HISTI

B.A.R.C. HILLCLIMB CHAMPIONSHIP 1977



These Classes have been evolved over the past nineteen years within the BARC in an attempt to give equal and balanced competition for all current types of cars and competitors in Hill Climbs and Sprints. The Classes are used in Hill Climbs organised by the BARC and its Centres. They are also used for the qualifying rounds of the Guyson/BARC Hill Climb Championship, The Longton & DMC Sprint & Hill Climb Championship, the Lancashire A.C.'s Sprint & Hill Climb Championship and for the Welsh Speed Championship.

Additional copies of this leaflet can be obtained from BARC, Thruxton Motor Racing Circuit, Thruxton, Andover, Hants., or from BARC Yorkshire Office, 6 Sidney Street, Vicar Lane, Leeds LS2 7JB. Tel. Leeds (0532) 38972. Queries about interpretation should be addressed to the Yorkshire Office.

CLASSES 1977

All vehicles will comply with the R.A.C: "Regulations for Vehicles" as printed in the 1975 R.A.C. Motor Sport Regulations with revisions as published in R.A.C. Bulletins and the 1976 and 1977 Motor Sport Year Book.

Vehicles will be divided into the following categories:

Touring Cars

- (a) Touring Cars.
- (b) Special Saloon Cars.

Production Sports Cars:

- "Marque" Sports Cars Modified Sports Cars. (a)
- (b)
- Limited Production Sports Cars. (c)

Competition Sports Cars:

- Grand Touring Cars. (a)
- "Clubmans" Sports Cars. (b)
- (c) Sports/Racing Cars.

Racing Cars

The definition of what constitutes a vehicle in one of these categories is at the discretion of the Class Committee and does not of necessity follow any rules laid down by the F.I.A. or the R.A.C. other than in general outline. The fact that a vehicle is open or closed has no effect upon its allocation and the basic rules, or definitions of these categories are:-

Touring Cars are normally series produced vehicles usually with a minimum of four seats and fully equipped for road use.

Special Saloon Cars are as laid down by the R.A.C. as aligible for entry in this category in Club Racing.

"Marque" Sports Cars are sporting cars which are arbitrarily grouped into classes to give even competition.

Modified Sports Cars are as laid down by the R.A.C. as eligible for entry in this category in Club Racing with certain clarifications.

Limited Production Sports Cars are arbitrarily selected Sporting Cars which were originally conceived for road use and were/are available in road trim.

Grand Touring Cars are as laid down by the R.A.C. as eligible for entry in this category in Club Racing.

Clubmans Sports Cars are two seater cars as laid down by the R.A.C. as eligible for entry in this category in Club Racing.

Sports/Racing Cars are two seater competition vehicles not complying with any of the definitions above.

Racing Cars are single seater competition vehicles of any type whatever.

CLASSES

Within easy category, vehicles will be divided into classes as below:-

Touring Cars

- Class 1. Touring Cars up to 1,150 c.c.
- Class 2. Touring Cars 1,151 to 1,500 c.c.
- Class 3. Touring Cars 1,501 c.c. and over.
- Class 4. Special Saloon Cars up to 1,000 c.c.
- Class 5a Special Saloon Cars 1,001 to 1,350 c.c.
- Class 5. Special Saloon Cars 1,351 c.c. and over.

Production Sports Cars

- Class 6. "Marque" Sports Cars up to 1,300 c.c.
- Class 7. "Marque" Sports Cars 1,301 to 2,600 c.c.
- Class 8. "Marque" Sports Cars 2,601 c.c. and over,
- Class 9. Modified & Limited Production Sports Cars up to 1,300 c.c.
- Class 10. Modified & Limited Production Sports Cars 1,301 c.c. and over.

