

6/7 APRIL







Loc. RONCOLE VERDI 14/15
BUSSETO - PARMA - ITALY





Endurance Slot Cars Championship with teams of 3/4 drivers. 2 races of 90 minutes each on Saturday (1 race MINICARS and 1 race GROUP2) and 2 races of 162 minutes each on Sunday (1 race MINICARS and 1 race GROUP2). 27 teams maximum allowed to the championship.

A score will be awarded at each race, in the first 2 races the score will be halved, in the second 2 races full score. The team with most points at the end of the 4 races wins the title.

The race area will consist in 2 tracks: TRACK 1: wooden track 8 lanes for the GROUP2 models - TRACK 2: Scaleauto PROTRACK plastic 8 lanes for the MINICARS models.

The championship will take place in 3 days: Friday only free practice. Saturday free practice on both tracks and 1 race MINICARS (group A) and 1 race GROUP2 for each team. Sunday 1 race MINICARS (group B) and 1 race GROUP2 for each team.

Every team will have to present at "parc fermèe" with 2 differents MINICARS models (1 A e 1 B) and 2 GROUP2 models and will race: MINICARS - race 1 with one model A, race 2 with model B with the possibility to switch with the first model at half race. Same for the GROUP2 category.

For each race 9 teams will start on the wooden track with the GROUP2, 9 teams will start on the Scaleauto plastic track with the MINICARS and 9 teams stopover with round robin mode.

At the end of one race the teams will in turn reverse the tracks, change class and restart for the next race, until all the teams will have complete the full rotation on each track.

The **BRM** models allowed to race for the 2 classes are:

MINICARS:

**GROUP A** 





Simca 1000



Mini Cooper



Renault R8 Gordini



A 112 Abarth



**GROUP B** 

Abarth 1000TCR



GROUP 2: \_\_\_\_\_

Ford Escort MK I







**VW Scirocco** 



**BMW 2002** 



Alfa Romeo GTA



Ford Capri



Datsun 240z



### **SPORTS**

### Rules

A total of 4 models per team must be presented, 2 "Minicars" and 2 "Group 2". The team has to indicate which models they race on Saturday (1 "Minicar" and 1 "Group 2"). During the races on Sunday, on both tracks, every team has the possibility, at the end of his 4th drive round, to switch the model they're using until that model with the model used on Saturday. This switch can take place only and exclusively in that exact moment of race, neither before nor after. The intentyion to switch the model must be communicated to the race direction before the start of the 4th drive round on the track you're racing.

### 1. Race direction – Judges – Technical Commission

- 1.1 Race direction: responsible for everything.
- 1.2 Race judges: the only ones who could take the cars.
- 1.3 Technical commssioners: insiders for technical inspections.

### 2. Behavior

- 2.1 All competitors are invited for maximum sportiness for the entire duration of the event, even outside the venue where the race takes place.
- 2.2 Smoking is forbidden inside the Arena.
- 2.3 Unsportsmanlike conduct will be sanctioned.

### 3. Type and duration of the races.

3.1 27 teams maximum will be admitted

- 3.2 During the weekend it will take place a GROUP2/MINICARS championship with 2 races of each category for each team.
- 3.3 The teams will be splitted in 3 groups. The composition of the first groups will be decided by inscription time. The firsts will be the Group A, then followed by B and C.

With this grouping the races on Saturday will start (as will be described below). At the end of the day of race, based on the sum of the scores after all the races of the 3 groups on Track 1 (wooden – Thoumieu) and on Track 2 (plastic – Scaleauto), we'll have a first partial classification which will be used to re-build the new groupings, assigning Group A the 9 teams with the higher scores and then B to the other 9 and C to the last 9 teams.

The new groups will determine the starting order of Sunday races which will follow the same procedure used for the Saturday races.

