#### THE ELECTRIC CAR RACING ASSOCIATION

#### 1981 MEMBERS HANDBOOK

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#### THE ELECTRIC CAR RACING ASSOCIATION

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#### PREFACE

The Electric Car Racing Association was formed many years ago for the purpose of providing basic rules and principles for model car racing, so that its members could race anywhere in the country on equal terms. This objective has been achieved so successfully that the basic rules are now used by many unattached clubs and in other countries.

The Association also organises the only series of national model slot-car races in Britain, producing National Champions in each of the main racing classes every year. ECRA was also responsible for the introduction of the Formula 32 class, which has proved successful in both providing the beginner with a simple but fast car to start with and, at its top level, another class requiring high standards of preparation and driving to succeed. The ECRA Newsmag, produced every two months, keeps members up to date with the slot-racing scene by publishing race reports, articles, comments and advertising, etc.

The racing rules, although perhaps complex, have been evolved to meet the needs of modern slot-racing by members voting through their Area Delegates at the Council Meetings. The officials of ECRA are enthusiastic racers, so any matter requiring action between Council Meetings will be decided with the good of the sport in mind. However, the official rely on you, the members, for help and advice. Your lines of communication within the Association are as follows:

- 1. Your club secretary.
- 2. Your Area Delegate.
- 3. Members of the Management Committee.

Your Area Delegate will be delighted to take any problems or queries on your behalf to the Midsummer or Annual Council Meetings. Going further, contact can be made with the Management Committee regarding the day to day organisation of the Association, or to the Competition Secretary for decisions regarding technical matters concerning tracks, cars and other rule interpretation problems.

You can contact any official direct, and he will do his best to help or advise. However, please remember to telephone at a reasonable hour or, if you write, to enclose a stamped, addressed envelope for his reply.

The full workings of the Association are set out in the Constitution. Reference to this will solve many problems of procedure and administration on the spot.

If a matter arises that is so urgent that it affects the good of the sport, the Council will take a decision on it. Following any Council decision, one postal vote of the Membership may be taken on that decision in the following year. A postal vote may be prepared by the Council or applied for by the members. In any application for a postal vote the signatories must include their Drivers Permit number or club name.

Any appeal against a decision by the Management Committee must be accompanied by a Protest Fee of £5.00. This fee will be returned if the protest is upheld.

Lastly, the existence of ECRA is largely responsible for the standardisation of cars and tracks, nationally, and hence the availability of the equipment that you race with. Members can help to continue this state of affairs by persuading other enthusiasts to join the Association.

#### **ORGANISING A MEETING**

A slot-racing meeting is easily marred by bad organisation leading to long delays or unnecessary argument over marshalling, race control or scrutineering, etc.

The officials needed to run an efficient meeting are:

- 1. Secretary of the meeting
- 2. Clerk of the course and deputy (race controllers).
- 3. Chief Marshall
- 4. Scrutineers
- 5. Stewards

It is, of course, possible to combine some of the above duties but at least two knowledgeable and responsible people are required besides the Stewards.

#### Secretary of the Meeting

He is responsible for all the paper work and should:

- 1. Draft, duplicate and distribute the entry forms and regulations as agreed by the club committee.
- 2. Receive the entry forms from competitors and enter them on race sheets.
- 3. Make out cards showing each driver's heat numbers and lane colours and draw up practice sheets.
- 4. Draw up the results sheets.
- 5. Draw up a balance sheet showing the financial result.

#### Clerk of the Course

This is the "manager" responsible for the conduct of the racing, and what follows applies equally to his deputy. His duties are:

- 1. To check with the chief marshall that all corners are covered.
- 2. To obtain practice sheets from the secretary and supervise official practice.
- 3. To obtain race sheets from the secretary, call up the appropriate drivers, record the results of each race and enter the qualifying drivers into subsequent finals, etc.
- 4. To make a decision on any protest made by a competitor unless he feels that the protest should go direct to the stewards.
- 5. To make a decision regarding the restarting of any race and to be responsible for the official result of each race.

#### Chief Marshall

He is responsible for ensuring that all agreed marshalling points are adequately covered at all times, and he decides:

1. Which points must be covered by experienced marshalls, i.e. the difficult ones. He should try to reserve one or two home-club members who can marshall anywhere as reserves.

2. Which corners should be covered by visiting clubs and makes sure that one member has the job of seeing that his club's corner is always covered.

#### Scrutineer

This official must have a good knowledge of ECRA Regulations and if possible, a knowledge of full-size racing cars. His equipment should consist of an ECRA scrutineering gauge, an accurate scale rule and a list of the wheelbase of as many full-size cars as possible. Any protest against his decision must be made to the Stewards.

#### Stewards

These are the ultimate authority on the day. They should consist of one home-club member with a good knowledge of the Rules and the sport generally, and one similar person from each of two visiting clubs - three in all.

They should avoid taking part in arguments and act only on protests from a competitor or by request of an official of the meeting. If they consider a matter of sufficient general importance they can report it to the Competitions Secretary for discussion or decision by the Council.

Should one of the stewards be himself involved in a dispute and feel unable to give an impartial vote, he should ask a member of another visiting club to take his place for that particular protest.

#### General

If sufficient members are available, it is a good idea to make someone responsible for repairing any faults which may occur with the track or lap recorders.

All officials, particularly the clerk of the course and the scrutineer, should have a current copy of the ECRA Handbook.

Every official should know his duties perfectly and also realise the effect of his actions on the meeting. The meeting should then run without apparent effort or officialdom.

#### Note

Clubs are advised to obtain insurance to cover their liability for injury or damage to persons or property, and against the loss or damage to their equipment.

#### MARSHALLING

One of the most vital posts to be filled at any slot-race meeting is that of corner marshall. Unfortunately, it is often regarded as being an irksome, thankless chore to be done as little as possible, and fit mainly for the lesser drivers or those with enough conscience to do more than their fair share.

This need not be the case as, if every competitor marshalled the same number of times that he raced, a good deal of delay whilst calling for marshalls, would be avoided. Remember, you'll want marshalls whilst you're racing, so be prepared to do your share. A good idea is to marshall immediately after you have raced, so leaving yourself with plenty of time to prepare your car before your next race.