Competition Sports Cars

- Class 11. Clubmans' Sports Cars up to 1,600 c.c.
- Class 12. G.T. & Sports/Racing Cars up to 1,300 c.c.
- Class 13. G.T. & Sports/Racing Cars 1,301 to 1,600
- Class 14. G.T. & Sports Racing Cars 1,601 c.c. and

Racing Cars

- Class 15a Racing Cars up to 500 c.c.
- Class 15. Racing Cars 501 to 1,100 c.c.
- Class 16. Racing Cars 1,101 to 1,600 c.c.
- Class 17. Racing Cars 1,601 c.c. and over.

CONDITIONS OF ELEGIBILITY

Touring Cars

In classes 1, 2 and 3 the capacity of any car shall be considered to be the standard, unmodified capacity of the vehicle when new. Engine modification and tuning is permitted without limit save that the original cylinder block shall be retained, the bore shall not be increased by more than 60 thou., the stroke will not be increased, the method of valve operation shall remain the same, the number of ports and valves in the cylinder head will not be changed and the engine will not be relocated.

Any modification may be made to the braking system and wheels. Suspension modifications are allowed so long as the layout and method of operation remain unchanged from standard. So far as bodywork is concerned, cars in these classes will run with all standard equipment, a full complement of seats (although proprietary seats may be used in the front only) and standard coachwork.

Coachwork may not be lightened and must include all bumpers, fittings and trim supplied as standard with the exception that overriders may be removed, number plates and number plate backing plates need not be carried and, as a safety measure, combustible sound insulation material, trim and carpets may be removed from the interior of boots and engine compartments only, whilst the battery may be re-positioned. Additional accessory equipment will be permitted but in cases where this has to be substituted for the original equipment, i.e. dash panels, fly-off hand brakes, etc., the construction must be at least as massive as the component removed save that non-standard steering wheels of smaller diameter or lighter construction are allowed. Where a roll cage is installed and some of the interior fittings or trim, e.g. interior light, have to be displaced, the items removed must be carried in the car.

Air Intakes and Carburettor blisters, supercharger bulges, etc., may be fitted. To enable the use of wider section wheels and tyres, wheel arch extensions not exceeding 7.5 cms., projection on each side may be fitted.

Spare wheels, fan belts and tools may be removed.

British Leyland 970 c.c. and 1071 c.c. Cooper "S" Cars are not eligible for Class 1 and will run in Class 2.

Special Saloon Cars are as laid down in the 1977 R.A.C. Championship and Formula Regulations. Cars which would normally be eligible for classes $1\,-\,3$ but which have engines increased in size by overboring above 60 thou,, or stroking or which are fitted with non-standard engines or which have lightened, stripped of non-standard coachwork, or equipment removed, will run in the appropriate Special Saloon Car class provided that the modifications are within the limits permitted for Special Saloon cars.

Production Sports Cars

Vehicle accepted as "Marque" Sports Cars are listed in Appendix "A".

Eligibility for classes 6, 7 & 8 will be exactly as for classes 1, 2 & 3 (above) with the additional requirement that standard windscreens will be carried in the upright position.

Vehicles accepted as Modified Sports Cars are listed in Appendix "A" subject to any additions made in the R.A.C. Championships and Formula Regulations for 1977, Please note that as allowed for in the R.A.C. Motor Sport Club News the Caterham Super Seven is not allowed a Modified Sports Car in BARC Speed Events,

Modified Sports Cars are as laid down in the 1977 R.A.C. Championships and Formula Regulations. In clarification of the R.A.C.'s Formula regulations, the part of the body structure which lies between the wheel hub centres shall be considered to be the stress-bearing part of the body structure which must be retained completely, whilst the remainder of the body structure is

Any vehicle nominally eligible for the "Marque" Sports Car Classes but not complying with these regulations because of increase in capacity, lightened or nonstandard coachwork or equipment, etc., will run in the appropriate Modified Sports Car Class provided that the modifications are within the limits permitted for Modified Sports Cars.

