



PRODUCTION SPORTS CAR
RACING ASSOCIATION OF AUSTRALIA INC
FORMERLY THE MARQUE SPORTS CAR RACING ASSOCIATION OF AUSTRALIA INC

2010

CUE SPORTS CAR ENDURO
CHAMPIONSHIP
HANDBOOK



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GLOSSARY

Race:	Individual events in a Round
Round:	A series of races at a venue, over one or more days
Category:	Per CAMS definition i.e.: Groups 2B, Class I and Class II, 2F, 2I and 2A
Class:	PSCRAA grouping of cars of similar performance, based on PWR or Category
Eligible:	Per current CAMS Manual of Motorsport, and augmented by these Rules
OEM:	Original Equipment Manufacture (i.e.: as delivered ex-manufacturer)
PSCRAA:	The Production Sports Car Racing Association of Australia
Promoter:	The convener of the race meeting
Team:	A combination of Driver and Co-driver driving one vehicle.
PWR:	Power to weight ratio
ODS	Official Dyno Sheet
Start:	When the entered car crosses the start line at the beginning of a race
Production Sports Cars:	For the purposes of this Handbook, cars that are described in the CAMS Manual of Motorsport under Groups 2F and 2B, Class I and Class II, and 2I
Marque:	Vehicles manufactured by the same Manufacturer e.g. Mazda, MG, Porsche etc
Model:	Vehicles that have the same generic model designation or are of the same basic silhouette, For example:- Porsche 911 (types 911, 964, 993, 996 etc), Mazda MX5 (NA, NB, NB8B), Nissan/Datsun Z (240Z, 260Z, 280Z, 300Z), Lotus Elise (Elise, Exige, Sport 200, etc.)

1 INTRODUCTION

The CUE Sports Car Enduro Championship is a one-hour format endurance championship for teams, comprising a driver and co driver. It is open only to members of the Production Sports Car Racing Association of Australia (PSCRAA). The format of the event will be a qualifying period for driver and co driver, a sprint race for each of the driver and co driver plus a one-hour duration race with change of driver required. Points will be scored on a driver and co driver basis from the sprint races and the one-hour race. The one-hour race will be worth double points. Single drivers without co drivers will be able to enter but not be able to run in the co driver events. The Championship will be based on four races, one in New South Wales, two in Victoria and one in Queensland.

2 SCHEDULE

The Schedule for the 2010 CUE Sports Car Enduro Championship is:

- 29 – 30 May 2010 – Eastern Creek
- 26 – 27 June 2010 – Winton Victoria
- 25 – 26 September – Morgan Park, Queensland
- 27 - 28 November 2010 – Phillip Island, Victoria

3 REGISTRATION and CHAMPIONSHIP FEES

3.1 Championship Entry Fee

There is a championship entry fee which is included in the annual membership and racing fees for PSCRAA NSW and PSCRAO Queensland members for all other entrants a PSCRAA Membership fee of \$60 is payable prior to the first round of the championship.

3.2 Registration

To be eligible to participate in the Championship, participants must register with the PSCRAA. The Championship Registration Form plus the Championship Entry Fee are to be forwarded to:

Brian Anderson, 18 Albert Ave, Sylvania, NSW, 2224 or
send via email to motorsport@ozemail.com.au

Please make cheques payable to PSCRAA or direct deposit into PSCRAA account direct – account details available on membership form available on website under ‘Series’.

Non-registered and / or non-financial competitors may participate in Championship events (subject to available grid space) but will NOT be eligible for Championship points or trophies.

4 CATEGORIES OF RACING, CLASSES and ELIGIBILITY

4.1 Eligibility

- a) Eligible vehicles are those which comply with the 2010 CAMS Manual Group 2B Class I, Group 2B Class II, or Group 2F regulations and cars meeting the specific criteria listed in paragraphs b) and c) below.

