may be equipped with telemetry/ data recording devices.

#### **14. COMMUNICATIONS EQUIPMENT**

- I. Radio Communications Equipment is Free. The Competitor shall ensure that the radio frequency and communications do not disrupt Race Control and Administration.
- II. Radio Telemetry Equipment is Free.
- III. Transmission of Data between Teams and Cars is Permitted.

#### 15. FUEL

- I. Fuel is Free.
- II. Methanol including Nitro-Methanol is prohibited.
- III. Nitrous Gas Injection Systems are prohibited.

#### **16. BALANCE OF PERFORMANCE**

Since the class is not a "spec" series and is subscribed to be a variety of cars featuring combinations of engines, chassis, suspension types and drivetrains, every effort will be made to ensure close competition, GMR&SC *reserves the right* to implement a balance of power regime either by the use of ballast (to a maximum OF 70 kg) <u>OR</u> via intake restrictor plate. The regime chosen will be advised by the GMR&SC.





#### **17. EQUIVALENCY FACTORS**

- I. Naturally aspirated Rotary Engine total swept volume multiply by 1.7
- II. Forced Induction Rotary Engine total swept volume multiply by 1.53
- III. Forced Induction Piston Engine total swept volume multiply by 1.7

## **18. WEIGHT CALCULATION FACTORS:**

- I. Minimum Weight of any production is car 1800 lbs WITH driver
- II. Minimum Weight of any tubular chassis and / or purpose built car **2000 lbs WITH** *driver*
- III. Racing weight of Cars will include a factor of **180 lbs for the driver**.
- IV. Tubular chassis and / or purpose built car shall *add 5% weight*. (Minimum weight X 0.05 lbs)

## V. <u>Racing weight Calculation examples:</u>

N.A. 20B TUB	1.962 X 1.7 X 625 + 180	= 2265
N.A. 20B PURPOSE BUILT	(1.962 X 1.7 X 625) X 1.05 + 180	= 2369
F.I. 13B TUB	1.308 X 1.53 X 1.7 X 625 + 180	= 2306
F.I. 13B PURPOSE BUILT	(1.308 X 1.53 X 1.7 X 625) X 1.05 + 180	= 2413
F.I. 2.0 L PISTON TUB	2.0 X 1.7 X 625 + 180	= 2305
F.I. 2.0 LPISTON PURPOSE BUILT	(2.0 X 1.7 X 625) X 1.05 + 180	= 2411
F.I.2.35 LPISTON TUB (MAX CC F.I)	2.35 X 1.7 X 625 + 180	= 2677
F.I. 2.35 LPISTON PURPOSE BUILT	(2.35 X 1.7 X 625) X 1.05 + 180	= 2802
N.A. 3.8 LPISTON PURPOSE BUILT	(3.8 X 625) X 1.05 + 180	= 2674
N.A. 4.0 L PISTON TUB	4.0 X 625 + 180	= 2680
N.A. 4.0 LPISTON PURPOSE BUILT	(4.0 X 625) X 1.05 + 180	= 2805

## **18. MISCELLANEOUS**

- I. Any modification which is not specifically stated in these Technical Regulations is prohibited.
- II. 2WD and 4WD Classes will be Gridded separately but may be run together. Races will be rolling start with a minimum speed of 50KM per hour.
- III. All above regulations are to be read together with the General safety Regulations.

## END OF REGULATIONS





# **TECHNICAL REGULATIONS**

# GROUP 4, FOUR WHEEL DRIVE/ ALL WHEEL DRIVE ONLY (4WD/AWD) Turbo Charged Piston Engine Only

## **1. DEFINITION**

This is a premium group 4WD racing in Guyana, intended to run multiple types of turbo charged 4WD race cars in close competition while creating a thrilling experience for spectators. The premise of creating close racing is based on formulating a **similar** power to weigh ratio for different types of highly modified 4WD production-based chassis and purpose-built race cars.

Production based Chassis is defined as vehicles where the body structure of the vehicle between the front and rear windscreens must be identified as having been derived from series produced vehicle generally available for purchase by the public, of which 2500 units were manufactured in any one production year. The engine/gearbox must remain in the same general location and orientation (kept in the front of the car vs. moved to the rear) but can be repositioned within the general location. Production cars outside of the scope defined shall be classified as purpose built.

Purpose-built Chassis is defined as a purpose-built race car. The body structure may be custom/purpose built and cockpit must remain enclosed, fitted with a roof, and front and rear windscreen. There must be separate compartment for engine and cockpit. All wheels and tyres must be covered when viewed from above. Formula cars, and/ or Open Wheel Cars are prohibited. Chassis may be built of any Metal and/ or Composite Material. Factory-built Production Race Cars shall be classified as a Purpose-built Chassis.

These rules shall be valid for the Competition Season Years 2024 - 2026.

The G.M.R & S.C shall have the right to make *minor* amendments to hone and perfect rules for fair racing from one racing meeting to another.

## 2. CRITERIA

- III. Closed Wheel Race Cars Only
- IV. Formula / Open Wheel Race Cars Prohibited





## 3. CHASSIS & BODYWORK

- VIII. Chassis shall be constructed of Metal and / or Composite Material
  - IX. Purpose-built vehicles with enclosed cockpit.
  - X. Unlimited lightening or substitution of panels or body structure may be carried out (with regard to Weight Limitations) provided that in the opinion of the scrutineers an unsafe condition is not produced.
- XI. Driver's compartment shall be sealed from the engine compartment, wheel arches and fuel cell.
- XII. Front and rear windscreen may be substituted with an approved polycarbonate material such as LEXAN.
- XIII. Open Wheel Chassis / Platforms modified to Closed Wheel Specifications are prohibited.

