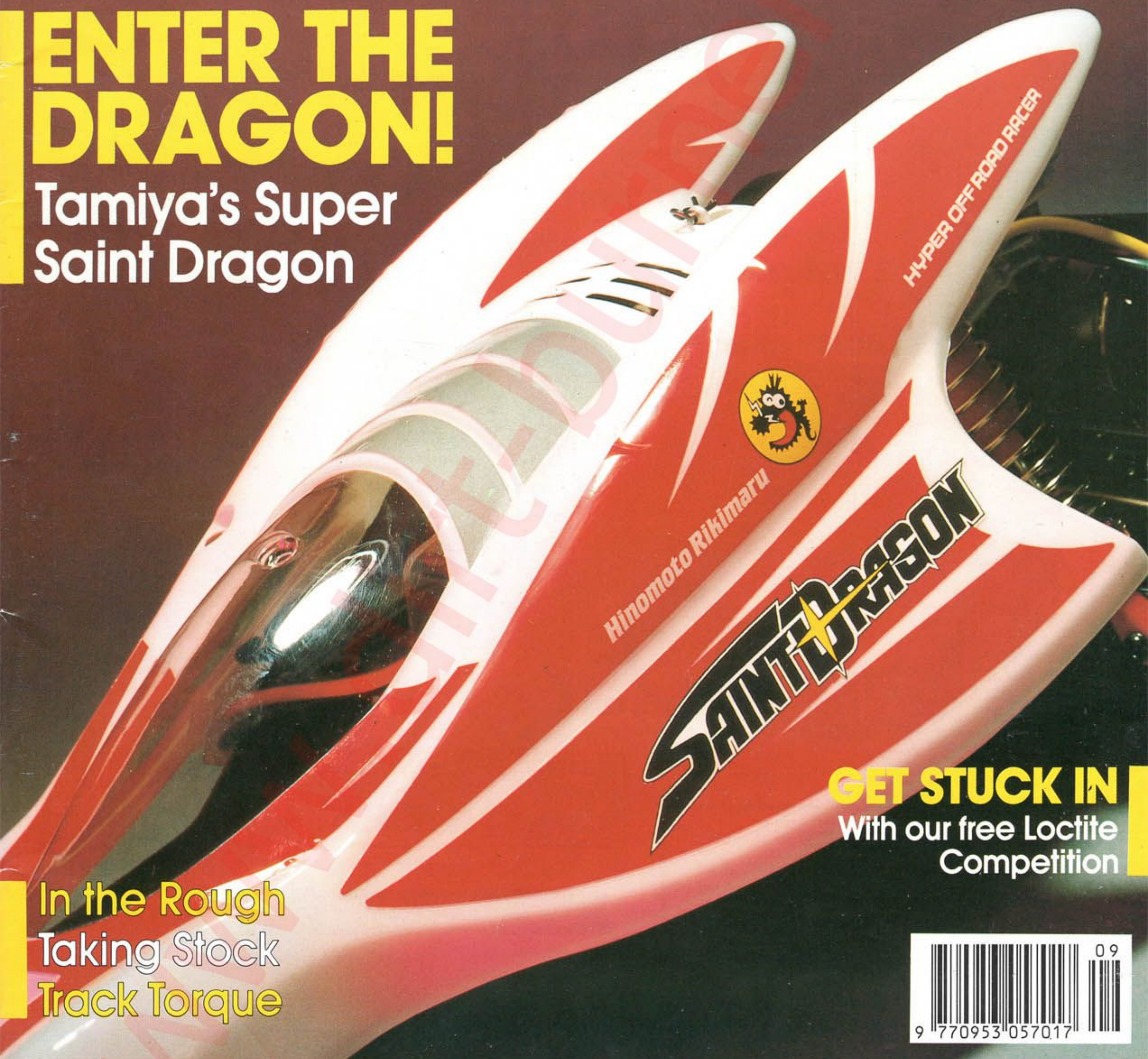


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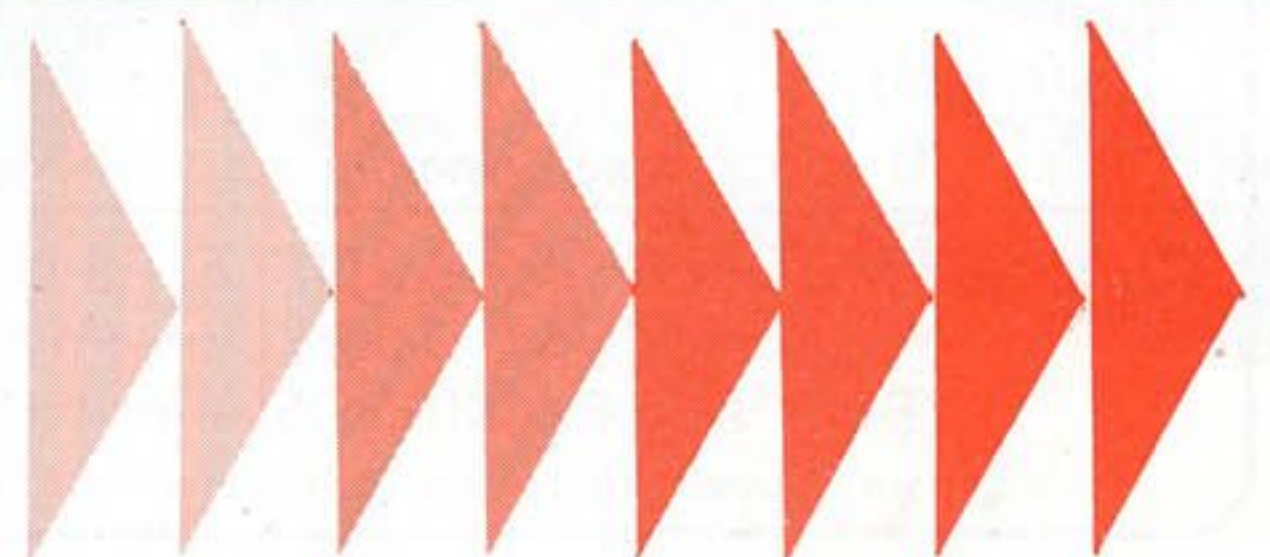
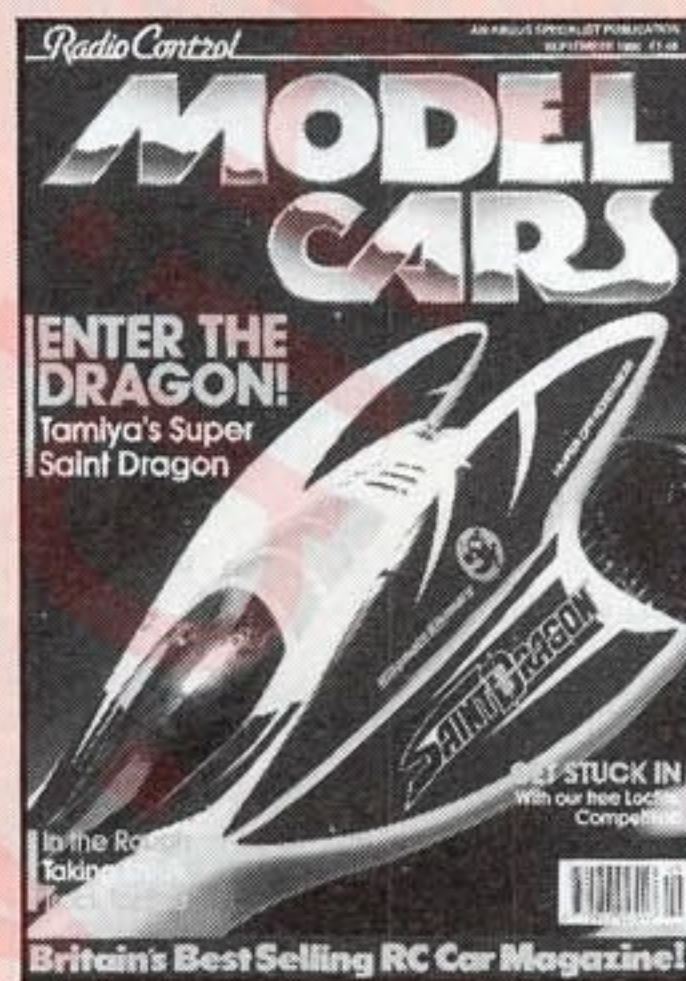
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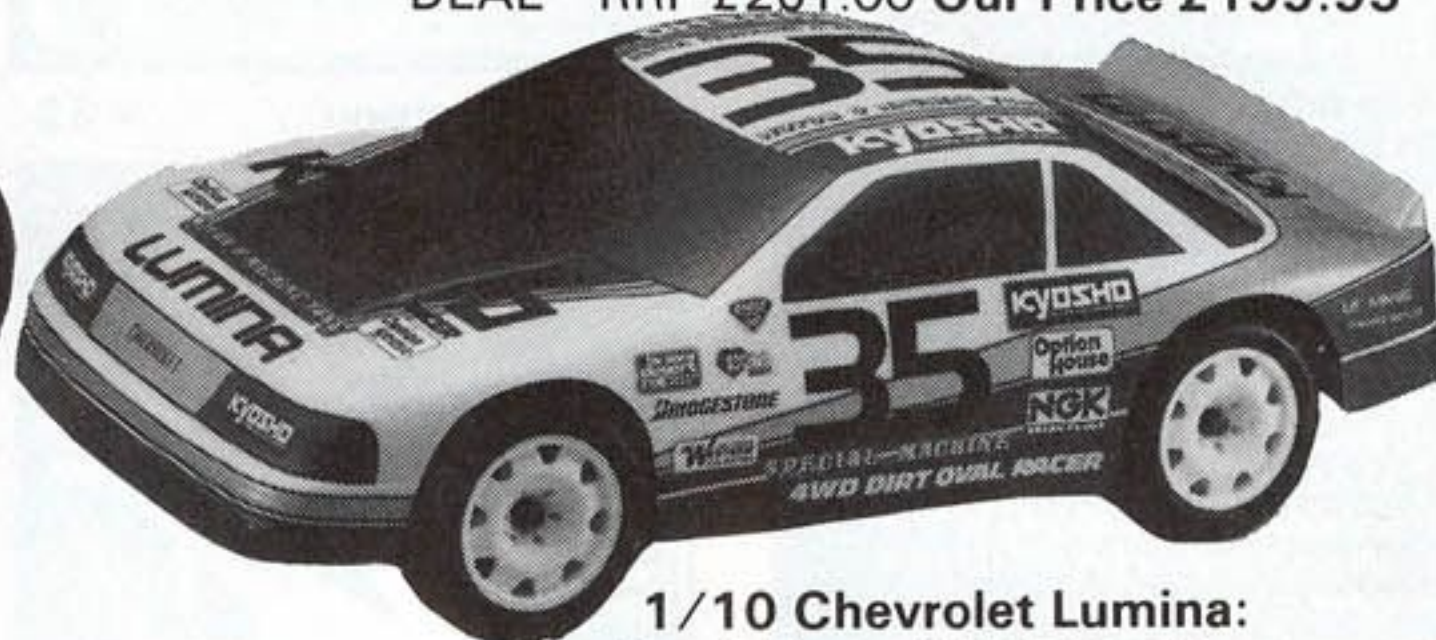