- b) Vehicles that meet the criteria contained in the CAMS 2B Class 1 Regulations with the exception of engine specifications which shall comply with the following:
 - (a) Vehicles within the same marque and model as defined in Appendix A may substitute engines from the same manufacturer that have been used in a different member of the same model, that is also eligible under the Group 2B Class 1 rules. A supercharged engine cannot replace a non-supercharged engine. All entries under this Rule are to apply in writing using the form at Appendix C. Approval to compete will be determined by the Enduro Eligibility Committee and any determination will be final.
 - (b) If supercharging is recognised as standard production for the model, the production inlet manifold and supercharging device and its location must be retained as per manufacturer's design specification with the following exceptions that:
 - a. The original supercharging device(s) may be replaced by a ball bearing supercharging device having the equivalent specifications.
 - b. Twin sequential turbochargers may be replaced with a single turbocharger provided the inlet opening area does not exceed the combined inlet openings area of the twin sequential turbochargers.
 - c. The boost pressure may be altered including the fitting of electronic boost controllers or for mechanical superchargers by modification of the drive pulley.
 - d. The exhaust is free from the cylinder head exhaust port.
 - e. Cars with supercharging are to be fitted with a data logging device that logs manifold pressure. These logs are to be provided to the technical commissioner if requested. Details of approved data loggers are available from the PSCRAA committee.
 - (c) Lotus Elises may use Honda K20A engines that meet the 2B Regulations provide that 5 production examples have been produced in Australia.
- c) Competitors are reminded that possession of a CAMS Logbook does not constitute compliance with, or eligibility for, Championships conducted under these Regulations. Furthermore, the Association reserves the right to exclude any cars from the point score.
- d) A vehicle found to be ineligible would be given a written report and a reasonable amount of time to remedy the problem. This time allocation will be at the discretion of the Enduro Eligibility Committee and the CAMS Stewards and may be as short as the next race. The vehicle will not be eligible for points until rectified; any irreconcilable matter shall be referred to CAMS for adjudication.

4.2 Vehicle Class System

- a) There are five classes, three of which shall be based on Power to Weight Ratio (PWR) Classes, namely A, B and C and for Group 2F vehicles over 2.5 litres, Class D and up to a maximum capacity of 2.5 litres Class E. The purpose of the PWR classes is to group together cars of broadly similar performance.
 - A: For cars with a PWR up to 6.3 kg/kW
 - B: For cars with a PWR between 6.31 to 8.1 kg/kW
 - C: For cars with a PWR over 8.1kg/kW
 - D: Group 2F cars and Group S cars with a capacity greater than 2.5litres
 - E: Group 2F cars and Group S cars up to a maximum capacity of 2.5litres and Porsche 944 Challenge cars complying with the 944 Challenge Racing Technical Document

4.3 Power to Weight Ratio (PWR) Rules

- a) Power shall be measured as Kilowatts of power at the driven wheels as determined by the official dyno check. For the purpose of establishing the official vehicle PWR, the racing weight shall be determined as per CAMS Regulations, which state “the weight of the car during any practice or race, including the driver wearing all normal racing apparel including helmet. No fuel may be added after the conclusion of any race or practice before the car is weighed”. The PWR is calculated by dividing the racing weight by the driven wheels’ Kilowatt power.
- b) Rotary powered vehicles are to apply a PWR multiplication factor of 1.2 to the raw PWR calculated above to obtain the final PWR.
- c) PWR example:

Car weight = 1050kg
 Driver weight = 85 kg
 Dyno at rear wheels = 151 kW

$$\begin{aligned} \text{PWR} &= (\text{car weight} + \text{driver weight}) / (\text{driven wheels KW}) \\ &= (1050 + 85) / 151 \\ &= 1135/151 \\ &= 7.52 \text{ therefore class B} \end{aligned}$$

If applicable apply the rotary factor of 1.2

$$\begin{aligned} \text{Rotary PWR} &= \text{Raw PWR} \times \text{Rotary Factor} \\ &= 7.52 \times 1.2 \\ &= 9.02 \text{ therefore class C} \end{aligned}$$