On Saturday, the groups (determined as explained before) will race on the 2 tracks in 3 "Stints" divided as follow:

### First "Stint"

Group A Track 1 (Thoumieu wooden)

Group B Track 2 (Scaleauto plastic)

Group C Break

### Second "Stint"

Group C Track 1 (Thoumieu wooden)

Group A Track 2 (Scaleauto plastic)

Group B Break

### Third "Stint"

Group B Track 1 (Thoumieu wooden)

Group C Track (Scaleguto plastic)

Group A Break

At the end of Saturday we'll have a general classification of Track 1 (Thoumieu wooden) and one general of Track 2 (Scaleauto plastic), considering these classifications, a score will be assigned to each team based on the position obtained on both tracks equivalent to the half of points indicated in the following order: 1° 100; 2° 95; 3° 90; 4° 85; 5° 81; 6° 77; 7° 73; 8° 69; 9° 66; 10° 63; 11° 60; 12° 57; 13° 55; 14° 53; 15° 51; 16° 49; 17° 48; 18° 47; 19° 46; 20° 45; 21° 44; 22° 43; 23° 42; 24° 41; 25° 40;

 $26^\circ$  39;  $27^\circ$  38;  $28^\circ$  37;  $29^\circ$  36;  $30^\circ$  35 ecc. ecc. The sum of the scores of the 2 tracks will determine the general day points classification. Once the general classification of the first day will be obtained, the new

groups will be formed which will determine the starting order on Sunday. Group A will be formed by the first 9 teams of the Saturday general classification, the Group B by the following 9 teams and so on for the Group C.

The Sunday races will follow the same scheme of Saturday, the groups will race on the 2 tracks in 3 "Stints" divided as follow:

### First "Stint"

Group B Track 1 (Thoumieu wooden)

Group C Track 2 (Scaleauto plastic)

Group A Break

### Second "Stint"

Group A Track1 (Thoumieu wooden)

Group B Track 2 (Scaleauto plastic)

Group C Break

### Third "Stint"

Group C Track 1 (Thoumieu wooden)

Group A Track 2 (Scaleauto plastic)

Group B Break

At the end of the races on Sunday, with the same method used on Saturday, but with full points, we'll proceed to assign the scores. In this way we'll have a new day classification which will be added up to the Saturday classification and so we'll get the final total classification which will assign the title:

### "BRM - Youngtimer Trophy 2024".

### 4. Teams - Driving shifts - Change Drivers

- 4.1 The teams must have 3 or 4 drivers.
- 4.2 The driving shifts must be in case of 3 drivers team "3-3-2" and in case of 4 drivers team "2-2-2-2", indipendently from the lane numbers.
- 4.3 Each race will consist in: Saturday 8 manches of 8 minutes + 2 lane changing;

- Sunday 8 manches of 16 minutes + 2 lane changing.
- 4.4 On the driving platforms must stand only one driver for each team and nobody else could go there for any reason.
- 4.5 The driver changing must be done at the end of the manche during the lane changing. The driver who finish his shift comes down from the driving station and only when it's free the driver who start the following shift can go there.
- 4.6 Infringements during the lane changing will be penalized with 10 laps.
- 4.7 The controller could be leaved plugged.
- 4.8 The numbers of shifts of each driver will be checked by cameras.

### 5. Marshall

- 5.1 The Marshall must be part of the team.
- 5.2 During the free practice, at the driving station must be only one driver per team with his marshall on the same track and same position of the number of lane of the driver. Both of them must have their identification badge with race number. During the free practice each team will take care of moving the cars during the lane changing.
- 5.3 During the free practice the Marshall must be at the assigned station; there will not be any type of advise.
- 5.4 The Marshall must be at his station 1 minute before the starting of the heat.
- 5.5 The absence of the Marshall will be penalized by Race Direction with 10 laps.
- 5.6 The Marshall can't do any type of work on the cars. Except for the braids fixing to explicit request by the driver in case the car will not run.

### 6. Maintenance and repair

6.1 For maintenance and/or repairing operations the mechanic of the team will make a first request to a race judge and then it will bring back the car on track on the pit-lane.

- 6.2 If the car will stop on the track, the marshalls will give to the boxtable and after the repair the car will go back on track on the pit-lane.
- 6.3 In the box area it will be allowed only one mechanic to work on the car. It could be a member of another team.
- 6.4 Avio, lubricants and rags will be supplied by organisers.
- 6.5 Any necessary spare parts during the race must be checked before being assembled except from the motor and tires that will supplied by the race commissioner.
- 6.6 Gli interventi sulla vettura vengono effettuati solo a gara effettivamente in corso, con corrente in pista (NO durante i cambi corsia o durante eventuali pause nel corso di una manche).