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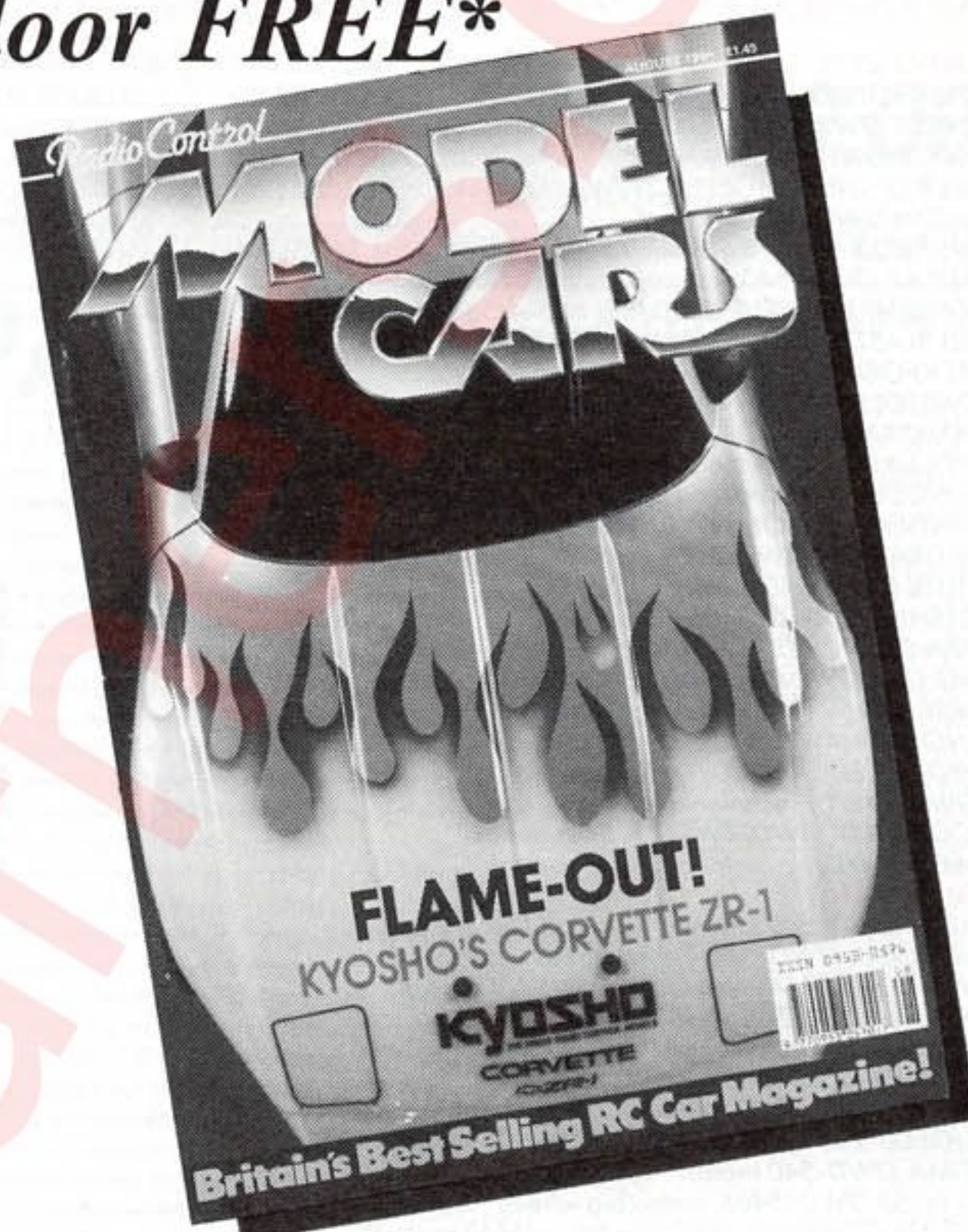
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SUPER BOMBER (Assembled) (2WD/540S motor)*	£59.00
TURBO RAIDER (2WD/540S motor)*	£69.00
AERO STREAK (Assembled) (4WD/540S motor)*	£89.00
BIG BRUTE (2WD/540 motor)*	£89.00
HONDA CR-X (2FWD/Le Mans .05 stock motor)*	£79.00
PEUGEOT 205 Turbo (2FWD/Le Mans .05 stock motor)*	£84.00
ULTIMA (2WD-540 motor)*	£89.00
BIG BOSS (2WD/540S motor/big wheel)*	£89.00
HI-RIDER CORVETTE (2WD/Big Wheel/540 motor)*	£99.00
NISSAN R89C (2WD/540 motor)*	£99.00
NISSAN 300 ZX (2WD/540 motor)*	£99.00
PORSCHE 911 (2WD/540 motor)*	£99.00
MAXXUM (2FWD/Le Mans 240 ST motor)*	£109.00
SIDEWAYS (2WD Sprint Car/540 stock motor)*	£112.00
ULTIMA PRO (2WD/no motor or speed control)**	£129.00
ULTIMA PRO 2 (2WD/no motor or speed control)**	£139.00
DOUBLE DARE (4WD/Big Wheel/2 x .05 stock motors)*	£139.00
OPTIMA CUSTOM-MID (4WD/Le Mans 240 ST motor)*	£135.00
OPTIMA CUSTOM MID SPECIAL (4WD/no motor or speed control)**	£149.00
LASER ZX (4WD/no motor or speed control)**	£139.00
STINGER MkII (4WD with Enya CXII engine)	£209.00
RAMPAGE (with O.S. 10 engine and pull start)	£159.00
CORVETTE (with O.S. 10 engine and pull start)	£169.00
CHEVROLET LUMINA (4WD/Mega Outlaw motor)*	£149.00
FERRARI F40 (4WD/Mega Outlaw motor)*	£149.00
NISSAN SKYLINE GT-R (4WD/Mega Outlaw motor)*	£149.00
NITRO BRUTE (with Enya .09 engine)	£149.00
FORD RS200 (with O.S. 10 engine and pull start)	£199.00
PEUGEOT 405 (with O.S. 10 engine and pull start)	£199.00
BURNS DX 2WD (for .21 glow engine)	£179.00
BURNS DX 4WD (for .21 glow engine)	£219.00
TURBO BURNS 4WD (for .21 glow engine)	£299.00

**KYOSHO MOTORCYCLES**

HONDA NSR 500, SUZUKI 500, RGV, YAMAHA YZR500	
Complete Deals including R/C, nicad and fast charger	£125.00

**SCHUMACHER**

TOP CAT (2WD/no motor or speed control)**	£89.00
COUGAR (2WD/no motor or speed control)**	£99.00
PRO CAT (4WD/no motor or speed control)**	£175.00

**MARDAVE KITS**

MARAUDER (for .20 glow engine)	£52.00
METEOR COMP (2WD/no motor/no speed control)**	£53.00
METEOR STD. (2WD/540 motor)**	£55.00
MINI STOCK (2WD/540 motor/nicad and charge lead)	£39.00
STOCKMASTER (for .20 Glow engine)	£58.00

**ASSOCIATED**

RC10 GRAPHITE (2WD, no motor/no speed control)**	£179.00
--	---------

**MARUI KITS**

BIG BEAR (2WD/Big Wheel/540 motor)*	£59.00
NINJA (4WD/540 motor)*	£89.00
SHOGUN (4WD/540 motor)*	£89.00
THUNDERBIRD (4WD/540 motor)*	£99.00

**HIROBO**

ALIEN MID (4WD/540 motor/Ballraced)*	£129.00
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(\*Suitable for Starter Pack, \*\*Suitable for Hi-Spec Pack)

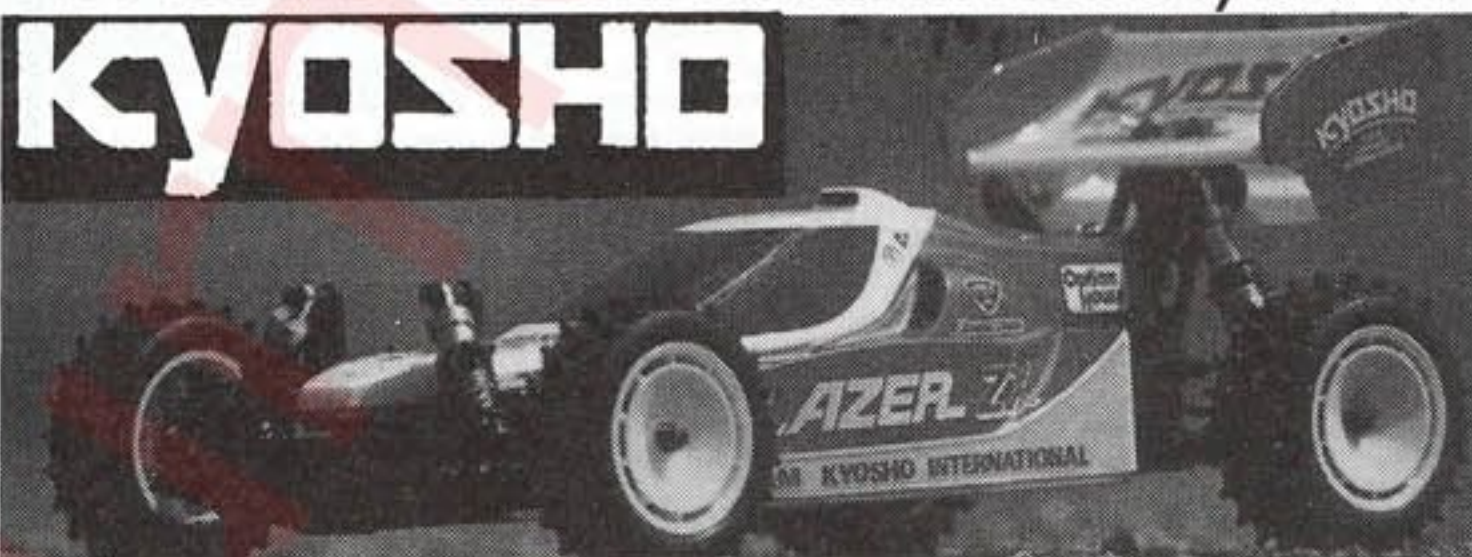


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**The FALCON**

**TAMIYA SPECIAL OFFER**

KIT PRICE ONLY £49.00

KIT PLUS MODELSPORT STARTER PACK only £99.00



**SPECIAL OFFER!** LASER ZX KIT ..... £139.00  
WITH PARMA MODIFIED MOTOR £159.00

**KYOSHO BURNS DX 4WD**

KIT: £219.00

DELUXE DEAL: £379.00

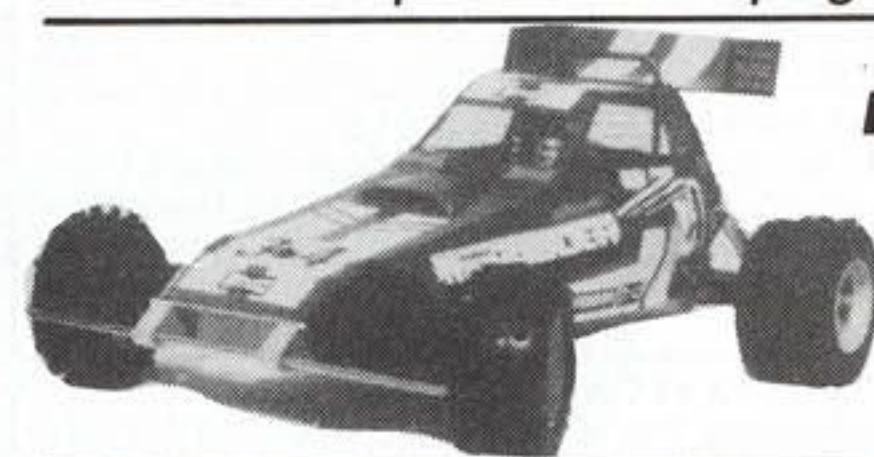
KYOSHO TURBO BURNS

4WD KIT: £299.00

DELUXE DEAL: £459.00

(Deal includes OS 21 RFB Engine

Futaba Attack Sport R/C Glowplug supply, 12v starter, fuel etc.)



**MARDAVE MARAUDER**  
KIT £52.00 DEAL £139.00

Deal includes Irvine 20

Engine and Futaba R/C

DELUXE DEAL: £195.00  
As above, but with 12v Starter,  
Glow plug supply, silencer,  
air filter, fuel, etc.)

**I.C. CAR ENGINES & ACCESSORIES**

IRVINE 20	£48.00	O.S. 21 RF-B	£89.00
IRVINE 25	£49.00	O.S. 21 EX-B	£155.00
IRVINE 20 ABC	£55.00	ENYA 21 CXL	£89.00
MAGNUM 12v ENGINE STARTER	£25.00		
JESTER GLOW PLUG SUPPLY	£16.00		

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THUNDERSHOT, SUPER SABRE, THUNDERDRAGON	£65.00
MIDNIGHT PUMPKIN	£85.00
8 'AA' SIZE NICADS & CHARGER	£14.00

**LOSI**

JR-X2 2WD (no motor or speed control)**	£179.00
---	---------

**YOKOMO**

SUPER DOGFIGHTER (4WD/no motor or speed control)**	£199.00
--	---------

**MANTUA**

JUNIOR (2WD, Picco 21 engine, pull start)	£224.00
DINGO (2WD, Picco 21 engine)	£224.00
JUNIOR or DINGO 4x4 conversion	£75.00







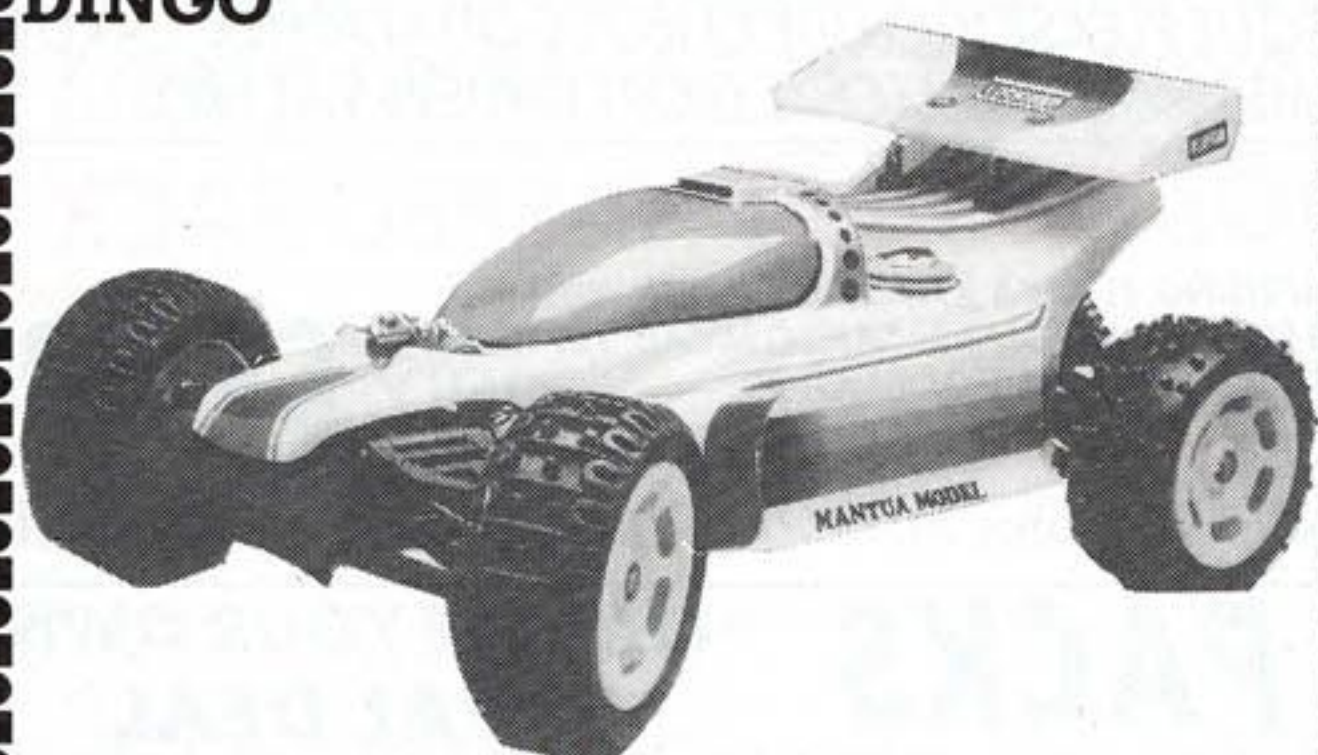


# WINDSOR MODEL SHOP

45 ALBANY ROAD (OFF ST. LEONARDS ROAD)  
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## DINGO



### FOR - SPORT - COMPETITION

- Dingo 2WD Kit ..... £124.95
- Dingo inc. engine pipe manifold ..... £224.95
- Dingo 4x4 conversion ..... £75.00

## DINGO

The Dingo gives you the opportunity to buy a car for fun or competition at the right price. The car has disc brakes, large diameter wheels, flip top tank (5 secs. to fill), no duration problems! It comes 2WD or 4WD although you can update to 4WD later when you can afford it. Also you can fit saloon bodies shown below.