Some tips for marshalls are listed below:

- 1. Don't wear anything that dangles on the track there is no need to create more work for yourself than is already provided by the drivers.
- 2. Try to concentrate on the job in hand. This entails not holding a conversation or eating your lunch, etc.
- 3. Don't try to replace a de-slotted car if there is a chance that you will knock another car off in the process your first task is to clear the circuit of debris.
- 4. Don't guess which lane to put a car back into if it's not stickered properly, that's the driver's fault and he will thank you in the long run for not putting it in the wrong lane.
- 5. In the event of a multiple crash, the car causing the pile up is always replaced last.
- 6. Don't take anything that a driver says to you in the heat of the moment as a personal insult. He probably doesn't mean it it's just that you are the most convenient person for him to vent his frustrations on.

Whilst there is no excuse for a really bad piece of marshalling, the drivers can help to make the marshall's job a little easier by following these basic tips:

- 1. Ensure your car is correctly stickered, with the sticker in a clearly visible position it's not much good placing it on the rear wing as the marshall will have his hand over it when he picks the car up.
- 2. You will probably know that you've overdone it before the car deslots, but the marshall won't. If you shout at him you will only succeed in making him lose his concentration at the critical moment your car comes off. Likewise, if the marshall has more than one car in his hands, all your yelling at him is likely to achieve is to make him even more confused, with the result that he will take longer to sort things out, possibly wrong-laning you in the process.
- 3. If you see a car across your lane, don't try to drive straight through it and then expect the marshall to put you back in the slot in double quick time. You'll save much more time by waiting for the marshall to clear the obstruction and you won't run the risk of wrecking your car or that of the other driver.
- 4. Finally, try to keep your temper and never, never use bad language, as this do nothing but damage to the reputation of our sport. If you do find that you can't help hurling abuse at a marshall, it costs nothing to go and apologise to him after the race which will certainly raise his opinion of you from the depths to which it had dropped.

#### RULES OF THE ASSOCIATION

The Rules are made by the majority vote of ECRA members and are primarily intended to cover ECRA Championships. However, they are generally used for all Open Meetings and other events, so clubs wishing to deviate from them should clearly state any such deviations in their regulations for the event.

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Part 3. Car Standards Part 7. Driving Permit Regulations.

Part 4. Formula 32.

#### Note

In preparation for metrication, metric equivalents have been included with the remaining imperial dimensions in the car and track standards. They have been rounded up or down in such a way that, when they become current, all existing legal cars and tracks will remain so. However, at present all metric dimensions in brackets are for guidance only, and cars and tracks must conform to the unbracketed dimensions.

#### PART ONE: Racing Classes

#### **Grand Prix**

Class 1: Any single seater racing car built to, and raced under, Formula 1, Formula 5000, U.S.A.C. or C.A.R.T. regulations since 1st January, 1966.

#### Sports/GT

Class 2: Any 2 seater or closed 2 + 2 (occasional seat) sports or sports racing car or any single seat Can-am car built to and raced under F.I.A. or Can-am regulations since 1st January 1966.

#### **Production Saloon**

Class 3: All closed cars, the full-size prototypes of which has 4 or more full-size seats, and circuit racing derivatives of such cars. Note: where doubt arises as to whether a car's seats are full-size, the Competitions Secretary will base his decision on the class in which the full-size car is raced.

#### Important Notes

- (a) Closed cars means cars where the roof is an integral part of the body or where a hard top is fitted. Cars, the full-size prototypes of which have soft or fabric tops which can be folded down, are regarded as being open.
- (b) Four-seater open cars are not eligible to compete in any ECRA class set out above.

#### PART TWO: Track Standards

Note: metric dimensions in brackets are for guidance only and tracks must conform to the unbracketed dimensions.

1. The slot width must be a minimum of  $\frac{1}{2}$ " (3mm) and a maximum of  $\frac{3}{16}$ " (5mm). The depth must be a minimum of  $\frac{3}{16}$ " (5mm), but  $\frac{1}{4}$ " (6.5mm) is preferred, and organisers of meetings must inform competitors in advance if

the slot depth is less than 1/4" (6.5mm). At least one point in each lane shall have a slot depth of not more than 1/4" (6.5mm).

Lane spacing should normally be at least 3" (75mm) but 3½" (90mm) is

preferred for 1/32nd scale and 4" (100mm) for 1/24th scale.

2. The contact surface on each side of the slot must not be less than 1/8" (3mm) or more than 1/4" (6.5mm) in width (metal-sprayed tracks excepted), and at all points on the track there must be pick-up contact 3/16" (5mm) from the centre of the slot. Note: tracks may have a short 'dead' section on one straight for lap recording purposes.

3. Looking in the direction of travel, the positive contact must be on the left

of the slot and the negative on the right.

4. Clubs must provide accurate lap recording equipment without additional

fittings to the car being necessary.

5. Track voltage must not exceed 16 volts D.C. off load, nor must it drop below 12 volts D.C. when each lane is drawing 4 amps. The voltage should not drop below 12 volts D.C. when one lane is drawing 10 amps.

6. It is the responsibility of all clubs to ensure the minimum of A.C. 'ripple' in the power supply at the track. All track power supplies must include one or more 12v D.C. batteries with a combined capacity of at least 30 amp. hours, but preferably 100 amp. hours minimum. (Note: an average small car battery is around 35-40 amp. hours capacity).

7. Tracks must be wired for dynamic braking.

8. No personal external power supplies intended to enhance the performance or improve the braking of the cars are permitted.

9. Controller plugs are to be B.S. 546 3-pin, 2-amp type, wired as follows:

Live to power lead.

Neutral to common lead.

Earth to brake lead.

On all new circuits, and on existing circuits where possible, the live terminal shall be positive with respect to the earth and neutral terminals of the controller sockets. The polarity shall be stated on meeting entry forms if it is not as above.

10. Clubs wishing to have a third, lights tape should install it on the right hand side in the direction of travel, so that the centre of the tape is ½" (13mm) from the centre of the slot.

11. Wiring Diagram:

Fig. 1. 'Normal' controller (i.e. fixed resistor and brake contact).

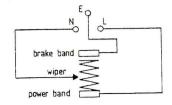


Fig 2. 'Barrel' controller (i.e. fixed brake and power contacts and moving resistor).

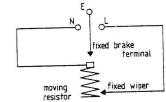


Fig 3. Correct track polarity. controller

12. WARNING: The use of epoxy resins on controller resistors should be avoided as these may produce toxic fumes if the resistor becomes overheated.

#### PART THREE: Car Standards

Note: metric dimensions in brackets are for guidance only. Cars must conform to the unbracketed dimensions.