- d) The onus is on the driver of the vehicle to describe the vehicle correctly and to provide an accurate PWR. The PSCRAA Eligibility Committee will initially classify cars based on the information provided by the owner’s entry form declaration with respect to power and weight.
- e) Supercharged vehicles are to have their maximum boost that will be attained noted on the VCF. This maximum boost figure is to be used as the maximum boost usable by that competitor in qualifying or races or during an official dyno check until a revised VCF is provided. If the data logger files indicate a higher boost was used during races then all points gained in those races will be forfeited or if during qualifying the car will be required to start from rear of grid.
- f) During the season, the Enduro Eligibility Committee reserves the right to request a power and weight check. This check may be conducted under the supervision of a Enduro Eligibility Committee member. After a race, Parc Fermé conditions may be invoked by the Enduro Eligibility Committee, if deemed necessary. The entrant of the vehicle must in all circumstances comply with the Enduro Eligibility Committee’s directions, noting his rights of appeal under the CAMS judicial processes. See Appendix A for Parc Fermé Dynamometer Test Procedure.
- g) The scales used during Parc Fermé will be taken as a judge of fact. Competitors should note that scales may vary by up to 2% and that the competitors should ensure that their vehicles comply with the PWR for their class and factor in any differences between scales..
- h) The Enduro Eligibility Committee may reclassify the Class of a car at any time due to a change in the PWR of the vehicle or may reclassify a Class D or Class F car to a PWR Class. If this occurs you will be informed in writing.
- i) Entrants in classes B, or C that do not provide an ODS on request may be reclassified into Class A. If this occurs you will be informed in writing. The Dyno Dynamics website lists the locations of “Shoot Out” authorised dynos.

<http://www.dyno.com.au/near.htm>

5 COMPETITION SCORING

5.1 Introduction

- a) The PSCRAA conducts the Enduro Championship for the benefit of its Members.
- b) Points for competitors competing in grids containing non-championship vehicles, or vehicles not officially classified, shall be calculated taking into consideration the finishing positions of non-championship vehicles.
- c) The Championship points will be allocated according to the point score rules and a register will be kept by the Association's Registrar, and will publish them on the Association's website (www.prodsports.com.au). In any dispute over points, his decision is final and binding on all parties.
- d) Points are not transferable between Classes.
- e) Where a vehicle changes Class due to changes in the PWR:
 - I. All points earned in the old Class shall remain unchanged,
 - II. Points earned in the new Class accrue only in that Class, and
 - III. Placing in each Class shall be determined from points earned in each Class.
- f) An Entrant may change cars during the race Championship and points may continue to accumulate providing that the replacement vehicle is in the same Class and is deemed eligible by the Enduro Eligibility Committee.

5.2 CUE Sports Car Enduro Championship Point Score System

- a) Points will be awarded for the first 10 place getters in **each** Class A, B, C D and E provided there are sufficient number in each Class, see Paragraph (g) below.
- b) Points are awarded for **sprint** races at each race meeting to every driver and co-driver participating in the Championship in accordance with these Rules.
- c) **Double** Points are awarded for the **One Hour** race at each race meeting to every team participating in the Championships in accordance with these Rules.
- d) The team accumulating the highest points in Class A, B, C, D and E becomes the Enduro Champion. Trophies will also be awarded to 2nd and 3rd places outright based on a comparison of points across each class.
- e) In the event of a tied result, a count back will be done to ascertain which Team scored the most first places, then the most second places, then the most third places. If the result is still tied, then joint winners or place getters will be declared.
- f) Points allocation will be as follows for **each** Class and **each** race:

g)

PLACE	6 + CARS	4 – 5 CARS	2 – 3 CARS
1st	14 points	12 points	8 points
2nd	12 points	10 points	6 points
3rd	10 points	8 points	4 points
4th	8 points	6 points	
5th	7 points	5 points	
6th	6 points		
7th	5 points		
8th	4 points		
9th	3 points		
10th	2 points		

- h) The points for the sprint and one hour races are based on the number of competitors who start in **each** Class, in **each** Race of **each** Round.

6 TROPHIES AND PRIZES

6.1 Trophies

Round Trophies, for the Round for each Class are awarded by the PSCRAA in accordance with the following schedule, where 'n' is the number of championship competitors:

- n > 1 < or =3 first place only
- n > 3 < 6 first and second
- n = or >6 first, second and third

Trophies will also be presented to the "Best Presented Vehicle" and "Best Presented Team" for each round.

