



SLOT RACING
COMPETITION CATEGORY

D P M

OFFICIAL
TECHNICAL REGULATIONS

CARS 1/24

2009

Version 3.6



OFFICIAL TECHNICAL REGULATIONS "DPM" COMPETITION CLASS

Technical regulations for the official Slot Racing car category „DPM“ class in 1:24 scale. Updated terms are printed in **bolded letters!** Version 3.6 / Status: January 20st, 2009.

a. CHASSIS

aa. Only the Plafit „Excel“ ProRacing Chassis in silver steel version (details see Homologations List attachment J) as supplied under Ref.-No.: PF.1300KX (chassis only), PF.9611 (pre-assembled chassis plus accessories) or PF.9700GT (pre-assembled chassis as an complete set including hubs, motor, tires etc.) is allowed to use. All chassis parts (except allowed optional parts) could be replaced only by the same original spare parts. A „mix of parts“ including chassis parts from other chassis types or made in different materials are not allowed. All chassis mounting parts like screws (in the case of screws the longest useable conehead screw can not extend a max. length of 10mm), washers, nuts, spacers including axle spacers are free to choose as long as these parts are unmodified (for example the thickness of screw heads is not allowed to be reduced in size) standard equipment available from the Plafit range.

ab. All chassis parts (guide holder, front- and rear axle mounts, motor mount bracket, chassis mainplate including „T“-bar) plus all body mounting parts (including „H“-subframe and mounting plates) must be used in standard shape as produced by the manufacturer and have to be mounted together in standard form at their original fixing points. The use of spacers etc. between the front or rear axle holders and the chassis mountings is not allowed.

ac. Beside the legal modifications (see point ad.) all changes on the chassis (as soldering, drilling or cutting etc.) are not allowed in all forms and kind of variations. Optional parts allows individual chassis set up's for different body types and assure the use of both existend and actual chassis. The use of legal optional parts is free of choose.

ad. MODIFICATION

Beside the original spare parts the following optional and tuning parts (Ref.-No. given in gaps) are allowed to use without additional modifications:

ae. Chassis Ballast

One single Handlings Kit (PF.1314 or PF.1314BX) can optionally be fixed in both directions on the underside of the front axle mount support. The quantity of additional weight plates (PF.1314B, 1314CP, 1314CP2 or 1314CBP) for fixing on top of the Handling Kit is free to choose. The weight plates can also be screw fixed on the mounting holes on both front and rear axle holders, but not between the the axle holders and the chassis mountings. All weight plates must be screw fixed, glueing is not permitted. Otherwise additional trim ballast is only allowed in form of lead weight wich has to be mounted on top of the chassis (including the top of „T“-bar and „H“-subframe plate). All lead weight must be fixed in the way that no weigth is extending outside the given shape of the chassis and have to be invisible from underside view. Also lead weight can not be used on the Handling Kit.

af. Chassis Suspension

Springs are allowed to use only on both sides at the front fixings of the „T“-bar. The „T“-bar can be fixed with or without the use of springs (only at the front end) and/or without the use of the „O“-ring (optional for use at the front and rear end). The springs can be used in soft, medium or hard tension (PF.1320, PF.1320A, PF.1320B).

ag. Body Mount

The body mount subframe („H“-plate) must be unmodified original shape but can be used in standard or thin version (PF.1310, PF.1310B). The subframe can be fixed flexible or inflexible (rigid) on the chassis main plate. The body mount plates (PF.1307N) can only carry two screws on each chassis side (for fixing on the H-plate).

ah. Body Holder

Optionally allowed for use are two different body holders (PF.1224N or PF.1224CP). That means always a single holder per side is allowed, but the same type must be used on both sides. The body holders can be formed when obligatory needed to mount the body on the chassis. Only the necessary fixing parts are allowed to be used in combination with the body holders. The mount plates (PF.1307N) plus holders (PF.1224N or PF.1224CP) must be fixed on top of the subframe („H“-plate PF.1310 or PF.1310B) as standard equipped. The use of spacers between the mount plates and subframe is allowed.