Vehicles accepted as Limited Production Sports Cars are listed in Appendix "A",

The modifications permitted to Limited Production Sports Cars are those laid down for Modified Sports Cars in the 1977 R.A.C. Championships and Formula Regula-

The lists of "Marque", Modified Sports and Limited Production Sports Cars in Appendix "A" is correct to 1st January 1976. Where new models, or modified versions of existing models, are introduced during the season the Class Sub-Committee reserve the right to allocate these vehicles to one or other of these categories until the end of the season.

Competition Sports Cars

Grand Touring cars must comply with the Definition and Regulations for "Sports/G.T. Cars" contained on page 194 of the R.A.C. "Motor Sport Regulations for 1975". Simply, this means that cars which comply with F.I.A. Appendix J. Groups 3, 4, 5 & 7 and which are not eligible as Saloon Cars, "Marque" Sports Cars. Modified Sports Cars or Limited Production Sports Cars are classified as Grand Touring Cars.



Unlimited mechanical modifications are permitted in the "Grand Touring" category. Competitors are allowed to substitute the material of the bodywork and to modify shape so long as the vehicle still conforms to the accepted requirements of a Grand Touring Car.

Clubmans Sports Cars must comply with the Clubmans Formula as set out in the 1977 R.A.C. Championships and Formula Regulations.

Sports/Racing Cars must comply with the definitions of Group 5 or 7 of Appendix "J" or comply with R.A.C. Vehicle Regulations AA.2(f) and AA.3.

General Conditions of Eligibility

In classes 4, 5a & 5 and 9 – 17 the capacity of any car shall be the actual measured capacity including any boring stroking, etc.

Supercharged Cars will be classified as having their engine capacity increased by 40 per cent with the exception that Historical Cars constructed before 1961 and competing in a class designed solely for these types of vehicles shall only have their capacity increased by 33.1/3 per cent.

A supercharger is defined as: Any mechanical device capable of augmenting atmospheric pressure induction and however driven other than ram-pipes, etc. In classes 1 – 14 only standard pump fuel of a type generally on sale to the public will be used and no additives to increase octane rating will be allowed. In Racing Cars only choice of fuel is free, but competitors are warned of the potential dangers of Nitro based fuels.

All vehicles must be fitted with Timing Struts as laid down in R.A.C. Vehicle Regulations CC4 (e). A vertical face will not be accepted.

Aerofoils may only be used on Racing Cars and on Competition Sports Cars. Aerofoils and Bodywork must comply with the Rules 2 and 3 of the Regulations for the R.A.C. National Hill Climb Championship as published on page 55 of the R.A.C. Motor Sport Yearbook for 1977.

The queries on the entry forms with regard to capacity, etc., must be answered accurately. Any false statements discovered at scrutineering, or subsequently will result in exclusion of the competitor from the event concerned, and from subsequent events promoted by the club.

Scrutineering will be divided into two sections. In addition to the normal check for race-worthiness there will be a separate examination for eligibility. Both these examinations will take place before the start of each meeting although additional checks for eligibility may be made during, or after a meeting.

Each car may only be entered in its own correct capacity class and category.

These classes will apply without alteration (save the possible addition of newly introduced vehicles to Appendix "A") until the end of the 1977 season.

Merging and Sub-Division of Classes

Classes may be sub-divided as allowed for in R.A.C. Standing Supplementary Regulations.

Two classes which will be divided at certain meetings are Class 1 and Class 4. These sub-divisions will be:-

Class 1a. - Touring Cars up to 850 c.c.

Class 4a. - Special Saloon Cars up to 850 c.c.

Additional classes for specialised types of cars e.g. Vintage, P.V.T., Historic Racing, Historic Sports, individual "Marques" or Models, etc., may be inserted for certain meetings. These will be numbered outside the normal 17 classes.

The A.S.R's for events may stipulate the maximum number of entries which may be accepted in any class. In any case where less than four entries are received for a class, the class may be merged with the next appropriate class.

Should a class be run with three or less entries, the value of the First Class Award in that class will be reduced to equal a Second Class Award in the classes with four or more entries.