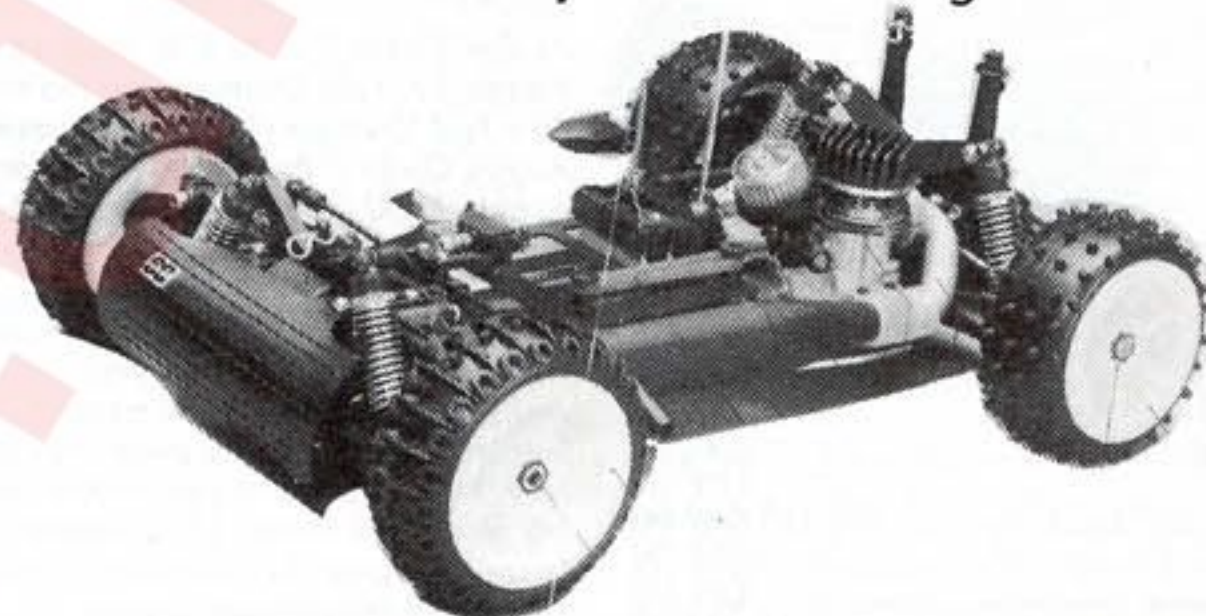
### TECHNICAL DATA

- 1 Competition servo saver
- 2 Double disk brake
- 3 Anti twisting bar
- 4 Receiver plate
- 5 Power pack plate
- 6 Servo Mount
- 7 Radio plate
- 8 Exhaust
- 9 Manifold
- 10 T4 engine (3.5cc option)
- 11 Air filter
- 12 Roll-bar
- 13 125cc tank
- 14 Large oil shock absorbers
- 15 Large hubs
- 16 Rubber tyres
- 17 Ergal rear shock absorber support

## NEW MANTUA MAGIKA 4WD

### TECHNICAL DATA

- Wheel base ..... 326mm
- Front track ..... 250mm
- Rear track ..... 250mm
- Weight with engine, muffler, radio and body ..... 2900 gr.

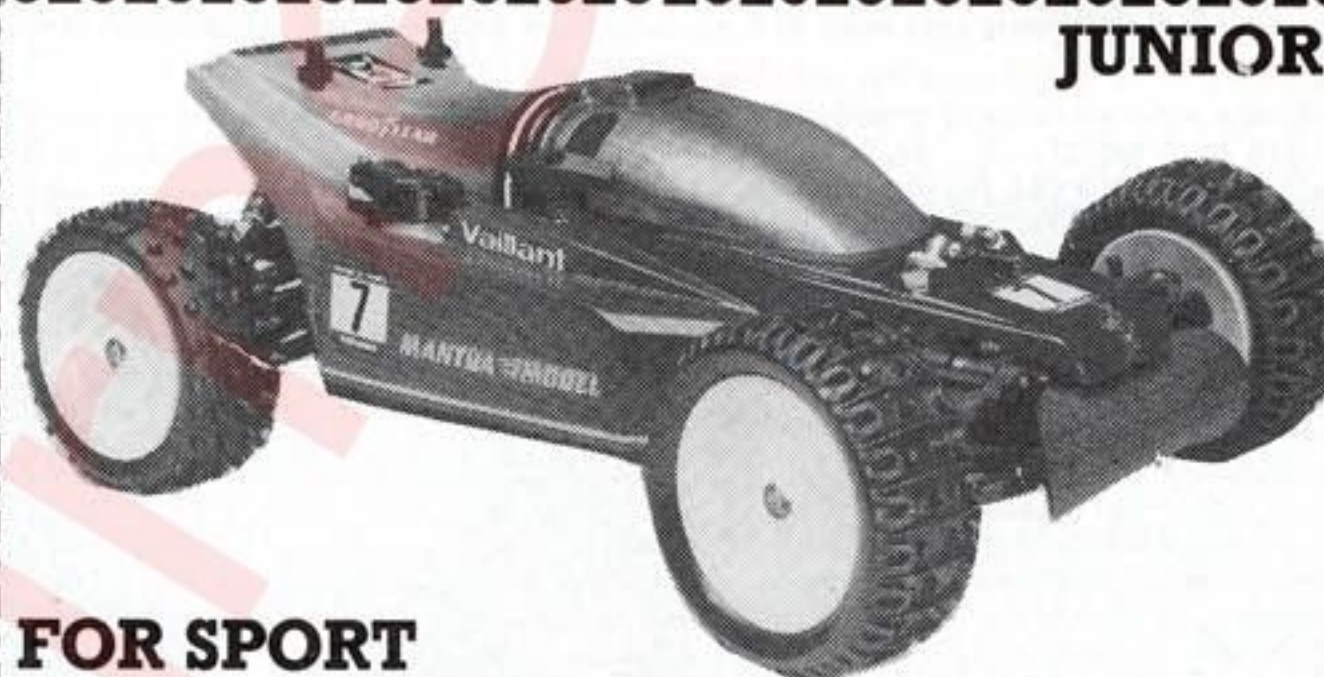


- MAGIKA STANDARD KIT ..... £240.00
  - MAGIKA PRO-KIT (BIT PRESSURE SHOCKS, WHEEL NUT CONVERSION) ..... £295.00
- BOTH KITS HAVE A CENTRE TORSION DIFF. AS AN OPTION AT £85.00 IN KIT, OR SEPARATE AT £120.00*
- STILL AVAILABLE IS THE S.G. SPACE EUROPA CIRCUIT CAR KIT £195.00**

## JUNIOR

The Junior is the first 1/8th scale pullstart off-road racer. The pull start is heavy duty to start the 3.5cc Picco racing engine which develops 1.3hp giving speeds of up to 50mph. It comes with disc brakes, flip top tank, large 4½ diameter wheels, oil filled shocks, all linkages pre-bent, shaft driven (no belts) fully updatable to 4WD and with the conversion you get a new exhaust pipe to develop more power for 4WD. You also have the opportunity to fit saloon bodies below.

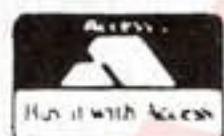
## JUNIOR



### FOR SPORT

- 2WD Pull-Start Convertible to 4WD
- Junior kit in Engine Pipe Manifold ..... £224.95
- Junior 4x4 Conversion ..... £75.00
- Length 445mm, Width 290mm,
- Height 210mm, Tyres 120mm.

- 18 T6 chassis
- 19 Front bumper
- 20 body mounts
- 21 Alu. nut wheel clamping
- 22 Front joint axles
- 23 Front conical gear differential
- 24 Rear conical gear differential
- 25 Std. central differential
- 26 Central Torsen differential (optional)
- 27 Adjustable Caster angle
- 28 2° inclination of the front and rear arms
- 29 Adjustable Camber angle

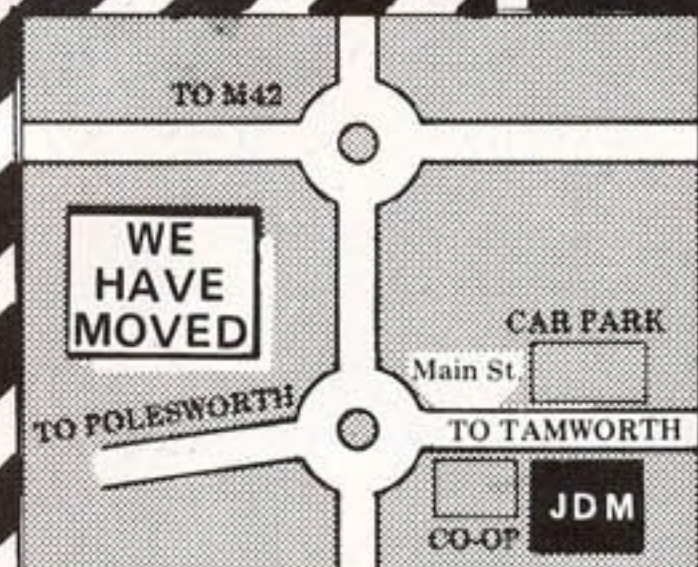


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### 2 WHEEL DRIVE TORNADO

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Kits include  
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3 Diffs  
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Thundershot.....	£87.00
Thunderdragon.....	£87.00
Hotshot II.....	£106.00

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Terra Scorcher.....	£119.00
Vanquish.....	£134.00
Clodbuster.....	£149.00
Astute Competition 2 Wheel Drive.....	£139.95

### KYOSHO

Raider.....	£49.00
Ultima PRO.....	£135.00
Maxxum.....	£115.00
Optima PRO.....	£80.00
Optima Mid Custom.....	£145.00
Optima Mid Custom Special.....	£170.00
Big Brute.....	£87.00
Hi Rider Corvette.....	£99.00
Double Dare.....	£135.00
Aero Streak.....	£89.00
Super Bomber.....	£65.00

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with every Car Deal

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£12.50 BUY TWO FOR £20.00

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£16.95 BUY TWO FOR £30.00

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£28.90 BUY TWO FOR £50.00

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LIMITED PERIOD ONLY

12 Volt 6 Amp Battery £17.95  
12 Volt ½ Amp Trickle Charger £9.95  
**£27.90**  
BUY THE TWO FOR £25.00

**ALL SCHUMAKER SPARES—**  
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S.A.E On all enquiries please U.K only.

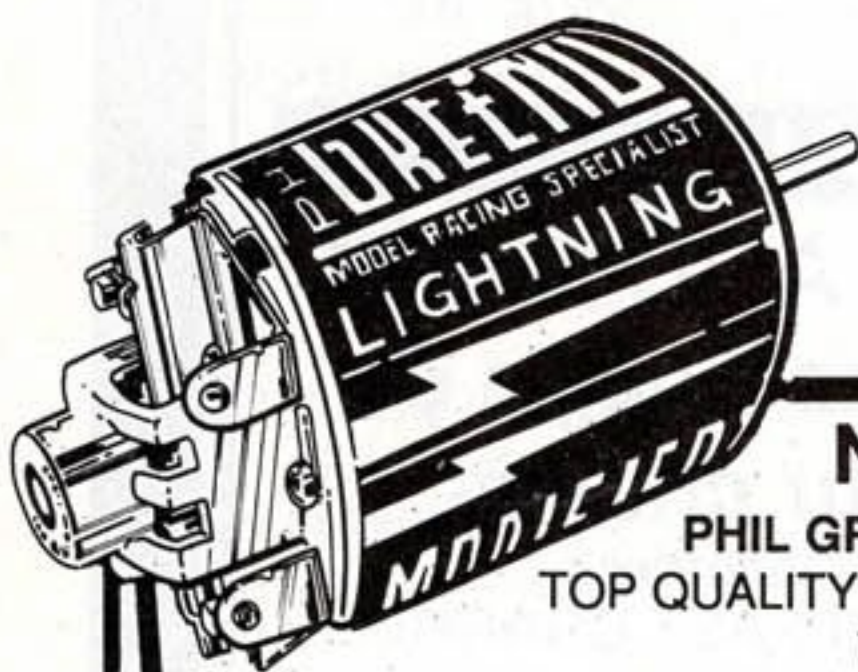


# PHIL GREENO

## MODEL RACING SPECIALIST

WE HAVE OVER 15 YEARS RACING EXPERIENCE AT NATIONAL AND INTERNATIONAL LEVEL. OUR AIM IS TO PROVIDE OUR CUSTOMERS WITH A WIDE SELECTION OF QUALITY PRODUCTS AT COMPETITIVE PRICES BACKED WITH OUR EXPERTISE AND UNRIVALLED AFTER SALES SERVICE AND ADVICE.

