

AFX Racemasters 6hr H:O Endurance Race at Pinewood Raceway, Wokingham

Rule Book 2019 Rev 1.1

Change Record	
2014	<ul style="list-style-type: none">• Timing backups available• Track and controllers updated• Junior team exemptions added• Conduct section added• Approved body list added as an annex
2015	<ul style="list-style-type: none">• Rules updated for AFX Mega G+• Annex B added - Guidance for body modifications• Number of handout components updated.
2016	<ul style="list-style-type: none">• Body rule for missing parts updated.
2019	<ul style="list-style-type: none">• Addition of AFX Audi R18 reference to body weight.• Low Height Tyres removed.

1) Format

- a) The meeting is scheduled to start at 10:00am promptly with free practice from 8:45am. Drivers are to 'sign on' at race control by 9:00 am. Once all the team captains have signed on, they will be handed over cars and parts. Doors will be closed and locked at 9:45am to latecomers. Due to the distances travelled by some team members, a contact number will be provided so that race control may be made aware of any delays. Latecomers may, at race control's discretion, be able to still participate if the contact number is used and the latecomers arrive by the time the briefing commences (9:45am). Team captains should notify Race Control of any delays ASAP so that the hand-out of cars and parts can commence in a timely manner.
- b) Drivers briefing will commence at 9:45. Any drivers and / or teams not at the briefing will not be eligible to partake in the race. Race fees will not be refunded.

- c) Practice will be in 6 minute segments. After each 6 minutes, teams **must** change to another lane. Only one driver from a team may practice at any time. Any type of car may be used during the practice session.
- d) Teams may swap to empty lanes at any time during practice ensuring that 1c is adhered to.
- e) Timing will be by computerised timing controls. Backups will be available.
- f) Controllers must terminate with a 3-pin, 2 amp plug, brake wire connected to the top pin.
- g) The track is wired to the worldwide HO standard, with +ve left rail.
- h) Due to the 18v track power, Controllers should not be used without consultation with the manufacturer, in all events racers use such controllers entirely at their own risk and race control accepts no responsibility for any damage caused.
- i) Controllers should be wired up Positively (+VE) as per BSCRA Standards.
- j) Teams will be given a starting lane by 'Lucky Dip', with the winners from the previous year having first pick, and will change lanes as per the sequence: 1, 3, 5, 6, 4, 2.
- k) Teams must have a minimum of 3 drivers and a maximum of 6 (six). Junior Teams (a team with at least 50% of members under the age of 12) may have any number of drivers.
- l) There will be a maximum of 4 or 6 teams dependent on demand and track layout.
- m) Each team will drive on each lane for a period of 1 (one) hour. At the end of each hour, lane changing will be announced by the race controller. Drivers may also change at this point.
- n) Each driver must race for a minimum of 1 (one) hour. Teams may change their driver at 15 minute intervals starting on the hour. A notice by race control may be given every 15 minutes. The notification may also be shown by a lighting system. This will be demonstrated in the drivers briefing. Before any driver change, Race Control must be informed. Junior Teams are exempt from this rule. Juniors may change drivers at any time.
- o) A period of 1(one) minute will be given to change lanes and to change car stickers. The next session will automatically start regardless. No work whatsoever may be carried out on cars during this time. Doing so will incur a penalty of 20 laps. Driver changes may also be carried out at this point.

- p) Cars will change lane moving over to the specified lane and being placed in the same position on the new lane. Any car being placed where an advantage may be made will incur a 5 lap penalty for the team.
- q) Cars must only be moved by its own team members at the lane change. The race controller may demand the removal of a car which has not changed lane and thus the team will incur a 15 lap penalty.
- r) Where a computerised timing system is used and Track power is available, 'TRACK' calls may be used under the provisos;
- A car is persistently 'riding' or has 'crashed' on another lane and cannot be retrieved. The power will be turned on as soon as the obstruction has been removed.
 - The track or its constituent parts is broken and needs repairing.
 - A power issue on one or more lanes prevents a team from competing competitively for any length of time.
 - A car has crashed in such a position that a marshal post will be unmanned during its retrieval.