1. All models to be built to 1/32nd scale of the full-size prototype with a tolerance of plus or minus 1/16" (2mm) in wheelbase. The onus of proof of dimensions rests with the driver. Note: on 6-wheeled cars all three measurable wheelbases must be accurate withint he above tolerances.

Cars complying with Formula 32 Regulations may be raced in other events that their bodyshells are eligible for and the wheelbase tolerance will not apply, providing the wheelbase REASONABLY fits the body.

2. Bodies must be reasonable representations of the prototype. This implies

(a) Wings and other aerodynamic devices must be of the correct proportions, and correctly positioned. In the case of a non-standard device, photographic evidence of it's use must be supplied by the competitor.

(b) Wheelarch openings on the model must be the same as those on the fullsize car, i.e. they may not be cut out where the prototype has closed arches. Likewise, where the prototype has open wheelarches these must be open on the model. Nor is it sufficient to just leave these openings unpainted - they must be cut out.

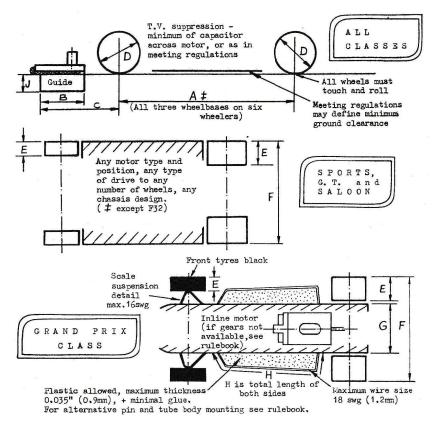
(c) Major visible appendages, such as lights, intakes, engine detail, etc., must be shown in their correct positions and colours.

(d) Rear bodywork, if fitted to the prototype, must not be omitted.

(e) In Class 1, the rear detail (e.g. gearbox) may be omitted provided that, on the prototype, the leading edge of the wing is behind the rear edge of the rear tyres.

- (f) The Council or Competitions Secretary have the power to declare any bodyshell ineligible if it does not conform to the above. ECRA maintains a list of non-approved bodies, details of which can be obtained from the Competitions Secretary.
- 3. Clear plastic bodies must be realistically painted.
- 4. All cars must carry clearly legible racing numbers in at least two APPROPRIATE places.
- 5. All cars must have transparent windscreens and windows as found on the prototype.
- 6. All cars must have a driver securely fixed, and consisting of a minimum of head, shoulders, arms and top segment of the steering wheel joining the hands. None of these items may be merely painted in.
- 7. No part of the motor, chassis or gears (excluding axles and axle tubes only, in Class 1) shall be visible when viewed from above or through the windscreen or windows.
- 8. There is no restriction on the type of drive which may be used or which wheel or wheels are driven, except that all Class 1 cars must be 'in-line', i.e. the motor shaft is at right angles to the rear axle.
- Note: Anglewinder chassis shall automatically be allowed in Class 1 if suitable in-line gears become generally unavailable. Having satisfied themselves that they are unobtainable the Council shall give at least one month's notice of the date from which anglewinders will be permitted.
- 9. The maximum length of the guide blade must not exceed  $\frac{1}{8}$ " (23mm) nor must the extreme front edge of the guide blade project more than  $1\frac{1}{8}$ " (29mm) forward of a straight line drawn between the centres of the leading pair of wheels.
- 10. No projections downwards capable of guiding the car, except for the guide blade, detailed in Rule 9 above, and pick-ups are permitted.
- 11. All cars must be suppressed against T.V. interference. The minimum suppression to be a capacitor across the motor brushes unless supplementary regulations for a meeting state otherwise.
- 12. At the start of a race the overall tyre diameter must not be less than  $\frac{5}{8}$ " (15mm) or scale size, whichever is the smaller.
- 13. The overall width of all tyres must be as follows:
- Maximum \%" (16mm) Minimum 3/16" (4mm). All road wheels must touch and roll.
- 14. All cars must pass through a gauge 64mm wide. The tyres must not protrude outside the enveloping body, wings, mudguards or flares.
- 15. In Class 1, the maximum overall width of the chassis is 1\( \frac{1}{2} \) (32mm). This limitation does not apply to scale engine and exhaust detail or suspension detail AS FOUND ON THE PROTOTYPE. Suspension detail thicker than 1/16" (1.6mm) rod or wire may result in disqualification. Suspension detail must be in the correct position and may not be filled in with lead or other weights.
- 16. In Class 1, vacuum-formed plastic bodyshells only are permitted, and these must not exceed 0.035" (1mm) in thickness at any point. No weights may be attached to the body so as to be outside the maximum 11/4" chassis width.

#### ECRA CHASSIS RULES ILLUSTRATED



# Formula 32 cars must use chassis and motor as defined in rulebook part 4.

Dimension	Minimum		Maximum	1
A	Scale size minus 1/16in	(2mm)	Scale size plus	1/16in, (2mm)
A #	Body must reasonably fi	t standard	3 in. chassis.	(76mm)
В	None	8	$\frac{7}{8}$ in.	(23mm)
C	None		1 <del>1</del> in.	(29mm)
D	5/8 in. or scale size	(15mm)	None	
Ξ	3/16 in.	( 4mm)	5/8 in,	(16mm)
F	None		64mm	
G	None		$1\frac{1}{4}$ in.	(32mm)
H	None		150mm	
J	Track normally 1/4 in, mi	nm.3/16in.	Track maximum 1/	4 in. (6.5mm)

The rules illustrated in these diagrams are defined in the ECRA handbook. Dimensions in brackets are for guidance only.

17. In Class 1, for body mounting purposes only, up to 150mm of not thicker than 18swg. (1.2mm) wire may be used outside the 11/4" chassis width limit together with a reasonable amount of tape. As an alternative to this, a maximum of 2 pin tubes per side, not exceeding 2mm o.d. and substantially parallel to the axles, are permitted outside the chassis width limit. Up to four pins or 100mm of wire not thicker than 22swg (0.8mm) may be used with the pin tubes. Note: wire outriggers or pin tubes, as described above, must be fixed to the chassis within the chassis width limit. Plastic 'pans' are regarded as being part of the bodyshell, and must therefore be of only one thickness of not more than 0.035" (1mm) thickness. The 'pans' should be in clear or translucent plastic, with a minimal amount of fixing glue. No stiffeners are

18. In Class 1, the cars must have black front tyres. One-piece wheels and tyres must have the appropriate part black.

#### PART FOUR: Formula 32

The Competitor

1. The following are ineligible to race in Formula 32 events leading to or consisting of the National F.32 Finals:

(a) All former individual National Champions (including F.32).