### 7. Technical inspections

- 7.1 Cars must be presented to Closed Park with the verification cards (one per model). They must have the body separated from the chassis with rubber covers and screws assembled. The body must have the identification stickers and forms with race number supplied by the organization (a number for each side and a sticker for the windscreen with Team name).
  - The chassis must be without the motor.

    The rear wheels must be without the tires.
- 7.2 The technical inspections will be done by the technical commission.
- 7.3 The verified and ready models will be taken by the race commissioners. At that time it will not be allowed anymore to touch the track.
- 7.4 The models, even if they have already passed the technical inspections, at any time they could be verified by one race commissioner (car on race or on park closed).7.5 From the beginning of the race and until 15 minutes after the end, the Technical Commission could verify a car after written request by a team (complaint). The verification will take place during the lane changing and not during the race time.
  - In the event the car that have been verified will result regular the

complaining team will be penalized by 10 laps and his car will be verified.

### 8. Penalties

- 8.1 The penalties, decided by the Race Direction, will be proportionate to the gravity of the infringements of the rules.
- 8.2 Failure with the guide table, using magnets, using prohibited liquids and products, repair done outside the "box table" will be penalized with the DISQUALIFICATION of the team.
- 8.3 Smoking inside the Arena will be penalised with 5 laps.
- 8.4 Infringements during the lane changing or during Marshall shift will be penalized with 10 laps.

### 9. Free Practice

- 9.1 The free practice will be one shift on each 20 lanes.
- 9.2 There will be heats of 6 minutes including lane changing where each time must occupy only one lane.
- 9.3 After the lane changing the team will go to the following lane.

### 10. Communications

- 10.1 The Race direction communications will be made known by microphone.
- 10.2 The captain of the teams will be responsible for the communication.

### 11. Starting grid

- 11.1 The starting grid and class will be decided by a randow draw. In the 2nd race, when you'll change track/class the grid will be the same. In the next races there will be the re-allignment, after race 2 and race 4, based on the actual ranking (sum points race 1 and 2).
- 11.2 The team with the best ranking will start in lane 1. The others will be consecutively on the same track.

### Introduction

This regulation specifies in detail the features and components that the cars must respect.

Changes not specified in the rules are prohibited.

On some models we clarify the allowed changes.

During the technical inspections and the races, the only allowed lubricants will be supplied by the organization.

Even if there will be supplied some soldering/welders the organization will not be responsible for their malfunction.

Each team should have his own during verification and race.

The use of a free component doesn't imply any change, replacement or omission that is not specified in these rules.

### Supply of motors and tires

The organization will drawn for each model:

1 original motor **BRM-blue** 19.000rpm - **BRM s-417**;

1 Nylon Pinion 12T BRM s-420 diameter 6,8mm;

Rear tires: BRM s-404 (MINICARS), BRM s-404k (GROUP 2)

s-404M (Mini Cooper - A112 with wheels S-402MC)













S-402MC - Wheels



S-404M Rear tyres (x2)

The tires and motor assembling will be in "Park closed".

The motors will be selected by the organization checking rpm and energy to be most equal as possible.

### 1. Maximum track

1.1 The rims can't be out from the wheel arches (view from the top).

### 2. Chassis

2.1 Each model must have his own specific chassis (internal/external).

- 2.2 The 2 chassis must be fixed using the brass BRM nuts original s-415 (h 1.5 mm) or s-415a (1.0 mm no movement), s-415b (h 2.0 mm), s-415c (h 2.5 mm) o s-415d (h 3.0 mm).
- 2.3 The rear plastic part of the chassis must be assembled (except Mini Cooper and Scirocco).