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### NEW FOR 1990

PHIL GREENO LIGHTNING MOTORS  
TOP QUALITY MOTORS FOR COMPETITION USE  
WITH WET MAGNETS

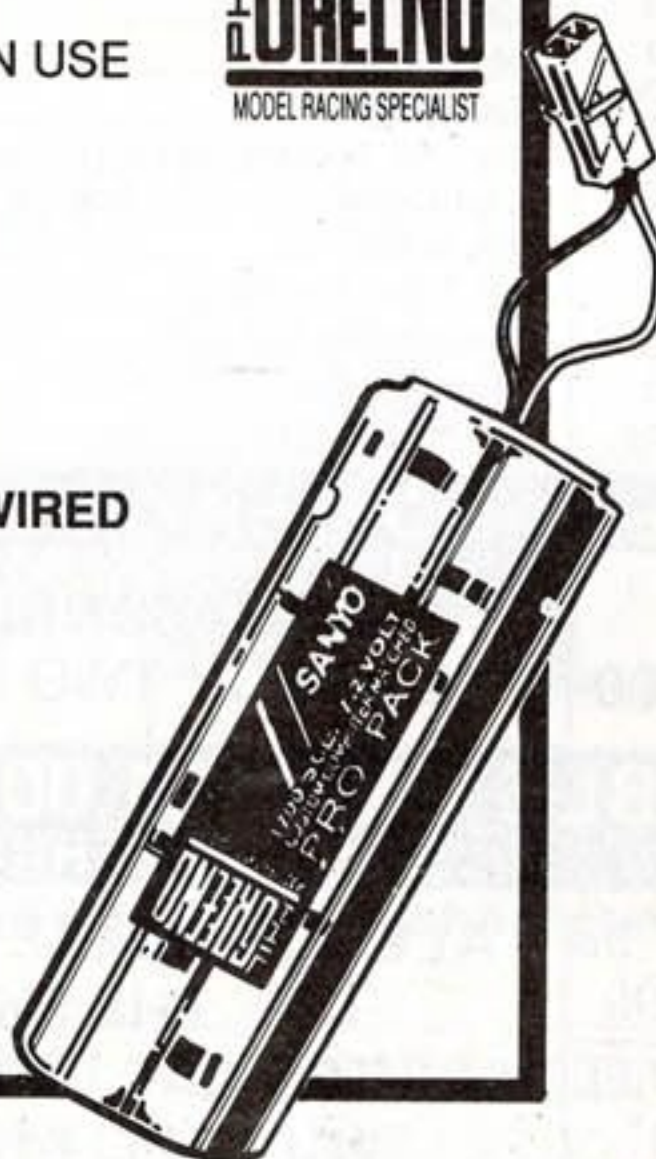


LIGHTNING STD 27 TURN £15.00  
LIGHTNING MODIFIEDS:- (BALLRACED)  
14 DOUBLE, 15 DOUBLE, 17 DOUBLE, 19 DOUBLE  
ALL MODIFIEDS ONLY £29.95

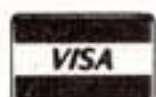
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PRO SERIES 52 + KJ £45.00  
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MONSTER BEETLE  
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LASER ZX  
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OPTIMA CUSTOM SPECIAL  
AERO STREAK  
RAIDER  
RAIDER ARR  
MAXXUM FF  
ULTIMA PRO  
ULTIMA PRO II  
BIG BRUTE  
HI-RIDER CORVETTE  
BIG BOSS  
DOUBLE DARE  
SUZUKI  
YAMAHA  
HONDA  
RAMPAGE  
ZRI CORVETTE  
FORD RS 200  
PEUGEOT 405  
BURNS  
TURBO BURNS  
BLITZ

MANTUA DINGO £124.95  
MANTUA JUNIOR £224.95

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Comprising 3 high grade monolithic ceramic capacitors,  
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**NEW Corally SP10 Car £179.95**

SOLE U.K. DISTRIBUTOR FOR P.K.  
FULL RANGE OF SPARES IN STOCK.

- Gold rear 1/10th ..... £7.95
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**The New Corally SP12 Car £149.95**

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- Gold front 1/12th ..... £4.50
- Silver rear 1/12th ..... £4.50
- Silver front 1/12th ..... £4.50
- Grand Prix C front 1/12th ..... £1.50
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**Digital Motor Management System**



- Two Models
- One for 1/10th
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- £125.00**

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- PK Multi matched SCR ..... £22.50
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- All packs are hard wired.
- Stick or saddle pack, please state which
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- Intronics Nicad Capacity meter .... £74.95
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- JR Apex car Combo ..... £173.00
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- 50w Allyclad discharge resistor 1R ..... £1.80
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**INTRONICS**

Trade enquiries welcome

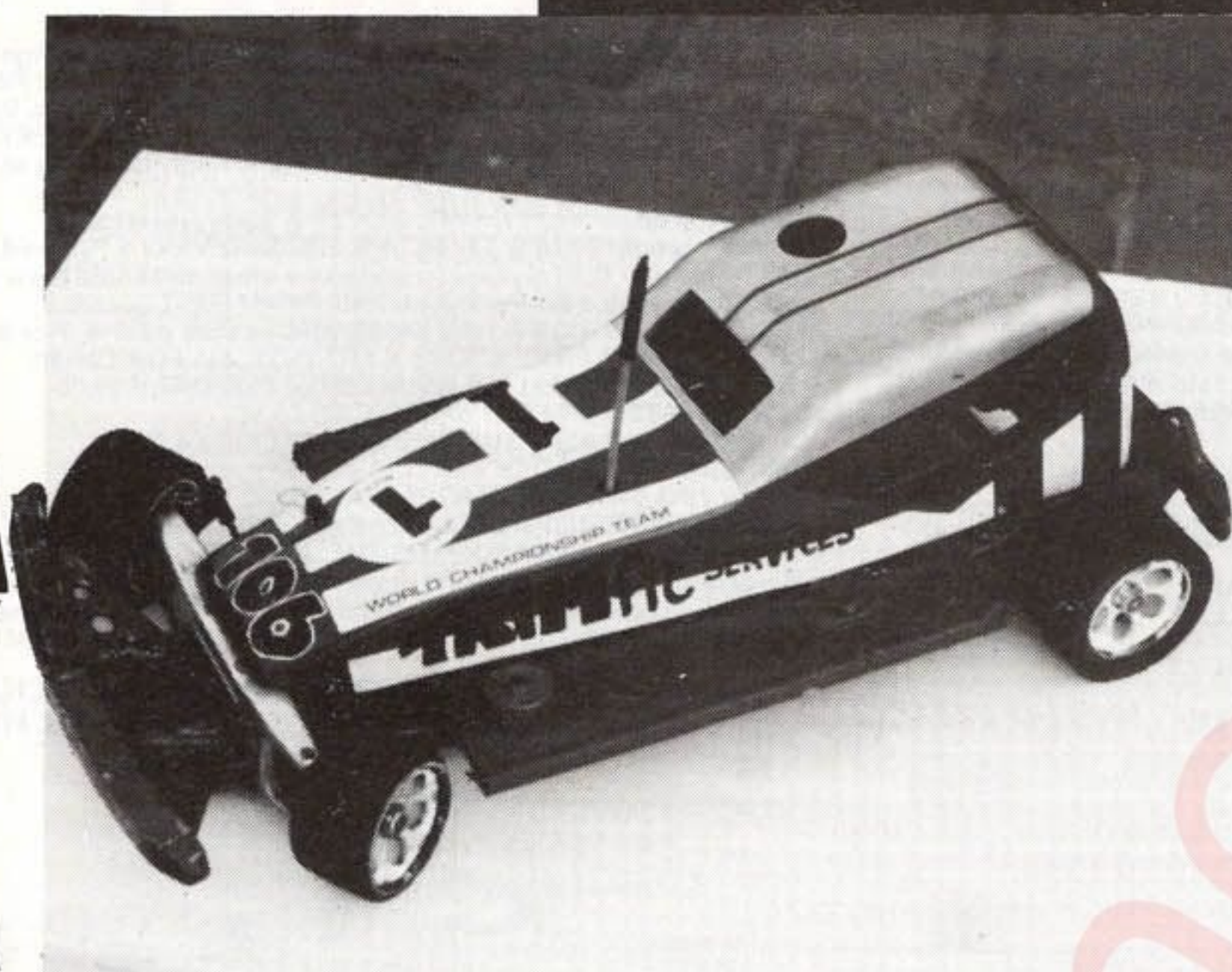
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**Tel: 0323 763688**



# T A K I N G S T O C K

*Amazing it might be but this Trimfit car belonging to Kevin Straw is now currently World & European Champion.*



Just in case you might wonder why this month's copy is shorter than usual, the simple fact is that I have been told by the Editor to cut my copy by about half for this, and future issues. How this is going to work at this moment I know not, because I generally write all that there is to write, then finish! Now it looks as though I may have to cut some aspects, so I will play it by ear and see how it goes.

I understand that the 1/8th European Championship title came back this side of the water after the meeting in Holland on May 27th. I was not there, but a report is enclosed from my foreign correspondent, so read on for details.

### Bits and Pieces

Let's start with the bits and pieces for a change. You may remember that some months ago I mentioned the difficulty I, amongst others, was having trying to track down some material for the nerf bars of the

low-line style of car. Several people, as a result, offered 'off-cuts', someone drew my attention to a supermarket shopping board, (actually saw one on Anglesey when I was over there), and people like Motile and Kingsway brought some on the market. The other week Simon Farrer mentioned a Leicester firm, Nylacast Oilon Ltd., of 5 Brighton Road, Leicester, on 0533-768558, who are prepared to sell nylon for nerf bars in the size and quantity required

by the driver at, to quote, 'A reasonable price.' In addition they will supply the nylon in colours, which will please those who have an eye for colour coordinated schemes. So if interested give them a ring.

Had Gerry Bolsover of Kingsway Kar Komponenten on the phone the other day to say that he had experienced some problems with the red trailing arms that he was selling, in that some had cracked under pressure. The firm that have been making them for him took some along to their test 'lab', and discovered that the red pigment used was causing a slight weakness to the material, the two were not as compatible as they should be, as a result Kingsway are now doing them in black, and if you

**Mike Chilvers reports on the European championships held in Holland**



have a problem with your red ones please return them to Gerry and I am sure he will see you right. Also you may remember that I mentioned that Kingsway were doing a three-shoe PTFE clutch. If you would like your flywheel drilled to take the extra shoe, please send it to Gerry, who would be pleased to do it for you at a small charge, literally that of the posting and packing, exactly what it was I forget, as my wife threw out the bit of paper I had written the details on during one of her rare 'clear ups' in what is laughingly called my study!

### 1/12th Stockcars National Round 2. Thames View

There was a good turn out as expected for the second round of the National series for 1/12th stockcars at the Thames View Club, with the host Club having a number of entrants, many of whom race full sized 'Spedeworth' cars as well.

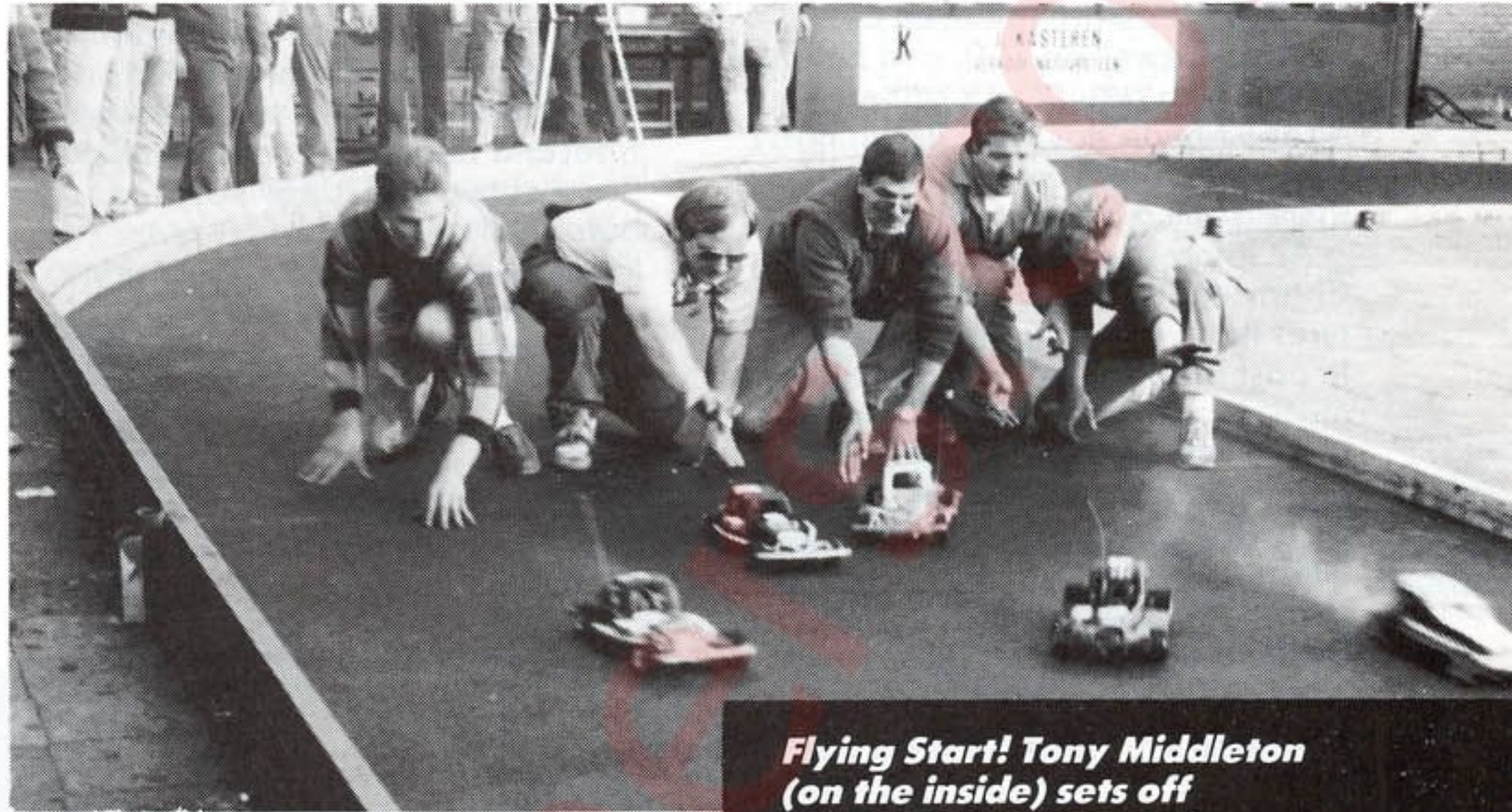
After the first round the National Series was headed by Mick Bryan, followed by Pete Lee and Jon Cutts, but with Jon racing on carpet twice a week, and the Thames View track being carpet it was anticipated that he would take some beating.

The first round was headed by Roy Jones with 72 laps, followed by Jon Cutts on 69, Clive Buckler and Steve Moore on 67, and Steve Lawrence, Mark and Paul Cooper on 66s. Casualties of the round included Gary McMullen with a snapped wire, and Paul Harrison with interference problems. In the second round Jon Cutts and Steve Lawrence made their presence felt with 76 lappers, the FTD, followed by Roy on 71, Clive Buckler on 69, son David on 66 and Paul Cooper and Mick Bryan on 65s. Jon again led the way in round three along with Clive Buckler on 70 laps, this time Anthony Jewell followed with 68, Daniel Buckler and Ade Eaglen on 67, Paul Cooper, Roy Jones and Steve Field on 66, and Pete Lee and Mick Bryan on 65s. Clearly Mick Bryan was finding the going difficult, whereas Jon Cutts was very much at home as the half way stage of qualifying was passed. Round four again was headed by Jon with 70 laps from Roy and Matthew Brown on 68s, Clive Buckler and Steve Lawrence on 67, Anthony Jewell, Mark and Paul Cooper on 65s and Rob Harris, Mick Bryan, Fred Hoffman, Dave Lawrence and Gary Wells all with 64 laps. The final round went again to Jon with 69 laps, followed by Clive Buckler on 68, Mark Cooper on 66, Ade Eagan and Daniel Buckler on 65s and Pete Lee on 64.