All other 'TRACK' calls will be dismissed and may incur a penalty for the team of 5 laps. The race controller will have overall say in the use of track calls for the duration of the event.

- s) The race may be suspended by the race controller if an 'act of god' occurs. These include power cuts, fire alarms etc. The race will be resumed once that situation is cleared.
- t) Marshals shall be available at all times during the race. Individuals are expected to marshal for at least the same amount of time as they have been driving. It is the duty of the Team Captain to ensure that the designated post is filled with one of their team members. Designated areas will be marked out around the track. Penalties of 10 laps will be incurred for lack of marshal at posts.
- u) Race Control and its teams entrants may be exempt from marshalling duties to aid the running of the race. Race control may ask for volunteers to marshal for them.
- v) Theoretical elapsed time is 6 hours, 5 minutes.
- w) At the end of 6 (six) hours racing, the power will be switched off and all scores calculated with any incurred penalties deducted and displayed. Prizes will be awarded to teams as appropriate.
- x) Should the 6 hours duration over-run due to unplanned events, the event will be concluded at 18:00 hrs and the result taken at that time.

2) Scrutiny.

- a) The race controller will / may select individuals to run the race, and to scrutinise the race.
- b) The race controller may demand that a car, or parts, may be scrutinised at any time. Any team not complying with this request will be disqualified. Any parts that fail at this time will also result in a penalty or disqualification dependent on the severity of the offence.
- c) Cars, and bodies will be produced to the race controller no later than 15 minutes before the start of the race. (immediately before or after the driver briefing is recommended) All cars will then remain in 'Parc Ferme' until the start of the race.
- d) All work on cars must be carried out at the specified location (to be announced as Pit Area during drivers briefing). The teams kit of parts must not be removed from this location at any time. Any team removing the kit of parts from the location will incur a penalty of 25 laps for each offence.
- e) Any work carried out away from the location will result in disqualification. Tools may be brought to and from the table as needed by the team.
- f) The exception to rule 2e is to oil moving parts and clean tyres. This is to be carried out at the allotted location around the track (Pit Lane). A penalty of 20 laps will be incurred for this work being carried out away from this location, or work other than that prescribed.
- g) If during a racing incident, a cars part(s) or structure come detached, the marshal or team member may replace this part in the area the car had the incident. This includes bodies. If a part is found to be broken, lost, or irreparable, the car is to be taken to the specified working area to be replaced or repaired within the limits set in clause 4d.
- h) No mains, rechargeable or battery powered tools may be brought into the work area. A loose 9v battery (PP6) may be brought into the area for the use of testing the car or its motor away from the track. Rolling roads or similar devices are prohibited. Good housekeeping is expected at all times.

3) Cars and spares.

- a) Each team will be supplied 3 Complete and standard AFX Mega G+ Chassis and rear tyres. The chassis and its parts shall be totally standard and unmodified with no added parts. Any cars and parts

being found to be out of specification in comparison with a new unused item will result in disqualification.

- b) Once the cars and parts have been handed out, teams may use, test & build cars using the parts given to them. Cars may be disassembled, used as the race car, and spares.
- c) The Motor and its circuit board must remain as one piece and must remain connected. No modification to either piece is permissible.
- d) During the car build, teams may use any 'measurement' tools they wish to bring. These can be powered by any means, but must not alter the cars or its components in any way. Rolling roads and Dremel style tools are prohibited. Cars must only be powered by a 9v battery. The battery may be used within a running in / test box. A 9v battery may be fitted with crocodile clips. Once cars have been handed over to Parc Ferme, rule 2h applies.
- e) Only 1 Long (1.7 MG+) chassis may be used by the team during the timed part of the 6 hr event. This chassis is to be presented to Race Control at Parc Ferme and will be marked by the scrutiniser accordingly. The teams may retain the other chassis, but these must not be used unless explicitly told to by Race Control. Doing so will lead to immediate disqualification. The use of a second chassis under Race Control agreement will automatically lead to 200 lap penalty.
- f) Each team will also be supplied 1 (one) AFX Pit Kit, each containing.
 - Pickups x2pr (1pr long and 1pr short)
 - Pickup springs x2pr
 - Guide pin x1
 - Pinion x1
 - Rear Axle x1
 - Rear Tyres x1pr
- g) All parts in the kit of spares must be complete standard AFX Mega G+ and must be unaltered. Pickups may be re-shaped, but no material may be added or removed. Springs may be reshaped or doubled up, but no material may be removed. No part may be glued in place or otherwise attached unless done so in the course of original manufacture.
- h) No parts other than those supplied in the kit of spares may be used on the car.