### 3. Motor holder

3.1 The only allowed motor holder is the original **BRM s-413** + photoetch (BRM S-013f).

### 4. Brass joint – Axle holders

- 4.1 MINICARS: Brass joint original **BRM s-414**.
- 4.2 MINICARS: Rear brass axle holders S-412 (large), S-412F (narrow) or aluminum axle holder double bearings S-412S (camber).
  GROUP2: Rear stock axle holders BRM: Kadett GT/E S-412K, Alfa GTA/BMW2002 S-412A, Escort MKI S-412E (straight).
- 4.3 MINICARS: Front original axle holders BRM S-411 or S-411M (Mini Cooper-A112 indipendent axle) (straight)
  GROUP2: Front original axle holders BRM: Kadett GT/E / Scirocco S-411K, Alfa GTA/BMW2002 S-411A, Escort MKI S-411E (camber).
- 4.4 For the MINICARS class you can assemble the axle holders indipendent wheels S-411M on all the models.
- 4.5 It's allowed to use the photo-etch spacers S-013HA 0.15mm / S-013HB 0.25mm / S-013HC 0.5mm placed under the axle holders, except for the models ALFA GTA / MINI COOPER / FIAT 1000TC.





5.2

### 5. Axles - Bearings - Spacers - Screws

5.1	Front axle free,	if BRM	items codes:
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A112 / Mini Cooper: front semi-axle BRM S-416M or axle with stopper. GROUP 2: front semi-axle BRM S-416K/416A or axle with stopper.

MINICARS: Rear axle free, if BRM items codes: semi-axle BRM S-416J / S-416 (included also front 56mm axle)

GROUP2: Rear axle free, if BRM items codes: BRM axle 58mm S-416KR.

- 5.3 To use the front independent axle holders BRM s-411m, use semi-axles BRM s-416m.
- 5.4 Brass original bearings BRM s-409
- 5.5 Free ball bearings, if BRM items codes: BRM S-410
- 5.6 Free spacers for 3mm axle.
- 5.7 It's allowed to use stoppers for 3mm axle.
- 5.8 The chassis screws for the axle/motor holders and the 4 brass "nuts" are free.
- 5.9 Grub screws M3 for gears and wheels are FREE.





s-416









### 6. Spur gear

6.1 Original spur gear 33T BRM s-419 or new Ergal BRM s-419a.



- 7.1 Pick-up original **BRM s-026ss**.
- 7.2 Allowed Pick-up REVOSLOT rs210 rs210w.
- 7.3 It's allowed remove the spring and reduce the height of the blade.
- 7.4 It's allowed to use guide shims **BRM S-026SA** (0.2mm) and **BRM S-026SB** (0.3mm).









rs-210



rs-210w





MODELLO	CERCHI ANTERIORI	CERCHI POSTERIORI	ANTERIORI / POSTERIORI	Ø
Mini Cooper	s-402m / 402 mc	s-402m / 402 mc		16,8 mm / 13,7 mm
Simca 1000	s-402 / 402s	s-402 / 402s	402r (16,0 mm)	17,0 mm
NSU TT	s-402	s-402	402r (16,0 mm)	17,0 mm
Abarth 1000 TCR	s-402f	s-402fr		15,5 mm
Renault Gordini r8	s-402	s-402	402r (16,0 mm)	17,0 mm
A112 Abarth	s-402s / 402 mc	s-402s / 402 mc	402r (16,0 mm)	17,0 mm / 13,7 mm
Opel Kadett GTE	s-402kf / s-402r2f	s-402kr / s-402r2		16,7 ant 17,3 post.
Escort MK I	s-402kf / s-402r2f	s-402kr / s-402r2		16,7 ant 17,3 post.
Alfa GTA	s-402kf / s-402r2f	s-402kr / s-402r2		16,7 ant 17,3 post.
BMW 2002	s-402kf / s-402r2f	s-402kr / s-402r2		16,7 ant 17,3 post.
VW Scirocco	s-402kf / s-402r2f	s-402kr / s-402r2		16,7 ant 17,3 post.
Ford Capri	s-402kf / s-402r2f	s-402kr / s-402r2		16,7 ant 17,3 post.
Datsun 240z	s-402kf / s-402r2f	s-402kr / s-402r2		16,7 ant 17,3 post.