The Consolation consisted of Fred Hoffman, David Lawrence, Steve Moore, Mick Bryan, Ade Eaglen, Pete Lee, Anthony Jewell and Matthew Brown, and was one of the cleanest

Consolation races witnessed. There were the odd comings together, a couple of clean rolls and at the end only five laps separating the eight cars at the finish, Anthony Jewell

Cooper, but this suddenly increased to a couple of laps, and stayed that way till the end, Jon winning with 70 laps, from Mark on 68, with Roy Jones finishing a couple of laps down on



**Flying Start! Tony Middleton (on the inside) sets off Kevin Straws car on his winning way.**

winning with 64 laps and Ade Eaglen and Fred Hoffman only yards behind.

### Technical Chart. 1/12th Stockcars National Round 2. Thames View 1990

Pos.	Name	Car Type	Cells	F. Tyres	R. Tyres	Speed	Gears
1.	J. Cutts	Schu/Dave	SCR Reds	Keith Dowsett Precision Yellows all round	Mardave	12.50	
2.	M. Cooper	Butchered Mardave	Sanyo Reds	Med 'B' Precision Whites	Precision Whites	Mardave	12.50
3.	R. Jones	Jones SPC	Pete Stevens 1200 Reds	Delta B's	Tru Tyres 215s	Jones	12.30
4.	C. Buckler	Schumacher	SCR Reds	Mar STD	Precision Yellows	Mar	12.50
5.	A. Jewell	Schumacher	Bury Model Shop SCR's	Motile 12001	Precision Whites	Parma	13.52
6.	S. Lawrence	Lawrence Mk V	Pegler Matched	Mar STD	Tru Tyres 215s	Parma	13.52
7.	P. Cooper	Lawrence Mk IV	Pegler Matched	Parlor TT07	Tru Tyres 215s	Parma	13.52
8.	D. Buckler	Schumacher	Parma SCs	Mar STD	Motile 12001s	Mardave	12.50

For the Final the drivers were Steve Lawrence, Daniel Buckler, Mark Cooper, Jon Cutts, Anthony Jewell, Clive Buckler, Roy Jones and Paul Cooper. What a race and how different from the Consolation! The eight cars all started from the red grade line, and on the buzzer all charged down to the first bend and, surprisingly, made it, but as they came out of the bend, Jon Cutts took the inside line, still at the back of the bunch and side swiped Mark Cooper's car, who, in turn, hit someone else, who hit someone else, etc., the incident having a knock on effect on the rest of the cars which enabled Jon to speed away leaving a big pile-up behind! Up to the 35 lap mark Jon was only about half a lap up on Mark

Mark with 66, and lucky not to lose his third spot after a couple of mishaps, during one of which his car became a 'Cabriolet'! Clive Buckler was fourth with 65, followed by Anthony Jewell with 62, Steve Lawrence on 61 and Paul Cooper on 60. Fortune was not on the side of Daniel Buckler as a wire came off his motor despite a couple of attempts at a come-back, finishing eighth with 21.

The Concours trophy went to Ade Eaglen, the Junior to Richard Harris. Top white grade was Gary Wells, top yellow Andy Wing, and top blue Fred Hoffman.

So a good day was had by all, with many thanks to the Thames View Club and especially Roy Jones for the organising, and for sending me the



report to include in this issue.

### Thames View Postscript

The National Points Table after two rounds now has Jon Cutts at the head with 105.5 points, followed by Anthony Jewell on 100, and Pete Lee on 95. As a result of his rather disappointing day Mick Bryan has slipped to fourth with 93 points, but there is still a long way to go.

An interesting point about the Tech Chart sent by Roy is the variety of tyres that were used at the meeting. In past issues I have commented that most drivers appeared to be using the Motile variants, but a glance at this chart shows a move towards the Precision Tyres manufactured by Keith Dowsett in 'white' and 'yellow' varieties, as well as Tru-Tyres. Nice to see the variety.

### E.M.S.A. European Championship. Rosmalen, Holland. May 27th

It is with grateful thanks to Neville Gabittas that I can report on the E.M.S.A. European Championship which took place at Rosmalen in Holland on May 27th, as I was unable to attend, so this is how he saw the event which was attended by an interesting British contingent which included Steve Talbot and the current World Champion Kevin Straw, both of whom now are concentrating on Circuit racing.

Practice day started like most practice days, everyone was busy, checking and re-checking cars, swapping notes on tyres, fuel, track conditions, etc. and taking time out to say 'hello' (meaning it's your round!) to old friends, after all, racing apart, this is what international events are all about, a time for the cream of model stock car racing to get together for a good laugh at jokes that never translate well, and to have a great time. Eddy Smeets was present, but confirmed that he would not be racing again for some time because of home commitments. Derek Bird was also limping around with a twisted muscle, caused, it is said, when someone offered to buy a round and he rushed to get to the bar first!

The track facilities are first class, a large club house, static pit benches half of which are fully covered with a fully computerised time keeping including transponders that gives every possible bit of information anyone could want. The track is small by Dutch standards, and although the surface is smooth it suffers from heat warping resulting in an uneven surface, particularly on the top bend,

making tyre choice and suspension settings critical, if good, lap times were to be achieved. Early practice times were over the 5.50 second mark, but, in the afternoon these came down to 5.20, with Mosman, Mak, Straw and Tony Middleton getting down to below the 5.20, Mike Powell being the first to get below the 5 second barrier. This opened the flood gates, and it was not long before all the top drivers were lapping around the 5 second mark. The Dutch, however, were not happy



*Gary Stevensons car fitted with a Serpent 'S' power engine.*

with their cars, causing a faint scent of victory to waft across to the British camp.

The weather on race day could not have been better, the sun shone by first light, and by 10 o'clock (start time) the track surface was warming up. Heat 1 was strictly for beginners with Ben Kwant winning with 30 laps. Heat 2 looked more interesting and was won by Frank Verhargh with 39 laps, young Stuart Tennant out after 19 laps with a carb problem. Heat 3 resulted in a surprisingly slow win of 34 laps for Rene Kuypers. Phil Chadbourne showed them the way home in heat 4, winning with 41 laps. Heat 5 was a first class heat featuring Trevor Tennant, but was won by Tjeu Stoks also on 41 laps. Heat 6 had all the makings of a good race with Leon Kunzler, John Hastilow, John Middleton and Derek Bird all looking potential winners. It was a battle royal, except for Middleton, whose throttle trim had been moved causing the car to stall at low revs. Derek emerged the victor again with 41

laps. Bob Jessop came home the comfortable winner of heat 7 on 40 laps, whilst Lee Middleton gave Jos Van Kasteren and Henk Shellings a good run for their money in heat 8, Jos getting the verdict with 40 laps. Heat 9 was a thriller, probably the closest of the heats, with Mark Flood, Freddy Mak and Louise Visschers all on 41 laps, and Peter Jans and Paul Dexter on 40s. Heat 10 looked as if it might be as tight, but a cruel blow was struck at Bob Middleton as his fuel pipe came off, and though Ian Henderson was racing as smoothly as I have seen, the race was won by Joe Van Nuland on 39 laps, one ahead of Ian. Heat 11 was a bit messy; Norman Spiller fighting his way through the carnage to win with 34 laps. Heat 12 featured Tony Middleton, Ken Cornish, Wim Robben and Martin Otten, so it promised to be exciting. The lead changed as often as the laps, with Tony putting in the fastest lap of the meeting at 4.70 seconds, but Robben went on to win with 44 laps, one ahead of Tony. Heat 13 saw the first appearance of Mike Powell who won with 44 laps, having better luck than John Hodgson who didn't make a lap. The pits suddenly went quiet as all eyes were on the track for heat 14 featuring Jarig Van De Meulen, Terry Dickinson, Kevin Straw, Ton Shoenmakers, Marc

Joul and Sander Poels, a formidable line up if there ever was one, as they prepared to do battle. At the finish the lap scores tell their own story, Kevin and Sander on 43s, Jarig and Ton on 42s and Marc on 41, a chunking rear tyre letting Terry down to 38. Heat 15 saw Gary Stevenson putting up a good fight to finish with 43 laps one down on winner Rien Van Sabben. Heat 16 concluded the first round with an easy win for Ronald Mosman on 44 laps.

At this stage I should perhaps say that the racing format for the meeting was that all drivers should have three 4-minute heats, with their best two scores being added together. The top twenty-four would then progress to four quarter finals, these being sorted on the basis of the top qualifier going to the first quarter, the second to the second, and so on. The first three from each of the quarters would move into the two semis on the same basis, and then the first three from those qualifying into the Final. All these races would be over five minutes. So



we were now one third of the way through qualification.

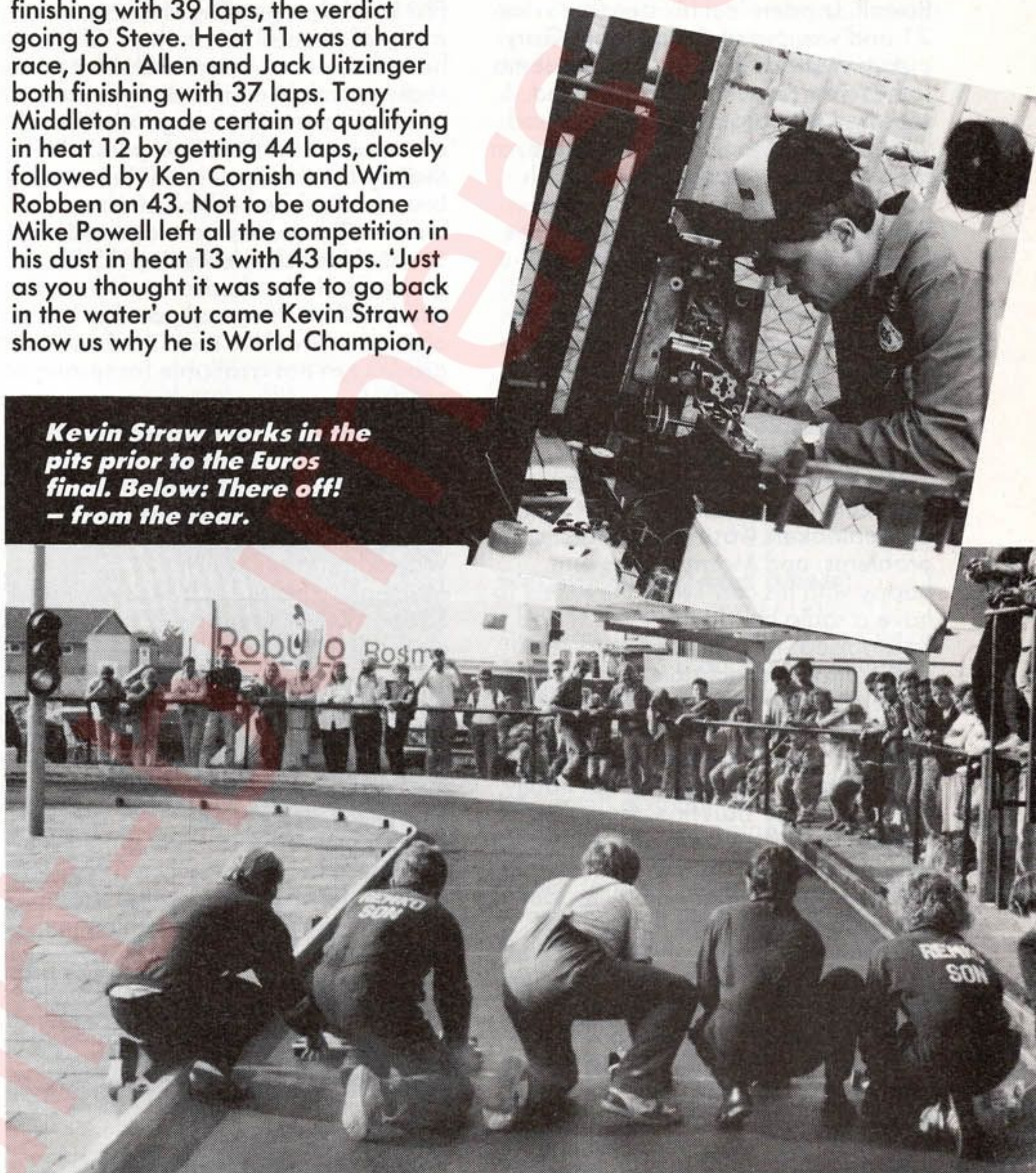
The first heat of the second round was won by Kok on a very low 27 laps. In the second, Frank Verhaegh left the rest for dead, finishing with 39, and heat 3 was again won by Kuypers on 38. Heat 4 was closely fought, but on low scores, as Melvin Yeo and Stefan Morrees finished on 36 laps and Alan Lane and Phil Chadbourne on 35s. In heat 5, Middelkoop again looked good, he and Verstraelen both putting in 40 laps, but Stoks won it with 41. Heat 5 was another great race except that John Middleton did not get a lap in due to electrical problems, but John Hastilow won it with 41 laps, just ahead of Leon Kunzler and Jos Van Der Groenendaal both also with 41, and Derek Bird on 40. Heat 7 went to Tony Van Der Wildenberg with 40 laps, whilst Henk Shellings took heat 8 with a great 42 lap win over Kasteren on 41. Heat 9 was almost a rerun of the first round, with Mark Flood, Freddy Mak and Louis Visschers all on 42 laps, and Paul Dexter on 40, with Mak getting across the line first. Bob Middleton did his slot racing routine in heat 10, this time with no bad luck, winning with 41 laps, and John Allen strolled to a win in heat 11 with a 39 lap walk over. Heat 12 was always going to be Tony Middleton's. After a flying start he never looked back, romping home with 44 laps, ahead of Ken Cornish and Otten on 41s. Mike Powell also had a good second outing, taking heat 13 with 41 laps, three ahead of John Hodgson and Jean-Paul Steegen. Kevin Straw was not going to be outdone by anyone, and on his second outing got 44 laps, two ahead of Sander Poels, whilst Terry Dickinson retired with a second chunked tyre plus broken track rod. Gary Stevenson was impressive as he sped to a 43 lap win in heat 15 from Sabben on 42 and Linders and Hersmus on 41s. The final heat of the round was again won by Ronald Mosman on 43 laps, closely followed by Steve Talbot on 42.

