



2016 HMMRC 6 HOUR ENDURO RULES

- a) Race Length 6 hours total, the only time that the track will be switched off will be at the time of changing lanes or for track repairs. Each team will race for a total of 1 hour on each of the (6) six lanes, changing lanes at 30 minute intervals.
- b) Power off Any time lost through track repairs or power off for any reason will be made up; the 6 hours will be 6hrs. Less the 45 seconds lane and driver change periods.
- c) Track Calls:
- Braid up
 - Power failure (one or all lanes)
 - Debris in slot
 - Irretrievable car
 - A car on the floor is not considered irretrievable therefore is not a track call.
 - A car in the infield or under the track is considered irretrievable therefore is a track call.
 - Lap counter or track equipment failure
 - Rider (Car in other than assigned lane)
 - On top of the bridge
 - In front of drivers stand
 - In front of race controller to bridge & Under the bridge.

Track calls are NOT work breaks but braid may be reset and bodies straightened during track calls.

- d) Lane Changes The time allowed for lane changes will be 45 (Forty Five) seconds. It is the team's responsibility to ensure their car is on the correct lane with the correct coloured sticker.

Lane Rotation: White ⇌ Red ⇌ Yellow ⇌ Purple ⇌ Blue ⇌ Green ⇌ White

- e) **Car Maintenance** (Also see track repairs below) You will be allowed to work on your car when the power is turned off for lane change. Once the Race Controller has noted the amount of laps covered by each team and changed the computer, the power will be switched back on for you to start racing.

- f) **Track Repairs** If the track has to be turned off for repairs then the cars must stay on the track where they stopped and no work may be carried out on them, if the car is being worked on in the pits then work must stop.

- g) **10 Lap Shootout** Lane choice for starting the race, each team to enter one member, that driver will have 10 laps on any lane of their choice to record their fastest single lap, one qualifier at a time, the driver with the fastest single lap will have first choice of the lane that their team will start on, the second then the third fastest will choose.

- h) **Catering** Individuals responsibility. Tea and Coffee will be supplied.

- i) **Teams** There will be a maximum of 6 (six) teams with a minimum of 2 members per team and each driver may only drive for a maximum of 30 minutes per turn with a minimum of 30 minute break between drives.

If there is more than six teams wanting to enter HMMRC has the right to choose which teams entries are accepted, taking into account the spread of the teams from within the HMMRC membership.

j) Entry Fee The entry fee for each team will be \$50-00.

k) Scrutineering Prior to qualifying, chassis, both bodies and all spare motors will be presented for scrutineering with the body off, once the body has been attached and scrutineering is done, the car will be impounded in parc ferme. At the completion of the race cars will be returned to parc ferme and may be re-scrutineered, this may involve motors being stripped down for inspection. Cars must remain in parc ferme until all placings have been confirmed. Both the chassis centre section and the pans will be uniquely identified at the time of scrutineering, both parts will be signed by the Scrutineer with an ink pen and the signature covered with clear tape for protection and will be checked after the end of the race to ensure that it is the same chassis.

The spare motors will also be marked uniquely so they can be identified in the event of a protest.

17. CAR SPECIFICATION

a) Width maximum width is 82.5mm [3.25"] excluding body pins.

b) Clearance minimum clearance is .5mm [.020"] under the rear axle and gear at the start of the race.
The gear shall not protrude below the chassis

Any car deemed to be at risk of damaging the track during the race as judged by the Chief Steward or his deputy will be immediately black flagged and the car must be rectified immediately by the team.

c) One Guide only one guide flag allowed, with a blade not more than 27mm long, the guide may be black or made of graphite for lap counting purposes

d) Spacers nut etc guide nut, spacers, clips, lead-wire and earring backs are free

e) Wheels

i) Four visible wheels all cars must have a total of four visible wheels when viewed from the two sides, of not less than 12.5mm [half an inch] diameter when the body is attached in racing position.

ii) Front wheels may be run if preferred but **Stick on front wheels** are permitted providing they are an accurate representation of a wheel and tyre and they must represent the scale of the car with a clear archway around them.