## 4. ENGINE

- VI. Engine Modifications and Swaps are Free.
- VII. 2.6 liters Forced Induction maximum allowable cubic capacity.
- VIII. 0.25 % variance in total declared Cubic Capacity will be allowed due to measurements/maintenance purposes.

#### 5. INTAKE

II. Air Intake Systems and Filters are Free

#### 6. TRANSMISSION

- III. Transmissions, Gearboxes, Transaxles, Axle Modifications and Swaps are Free.
- IV. Transmission, Gearbox, Transaxle <u>major</u> location change (i.e. Front to Rear, Rear to Front, Mid to Rear, etc) will deem the Chassis as Purpose Built.

## 7. COOLING

- III. Cooling Systems are Free.
- IV. Use of Commercial Automotive Coolant is Prohibited.





#### 8. EXHAUST

II. Exhaust Systems are Free

## 9. SUSPENSION AND RUNNING GEAR:

- V. Suspension Modifications and Substitutions are Free
- VI. Adaptive and Electronically Adjustable Suspensions are Prohibited
- VII. Traction Control Systems are Permitted.
- VIII. Launch Control Systems are Permitted.

#### 10. BRAKES:

- III. Brake Systems including Carbon Brakes are Free
- IV. Antilock/ Antiskid Brake Systems are Free

#### **11. STEERING MECHANISMS**

- V. Driver Assist Technology is Prohibited
- VI. Torque Vectoring is Prohibited
- VII. Four Wheel Steering is Prohibited
- VIII. Drive by Wire is Permitted

## **12. ELECTRONIC CONTROLS**

- III. Electronic Controls are free, except those expressly forbidden in 11. Steering Mechanisms.
- IV. GPS/ Location Assisted Throttle Management Systems are Forbidden.

#### 13. RIMS & TIRES

- VII. Maximum tire width shall be 285mm.
- VIII. Maximum rim diameter shall be 19 inches.





- IX. A maximum of **8 Competition tires** of any make or compound are allowed for use for Qualifying and Racing per event. The Competitor shall be responsible for ensuring that their tyres are scrutineered and marked with the official identification marks before attempting to enter qualifying/race events. Use of unmarked tyres will result in disqualification.
- X. Rain tires are free.
- XI. In exigent circumstances, **One** additional Competition tire will be allotted to a competitor, if any of the 8 Slick tires scrutineered, are punctured, damaged or for any other reason, which, in the opinion of the Scrutineers renders such tire unusable. This damage must not have happened during competition, and tyres will be replaced with like kind (i,e. Used with Used, New with New).
- XII. Rims/ Tyres may be equipped with telemetry/ data recording devices.

# **14. COMMUNICATIONS EQUIPMENT**

- IV. Radio Communications Equipment is Free. The Competitor shall ensure that the radio frequency and communications do not disrupt Race Control and Administration.
- V. Radio Telemetry Equipment is Free.
- VI. Transmission of Data between Teams and Cars is Permitted.

## 15. FUEL

- IV. Fuel is Free.
- V. Methanol including Nitro-Methanol is prohibited.
- VI. Nitrous Gas Injection Systems are prohibited.

# **16. BALANCE OF PERFORMANCE**

Since the class is not a "spec" series and is subscribed to be a variety of cars featuring combinations of engines, chassis, suspension types and drivetrains, every effort will be made to ensure close competition, GMR&SC *reserves the right* to implement a balance of power regime either by the use of ballast (to a maximum OF 70 kg) <u>OR</u> via intake restrictor plate. The regime chosen will be advised by the GMR&SC.

# **17. EQUIVALENCY FACTORS**

IV. Forced Induction Piston Engine total swept volume - multiply by 1.7





## **18. WEIGHT CALCULATION FACTORS:**

- VI. Minimum Weight of any car is **2200 lbs WITH driver**
- VII. Racing weight of Cars will include a factor of **180 lbs for the driver**.
- VIII. Tubular chassis and / or purpose built car shall *add* 5% *weight*. (Minimum weight X 0.05 lbs)

#### IX. **Racing weight Calculation examples:** F.I. 1.8 L PISTON TUB 1.8 X 1.7 X 700 + 180 = 2322 F.I. 1.8 LPISTON PURPOSE BUILT (1.8 X 1.7 X 700) X 1.05 + 180 = 2429 F.I. 2.047 LPISTON TUB 2.047 X 1.7 X 700 + 180 = 2616 F.I. 2.047 LPISTON TUBE/PURPOSE (2.047 X 1.7 X 700) X 1.05 + 180 = 2738 BUILT F.I. 2.275 LPISTON TUB 2.275 X 1.7 X 700 + 180 = 2887 F.I. 1.8 LPISTON TUB 1.8 X 1.7 X 700 + 180 = 2322 F.I. 1.8 LPISTON PURPOSE BUILT (1.8 X 1.7 X 700) X 1.05 + 180 = 2429 F.I. 2.047 LPISTON TUB 2.047 X 1.7 X 700 + 180 = 2616 F.I. 2.047 LPISTON TUBE/PURPOSE (2.047 X 1.7 X 700) X 1.05 + 180 = 2738 BUILT F.I. 2.275 LPISTON TUB 2.275 X 1.7 X 700 + 180 = 2887 F.I. 1.8 LPISTON TUB 1.8X 1.7 X 700 + 180 = 2322

## **18. MISCELLANEOUS**

- IV. Any modification which is not specifically stated in these Technical Regulations is prohibited.
- V. 2WD and 4WD Classes will be Gridded separately but may run together. Races will be rolling start with a minimum speed of 50KM per hour.
- VI. All above regulations are to be read together with the General safety Regulations.

# END OF REGULATIONS