So we moved into the final round of heats. Heat 1 went to Rooyackers with 32 laps, and heat 2 again to Frank Verhaegh out on his own with 40 laps. Heat 3 gave Kuypers his hat-trick with 39 laps, but not enough to qualify into the final pool, as it was quickly emerging that a two heat total of 80 plus was needed to qualify. Heat 4 was won by Morrees on 39 laps, but only after a good chase from Lane on 38, Chadbourne on 37 and Yeo on 36. Leon Verstraelen won heat 5 on 41 closely followed by Middelkoop a lap down. John Middleton showed what he was capable of in heat 6 covering 41 laps, but Leon Kunzler won with 42. Heat 7 was won by Jo Engelen with 39 laps

after a hard fought battle, and Henk Shellings took heat 8 after a terrific race with 43 laps. Paul Dexter and Mark Flood tried very hard in heat 9 but could not catch Freddy Mak who got 43 laps. Heat 10 was another very good race, with Bob Middleton, Ian Henderson and Steve Gould all finishing with 39 laps, the verdict going to Steve. Heat 11 was a hard race, John Allen and Jack Uitzinger both finishing with 37 laps. Tony Middleton made certain of qualifying in heat 12 by getting 44 laps, closely followed by Ken Cornish and Wim Robben on 43. Not to be outdone Mike Powell left all the competition in his dust in heat 13 with 43 laps. 'Just as you thought it was safe to go back in the water' out came Kevin Straw to show us why he is World Champion,

from such a line-up, but Mak was having lots of problems and only managed 25 laps. The race was won by Kevin Straw with 55 laps, from Mosman on 52, and Otten just taking third place from Kasteren both on 51. For the second it was Tony Middleton, Cornish, Flood, Schoenmakers, Stoks

**Kevin Straw works in the pits prior to the Euros final. Below: There off! - from the rear.**



to equal the lap record with 45 laps. Ton Schoenmakers tried hard and got 44, whilst Sander Poels presumably thought he had done enough in his first two heats and did not bother to come out. Heat 15 saw Gary Stevenson notch a trio of 43s just ahead of Jos Linders also on 43. Steve Talbot showed some of his old brilliance in the last heat with a 43 also.

### Last Twenty-four

So we were down to the last twenty-four. Kevin Straw was out in the first quarter final along with Mak, Mosman, Kasteren, Otten and Brock. It was everything you could expect

and Schellings. Middleton got a good start and shot into the lead with Schoenmakers and Schellings giving chase, but not looking like catching him, but then catastrophe, the Middleton car appeared to just catch the outer barrier on the top bend, and it stuck there, the steering arm broken, and Tony out of the running. The bad luck he has needs to be seen to be believed. Schellings and Schoenmakers went on to get 53 laps and 52, with Mark Flood in third on 51. The third quarter also saw bad luck this time for Steve Talbot who only managed 1 lap, the race being won by Mike Powell with 56 laps followed by Van Sabben and Linders



with 54. Gary Stevenson was drawn in the final quarter along with Van Der Meulen, Robben, Kunzler, Visshers and Poels. Robben retired after 18 laps, Poels stalled his car on lap 27 and never came back, so it was down to the other four, Van Der Meulen's winning with 55 laps, from Kunzler on 51 and Stevenson on 50.

So to the two Semi Finals; Gary Stevenson was out in the first along with Van Der Meulen, Linders, Mosman, Van Sabben and Mike Powell. Linders lost his steering in lap 21 and was out of the running, Gary put up a good fight, but did not seem to have the legs, whilst Powell and Mosman were fighting over the lead which seemed to change every lap, at the end, Mike was the winner, both having 55 laps, Van Der Meulen taking third spot with 51, these three having booked their places in the Final. The other Semi was just as exciting, Kevin Straw taking an early lead and managed to stay there winning with 55 laps, just one lap ahead of Schellings, and Mark Flood taking third place with 52 laps to earn his place in the Final.

The Final was marred by a very long hold up, seemingly Schoenmakers was having electrical problems, and Mosman was not happy with his car. Twice they tried to have a radio check and twice it had to be stopped. Time passed, and some of the English spectators had to leave without seeing the Final in order to catch their ferries. Tempers were getting ragged, the sun was sinking and the track was cooling, but finally they got to the start line. The lights flashed, and they were off; but not for long. Schoenmakers' fears came true, his car stopped after half a lap, but he was better off than Mark Flood, who blew his engine on the start line and did not get away at all. Van Der Meulen was out after 16 laps, so the 1990 European Final was down to three drivers. Mosman passed Powell and went after Straw, but was out of luck, not only did Straw pull away from him, but actually lapped him to take the win and add the European title to World title he currently holds, with 57 laps, a lap ahead of Mosman on 56, who was a lap ahead of Powell on 55.

So Kevin Straw has achieved what few have done before him, the current holder of the World, European and British Championships, and he deserved it as all were to see when the Yorkshire drivers lifted him shoulder high for a lap of honour. Well done!

By the way, if you should bump into Derek Bird, ask him how his penguin is!

Many thanks, Neville for the report, congratulations to Kevin on his win, and I hope that will prompt him to

return to Coventry on September 2nd to defend his World title, and indeed to be seen more around the ovals than he had intended this season. Congratulations too to Mike on his third place, and commiserations to Mark, but well done to come 6th, as this was his first major Final. Well done to all the British contingent.

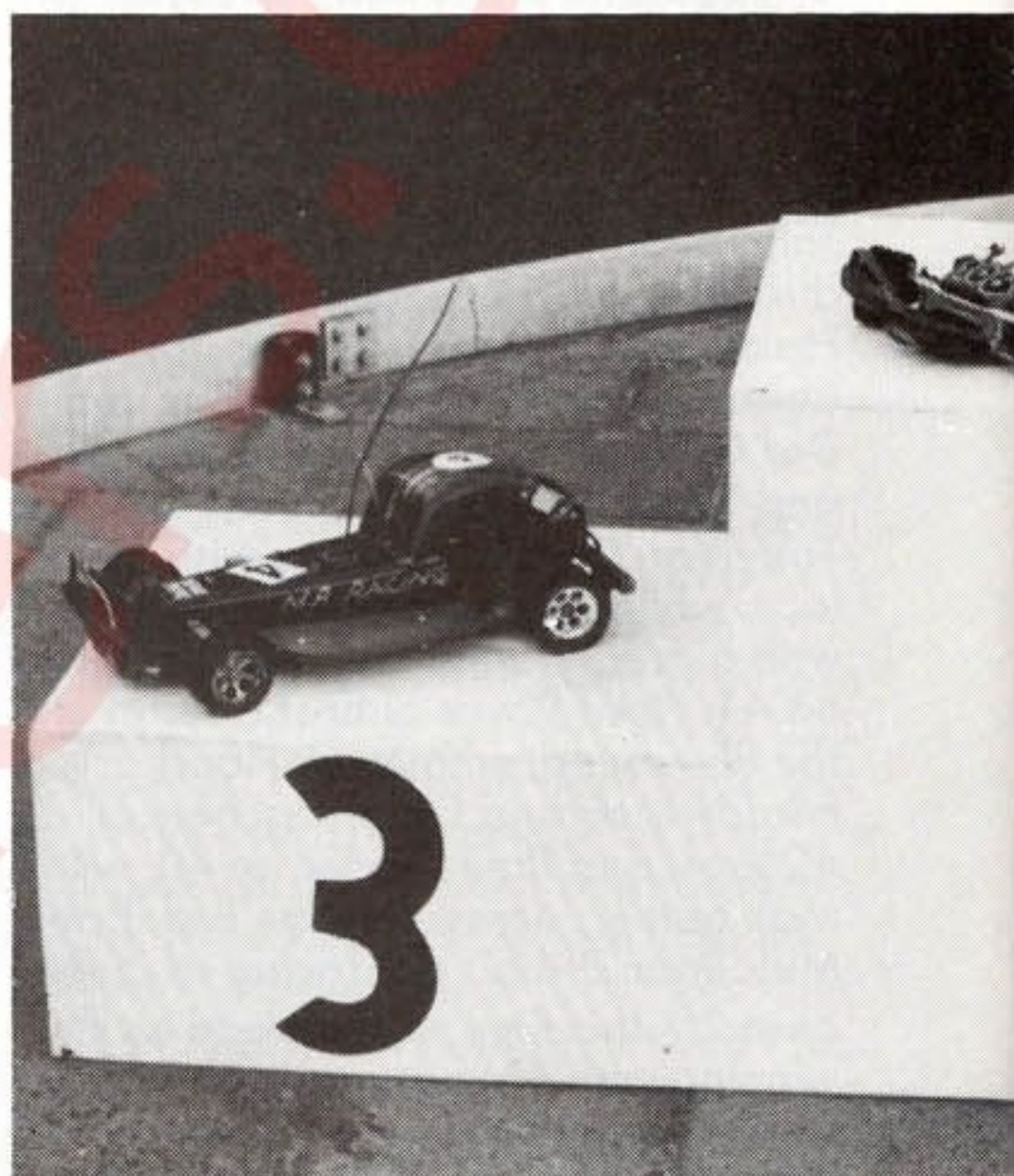
### **Tyre Talk**

Whilst writing, have just had a phone call from Chris Evans of Grand Prix Models regarding their tyres. As many of you will know, their 'C' tyres have been used by several drivers this season, mainly on the rear, but also as an all round tyre, to good effect. It does seem that there is a possibility that by the time you read this, new brands of rubber will be on the market. These may be marketed as an 'R', which should be Jap 35-like, and suitable for the front, plus a 'W' which will be firm, and possibly more of a front tyre than rear. As these two grades are not available for testing at present, it is difficult to be more precise, but I am sure those devotees of the Grand Prix Models' tyres will want to give them a go. Two addresses I have are either at 18 Adams Road, Finchfield, Wolverhampton, or Unit 2F, The Marshall Industrial Estate, Sedgley Street, Wolverhampton WV2 3AJ or on 0902-351815.

### **National Series Round 3. Midlands Regional 2. Nottingham. June 10th**

To say that this round took place at Nottingham on June 10th, might not appear to be very significant at first glance, but when you realise that vandals had caused something in the region of £7,000 worth of damage at the Sports and Social Club where the Nottingham track is situated about ten days earlier, you realise that the

meeting was in jeopardy. Fortunately for the Club the damage was confined to their timekeepers' hut, but no timekeeping or P.A. equipment was stored there, so that was safe. The main problem was that they had no electric to power things, or indeed water for the toilets. However, with makeshift measures, a lot of hard work, and offers of help from the other local Clubs, for which I have



*The three cars that finished in the all important places.*

been asked to say 'thanks', the meeting went ahead.

Unfortunately, this was one of the meetings that I did not attend, and because of that and the editor's

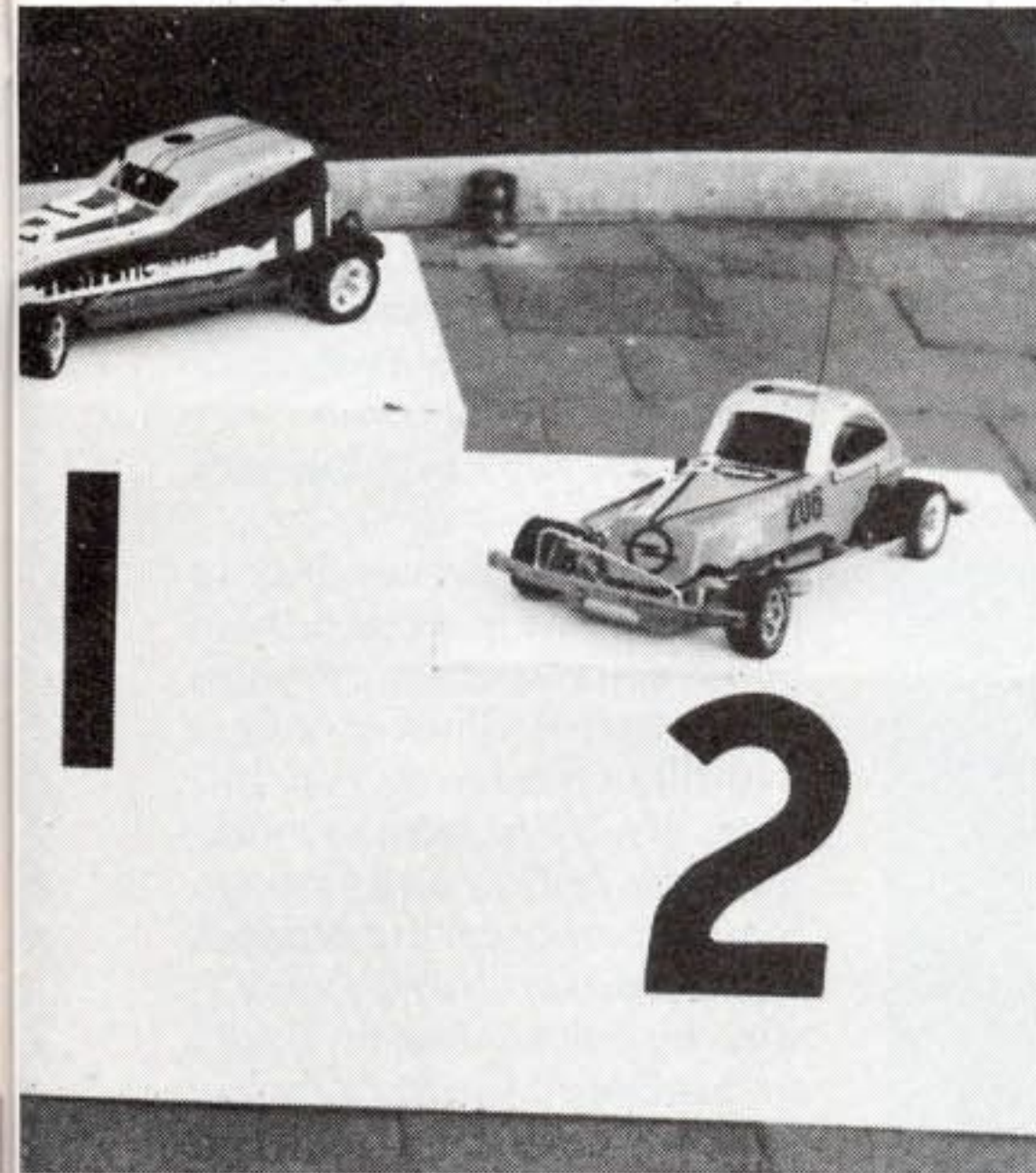
*The Brits in the pits including John Middleton nearest camera - note covered pits at Euro events.*





desire for less copy, only a brief report of what went on, and that with grateful thanks to Dave Chambers, the 1/8th BRCA Oval Secretary, and Nottingham & Derby Club Secretary.