The A.S.R's for events may stipulate that only certain of these classes are eligible for entry. In some cases where the potential entry in certain classes is small, the A.S.R's for an event may announce that specific classes are merged before entries even open.

In the event of a class being merged because less than four entries have been received, this class will normally be amalgamated with a class for similar types of vehicle having a slightly quicker class record.

Championships

The 1977 Guyson/B.A.R.C. Hill Climb Championship will be run to the Classes outlined above.

The 1977 R.A.C. British Hill Climb Championship will be open to Racing Cars which comply with R.A.C. Vehicle Regulations AA, BB, CC and FF1(s) with Aerofolis as laid down for Formula 1 Cars and to Sports Cars which comply with R.A.C. Vehicle Regulations AA, BB, CC and FF1(w) excepting AA3(d) with Aerofolis and bodywork as laid down on page 55 of the R.A.C. Motor Sport Yearbook for 1977.

The 1977 R.A.C. National leaders Hill Climb Championship will be run in 11 Classes which are laid down on Page 56 of the R.A.C. Motor Sport Yearbook for 1977.

Class a - Special Saloon Cars up to 1,300 c.c.

Class b — Special Saloon Cars 1,301 c.c. and over.

Class c = G.T. & Modified Sports Cars up to 1,300 c.c.

Class d — G.T. & Modified Sports Cars 1,301 to 1,600 c.c.

Class e — G.T. & Modified Sports Cars 1,601 c.c. & over Class f — Clubmans & Sports Racing Cars up to 1,600 c.c.

Class g — Sports Racing Cars 1,601 c.c. & over.

Class h — Racing Cars up to 500 c.c.

Class i - Racing Cars 501 to 1,100 c.c.

Class j - Racing Cars 1,101 to 1,600 c.c.

Class k - Racing Cars 1,601 c.c. & over.



Beadblast Centres For Personal Performance

Appendix "A"

List of Eligible Cars for "Marque" Sports Car Category — Correct to 1st January 1977

A.C. - Ace, Ace Bristol, Aceca, Aceca Bristol, Ace Zephyr, 428, Cobra 4727 c.c., ME3000.

ALFA ROMEO - 1300 G.T., 1750 Spider, 2000 Spider Veloce

AUSTIN HEALEY - Sprite, 100 (all models except S), 100 Six, 3,000 (except lightweights & Ex Works). CLAN - Crusader 875 c.c.

DAIMLER SP250.

DATSUN - 240Z, 260Z.

FIAT - 1500S, 2300S, 124 Spider Sport, X19.

GILBERN - Invader.

GINETTA — G15 875 c.c., G21 1800 c.c.

HONDA - \$.800

JAGUAR - XK120, XK140, XK150 "E" Type (all 6 and 12 cylinder models excluding Competition Lightweight models).

JENSEN - Jensen Healey. LOTUS - Elan, Elan Plus 2, Europa (Renault engine), Eclat, Esprit, Efite 501, 502, 503.

MARCOS - Ford G.T. 1,500 and 1,600 (Push Rod) 2 litre (V.4), 3 litre, Mantis.

MERCEDES BENZ — 230 SL, 250 SL, 280 SL, 350 SL, 450 SL.

M.G. - Midget "T" Series, M.G.A. (Including Twin Cam), M.G.B., M.G.B. G.T., M.G.C., M.G.C. G.T., Costello B., G.T., M.G.8, G.T. V8.

MORGAN - Plus Four, Plus Four Super Sports, Plus Four/ SLR, Plus Four Plus, 4/4, Plus 8.

PORSCHE - 1500, 1500 Super, 1600, 1600 Super, 1600 Carrera, 911L, 911E, 911S, 911T, 911 Carrera, 912. RELIANT — G.T. E

SUNBEAM - Alpine (all models), Tiger 4,260 c.c. (excluding Le Mans models), Tiger Mk. 2 (4727 c.c.)