(b) All those who have qualified for, or raced at, the Individual National Finals (except F.32) in any of the preceding years.

(c) All those who have qualified for, or raced at, the F.32 National Finals in

all of the preceding 3 years. (d) All thsoe who have raced in the actual Final (1st six) at the F.32 National Finals in any of the preceding 3 years. This rule applies to finalists from 1979

Finals in any of the preceding 3 years. This rule applies to finalists from 1979 onwards.

Note: Competitors who qualify for other Individual National Finals as well as the F.32 Nationals may race in both events in that year.

#### The Car

2. (a) The cars to be used must be Sports, G.T. or Saloon cars from the ECRA Classes 2 or 3, and the bodyshell must reasonably fit the wheelbase of the chassis.

(b) All cars must comply with the Car Standards except as stated below.

(c) Cars must use an ECRA-approved chassis as described in (d) below. No part of the chassis may be removed or repositioned and the only additions are strengthening parts and weights.

(d) Chassis Specification Note: this specification is intended as a guide to chassis manufacturers. Competitors are not allowed to construct their own chassis.

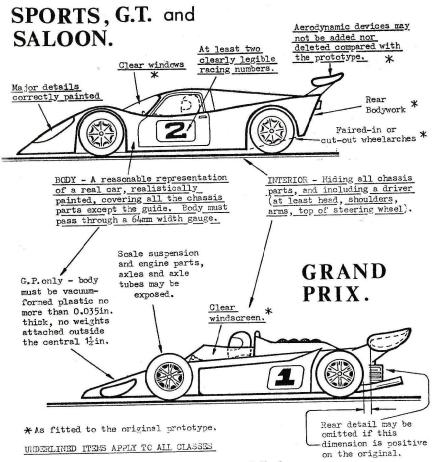
i. The chassis must be constructed to allow for a minimum motor/rear axle angle of 15°.

ii. The chassis must have a drop arm for the guide.

iii. The chassis must incorporate hinged side pans.

iv. No hinged "plumber" action is allowed.

v. The wheelbase must be 3" (76mm) plus or minus 1/16" (2mm).



The rules illustrated in these diagrams are defined in the ECRA handbook.

The Competition Secretary holds a list of non-approved commercial bodies.

- vi. The maximum distance from the centre line of the rear axle to the centre line of the guide pivot hole is to be  $3\frac{1}{2}$ " (89mm).
  - vii. No ballraces are allowed.
- (e) The car shall be powered by the Mura Group 20 or the Mura MII Group 20 motor, the can, endbell (including hardware), bearings and armature of which must remain standard and unmodified. The endbell, however may be held on with screws and a small piece of plastic may be removed to obtain chassis clearance. The magnets, brushes and springs may be changed for other items and magnet shims may be added. The use of cobalt/smarium magnets is not permitted.

(f) All remaining components are a free choice.

PART FIVE: National British Championships

- 1. The Association shall, each year, hold a meeting or meetings to decide the National British Championships for 1/32nd scale models in the following:
  - a. Individual Grand Prix (ECRA Class 1). b. Individual Sports/GT (ECRA Class 2).
  - c. Individual Production Saloon (ECRA Class 3).
  - d. Individual Formula 32.
- e. Club Teams: 1981 ECRA Class 2. 1982 ECRA Class 3.

f. Constructors.

**Individual Championships** 

2. a. Such Championships will be contested on the following basis:

Areas with under 5 members - minimum of 0 qualifiers.

Areas with 5 to 24 members - minimum of 1 qualifier

Areas with over 24 members - minimum of 2 qualifiers.

The next six vacant places are allocated to the Areas with the largest membership. Extra places may be allocated by the Council up to a total of approximately 30 in each class. In allocating such places the Council shall consider the size of Area memberships, Area competitiveness and the likelihood of the places being taken up.

Note: Overseas members of ECRA, able to form a group of 25 or more members and run a suitable qualifying procedure, may, on application, be granted a place at the National Finals.

b. The membership for each Area is that registered at 1st May preceding, and in order to qualify for the Individual National Championships, drivers must

be ECRA registered members by 1st May that year.

c. Each Area shall arrange at least two meetings amongst its constituent members to decide the qualifiers, and shall inform all interested members of such arrangements.

d. In Area Meetings, the organisers shall arrange for sufficient heats and semi-finals (or sub-finals) to be held to enable at least the first six competitors to gain championship points.

Club Team Championship

3. a. Each Club may enter one team in the National Club Team Championships, provided that the club is affilliated to ECRA by 1st May of

that year. The drivers in the team must all be ECRA-registered members of the club at the time of the event, but the same drivers need not be used in each event. An Area must run at least one meeting to decide the qualifying team. b. The Association shall organise whatever additional meetings are necessary to reduce the number of teams qualifying from the Areas to that

which can be catered for at the National British Finals meeting. c. To participate in any team event including up to and including the National Finals, a member's permit must show him to be a member of the

club he is driving for.

d. Any person who has raced for one club in any event leading up to the Team Championship may not race for another club in the Team Championship during the same year or season.

e. The race format shall be as follows:

i. Each team shall consist of four drivers and 2 cars.

ii. The National Team Race final shall be of 3 hours duration, but semi-finals and Area team races need not be of this length. In all team races leading up to and including the Team Race Final each driver shall race for an equal period of time, and each team shall race on each lane for an equal period of time. For the purpose of this rule, 'driving' shall include repairing the car or waiting for it to be repaired if this is necessary during the driving period. Repairs to the car may only be made during the running time of the race.

iii. Once a team's second car has been used in a race, the first car cannot be used again in that race. Teams will be required to nominate

their first and second cars before the race commences.

iv. The winners shall be the team covering the greatest distance. Ties shall be decided by the distance covered in the segments, starting with segment 1.

v. At the National Team Race, all competing teams will have both their cars impounded when not being raced, throughout both semi-

finals.

**Constructors Championship** 

4. At the National Individual Finals each year, a trophy shall be awarded for the best constructed car overall. This shall be judged giving credit for all the work carried out by the constructor. The winning car must complete one heat with at least 70% of the laps of the fastest heat in that class. Final judging shall take place after the heat to ensure that items are not used which are impractical on a genuine slot car.