iii) Front axle may solder front axle to front wheel towers.

iv) Rear wheels & tyres Rear tyre width may not exceed 20.5mm [.510"]

v) Tyre Goop the use of any tyre goop or glue on the rear tyres is prohibited. [Spray glue will be applied to the track from time to time as the chief steward sees fit].

f) Bodies **cut detail on last page******

i) Bodies for this event are identified on the last page below. Two (2) bodies allowed, they must be the same and painted and numbered the same.

ii) Paint Bodies must be fully painted and sufficiently opaque so that no chassis or components can be seen through the body when viewed from above. Windscreens and windows must be left clear. A clear strip may separate the wing from the main body

iii) Interior all cars must have a 3D painted driver figure, and a sufficiently full interior so that no chassis or components can be seen through the windows.

iv) Numbers all cars must have at least two readable numbers, of the same numeral.

v) Wheel arches front wheel arches must be clear, or cut to at least the horizontal centre line of the front wheels. Trimming for front or rear wheel clearance may not extend into the top surface of the body.

vi) Trimming & cut outs Body shape is to remain as manufactured except for the necessary cut-outs to clear axles and wheels. The front of the body may not be cut so high as to lose the shape and detail of the front

Cutting out the rear of the body is OK. No other cut outs are allowed except areas normally cut out on full size race cars, [e.g. air intakes]. ****For detail on body cut lines see last page****

vii) Body Mounting Bodies may be fixed to the chassis by any combination of tape, clips or pin tubes. Where pin tubes are used they must be located in the existing body fixing chassis holes. Floating Pin tubes allowed.

g) Cover chassis The chassis and guide must be completely covered by the body when viewed from above.

H.1 Chassis Type - Champion Turbo Flex chassis – standard and light weight pans allowed.

H.2 Blueprinting – chassis may be flattened and straightened, wheel towers and cotter pin upright straightened to ninety degrees, guide tongue leveled and doubled, rear bearing holes filed out to enable rear axle to be set level and at ninety degrees to direction of movement, sharp edges rounded to avoid track damage, and chassis assembled to allow pans to move freely.

As per NZSCA Rules, may remove chassis material from the rectangular slot in the rear pan cross piece to allow pans to move freely.

May remove chassis material from the underside of the front hooks above the front pan cross piece to allow pans to move freely and equalize pan roll.

H.3 Motor mounting - may enlarge motor bracket holes to clear the motor bushing, but the full bracket outline must remain. May solder motor in place, and brace it to the chassis. May space the motor back from the motor bracket to achieve desired gear mesh.

H.4 Bracing - may add bracing to support the rear axle uprights.

H.5 Rear axle bearings – oilites or brass only, may solder or glue axle bushings into place.

H.6 Gears – any 48 or 64 pitch gears allowed.

H.7 Tape & weight - may apply tape to the chassis and add lead weight.

H.8 Front wheels – front wheels and front axle are optional. Must use realistic looking stickers if front wheels not used. If front wheels are used, must have two front wheels that rotate on the axle and, when chassis rocked, will contact the track before the chassis grounds.

H.9 Front axle - may solder front axle to front wheel towers.

H.10 Body mounting – may use fixed or floating pin tubes located in the original holes of the chassis, or body clips.

H.11 May not - alter chassis movement or remove chassis material, except as specified above (*the original manufacturers method of joining the chassis pieces together and articulating their movement must be retained*).

H.12 No chassis modifications other than those detailed above will be permitted.

MOTOR:

G1. PROSLOT PS4002FK

G.2 Motors rules will be as per current NZSCA at time of the event, refer to the NZSCA web page.

HMMRC 2016 ENDURO BODY OPTIONS (Bodies supplied are clear)

ATTAN BMW M4 DTM 1/24 .007"

Hobbies Plus code ATT 1501-007



ATTAN VOLVO S60 TTA 1/24 .007" HOBBIES PLUS CODE ATT 1401-0



Cutting rules for ISRA 2015 production body.