- i) The race controller will also supply each team with 3 sets of tyres, with tyre sizes of Medium (Tyco 0.434) and Tall (Tyco 0.438). Stock tyres may also be used.
- j) The Chassis and constituent parts will be marked by race control. When handed back to race control, any parts without this marking, or showing signs of tampering will lead to disqualification.
- k) The chassis and its constituent parts will be handed out, on a first come, first serve basis, and at random picking.
- l) The magnets on the car must be used in the stock neutral position (Both magnets with either North or South Poles towards track rail). Magnets will be checked and marked to ensure this remains
- m) The chassis and any of its parts must not exceed the overall width of 34mm in width.
- n) Unused supplied parts should be clearly separated and marked accordingly during hand-back. Bags will be supplied.

4) Bodies.

- a) Bodies to be raced must be on the approved bodies list as found in the annexe at the rear of these rules. No other bodies will be allowed to be used. Bodies must be manufactured by either the process of casting, injection moulding, or printing and must be made of only resin or plastic.
- b) Bodies must be a scale, honest representation of a 1/1 sports racing car which has raced at FIA endurance event.
- c) If the 'real' car used a rear wing, the scale body raced must also have the wing.
- d) Bodies must be fitted with the manufactures original parts such as bumpers, windows, heads, rollover bars, wings etc and each piece must be complete and in its original place and orientation at the start of the race. Parts which becomes detached during racing must be replaced or repaired within 10 laps. Should any part be unable to be repaired, or is lost, a 10 lap penalty will be incurred. If team does not attempt a repair, a 25 lap penalty will be incurred. Should the loss result in the car weighing under the limits set in 4m, the body must be replaced in accordance with those rules. Very small items such as mirrors and scoops are exempt from this rule under race conditions, but only under the discretion of Race Control.
- e) No extraneous holes in the body are allowed. (Modifications as Per Annex 2 are exempt)
- f) All bodies must compete with windows in place.

- g) All windows supplied with the body must be in place and fully fill the window frame.
- h) Rear wings may have their mounts replaced by rubber ones, but the mount should not be oversized, and the wing should be re-mounted in its original position. Re-enforcing of the endplates is allowed, as long as the body stays within the 34mm rule, and that the outward appearance of the car is not affected.
- i) Bodies must have a paint scheme of either fictitious or factual origin. Bare bodies will not be allowed.
- j) Original AFX Bodies must use the original mounting method. Re-enforcement is allowed. Material may be removed to aid body rock, and to reduce overall weight, as long as the clip still operates as it was originally intended to do.
- k) Original AFX LMP bodies may have material removed to allow fitment around the motor and circuit board, but must comply with 4m. Annex B shows examples of how to modify the Audi and Peugeot body to enable fitment to the Mega G+ Chassis.
- l) Resin bodies may be mounted to the body using any method other than gluing, bonding or screwing into the chassis.
- m) The body inclusive of any kind of body mountings used must not weigh less than 4.2 grammes. (note: stock Audi R10 5.64g, Peugeot 4.74g, Audi R18 5.00g and all may be reduced to 4.2 grammes).
- n) All bodies to be used for racing must be submitted to the race controller with the chassis. A spare body may be presented, but can be only used where the first body is deemed unsuitable, or is damaged through racing to such an extreme that it interferes with the track or other racers. The body change can only be carried out when explicitly deemed by the race controller. A penalty of 20 laps will be incurred with the use of a spare body.
- o) Bodies should fall within the 34mm rule, but exceptions will be provided where the original design of the body exceeded this rule. No body shall exceed a width of 34.5mm.