#### General

- 5. a. The track used in all events leading up to the National British Championships must have a minimum of four lanes and be not less than 50' (15m) to the lap, marked out in sections of 1/10th of a lap or less.
- b. All cars competing in the National Finals shall be scrutineered before competing and, if they do not comply with the Car Standards, shall be excluded.
- c. In Area events, all cars qualifying for semi-finals, sub-finals and finals shall be scrutineered before those events are run.

- d. Drivers may accumulate points in only one ECRA Area's qualifying events leading to Individual or Club Team National Finals in any one year or season.
- e. To participate for points in Area Meetings, a member must hold a current permit for that Area.

f. Driving Permits should be carried by all members whilst participating in an official ECRA Area or National Championship Meeting.

g. All Competition Rules, Racing Classes (as specified in Part 5, Rule 1), Track Standards and Car Standards apply to and must be enforced in all events leading up to and including the National British Championships. Certain local conditions may require additions to these; in particular it is widely accepted that a club may insist on a minimum ground clearance or addition T.V. suppression. Note: clubs wishing to insist on these additions must given competitors written notice of them before the day of the event. However, Part 6, Rule 4 does not give organisers the right to modify Competition or other Rules in the events specified in this rule.

h. The Victor Ludorum Trophy at the National Finals shall be calculated by adding the points obtained in each class (except F.32). Points shall be allocated 30 for 1st place, 29 for 2nd, etc., down to 1 point for 30th place. j. A best presented car award shall be awarded in each Class at the National Finals. These awards shall be judged on the appearance of the car as viewed

on the track.

#### **PART SIX: Competition Rules**

1. The organisers shall appoint a clerk of the course, three Stewards - at least two of whom shall be visitors and sufficient scrutineers and marshalls to efficiently run the event.

2. The clerk of the course shall have general control of the meeting. He may stop a race (by reasons of a false start or other reasons) and order a re-run. Any questions arising out of the general running of the meeting shall be referred to the clerk of the course whose decision shall, subject to an overriding decision by the stewards, be final.

3. An aggrieved competitor has a right of appeal to the Stewards. Should he not be satisfied with their findings, he may refer the question at issue to the

Competitions Secretary for a ruling.

4. Supplementary regulations and entry forms shall specify the Classes to be raced, any special rules and any variations of the Competition Rules. If no variation is specified, these Competition Rules shall apply.

5. Supplementary regulations must state whether 'home' drivers are to be

allowed to compete at a meeting.

6. Entries received after the official closing date shall not be accepted.

- 7. Drivers must book practice with the clerk of the course or his deputy.
- 8. A car or chassis that has been raced in one class shall not be raced in another class or raced by another driver at the same meeting. If a separate F.32 event is organised at a meeting, a F.32 car or chassis may be run in one other event at that meeting. This event shall be stated in the supplementary regulations of the meeting.
- 9. Proxy driving is not permitted.

10. Before racing starts, the organisers shall allocate adequate practice time to all competitors and shall notify competitors of their lane or lanes.

11. Drivers may drive their cars to the start line.

12. If, when a race is ready to start, any competitor is missing, he shall be allowed one minute to bring his car to the grid. The race shall then be started and the competitor may join the race thereafter.

13. If, when a race is started, all the cars do not leave the starting grid, the clerk of the course shall declare a false start and order a restart. Power to the lanes shall be checked and if, on the restart, all cars do not leave the grid,

those cars shall be presumed faulty and the race shall continue.

14. If, at the first corner, half or more of the cars are deslotted, the clerk of the course shall stop the race and permit a restart. At the National Finals, in the actual Finals only, the race shall be restarted if half or more of the cars are deslotted at the first or second corners.

15. Heats shall be run for a fixed period of time with a minimum of 3 minutes per heat. Laps and fractions of laps covered by each car shall be recorded and

the fastest competitors shall go forward to the next stage.

16. Any finals, sub-finals and semi-finals may be run over a fixed period of time or over a set number of laps, as set out in the supplementary regulations.

17. A sub-final shall be between the fastest competitors not qualifying for the

final.

18. In finals, sub-finals and semi-finals, the fastest driver has first choice of lane, second fastest the second choice and so on until all the lanes are taken.

19. A driver qualifying for a final, sub-final or semi-final with more than one car may elect to drive any one of them. The other or others are then withdrawn. A competitor must use the car he has qualified with.

20. A driver may remove, or ask to have removed, his car from the track at any time duirng a race, to make a repair or adjustment to it. When such repairs are being made: a. they must be made off the track, b. the race will not

be interrupted.

- 21. The clerk of the course may have removed from the circuit for attention any car that he believes is creating a hazard either to other cars or the track, whether due to faulty mechanical, electrical or physical condition. The track will be switched off during the inspection only. The car thus removed may not be replaced on the track to continue racing until such time as the clerk of the course is satisfied with the repairs or corrections that have been made. 22. In the event of a competitor being granted a re-run after the end of a heat, only the competitors whose race was affected by the cause of the re-run will be allowed to count their re-run time. If possible, these competitors shall be fitted in spare spaces on the appropriate lanes in later heats, but if the heat has to be re-run, the non-counting drivers must drive, but need not use the same car as long as it is eligible for that particular class.
- 23. Any competitor intending to race at a meeting counting towards the National Championships shall not race or practice on that particular circuit in the month preceding that meeting except during the official practice sessions for that meeting.

24. Cars scrutineered before a race must comply with the rules as specified in Part 3 of this Handbook. If cars are scrutineered after a race, the scrutineer must satisfy himself that the car was legal at the start of the race, mindful that a car is not necessarily illegal if minor damage or tyre wear sustained during a race renders it temporarily outside the Regulations. However, a car cannot be allowed to continue racing if it suffers major damage, such as the loss of the main bodyshell or one or more wheels, etc.

25. Silicon based tyres and tyre dressings containing oil of Wintergreen are not allowed.

PART SEVEN: Driving Permit Regulations

1. The ECRA Driving Permit is the only proof of a driver's membership of an Area or a club.

2. An ECRA member may hold one current permit only.

3. Area Delegates may issue a receipt for applied membership which will be accepted as a temporary Driving Permit for 28 days from the date of issue.

4. In the event of a member changing his club, his Permit should be returned to the Association Secretary (not the Membership Secretary) for amendment. The application for amendment will be investigated and, if found to be bona fide, will be passed to the Membership Secretary for action.

#### ECRA MAP

The boundaries of this map are notional only and clubs situated within approximately 25 miles of a boundary or boundaries can opt to join whichever adjacent Area they wish.