ai. Guide

As guide holders optionally the short and long type (PF.1302N, PF.1313N) or the formed version (PF.2610N) can be used. The formed guide holder can be mounted with the bended guide fixing hole in both ways (faced up or downside). Genuine guide holders can be formed by bending. The guide – but only one guide per car – including fixing nut, washers, braids plus additional mouting clips (for solder on the motor wires) and motor wires are free to choose. **Contact fluids for braids (for example SLICK 7 "Voodoo")*1) allowed for use.**

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aj. Miscellaneous

aja. All modifications resulting in a lower weight are not allowed. Chassis components (including motor mount bracket) are allowed to be adjusted and to fine sandpaper the surface for an extra perfect fit.

ajb. The front axle holder can be mounted in both ways (faced upside or downside), and can also be fixed in both directions (faced front or back side) by mounting at the front or rear of the fixing support.

ajc. Beside the standard motor fixing the motor can be additionally secured by using one or two long screw(s) / washer(s) / nut(s) threaded through the rear axle holder.

ajd. Only genuine SIGMA ballbearings (SG.8261) are allowed for use. The ballbearings can be optionally glued in place. The enlargement of the ballbearings mounting holes in both front and rear axle holders is forbidden.

aje. The use of SIGMA security nuts (SG.8713), fine spacers (SG.8225, SG.8226, SG.8227) and wheel stoppers (SG.8220) is allowed.

ajf. The front and rear axles are free to choose as long as they are made of a single piece solid steel with an outer diameter of 3mm.

adg. The use of additional magnets for example as „variable to fix“ chassis ballast or in any kind of other arrangements giving a magnetic ground effect (resulting in better roadholding on tracks with steel power rails or magnetic track braids) are strictly forbidden.

ajh. The use of heat absorbing paste etc. is not allowed.

b. MEASUREMENTS AND WEIGHTS

ba. The spur width of the front and rear axle assembly **belongs to the body type** (wheels must be covered by top view) but maximum width is 80mm (always measured from the outside of one wheel to the outside of the other wheel).

bb. Each wheel must have a gap of min. 1,5mm (measured horizontally at axle height) as distance between the complete wheels and the body.

bc. All four wheels must touch the track surface (controlled on a flat surface).

bd. The minimum ground clearance between the underside of the complete and ready build car and the track during the qualification and at the following race start must be min. 1,2mm (with the car standing still on a flat surface and measured between the rear axle and the end of the chassis) otherwise min. 1,0mm. During the race the minimum ground clearance between the underside of a complete chassis (that means including the mounting screws, spur gear plus body holders) and the track must be min. 1,0mm (measured with mounted body on a flat surface). After the race the minimum ground clearance at the rear end must be min. 1,0mm (with the car standing still on a flat surface and measured between the rear axle and the end of the chassis) with all other parts not touching on the track surface (control is done with still standing car on a flat surface).

be. During and after the race the body and plastic parts of the body are allowed to be lower as the minimum ground clearance of 1,0mm, as long as the plastic is not touching on the track surface (control is done with still standing car on a flat surface).

bf. The overall weight of a car (complete assembled and race ready) must be min. 225 gram. The weight of the body (including both mount plates and body holders) must be min. 65 gram. Adding ballast on in an area below 10mm of the bottom line of the body is not allowed.

bg. If the complete assembled body including all body mounting parts did not reach the minimum weight, additional ballast (leadweight) has to be added at the inside of the body. These additional weights must be placed under both doorwindows in an area of 10mm above of the bottom line of the doorpanels.

bh. Dimensions and weights can be checked by the race directors at any time. By incorrect results the concerned team has to arrange – always under “time on” race conditions – immediately all the needed change(s) to make the car legal again.

c. MOTOR

ca. As motor only the „Bison“ typ (PF.8896) as standard equipment***2**) is allowed. The motor wires are free to choose. The wires also can be optionally guided by an additional loop behind the front axle. Lubrication/oiling of the motor is allowed. ***1**)

cb. The supplied power range is rating (depending to tracks conditions) between 16 and 20 volts***3**). The exactly driven voltage must be announced by the race directors before the first free practise. After the said voltage is fixed and has to be carried on without a change for the complete race event.

cc. Optionally the motor mount bracket made in silver steel (PF.1309N) or aluminium (PF.1309X) is allowed for use. The motor must be fixed by screw(s) only. The motor stay (PF.1311) can be mounted in a formed way by bending to allow a perfect motor fixing. An additional motor fixing by glue or soldering is forbidden.