TRIDENT - Venturer, Clipper, Tycoon. TRIUMPH - Spitfire, G.T.6, All T.R. models, Stag.

T.V.R. - Grantura 1600 c.c. 1800 c.c. Vixen, Tuscan (3 litre + 4.7 litre), 1300, 2500, 2500M, 3000M,

3000ML, 3000 Turbo, VOLVO — P.1800S, P.1800ES.

VOLKSWAGEN - Porsche 914/6.

List of Eligible Cars for Modified Sports Car Category - Correct to January 1st, 1977, (Plus any additions published in the 1977 R.A.C. Championships and Formula Regulations).

A.C. — Ace, Ace-Bristol, 289 Cobra (4727 c.c.).

ALFA ROMEO - Giulia G.T.A., Giulia Spider, Giulia Spring G.T., Giulia Spring G.T.C., Giulia S.S., 2600 Spring, 2600 Spider G.T.V., Spider 1300, 1750, Sprint Veloce, JZ1300.

ARKLEY - SS

ASTON MARTIN — D.B.4 G.T., D.B.4 G.T. Zagato, D.B.5 G.T., D.B.6, D.B.6 Series 2.

AUSTIN HEALEY - 100 (All Models), 110-six, 3000 (All Models), Sprite (All Marks).

CHEVROLET — Sting Ray (excluding Grand Sport).

CLAN -- Crusader.

DAIMLER - SP250. DATSUN - 240Z, 260Z.

DAVRIAN - Imp & Mini engined model.

DE TOMASO — Pantera.

ELVA - Courier (All Models).

FERRARI - 275 G.T.B., 275 G.T.S., 330 G.T., Dino 246 and 308, Daytona.

GILBERN — Invader.

GINETTA - G4 (997 c.c. and 1500 c.c. Twin Cam), G15. HONDA - 600S, \$800.

JAGUAR - SK120 (3442 c.c. 3781 c.c.) XK140.

XK150 (3442 c.c. 3781 c.c.), "E" Type (3781 c.c., 4235 c.c.) V12.

JENSEN — Jensen Healey.

LOTUS Elan 2, Lotus Plus 2, Elan, Europa Type 46, Europa twin-cam, Esprit.

M.G. — M.G.B, M.G.B.G.T., M.G.C, M.G.C G.T., Midget

MARCOS — Volvo 1800, Ford 1500 (1965 onwards). Ford 1600 (Pushrod), V.4 3 litre, Mini Marcos.

MERCEDES BENZ – 280 SL, 350 SL.

MINI — Jem.

MORGAN - Plus 4, Plus 4 Super Sports, Plus 4/4, Plus 8. PIPER - 1600 c.c.

PORSCHE - 911L, 911S, Carrera 914, 914/6, 911 Turbo (Not RSR).

RELIANT - Scimitar G.T.E.

SHEL8Y AMERICAN - Cobra (4727 c.c.)

SUNBEAM — Alpine (all models), Tiger 4260 c.c. (excluding Le Mans models), Tiger 4727 c.c. (excluding Le Mans models.

TRIUMPH -- TR3, TR3A, TR4, TR4A, TR5, TR6, TR7, Spitfire Mk, 1, 2 & 3 (excluding Le Mans models) G.T.6 G.T.6 Mk. 2, Stag.

TURNER - 950 (948 c.c.). B.M.C. G.T. (998 c.c., 1080 c.c.) Ford G.T. (1498 c.c.)

T.V.R. - Grantura (all models), 1800S, Vixen, Tuscan UNIPOWER - G.T.

List of Eligible Cars for Limited Production Sports Cars Category — Correct to 1st January 1977.

COX - G.T.M.

FAIRTHORPE - Electron Minor, TX S 1300, TX SS P1, TX Tripper 1300, TX Tripper 2500 P.1.

GUYSON — E.12. LOTUS - Elite type 14 (1216 c.c.) UNIPOWER - G.T.