#### LIST OF CLUBS IN THE U.K. AREA 1

Area Delegate A. Coppola, 23 The Orchard, Ormiston, East Lothian. Ecurie Barnton

Secretary As Area Delegate

Club address Tynecastle Boys Club, Pentland Annexe, Gorgie Road,

Edinburgh

Clubnight Wednesday

Hamilton

Secretary J. McKie, 26 Dixon St, Hamilton

#### AREA 2

Area Delegate A. Cowperthwaite, 23 Victory Road, Blackpool, Lancs. FY1 3JT

#### **Coastal Equipe**

Secretary K. Appleby, 5 Walrey Place, Blackpool FY3 7RT

Club address 24 General St, Blackpool. Tel 0253 35806

Clubnight Wednesday

Fylde M.R.C.C.

Secretary S. Sargent, 11 Margate Road, Lytham St Annes FY8 3EG

Tel 0253 724119

Club address The Reading Room, Claremont Rd, Blackpool

Clubnights Monday, Tuesday, Friday

A.R.R.A.

Secretary C.D. Fitzpatrick, 61 Larkfield Lane, Southport,

Merseyside PR9 8NN

Club address Pool Hey Lane, Southport, Merseyside.

Clubnight

Aintree M.R.C.C.

Secretary A. Clark, 22 Kinsale Drive, Birchwood, Warrington

WA3 6LX

Club address Kirkdale Community Centre, Kirkdale, Liverpool

Clubnight Monday

Bolton S.C.

Secretary G. Walker, 18 Arlington St, Bolton BL3 2BN

Club address Y.M.C.A. Dearsgate, Bolton

Clubnights Wednesday, Friday

Dog and Gun M.R.C.C.

Secretary G. Taylor, 1 Ansdell Villas Road, Rainhill,

Merseyside Tel 051 426 4782

Club address Annexe to Dog and Gun P.H. Augthan, Nr. Ormskirk

Clubnight Wednesday

Manx M.R.C.C.

Secretary G. Mitchell, 49 Silverburn, Ballasalla, Isle of Man.

Tel 0624 822715

Club address Hut behind Quaterbridge Hotel, Quaterbridge

Douglas, Isle of Man.

Clubnight Wednesday

#### AREA 3

Area Delegate C. Wallis, 26 Roxholme Grove, Leeds LS7 4JJ Tel Leeds 620311

Leeds M.R.C.C.

Secretary J. Norton, 36 Haighside Close, Rothwell, Leeds Club address Market District Boys Club, Brussels Street, Leeds 2. Thursday

Wakefield MRCC

Secretary I. Prout, 4 WOodhall Drive, Ackworth, Pontefract, W. Yorks. Tel 0977 613677

Club address Old British Relay Building, George St. Wakefield

Clubnight Monday
South Yorks MRCC

Secretary A. Leese, 75 Victoria Rd, Edlington, Doncaster DN12 1BQ

Tel. Rotherham 864935

Club address Empress Ballroom, Marlborough, Yorks.

Clubnight Monday Middlesborough MCC

Secretary J. Rutter, 161 Alma St, Hartlepool, Cleveland Club address Princess St. Community Centre, Princess St. Middlesborough.

Clubnight Tuesday

Tyne and Wear MCC

Secretary G. Kimber, 28 Doncrest, Donwell Village, Washington

Tyne and Wear. Tel Washington 462620

Club address Old Primitive Methodist Church, Blue House Lane,

Concord, Washington, Tyne and Wear

Clubnight Thursday

Retford MCC

Secretary R. Prince, Dover Lodge, Elkesby, nr Retford, Notts.
Club address The Barnloft, Manor Farm, West Drayton, Retford.

#### **AREA 4 NO KNOWN CLUBS**

#### AREA 5

Area Delegate R. Parker, 1 Doncaster Way, Bromford Bridge, Birmingham B36 8ND, Tel 021 747 0892

3 Spires M.R.

Secretary K. Packer, 41 Romford Road, Coventry, West Midlands

CV6 4FS. Tel Coventry 84982

Club address Cheylesmere Community Centre, Arundel Rd, Coventry

Clubnight Monday and Friday

Jaguar-Climax

Secretary
Club address
M. Gidlow, 24 Tamar Rd, Bulkington, Nuneaton CV12 9PU
Club address
Jaguar-Daimler Social Club, Radford Works, Coventry

Clubnight Friday

Leicester MCC

Secretary C. Loughran, 12 Markland, Eyres Monsell, Leicester Club address All Souls Church Rooms, Sawday St, Leicester.

Clubnight Monday, also Saturday afternoon

**Birmingham SRC** 

Secretary M. Perry, 38 Manor Gardens, Birmingham 33 Club address Harry Mitchell Recreation Centre, Coopers Lane,

Smethwick, Birmingham

Clubnight Tuesday

**Bedworth** 

Secretary T. Tennant, 110 Wooton St, Bedworth, Warwickshire

Club address Bedworth Youth Centre

Clubnight Tuesday

Parkside SCC

Secretary T. Hayes, 6 Watling St, Wilnecote, Tanworth, Staffs

B77 5BP

Club address YMCA Sutton Coldfield

Clubnight Wednesday

#### AREA 6

Area Delegate I. Fisher, 106 Chester Drive, Harrow, Middx. HA2 7PY Tel 01 866 8571

#### **North London SME**

Secretary A. Cordon, 44 Radcliffe Road, Wealdstone,

Harrow, Middx. Tel 01 427 9918

Club address Church Farm Community Centre, Church Hill Rd,

(due to change East Barnet, Herts.

in 1981)

Clubnight Thursday

Church Farm Racing

Secretary A. Young, 17 Little Dell, Welwyn Garden City, Tel Welwyn Garden City 32723

Club address and Clubnight As North London SME

The Chequered Flag

Secretary Mr K. Whiting, 2 Collins Drive, Eastcote, Middx.

Tel 01 427 1321

Club address The Youth Club, Gulliver Close, Northolt, Middx.

Clubnight Wednesday

Vauxhall Motors MRCC

Secretary M. Austin, 33 Totternhoe Rd, Dunstable, Bedfordshire

Club address Vauxhall Motors Recreation Club, Kingston Rd,

Luton, Beds.

Clubnight Tuesday Wonderland Raceway

Wonderland Raceway

Address 21-22 Eastern Esplanade, Southen on Sea, Essex

SS1 2ER. Tel 0702 65882

Note: This club races mainly 1/24 scale.