### 8. Wheels - Inserts

- 8.1 See the wheels tabel
- 8.2 The wheel inserts are mandatory but you can interchange them between the models but they must be the same type on the 4 wheels









s-402kr

s-402kf

s-402r

Mini Cooper/MKI BMW

Simca

Simca/Kadett/MKI BMW/VW Scirocco NSU TT/Simca VW Scirocco

Abarth 1000 TCR

Renault Gordini r8

Opel Kadett GTE

Alfa GTA

A 112 Abarth

BMW Le Mans





















## **TECHNICAL**

Rules

### 9. Wheels - Front tyres

9.1 Front tires MINICARS

**BRM S-403** (original on wheel Ø 17mm)

**BRM S-403S** (lowered on wheel Ø 16.8/17mm)

**BRM S-403F** (original on wheel  $\emptyset$  15.5mm)

**BRM S-403FL** (lowered on wheel Ø 15.5mm)

**BRM S-403M** (for Mini and A112 with wheels S-402MC Ø 13.7mm).

Front tires GROUP 2

BRM s-403k - BRM s-403vw (Scirocco original) on wheel Ø 16.7mm)

- 9.2 It's allowed to grind the front tires homogeneously over the entire surface of the tyre.
- 9.3 When the model is ready during the verification the front rims must touch the track, except for models NSU / Simca / Renault R8 / Abarth A112, which they don't have a limit and so the size is free.

### 10. Braids – Motor wires

- 10.1 Free braids and motor wires.
- To fix the wires to the guide it's allowed to use grub screws or cable eyelets.
- 10.3 You can fix the wires on the chassis



s-403 s-403s



s-403f s-403fl



### 11. Body

- 11.1 At the start the model must have all his parts except for wipers, hooks and mirrors).
- 11.2 Mandatory the rubber covers for body posts BRM S-013R, S-013RA, S-013RB or S-013RC.
- 11.3 It's allowed to change the height of the body adding spacers inside the rubber covers using brass spacers of 0.5mm BRM s-011c or 1.0mm BRM s-011d.
- 11.4 The fixing body screws must be the original S-421B or S-421A (M2x6 sink head for 1.3mm allen key) or the Revoslot RS213B (1.5mm allen key).
- 11.5 Weight bodies, see the list on the right.
- 11.6 If it's necessary add weight to reach the minimum weight, it must be located on the red area under the cockpit.. (see photo)
- 11.7 To facilitate the assembling of the cockpit it's possible cut the legs of the driver from the knee.

MODEL	WEIGHT (without rubber and screws)		
Mini Cooper	34g		
Simca 1000	46g		
NSU TT	43g		
Abarth 1000 TCR	<b>35</b> g		
A 112 Abarth	43g		
Renault Gordini r8	41g		
Opel Kadett GTE	45g		
Alfa GTA	42g		
Escort MKI	42g		
BMW 2002	45g		
VW Scirocco	44g		
Ford Capri	44g		
Datsun 240z	44g		





### 12. Body exceptions

### Abarth 1000 TCR

12.1 It's allowed to use both types of rear bonnets and to not use the original side mounts. The rear bonnet must be kept open like the original model.

12.2 It's allowed to scratch material inside the rear wheel arch to get a better rolling of the rear tyre.

### Simca 1000

12.3 It's allowed to scratch material inside the rear wheel arch to get a better rolling of the rear tyre.

### **BMW 2002**

12.4 You can replace the whole cockpit using a full lexan one.

You can remove the rear black plastic part from the body.

### **SCIROCCO**

12.5 You can replace the whole cockpit using a full lexan one.
It's allowed to not assemble the front and rear bumpers.

### **FORD CAPRI**

12.6 You can replace the whole cockpit using a full lexan one.

### Abarth A112

12.7 You can replace the whole cockpit using a full lexan one.

### a full lexan one. CAPRI S-424C

Lexan cockpit

BMW **S-424B** 

if BRM items codes:

SCIROCCO S-425VW

### Renault R8 Gordini

12.8 It's allowed to reduce the height of the front spoiler to the red line (see photo on the right).



Rules