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cd. The motor has to be kept absolutely standard. Any modification on the motor including the can (to sandpaper etc.) is not allowed. To open the motor is strictly forbidden. Already little marks showing a possible opening or modification will automatically result in disqualification.

d. GEARS

da. Only SIGMA (including the NEW RACING) or SCALEAUTO (including the PROCOMP RS) spur gears are allowed to use on rear axle. The amount of teeth is free to choose. The gear has to be kept standard (Optionally the plastic ring can be secured by glue on the changeover area to the metall boss).

db. The motor pinion is free to choose. Glue fixing or soldering of the pinion on the armature shaft is allowed.

e. FRONT WHEELS

ea. Only genuie SCALEAUTO hubs (SC.4003, or SC.2702P as complete wheels with tires) in lightweight version with 8 x 4,5mm drilled holes (sizing: outer diameter 21mm, inner diameter 19,9mm, with 8mm width and 10mm total width including fixing boss) are allowed to be used.

eb. Additional wheel inserts (made from solid plastic, metall or resin) have to be fixed inside the hubs for the whole race time. In case of a lost insert the car must stop and an insert has to be refitted again.

ec. All hubs must be set screw fixed on the axle. Independend rotating front wheels are not allowed.

ed. A complete wheel (tire fixed on hub) must have an outer diameter of min. 24mm. The tires must be 7mm width with a min. of 6mm touching the track surface. Both wheels must turning when the car is moving.

ee. Sponge or full rubber tires are allowed to use. The type and quality of tire material is free to choose as long as the color is black. The running surface of the tires can be optionally sealed or hardened by the use of varnish or super glue covering.

f. REAR WHEELS

fa. Only genuie SCALEAUTO hubs (SC.4004, or SC.2421P as complete wheels with tires) in lightweight version with 8 x 4,5mm drilled holes (sizing: outer diameter 21mm, inner diameter 19,9mm, with 13mm width and 15mm total width including fixing boss) are allowed to be used.

fb. Additional wheel inserts (made from solid plastic, metall or resin) have to be fixed inside the hubs for the whole race time. In case of a lost insert the car must stop and an insert has to be refitted again.

fc. All hubs must be set screw fixed on the axle.

fd. A complete wheel must have an outer diameter of min. 26mm at the start of the race and min. 25mm during at at the end of the race. The tires must be 13mm width with a min. of 12mm touching the track surface.

fe. Sponge*¹ or full rubber tires are allowed to use. The type and quality of tires is free to choose as long as the color is black.

ff. For cleaning and service of tires only tape is allowed. *¹

g. BODY

ga. Only bodies listed in the Homologations List are allowed to use. All bodies must be mass production and injected hard plastic material matching their valid general and specific body regulations. The body must cover all chassisparts including wheels, guide etc. From top view.

gb. Allowed for "ProRacing" competition events are only the listed bodies. Detailed informations about these bodies are given in the Homologations List Attachment J (the valid code no. of each homologations sheet is given in gaps):

Corvette C6R (Code 10.), Ferrari 575 GTC (Code 11.), Honda NSX-05 (Code 12.), Lamborghini Murcielago (Code 08.), Nissan 350Z (Code 09.), Porsche 911GT1 Evo (Code 06.), Toyota Supra GT (Code 07.).

gc. Additional bodies wich are only useable for club or other national racing (not counting as "ProRacing" events) are listed in the Homologations List Attachment K (Body Index B).

gd. Body fixing on the body mounts can be done only by glue using the standard mounting rubber (PF.1212 or SIGMA SG.8214) or optionally directly (without rubber) on the mountings. Glue fixing is only possible on the given area of the body mounts surface. Adding or gluing ballast into the mountings is not allowed.

ge. Body reinforcements are possible but must be always fixed in a distance of min. 10mm over the bottom line of the body. Reinforcements placed lower as 10mm over the bottom line can only be done by using standard mounting rubber (PF.1212 or SIGMA SG.8214) in combination with flexible mounting glue*².

gf. A minimum of three starting numbers*³ must be placed on the body to allow a clear identification of the car. Therefore a start number is to fit on the front and on both side sections of the car.