Enduro Championship Trophies will be awarded by the Association at the conclusion of a year's racing, when the winners are decided in accordance with the Rules.

- There shall be a Enduro Team Champion,
- There shall be a Class Champion in each Class, and placing down to third;
- Other trophies shall be awarded at the Committee's discretion.

6.2 Prizes

The Association, depending upon availability and sponsor requirements, will award sponsor prizes.

7 SPONSORS

The Association is pleased to have CUE as the Championship sponsor. Further secondary sponsors may be sourced.

Every car entered in the Race shall carry "CUE" sponsorship advertising provided by the Association and it shall be positioned on the rear quarter panel on both sides on every vehicle.

Any entrant refusing or failing to carry Championship sponsorship advertising in any race may be excluded from benefits and will not be eligible to accrue points or receive trophies.

8 COMPETITION NUMBERS

The Association Registrar shall maintain a register of racing numbers for the Championship.

An Entrant may request any competition number from the Registrar. If the number is not already taken, then it may be allocated to the Entrant

Numbers will be allocated to Championship entrants first, on a basis of date of receipt of their Championship entry forms. Round entrants will be allocated next on the basis of entry date.

All race vehicles must display their Class in 100mm high letters next to each of their vehicle numbers.

Competitors must compete under the competition number allocated by the Association.

Failure to do so may result in points being forfeited.

9 ENTRY

Entries to individual events will be direct to the event Promoter. Entry forms will be available on the PSCRAA website www.prodsports.com.au

Promoters shall issue supplementary and further regulations.

If an entrant has not received Race Entry Form six weeks before an event, he should contact the Competition Secretary.

10 COMPETITION DETAILS

Competition details are specified in the CUE Sports Car Enduro Regulations for each specific event. Available on www.prodsports.com.au



11 PSCRAA COMMITTEES FOR 2010

11.1 PSCRAA Enduro Committee

Arthur Magaitis
Phone – 0419 987 780
Email – am@quintessence.net.au

Cal Ballinger
Phone – 0407976941
Email – calballinger@hotmail.com

Brian Anderson – Competition Secretary
Phone – 0414499961
Fax – 02 9576 2577
Email – motorsport@ozemail.com.au

11.2 ENDURO Eligibility Committee

Brian Anderson
Phone – 0414499961
Email – motorsport@ozemail.com.au

Craig Dury
Mobile: 0401676925
Email – frog76@optusnet.com.au

Production Sports Car Racing Association Inc.
All Correspondence to: Brian Anderson, 18 Albert Ave, Sylvania, NSW, 2224

www.prodsports.com.au



APPENDIX A

PARC FERMÉ DYNAMOMETER TEST PROCEDURE

The PSCRAA reserves the right to demand a power and weight check at the designated dyno centre under the supervision of the Technical Commissioner. After a race, Parc Fermé conditions may be invoked by the Enduro Eligibility Committee if deemed necessary. The entrant of the vehicle must in all circumstances comply with the Enduro Eligibility Committee's or their representative's directions, noting his rights of appeal under the CAMS judicial processes. If the vehicle is found to be in breach of its Class allocation or CAMS Regulations, then the cost associated with transport to the dyno and the dyno costs will be for the Entrant's account. If the vehicle conforms, then the costs will be borne by the PSCRAA.

If a vehicle is placed in Parc Fermé conditions for the purposes of Dynamometer (Dyno) testing one of the following two procedures should be applied. The Entrant and/or Driver will be informed of which procedure is to be used.

Procedure A – Transport arranged for immediate dynamometer testing

The PSCRAA will arrange for the selected vehicle to be transported by truck to a designated dyno centre, which is near to the track.

The Enduro Eligibility Committee or their representative as well as the entrant or his representative will accompany the vehicle to the dyno centre. On arrival the vehicle is to be unloaded and the entrant or his representative may at that time be allowed to check the vehicle's fluid levels under the observation of the Enduro Eligibility Committee or their representative. The entrant or his representative is not to be left alone with the vehicle at any time during the test.

Entrants should ensure their cars are prepared for this eventuality and no responsibility will be accepted by the PSCRAA for any "Incidents" on the dyno!