Billericay

Secretary J. Neil, Tyringham, 11 West Park Crescent.

Billericay, Essex.

Club Address As Above Clubnight Tuesday

Dunton

Secretary C. Leadbetter, 1 Lower Church Road, Berfleet,

Essex SS7 4PL

Club address Dunton Research Centre

AREA 7

Area Delegate C. Gooding, 1 Balmoral Close, Stoke Gifford,

Bristol, Tel (0272) 694544

**GROPE** 

C.M. Frost, 22 Phillips Rd, Marnhull, Sturminster Newton Secretary

Dorset DT10 1LF. Tel. Marnhull (0258) 820770

Club address As above

Clubnight Alternate Fridays

Hadcar

Secretary P. Morris, 19 Chichester Walk, Wimborne, Dorset

Tel. Wimborne 888329

Club address Hillbourne and District Community Association,

69 Coram Crescent, Waterloo Estate, Poole, Dorset

Clubnight Thursday

Bath MCRC

Secretary R. Norwood, 3 Ellacombe Rd, Longwell Green, Bitton,

Bristol Tel Bitton (027588) 3613

Club address Percy Boys Club, New King St, Bath

Clubnight Wednesday

**Torbay MRC** 

R. Perrow, 58 Higher Audley Ave, Torquay, Devon Secretary

Tel Torquay (0803) 36781

Club address Braddon St, Torquay, Devon

Clubsnights Tuesday & Friday

Dowty's MCC

Secretary D. Coward, 23 Curlew Rd, Gloucester, Tel (0452) 421311 Club address Sir George Dowty Memorial Club House, Cheltenham

Clubnight Wednesday

The Rabbit Warren

Secretary S. Wyatt 'Skinnersland' North Tawton, Devon

Tel. N. Tawton (083 782) 267

Club address As above

Tamar MRCC

Secretary M. Aston, 53 Goodwin Ave, Southway, Plymouth, Devon

Tel Plymouth (0752) 775363

Club address Callington Social Club, Well St. Callington, Cornwall

Penripper SCC

Secretary C. Bell, 78 Pendarves Rd, Falmouth, Cornwall

Club address Penpounds School, Falmouth

Clubnight Friday AREA 8

Area Delegate A. Manton, 59 Nutley, Hanworth, Bracknell,

Berks. RG12 4HZ. Tel 0344 52825

**Haydon MRCC** 

Secretary J.S. Jensen, 10 Pennings Ave, Rydes Hill, Guildford,

Surrey GU2 6SU

Club address Laburnum Hall, Laburnum Close, Laburnum Road

(off Grosvenor Road) Aldershot, Hants.

Clubnigt Friday

Reading MRCC

Secretary As Area Delegate

Club address Yeomanry House, Castle Hill, Reading, Berks.

Clubnight Tuesday

Roedale MCRC

Secretary C. Church, 174 Hollindean Terrace, Brighton BN1 7HE

Club address 2 Roedale Road, Brighton

Clubnight Thursday

**Surbiton MRCC** 

A. Hammocks, 46 Aston Rd, Raynes Park, London SW20 Secretary

Club address Surbiton Town Sports & Social Club, Worcester Park,

Surrey

Clubnight Friday

Crawley

Secretary C. Newble, 14 Fisher Close, Southgate, Crawley, Sussex

Club address Hut 18, Tilgate Recreation Centre, Tilgate, Sussex

Maidenhead

Secretary S. Hole, 25 Narromine Drive, Fords Farm, Calcot,

Reading, Berks.

Club address Maidenhead Model Makers Club, Holmanleaze behind

Maidenhead Sports Centre

Clubnight Tuesday

AREA 9

Area Delegate D. Harvey, 52 Hawbeck Road, Wigmore, Gillingham, Kent **Nedway Mac** 

Secretary

R. Thomas, 111 Hollywood Lane, Frindsbury, Rochester, Kent

Club address Rear of Kent's Cameras, 6 Hillside Road, Chatham, Kent Clubnight Tuesday and Friday

Something Kompletely Different (S.K.D.)

A. Rowland, 22 The Green, St Leonards on Sea, Sussex Secretary Tel. 0424 421487

The Barn, rear of the rectory, Short Lane, Old Town, Club address Bexhill, East Sussex

Reed MEC

Secretary As Area Delegate

Club address Reed Factory, New Hythe, Maidstone, Kent

Clubnight Thursday

Timaru			
Secretary	G. Sampson, 175 Kent G10 2NR	Westwood Road,	Broadstairs,
Club address	Rear of Bull Inn,	Eastry, Nr Sandw	rich Kent
Clubnight	Friday	,,	,
Bromley	<b>2</b>		
Secretary	T. Ryan, 52 Hayes	Road, Bromley,	Kent
Club address	H.G. Wells Centre	, nr Bromley Sou	th Station
Clubnight	Tuesday		
Folkestone M	RCC		
Secretary	A. Ferguson, 18 A	thelston Road, F	olkestone, Kent
Club address	The Leas Shelter,		
Clubnight	Tuesday, also Sun-	day morning	
Coulsdon			
Secretary	B. Meagher, 229 Ca	roydon Rd, Wallir	ngton Surrey SM67LR
Club address	Rear of Midland F	Bank, Chipstead V	alley Rd, Coulsdon
Clubnight	Thursday		
AREA 10			
Area Delegate	N. Harvey, 22 Jeff	ries Road, Ipswic	h. Suffolk
	Tel. 0473 214267		
Heron MCRC			
Secretary	J. Goldsmith, 8 Al	bert St. Bury St.	Edmunds, Suffolk
200	IP33 3TB. Tel 0284		
Club address	W. Vinten Ltd. We	estern Way, Bury	St. Edmunds, Suffolk
Clubnight	Monday		
Ipswich SCC			
Secretary	C. Merlo, Heather	Lodge, Levington	n, Ipswich, Suffolk
Clark and discount	IP10 0NA. Tel. Na		
Club address	Grimwade Memori	al Hall, Back Ha	mlet, Ipswich.
Clubnight Presto Park M	MDC		
Secretary		-11 D.1 N C	SURVEY & SUBSTRUCTURES AND ST
Secretary	P. Clarke, 35 Breck Norwich NR5 0RW		ostersey,
Club address			Dood Norwich
Clubnight	Norman Community Centre, Bigrald Road, Norwich Monday		
Gorleston Gre			
Secretary	A. Pawles, 3 Pier (	idns Gorleston (	Gt Varmouth
Club address	Shrublands Youth	and Adult Centre	Magdalen Way
	Magdalen Estate, C		,,,
	,		
CHARDIO			
	THROUGH THE		
1964 G.P.	V C4-1	1965	О.Т. 11
	K. Stokes	G.P.	G. Tapsell
Sports/GT	J. Ramsdale	Sports/GT	L. Hedley