A total of 50 drivers booked in, including seven from the south and nine from the north. Nice to see such a good southern representation keeping regular Steve Bell company, the northern group being the



Middleton's mainly, but with support from Ian Drake, Dave Steel and Pete Pexton. The usual Midlands drivers were joined by Steve Talbot making one of his rare 'oval' appearances. Thirty-five of the drivers scored 40 laps or over in the first round, Simon Galbraith leading the way with 46, followed by Peter Butlin, Jason Watkiss and Norman Wheeler on 45s, so it was clear from the start that it was going to be a close meeting. Rob Thorpe and Peter Butlin went to 47s in the second round with Mike Powell and John Watson on 46s. One surprise so far was that Tony Middleton had only been equal ninth in the first round, and was out of the top ten in the second, so clearly had his work cut out if he was to make it through to the Consolation let alone Final, Steve Talbot was also out of the top ten at this stage.

Simon Galbraith's 47 took home to the front in the third round, the Coventry youngster showing some good form this season, he was followed by the 46s of Peter Butlin and Pete Hooten, both from Nottingham. Again Tony was down in equal tenth with seven other drivers on 44 laps, so things were not looking good for the driver who had won the second round at Yorkshire a few weeks earlier, but really did highlight the closeness of the racing. The final round of heats went to Simon Galbraith and Mike Powell, the

Coventry youth duo both recording 46 laps, but they were followed by nine other drivers, all with 45 laps and seven with 44, a total of eighteen drivers all within two laps of each other!

Top qualifier was Simon Galbraith with 139 laps as his best three heat total, followed by Peter Butlin on 138 and Mike Powell and Robert Thorpe on 137. These four went direct to the Final. To fight for the two remaining places via the Consolation were Pete Clifton, John Watson and Jason Watkiss on 134, Pete Pexton and Pete Hooten on 133 and Julian Vaux on 132. Most unlucky were Brett Nixon and Phil Chadbourne who both had 132 also but missed out as their throw away heat was worse than Julian's.



Dave did not give me any score-sheets for either the Consolation or Final, so I can not say who got what, only that Pete Clifton and Pete Hooten were the two who made it through to the Final, and that the Final itself was won by Mike Powell from Pete Clifton, with Robert Thorpe third and Peter Butlin fourth. Fifth was Simon Galbraith and in sixth place Pete Hooten. An all Midlands Final, and in fact only Pete Pexton from the North getting into the top ten, which allowed Brett Nixon to take tenth spot in the Midlands Regional Championship round.

Many thanks Dave for the results sheet, and congratulations to Mike Powell on his win.

# tAKING STOCK

## Championship Points

At the moment, after three rounds, the National Series is headed by Mike Powell with 25 points, from Jason Watkiss on 23 and Julian Vaux on 17. So far all three have scored in all three rounds, there are three more rounds left, and the best scores from five of the six rounds count, so it could hinge on throw away scores. Tony Middleton missed the first round at Adur, scored 10 in the second, and was out of the points at Nottingham, so he looks like having his work cut out to head the three Midlands drivers.

The Regional Championships after two rounds have Mike Powell heading the Midlands with 20 points following two wins, followed by Simon Galbraith on 14 and Jason Watkiss on 13. Rob Griffin heads the Southern with 17 points from Nigel Williamson, R. Penfold and Keith Dowsett all with 15 points. In the North Scotland's Dave Clark leads the way with 18 points from Ken Penny on 12 and Tony Middleton on 10.

## Racing Round and About

On August 5th, the 1/12th stockcars Open Meeting will be held at Leicester, and on August 12th the Ministox National is also being held at Leicester, so they appear to be quite busy.

The 1/8th oval scene is its usual hectic self starting with an Open Meeting at Chessington on August 5th for the Metfix International, open to any form of 1/8th stockcar. There are also Open meetings at Adur, the Borders, NORA and Leicester and Club meetings at Coventry and Hastings. Mid week on August 7th Leicester have an Open evening meeting plus B-B-Q with a 7pm start. The National Series moves to Chessington for Round 5 on August 12th coupled with a Southern Regional Round, this is of course an Open Meeting. There is also a Club meeting at Yorkshire. August 19th features Open meetings at the Borders, Lilford, Nottingham & Derby and Leicester, with Club meetings at Adur, Coventry and NORA. The month closes on August 26th with an Open meeting at Yorkshire and Club meetings at Bournemouth, Chessington and Hastings.

The big one in this country takes place on September 2nd, when the Coventry Club hosts the EMSA World Championships, when all eyes will be fixed on Kevin Straw, to see if he can hold onto his World title, and put it alongside the European 1990 title he won in Holland in May.



# IN THE ROUGH

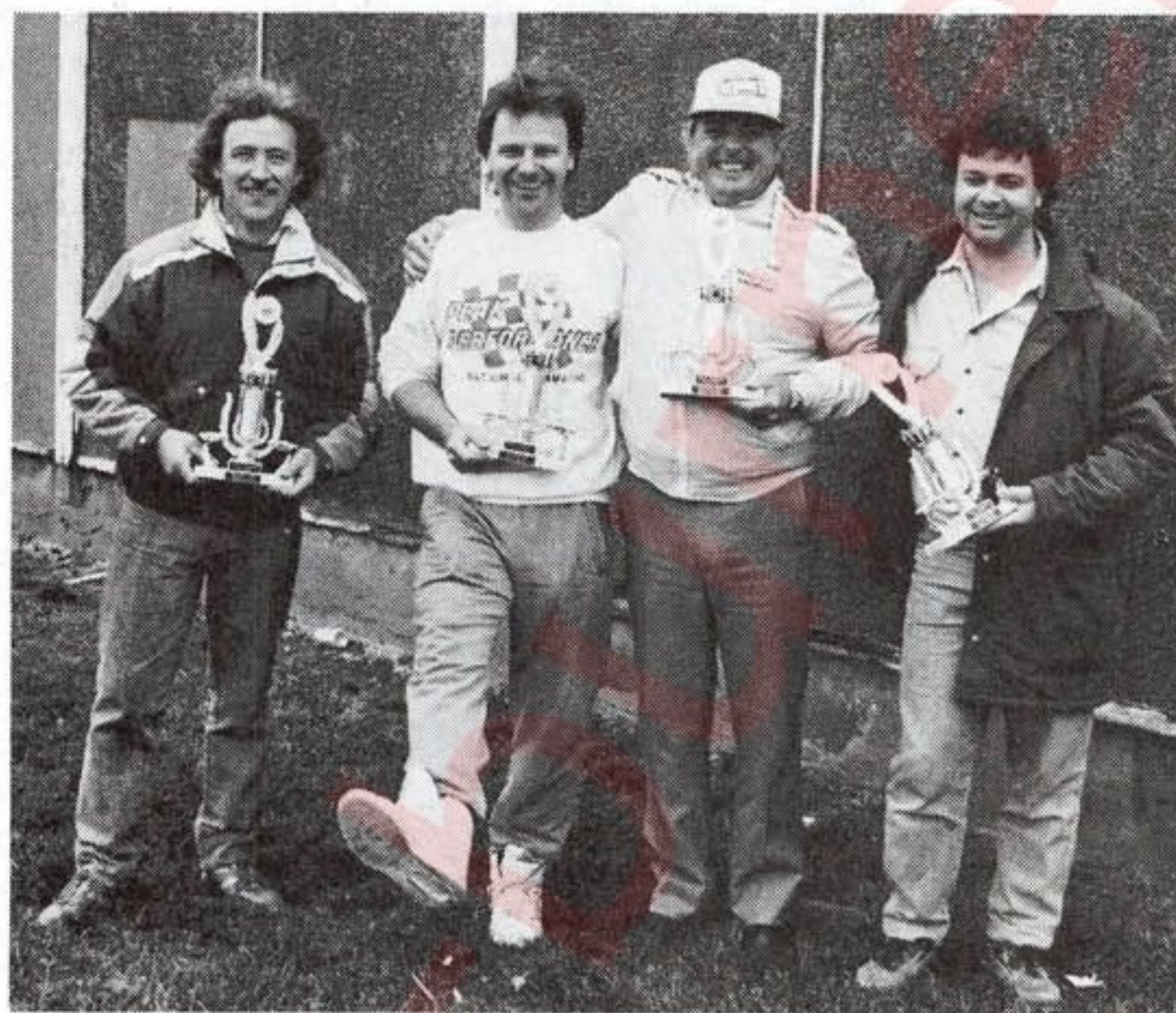
## The BRCA Nationals & Home Internationals – Harolds been to both!

### Home Internationals

The 1990 UK Team race, sponsored by Schumacher/Parma, was held at the Hillocks Community Centre in Bury, Lancashire in May. Organised by the Bury Model Shop Buggy Club, with Race Director Steve Glover in charge, the meeting was a test of team driving between four teams chosen from four areas in the UK. The teams, from Scotland, the Midlands, North and South, were made up of 20 drivers from their respective areas. Originally five teams were selected, but for the second year running the Welsh contingency dropped out at the last minute. This let down was unfortunate in so far as many months of preparation had gone into the project by the host club and for drivers from one region to decide at the last minute not to attend is a very poor show.

I'm sure that if an entry fee had been charged the Welsh Team might have been more accommodating. In conclusion, this state of affairs is just not good enough and a rethink is needed for next year.

Team selection was made, mainly from the results of last year's regional competitions. Each Team Manager kept his team members on their toes throughout the day and some excellent organisation by the Bury Club helped fulfil the promise of an enjoyable event.



**The Real winners from the Home Internationals pose with their trophies – nice hat Robin!**

The Bury club suffered much criticism last year because their track failed to reach the required standards during a BRCA 4WD National, so a marvellous effort on their part in early 1990 has seen it rebuilt from scratch. After an arduous day's racing I'm pleased to say that the track held up brilliantly, in fact the FTD was set in the last race of the day and this after five rounds of racing. All grass except for a raised concrete plateau at the end of the straight, the track contained a series of pitfalls for the unwary driver including a jump and a sleeping policeman. It was certainly a driver's track and great care was needed to negotiate a lap without an error.

The format for racing at this meeting differed from normal race meetings in that there was no qualifying. We had five rounds with 10 heats per round and each heat was a race for points. Two team drivers in each heat gave each team the chance of maximum points every race and drivers were swapped around so that they raced against different drivers throughout the day.

This made the racing as fair as possible as most of the top drivers raced against each other at some time during the day, so no one was given an easy time of it. Unfortunately, there

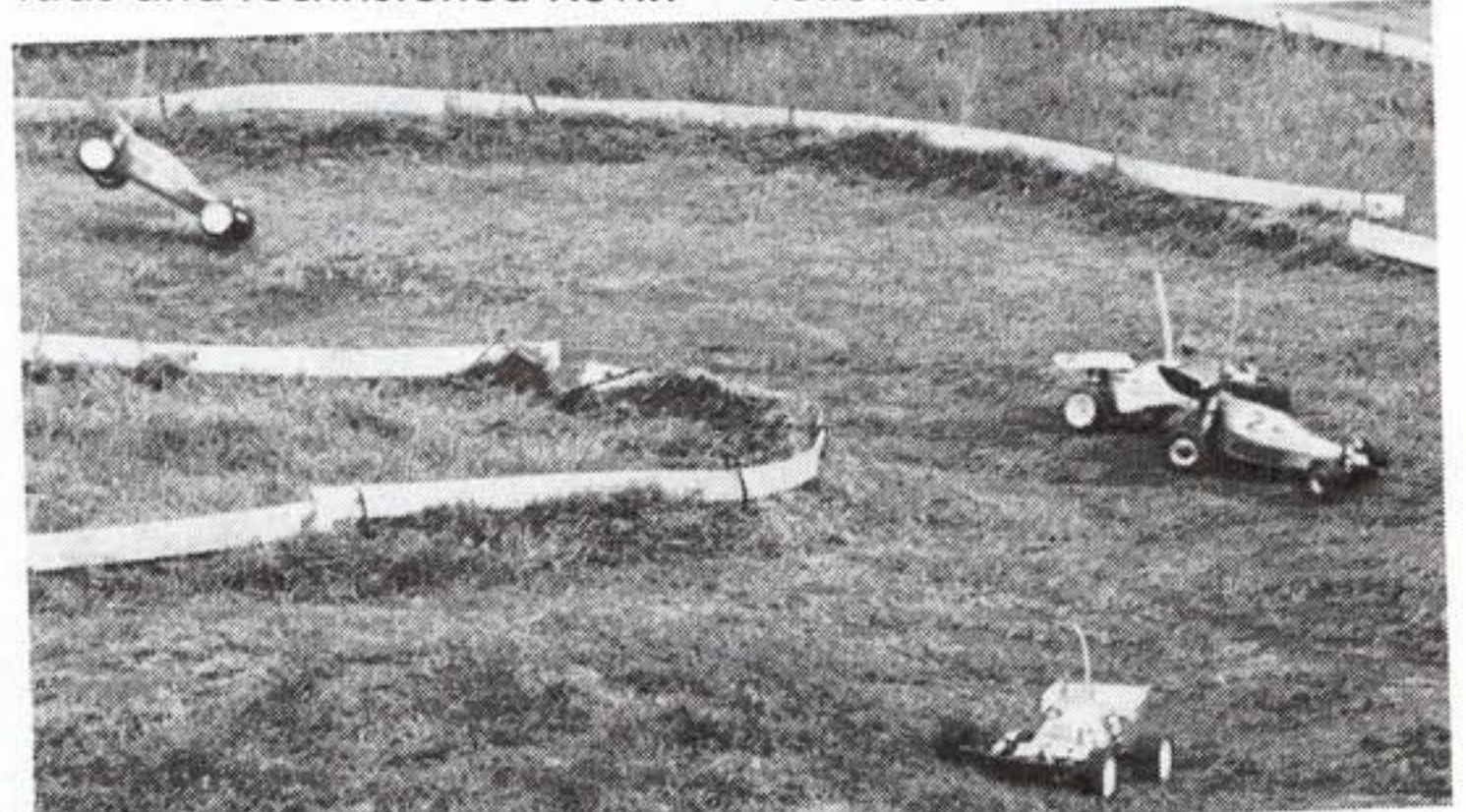
McBlears! Jamie Booth and Steve Haynes joined Derek Clarke's Southerners so every team started with a full complement of drivers.