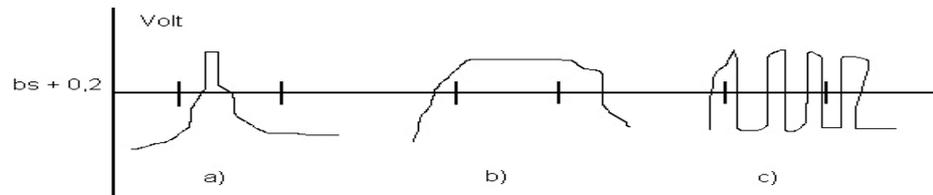
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h. HAND CONTROLLER

ha. The existing voltage has to be regulated only by the drivers hand, any automatical support for the speed operation is not allowed.

hb. A speed controller can only regulate the available power of the corresponding lane. An boost of the given (e.g. existing) lane power to a higher voltage is forbidden. All mechanical and electronic hand controllers are allowed for use, wich are not increasing the given voltage during operation. The voltage will be checked on each lane. In the case that the voltage is increased higher as 0,2 volts over 1 millisecond (same is valid for shorter voltage peaks appearing over a longer time period over 1 millisecond) the hand controller is not legal to be used.

Diagram:



- a) Legal: A single voltage peak bs is higher by a given tolerance of 0,2 volts in a period shorter as 1 millisecond.
- b) Not legal: bs higher as 0,2 volts in a period longer as 1 millisecond.
- c) Not legal: several short voltage peaks bs higher as 0,2 volts in a period shorter as 1 millisecond.

hc. The connection of the hand controller to the track power is done by banana plugs with $\varnothing 4\text{mm}$ diameter. The following connection code is valid: white (grey) = Power, black = Track (common), red = Brake.

i. GENERAL NOTES

ia. All what is not definitively allowed by these regulations is forbidden. The competitor has to take care to clear doubtful aspects by contacting the race organisator in time before a race event takes place.

ib. The description DPM and the right to use this description, including all regulations (in whole or part form) belongs to the DPM Race Organisation. All races, race events and championships named DPM or named in combination with DPM or raced by DPM class, can only be raced by using the original and valid technical DPM regulations&homologation lists without any change or modification. All kinds of official use only by approval on written permission. For details please put in contact on the webpage www.plafit-racing.com .

ic. Regulations are finally interpreted by the race organisation only and at the race day by the race director. Actual informations will be published on the website www.plafit-racing.com.

id. Footnotes

*1) At official „ProRacing“ competition events (like „DPM“, „EPC“) all allowed service materials (that means cleaning fluid, tire cleaning tape and oil) will be provided – in quantities matching the amount of lanes – from the race organizer. These materials will be available from the time of the parts handout and after have to be used until the end of the race. The use of other service materials, fluids etc. is not allowed.

*2) At „ProRacing“ events new and special marked motors will be hand out free of charge to all participants just before the final free practise. Starting with the time of the parts handout only this marked motors are allowed for use. In case of the need of a second engine another (also marked) motor is available in exchange from the race directors. The engine must carry their correct original markings during the complete race event.

*3) At „ProRacing“ series events the power supply is rated at 19 Volt (given by a separate transformer for each lane).

*4) At „Pro Racing“ events new and special marked SCALEAUTO rear wheels (SC.2421P), that means aluminium hubs complete with already glued on sponge tires of the type „ProComp 3“ (SC.4830) will be hand out free of charge to all participants. After the parts handout only these marked rear wheels are allowed for use. In case of the need of a second unit another (also marked) pair of tires is available in exchange from the race directors. The rear wheel and tire combination must carry their correct original markings during the complete race event.

*5) A flexible mounting glue (for example HENKEL „Pattex“ oder PLAFIT „Magic Glue“) is a glue wich can be pierced by a pin and wich is also reacts as material disconnecting by the use of cleaning- / lighter fluids (for example ESSO „Tiger“).

*6) When a special decal sheets is provided to the participants of a „Pro Racing“ event the starting numbers and additional markings have to be added on the each car (from the begin of the first free practise until the end of the race meeting) matching the given guidelines.

- Subject to alterations -

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SLOT MODEL CAR RACING

*Original Powerparts
For PLAFIT Chassis*