1964		1965	
G.P.	K. Stokes	G.P.	G. Tapsell
Sports/GT	J. Ramsdale	Sports/GT	L. Hedley
Construct.	R. Parker	Construct.	M. Pannett
Team Race	Ashton-u-Lyne	Team Race	Beckenham MRC

1966		1973	
G.P.	G. Ball	G.P.	P. Enos
Sports/GT	J. Essex	Sports/GT	P. Enos
Saloon	G. Kimber	Saloon	R. Smith
Construct.	R. Parker	Construct.	P. Clarke
Team Race	Ashton-u-Lyne	Team Race	N. London SME
1967		V. Ludorum	R. Smith/A. Condon
G.P.	N. Hinton	F.32	J. Wilkinson
Sports/GT	S. Davey	1974	
Saloon	S. Broadbridge	G.P.	M. Burnham
Construct.	M. Pannett	Sports/GT	P. Firth
Team Race	Sidcup MCC	Saloon	P. Firth
1968		Construct.	K. Appleby
G.P.	P. Ratcliffe	Team Race	N. London SME
Sports/GT	R. Coleman	V. Ludorum	R. Smith
Saloon	R. Coleman	F.32	A. Mills
Construct.	M. Pannett	1975	
Team Race	Coulsdon MCC	G.P.	P. Williams
1969		Sports/GT	M. Burnham
G.P.	A. Aird	Saloon	J. Ballard
Sports/GT	A. Aird	Construct.	K. Appleby
Saloon	I. Jensen	Team Race	N. London SME
Construct.	G. Green	V. Ludorum	P. Williams/
Team Race	Leicester		I. Jensen
V. Ludorum	A. Aird	F.32	G. Fitzsimmons
1970		1976	
G.P.	P. Enos	G.P.	S. Walker
Sports/GT	R. Birtles	Sports/GT	P. Hore
Saloon	P. Hore	Saloon	P. Williams
Construct.	G. Green	Construct.	S. Walker
Team Race	Sydenham MCRA	Team Race	S.K.D.
V. Ludorum	P. Enos	V. Ludorum	P. Williams
1971	D C	F.32	P. Crane
G.P.	R. Scott	1977	
Sports/GT	R. Diggens	G.P.	I. Jensen
Saloon	P. Hore	Sports/GT	S. Walker
Construct.	P. Radcliffe	Saloon	S. Barden
Team Race	London SME	Construct.	S. Walker
V. Ludorum F.32	I. Jensen	Team Race	Ecurie Barnton
1972	J. Dominy	V. Ludorum	I. Jensen
G.P.	D. C	F.32	P. Young
	D. Cooper	1978	
Sports/GT Saloon	A. Condon P. Enos	G.P.	I. Jensen
	D 61 1	Sports/GT	S. Walker
Construct. Team Race		Saloon	S. Walker
V. Ludorum		Construct.	P. Lyon
F.32	M. Geraint	Team Race	Haydon MRCC
1.34		V. Ludorum	S. Walker/P Hore
		F.32	S. Jenkins
	2	2.5	

1979		1980	
G.P.	I. Jensen	G.P.	S. Walker
Sports/GT	S. Walker	Sports/GT	S. Walker
Saloon	I. Jensen	Saloon	P. Hore
Construct.	S. Walker	Construct.	S. Walker
Team Race	<b>Ecurie Barnton</b>	Team Race	Ecurie Barnton
V. Ludorum	I. Jensen	V. Ludorum	S. Walker
F.32	D. Paxman	F.32	D. Croft

#### TRADE DIRECTORY

TRADE DIRECTOR	Y	
Beatties Model Shop	Gear Manufacture and other parts supplied	210 Lewisham High St. London SE13
Betta Bodies	Bodyshell manufacture, other parts supplied	C.D. Fitzpatrick, 61 Larkfield Lane, Southport, Merseyside
Bog	Chassis	Tel: Spt 29342 S. Wyatt, Skinnersland North Tawton, Devon Tel 083 782 267
Ece Controllers	Manufacture of hand controllers	I. Fisher, 106 Chester Drive, Harrow, Middx. Tel 01 866 8571
HB Model Products	F.32 Chassis, motor, wheels, chassis, parts, services and r.t.r.'s, etc.	T. Hough, 'Fircot' Elm Lane, Earley, Reading, Berks.
M.G. Products	supplied. Chassis, motor, wheel, gear manufacture, parts services, etc. supplied.	Tel. Reading 861730 M. Goddard,
Missile Products	Slot car components supplied	M. Hunt, 48 Neuchatel Rd, Catford, London SE6 4EO
MRRC Ltd.	Copper tape and slot car parts supplied.	29 Ashley Rd, Boscombe, Dorset.
Nordic Models	Titan bodyshells and other parts supplied	Woodfall, Foulsham,
Old Pekuliar Products	Chassis and r.t.r. car manufacture.	East Dereham, Norfolk Ian Jensen, 201 High St. Old Woking, Surrey GU22 9JH Tel. Woking 23773.
One-O-One Products	Chassis, r.t.r.'s, motors, components and supplied	52 Hawbeck Rd, Wigmore, Gillingham, Kent

S.C.D.	F.32 chassis, chassis jigs and other parts	Grange Nurseries, Westgate Hill, nr.
Supershells	manufactured Mabuchi 13UO motors,	Bradford, Yorks. SRM Plastics Ltd.
Wonderland Raceways	trailer kits, etc., supplied	West St., Harrow, Middlesex.
Wonderland Raceways	Slot car components, etc., supplied	21-22 Eastern Esplanade, Southend on Sea, Essex SS1 2ER

# WE'LL STICK ONE ON YOU FOR JUST 20p (OR 30p IF YOU'RE NOT AN ECRA MEMBER)



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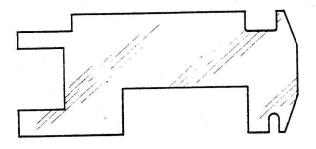
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- \* Maximum and minimum
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- \* Maximum car width
- \* Minimum tyre diameter

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