5) Additional

- a) Tyres may be cleaned with tape or washing in water.
- b) Each team will be given a 'Pit Box' and a 'Spares Box'. Teams may use the boxes as they see fit, but all tools and parts must be kept within these boxes when not in use, and must not leave 'Pit Area' during racing as defined in Section 2. Contents of the boxes must

not protrude more than 3" above the boxes top edge. Teams may substitute these boxes for their own, as long as they do not exceed the size of the boxes given out.

Pit Box: 11"x8"x4.25" tall (28cmx20cmx11cm tall)

Spares Box: 6.5"x3.5"x3" tall (16.5cmx8.5cmx7cm tall)

- c) NO spray oils / lubricants or cleaners to be used indoors. The use of any form of tyre treatments are not allowed. The race controller will reserve the right to request the reduction of lubrication if they feel it interferes with others or the condition of the track. Repeated offences will incur a 15 lap penalty.
- d) Anything not expressly mentioned in the rules above is deemed illegal and such infringements of these rules will incur a penalty of 50 laps or elimination from the competition as deemed appropriate by the race controller.

6) Conduct

- a) Personal listening devices such as walkmans, mp3 players etc are not to be used during marshalling duties. If used during racing, they must not disturb other racers.
- b) No food or drink should be brought near the track
- c) Both hands should be kept free at all times during marshalling.
- d) The use of tablets and phones must not be used when marshalling. The use of phones should be kept to a minimum. Phone conversations must be taken out of the room.
- e) Swearing, shouting and poor conduct will not be tolerated. Any racer caught doing so will be warned of their behaviour, and may be asked to leave.
- f) Any unacceptable behaviour must be reported to the race controller immediately.
- g) Should an individual wish to complain against poor conduct, they must contact the race organiser as soon as possible so that the correct action may be taken.

Annexe A- Approved Bodies List

1994 -Kremer K8

1995 -Courage C34

1996 -TWR Porsche WSC95, Courage C36

1997 -Ferrari 333SP, Courage C41

1998 -Toyota GT-one

1999 -BMW V12LMR, Audi R8R, Courage C50, Courage C52

2000 -Audi R8 (not road car!)

2001 -Bentley EXP Speed 8, Chrysler LMP

2002 -Dallara LMP, Dome S101, Cadillac Northstar LMP02, Courage C60

2003 -Bentley Speed 8

2005 -Pescarolo C60 Hybrid

2006 -Audi R10

2007 -Peugeot 908 HDi FAP, Pescarolo 01, Lola B07/17

2008 -Courage LC70, Lola B08/60

2009 -Lola Aston-Martin DBR1, Audi R15, Oreca 01

2011 -Audi R18, Lola B10/65, Peugeot 908

2012 -Aston-Martin AMR-one, Toyota TS030

2014 – Honda HPD ARX-03a,b,c., Rebellion R-One.

2015 – Nissan GT-R LM Nismo, Porsche 919.

Annex B - Permissible body modification to the AFX Audi and Peugeot to allow fitment to the AFX Mega G+ 1.7 Long Chassis.