The vehicle is then to be dyno tested using "Shoot Out" mode in accordance with the Dyno Dynamics published procedures and the "Shoot Out" code of practice.

On completion of the dyno test the vehicle will be transported by track back to the track.

On completion of the dyno test the resultant ODS is to be given to the PSCRAA Eligibility Officer

Procedure B – Entrant to arrange dynamometer testing

Sealing of cars prior to Dyno testing.

The selected cars will fall under the custody of the Enduro Eligibility Committee or their representative, who will arrange for the sealing of the car. The car is to be sealed with breakable wafer seals. The Entrant or his/her representative is to be present whilst the car is sealed.

The following items are to be sealed:

- Engine Bay/Compartment,
- ECU ports (if a controller is attached then the owner will be asked to remove the controller and the ports will then be sealed)
- ECU to loom connection and
- Throttle stops in the cockpit.
- Mark fitted wheels and tyres.

Having completed the sealing of the vehicle, the Enduro Eligibility Committee or their representatives are to:

- Record the seals used and pass this information to the dyno test venue.
- Instruct the Entrant or his representative to present the vehicle, within the next 7 days, to the PSCRAA's nominated dyno (Dyno Dynamics Certified Shoot Out workshop) for a dyno run to establish peak power.
- Give the Entrant or his representative a copy of this procedure.

Post-sealing procedure

The Entrant is responsible for presenting the vehicle to the PSCRAA's nominated dyno within 7 days of the completion of the race meeting. The Entrant is to arrange a suitable time with the nominated dyno operator. If difficulty is experienced they are to inform the Enduro Competition Secretary

Dyno testing procedure

Check all seals are intact. If any of the seals appear to have been tampered with, abort the dyno run.

The entrant or his representative may at that time be allowed to check the vehicle's fluid levels under the observation of the dyno operator. Seals may be broken if necessary to perform this task. The entrant or his representative is not to be left alone with the vehicle if any seals are broken.

Entrants should ensure their cars are prepared for this eventuality and no responsibility will be accepted by the PSCRAA for any "Incidents" on the dyno!

The vehicle is then to be dyno tested using "Shoot Out" mode in accordance with the Dyno Dynamics published procedures and the "Shoot Out" code of practice.

Post Dyno testing procedure

The dyno operator is to fax the resultant dyno sheet and the results of the seal inspection to the PSCRAA Enduro Committee member

The Competition Secretary is to calculate the PWR resultant from that dyno test combined with the last official weight and confer with the Technical Commissioner regarding the results.

The points for the Round at which the Parc Fermé occurred will be forfeited if any of the following occur:

- The resultant PWR is outside the PWR limits for the class entered.
- The car was not presented within the specified timeframe.
- The seals appear to have been tampered with or broken.

If Entrants are unwilling to submit to this procedure they will by default forfeit any points from that Round and, until a new dyno sheet is provided, the points from any future rounds.

APPENDIX B

Definition of Marque and Model

The 2010 CUE Sports Car Enduro Championship Handbook refers to marque and model as noted below. The following definitions will be used for the purposes of determining compliance with section 5.1 of the Handbook.

The PSCRAA Enduro Committee will also determine and publish the current marque and model listing to be used for determining compliance with section 5.1 of the Handbook, based on the CAMS Eligibility List and Members' vehicles. Any new vehicle joining the Championship will be classified, by the Enduro Committee, as to marque and model prior to its first race event.

Marque – Vehicles manufactured by the same Manufacturer e.g. Mazda, MG, Porsche, etc.

Model – Vehicles that have the same generic model designation or are of the same basic silhouette, e.g. Porsche 911 (types 911, 964, 993, 996 etc), Mazda MX5 (NA, NB, NB8B, NC), Nissan/Datsun Z (240Z, 260Z, 280Z, 300Z, 350Z, 350Z), Lotus Elise (Elise, Exige, Sport200 etc) etc.

