

Heart Of England Classic Grand Prix Formula One Championship.

Competing Car Regulations (The "Johnson Formula")

Formula Ethos:

- To revisit a golden age of motorsport to celebrate :
 - The diversity of car design of Grand Prix Cars of 1970 -80
 - Legendary racing drivers.
- To keep the formula:
 - Low "tech" but allowing some limited forms of modification.
 - Cheap to compete in.
 - Fun to race.
 - Equal, Honourable and equitable for young/old & inexperienced and experienced alike.
 - Relatively low powered and somewhere near the actual scale speed of the 1:1 Grand Prix cars of 1970 - 1980's.
 - A framework for the scale modeller to show their skills by allowing scratch built cars and freedom to dress the cars in any livery.

1, Eligibility:

- 1.1. Based upon 1:1 vehicles which were eligible for - or competed in - Formula One races between 1970 & 1980 only.
- 1.2. 1/32 scale model slot cars only.
- 1.3. Open wheeled Grand Prix/Formula 1 slot cars of any manufacture.
- 1.4. Competing cars must comply with the regulations set out below.

2, Motor type

- 2.1. Unmodified/standard Johnson Motors 111 only.
- 2.2. Resistors may be removed.
- 2.3. Motors may be stripped down, cleaned and have replacement contacts fitted as part of a competitors motor maintenance regimen.
- 2.4. Any other form of performance enhancement is not permitted.
- 2.5. Motor performance will be assessed at the race scruteneering by means of a simple wheel speed check, which the competing driver will be able to witness in an open environment of mutual trust with the scruteneer.
- 2.6. Drivers who present cars at scruteneering which manifest performance above and beyond the known performance parameters of the Johnson 111 motor will be asked to fit an alternative motor which passes scruteneering or withdraw that slot car entry into the Grand Prix.
- 2.7. No form of protest is permitted and the scruteneer's judgement is final.

3, Slot Car Upper Body:

- 3.1. Permitted construction (all competing slot car types)
- 3.2. Hard bodied plastic slot cars only.
- 3.3. Where aerodynamic wings/aerofoils are present on the 1:1 car they must be also be present on the competing slot car.

repaired/replaced prior to the competitor's next race/heat.

3.5. Wings & aerofoils may be built from plasticard if the original components are not available

3.6. A driver helmet/body must be present in the cockpit of the slot car.

3.7. Non permitted construction

3.8. Lexan/vac formed body shells are not eligible to compete.

4, Chassis:

4.1. Permitted construction

4.2. Chassis must be constructed from plastic materials.

4.3. Non permitted construction

4.4. Slot cars with metal chassis construction are not eligible to compete.

4.5. Open Pan Chassis:

4.6. Slot cars of "open pan" construction are eligible to compete

4.7. Please note that the following lists are not exhaustive and are purely intended to give some guidance to competitors as to the types of slot car included in the "open pan" chassis type.

- (E.G.) Scalextric (including) Brabham BT44, Ferrari 312T, Shadow DN1-5, BRM P160, McLaren M23.
- (E.G.) French Scalextric (including) McLaren M23, Tyrrell 005.
- (E.G.) MRRC Airfix (including) Lotus 79, , Williams FW07, BRM, McLaren M23, Brabham BT49.

4.8. Closed pan

4.9. Slot cars of "closed pan" construction are eligible to compete

4.10. Please note that the following lists are not exhaustive and are purely intended to give some guidance to competitors as to the types of slot car included in the "closed pan" chassis type.

- (E.G.) Scalextric (including) Brabham BT49, Ferrari 312T3, Tyrrell 007/008, Lotus 72/77, Renault RS01
- (E.G.) Policar (including) Tyrrell 006.
- (E.G.) SCX (including) Brabham BT46, Tyrrell 003, Tyrrell P34
(NB: SCX motors are not permitted and must be replaced by a Johnson Motor).

4.11. Scratch built.

4.12. Slot cars of "open & closed pan" construction are eligible to compete.

4.13. Ideally these cars should be modified using the chassis/model types described previously.

4.14. Chassis made from "plasticard" are not eligible to compete (ie scratchbuilt cars must use an original plastic chassis from an allowable car).

4.15. Scratch built cars must comply with all other car regulations.

4.16. Please note that the following links included below are purely intended to give some guidance to competitors as to the types of slot car included in the "scratch built" chassis type.

- Tyrrell P34 (Modified Scaley Tyrrell 007).
- Ferrari 312T4. (Modified Scaley Ferrari 312T3).
- March 761 (Modified Scaley 6 Wheeled March).

5, Axles/gearing (all competing slot car types).

5.1. Front axle - Free, No regulations ([axle tubing permitted](#)).

5.2. Standard 27 toothed crown wheel (Plastic only).

5.3. Standard 9 toothed pinion (Metal or Plastic).

5.4. "Aftermarket gearing" is not permitted (e.g. Slot It etc).

6, Wheels

- 6.1. Plastic construction suitable to take F1 tyres.
- 6.2. Preferred types are F1 Scalextric/Ninco/SCX.
- 6.3. Aftermarket alloy/Slot It type hubs are not permitted.

7, Tyres.

- 7.1. Rubber construction only.
- 7.2. No silicone based tyres.
- 7.3 Super sticky NSR type compounds are not permitted.
- 7.4. Tyres may be treated with softening type products but must be clean and dry when the car goes to the racing grid.
- 7.5. Preferred tyres include Scalextric Superslix (including reproduction Superslix)/Ninco F1/WASP (Harder Compounds only).
- 7.6. All tyres must look proportionally correct for the period/model.

Rear Tyres

- 7.7. The basic dimensions of the rear tyre to fit the Formula 1 wheel type is 20.5 x 14 x 4.7 x 3.
- 7.8. Rear tyres may be ground down to allow the contact patch to run true.
- 7.9. Rear tyres which have been ground down excessively to produce a “rubber band” tyre will not be permitted to compete.
- 7.10. Rear tyres will be checked at scruteneering and at unspecified times during the Grand Prix.

Front Tyres

- 7.11. Front tyres may be ground down to allow the contact patch to run true.
- 7.12. Front tyres may be of Zero Grip compound or treated with a product to produce Zero Grip performance.

8, Magnetic Downforce.

- 8.1. Slot cars with magnetic downforce are not eligible to compete.

9, Livery

- 9.1. Period livery is preferred but not mandatory.
- 9.2. Competing slot cars will not be excluded if they carry “non period” livery.

10, Dimensions

- 10.1. 1/32 scale slot cars.
- 10.2. Overall height = Free/Open dimension.
- 10.3. Overall length = Free/Open dimension.
- 10.4. Maximum overall front/rear width including tyres (measured to the outside tyre bulge) = 74mm.

NB

The competing car should be a reasonably accurate representation of an original car from the period. Competitors that intend to use cars that fall outside these parameters will be kindly asked to withdraw their entry from the Grand Prix.

11, Guide/braids/wiring:

- 11.1. Free, No regulations.
- 11.2. Guide locations may be modified to allow cars to sit closer to the track.

12 Weight

12.1. Free, No regulations.

13 Wheel Bearings.

13.1. Free, No regulations.

Any query regarding these technical regulations can be addressed to Ian Howard via Slot Forum messaging system.

Useful Links: HOE 2013 bulletin board

<http://www.slotforum.com/forums/index.php?showtopic=65754&st=0&p=739221&-entry739221>