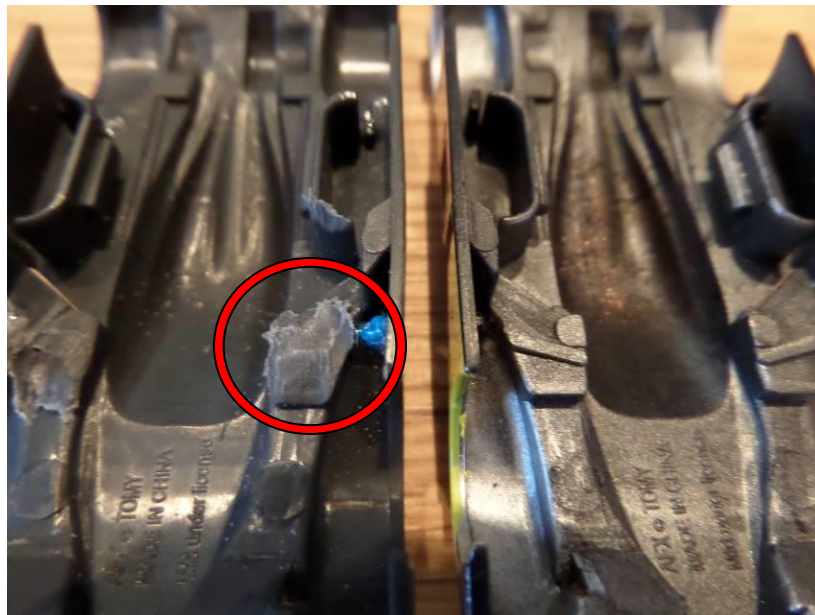
The AFX Racemasters Audi and Peugeot LMP cars were designed to fit the earlier AFX Mega G Chassis, and as such will not fit the Mega G+ without modification to the body.

The Peugeot is the easier to modify, and less risk to affect the outward appearance of the body.

The Peugeot may have the areas as circled in the pictures below to aid fitment to the MG+ Chassis.

The 'nubs' may be removed using any method, but a 'dremel' type tool is recommended.

Avoid breaking through to the outer bodywork. Repair and re-paint where possible any areas where too much material is removed.



The Audi may have the areas as circled in the pictures below to aid fitment to the MG+ Chassis.

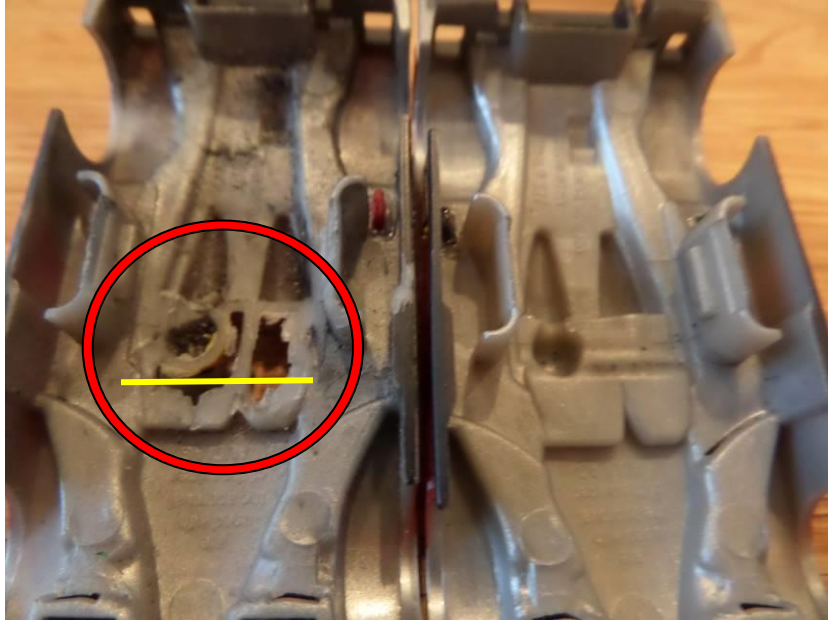
Excess material may be removed using any method, but a 'dremel' type tool is recommended.

Material should be removed only from the drivers helmet rearwards (Yellow Line).

Breakthrough to the outer bodywork is permissible, but should be kept to a minimum.

The central bar between the cockpits should remain.

The example pictured does have too much material ahead of the drivers helmet removed.



Race control should be informed of any issues with body fitment.