Examples of Current Marques and Models are:-

Marque	Model	Manufacturer's designation
Austin Healey/MG	Sprite/Midget	MG Midget, Austin Healey Sprite
Lotus	Elise	Elise, Exige, Motorsport 200
Mazda	MX5	MX5, MX5 Miata, Eunos Roadster
Mazda	RX7	RX7 Series I – VIII
Morgan	Morgan	Plus 4, Plus 8, 4/4
Datsun/Nissan	Z	240Z, 260Z, 280Z, 300Z, 350Z
MG	MGB	MGB, MGB GT, MGBGT V8, MG V8 Roadster
MG	MGF	MGF, MGTF
Nissan	200SX	200SX, Nispro 200SX-R, 200SX GT
Porsche	911	911, 930, 964, 993, 996, GT3, GT2, Turbo
Porsche	924, 944, 968	924, 944, 968

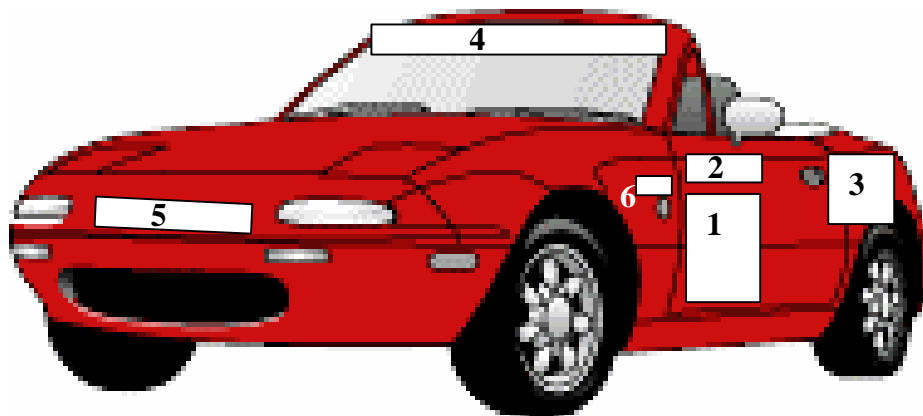


APPENDIX C

Placement of Sponsor Decals

Sponsor decals are to be positioned as indicated below.

- a. Number Panels
- b. Sponsor or PSCRAA Panels
- c. Major Sponsor Logo (One each side of Car)
- d. Major Sponsors Windscreen Banner
(not applicable for cars without windcreens) if appropriate
- e. Sponsor Name Decals (Front and Rear)
- f. A CAMS sticker on each side, adjacent to the competition numbers



APPENDIX D

CUE Sports Car Enduro Championship Entry Registration Form and Vehicle Classification Form

Entrant Name		Club	*Club Member Number*
Entrant Address			Postcode
Home Phone	Mobile Phone	FAX Number	Work Number
Email Address			

** IF NOT A MEMBER OF PSCRAA OR PSCRAQ A COMPETITION FEE OF \$60.00 IS TO BE INCLUDED IN ORDER TO PARTICIPATE IN CHAMPIONSHIP AND / OR ACCEPT TROPHIES

Driver Name		Club	Club Member Number
Driver Address			Postcode
Home Phone	Mobile Phone	FAX Number	Work Number
Email Address			

Co Driver Name
Email Address

Team Name

Car Make	Model	Colour	Year	Car No 1 st Pref	Car No 2 nd Pref
Category applicable for Enduro Championship entry (circle) 2B Class 1 2B Class 2 2F 944 Group S					Log Book Number
Engine Capacity	Vehicle Weight in kg (A)	Drivers Weight in kg (B)	Co Drivers Weight in kg (C)		
Driven Wheel Power in kW (D)	Power to Weight Ratio [A + [Min of B or C]] / D = PWR		Max Boost (psi)	Class Entered A _ B C D E	

I _____ (entrant) request approval for entry into the 2010 CUE Sports Car Enduro Championship. I agree to abide by the rules contained in the 2010 CUE Sports Car Enduro Championship Handbook and state that the weight, power and specification of the above vehicle is true and correct and meet the requirements of the above manual and the 2010 CAMS manual.

Entrant Signature _____

PSCRAA Use Only

Date Received	Approved	Recorded	Response Sent	Date
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Mail complete form to Brian Anderson, PSCRAA, 18 Albert Ave. Sylvania, NSW, 2224

or

email to motorsport@ozemail.com.au