### Round One

Ten points were scored for each win and as there were only eight drivers per race, due to the Welsh Team's absence, the last placed man/woman scored three points in each race.

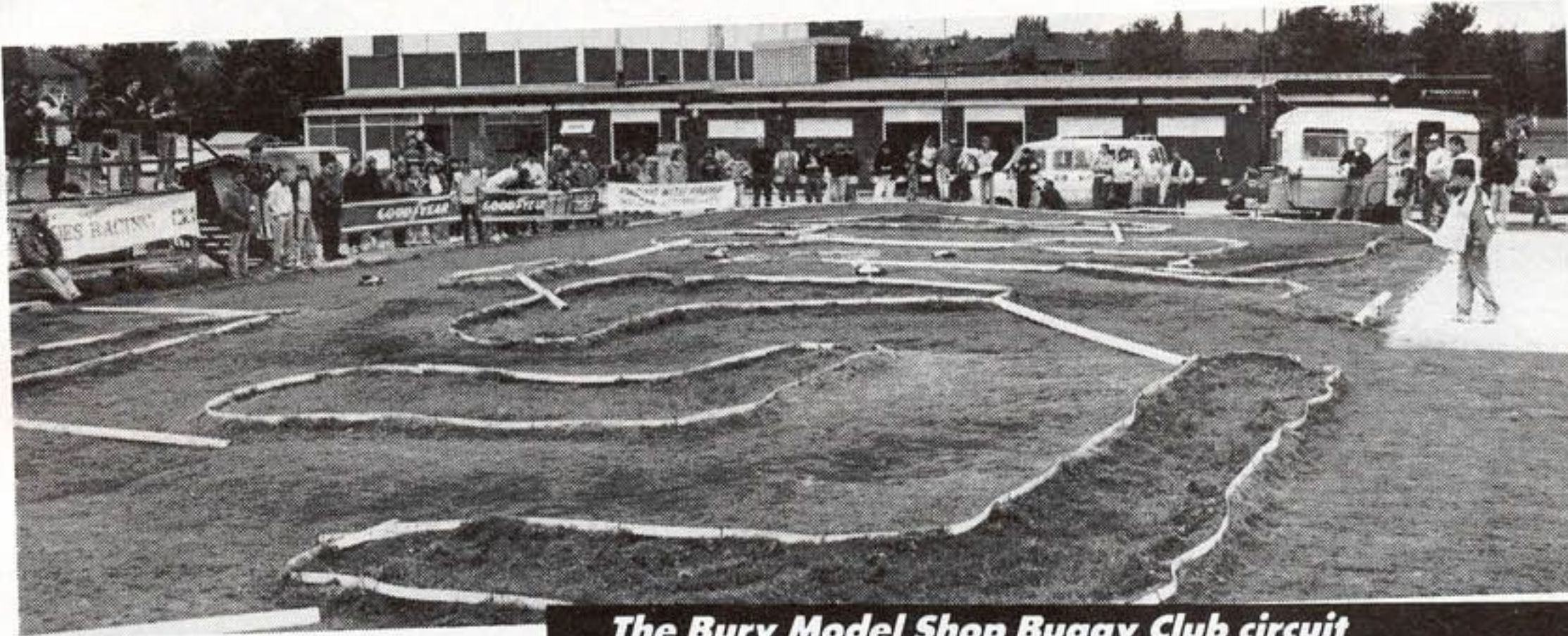
The north made a great start in round one when Craig Drescher and Keith Hirons won the first two heats. Matthew Needham for the Midlands came home first in race number three beating Marcus Greenwood's Procat (North) Peter Gilbert recorded the South's first success getting the better of Olly Carnelly (North) in the fourth run. In heat five a first and second by Mark Buckle and Colin Steele increased the North's excellent start but good wins by Luke Burley in heat six for Derek Clarke's mob, followed by Gary Crowther-Green (Midlands) in the next race ensured that their teams kept in touch with the leaders. The next two heats proved decisive for the North when they scored maximum points in each. Firstly, Joint Elliott and Derek McClarney did the business, then it was Richard Isherwood, driving a Kyosho Laser and Pete Hastings turn. The final turn of the round saw a success for Kevin Moore, racing his Schumacher Procat for the South. So the North had started well with the Southern team in second spot.

The positions and points after Round One were as follows:



**Action from the Internationals – Procats featured heavily.**





**The Bury Model Shop Buggy Club circuit was an excellent venue.**

North .....	159 points
South .....	132 points
Midlands .....	110 points
Scotland .....	107 points

**Round One**

Lawrence Harris carried on the good work by helping his team-mates with another success in the first heat with Leigh Edwards second to score a max 19 points for the North, both drivers running Schumacher Procats.

Robin Smith, who was the North's Team Manager, kept his lads on their toes and thumbs pointing in the right direction by reminding them it was a team effort and finishing with as many points as possible was the name of the game. His efforts paid dividends again in the second heat with a win for Ian Oddie and also in heat four, when although Kevin Moore (S) had his second ten point win of the day, more significantly Richard Isherwood and Pete Hastings finished second and third respectively to give the North another 17 points reiterating the point (sorry for the pun!). Prior to this heat Matthew Needham and David Button had made a max score for the Midlands. James Robelou (S) beat Chris Pepper's Procat (N) in the fifth run of Round Two, followed by wins from Craig Drescher in heat six and Gary Crowther-Green in the seventh race both having scored two wins from two races. Impressive wins followed by Andy Woods and Ian McClarney to further improve the North's position, but the South's first 19 point maximum left everything to go for in round three. All Robin's lads were consistent in picking

up as many points as possible each race and a gap, which would be hard to reduce, was steadily increasing.

**Round Two positions:**

North .....	310 points
South .....	270 points
Midlands .....	234 points
Scotland .....	214 points

**Round Three**

John Elliott scored his second success of the day by winning heat one and Kevin Moore made it three wins from three runs in the second heat in a praiseworthy effort to keep his team in contention. David Button maintained the standards required to beat James Robelou much



**William & Brian Mitcham look well pleased with their joint performance – and why not.**

to the delight of his Midlands team-mate, then Craig Drescher comfortably won heat four with Chris Fowle in second place to give another 19 points to the North. Keith Hirons kept the momentum going in heat five, with Steve West third and then, in the next race, Peter Gilbert, followed home by Wayne Darwell, helped the Southern Team to record a priceless 19 points. In the next run a major event took place – Jimmy Hamilton, the Scottish Team Manager, clenched the dirk between his teeth and won a race for Scotland! It had been long overdue and the only thing missing was the bagpipe fanfare! Eh Jimmy! William Mitchum (S) hit the jackpot

in heat eight, but the North increased their stranglehold on the competition in the last two races when Leigh Edwards was followed home by Lawrence Harris to score 19 points and then Iron Oddie won the last race. A 48 point difference could now be seen between the top two with the Midlands and Scotland trailing 100+ behind. It had become a two team race.

**Round Three positions**

North .....	465 points
South .....	417 points
Midlands .....	335 points
Scotland .....	327 points

**Round Four**

Derek Clarke must have fed his lads raw meat before the start of round

four because the South won the first four heats with Peter Gilbert, Gary Smith, William Mitcham and Danny Conway all doing the business. Undaunted by this Southern onslaught, the North came fighting back in race five with a 19 point max from Lawrence Harris and Leigh Edwards. The next two heats saw maximums from the South when Steve Brace led home Jon Dell and Jamie Booth running his 4WD Egress for the first time in the day beat

Kevin Moore. So by heat eight the gap between the North and South team had narrowed to 33 points. Southern celebrations were short lived however as the gap widened again when Richard Isherwood and Peter Hastings came home in the vanguard to record a 19 point max. Simon Walton scored 10 points for Scotland in the ninth run to help nudge their score into a more respectable one and Craig Drescher finished off the round by winning the final race.

**Positions after Round Four**

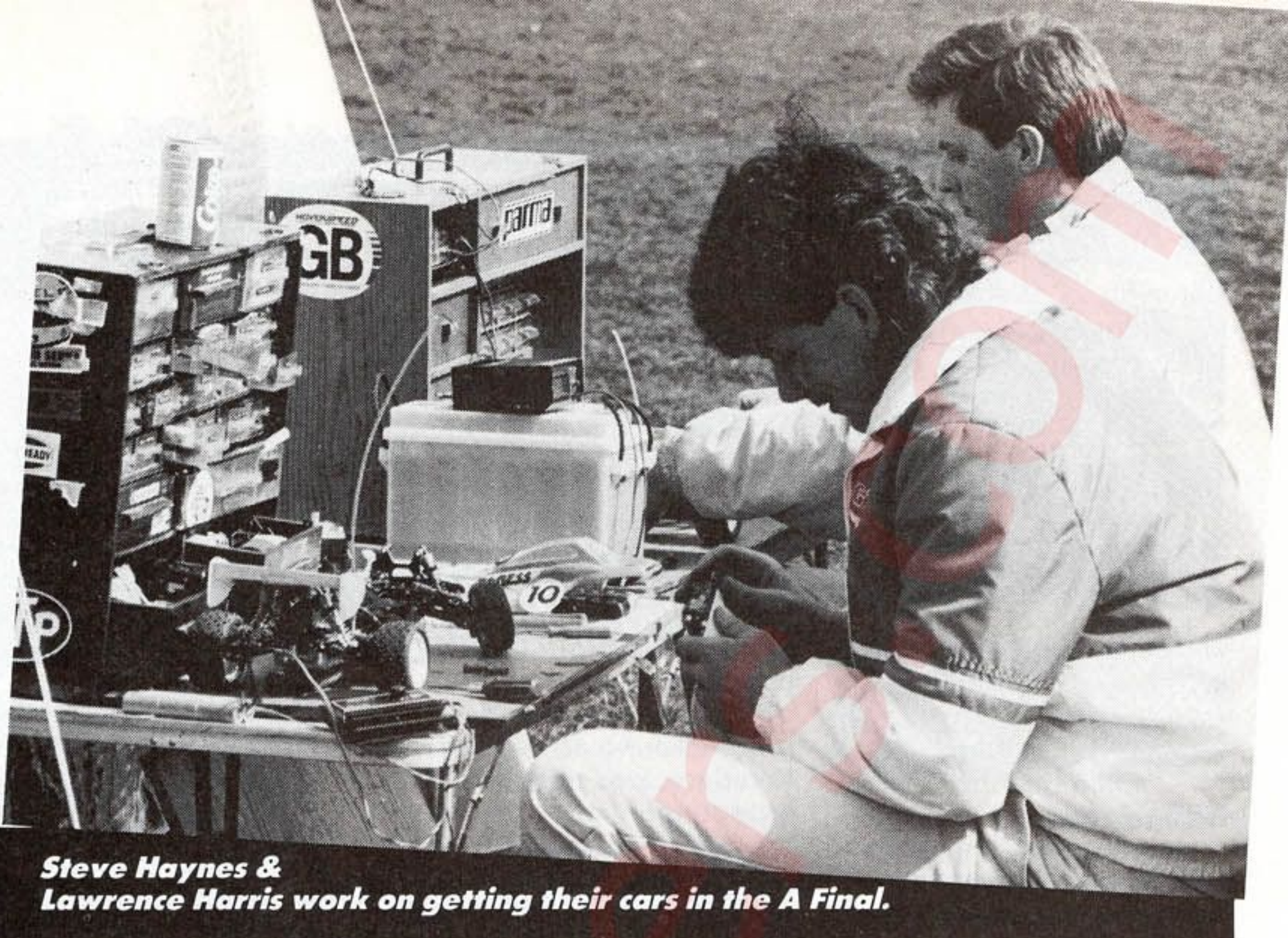
North .....	618 points
South .....	563 points
Midlands .....	448 points
Scotland .....	433 points



## Final Solution

A monumental effort was required by the South to stop the Northern lads from becoming easy winners and Neal Twitchen gave Derek Clarke a fillip by winning heat one with Gary Smith finishing third to record 18 points for the South. This reduced the gap by eight points. George Haining won well for Scotland in the next run and it was the Midland's team which scored 19 in race three thanks to Matt Needham and Dave Button coming home first and second respectively. The Midlands team were worthy winners in 1989 but quite frankly seemed mainly out of their depth at this meeting. In most runs, only one of their two team members were coming up with the goods thereby losing out on valuable runner up points. As I've already said it's the team which gets most from both drivers irrespective of whether one actually wins the race that is successful at the end of the day. Alan Bakeman was hard pressed to find consistency from his lads, but Steve Harris's win with his Laser helped the Midlands cause in heat four.

The gap between first and second had increased to 50 points by this time, but John Dell won the next for the South and in race six James Robelou beat his team-mate Brett Ley to help record 19 points. It was as though the North decided to turn the screw to ensure victory in heat seven with a max from Andy Woods and Marcus Greenwood. Ian Headland (Junior), who had swapped his flatcap for a tam-o-shanter for this meeting, gave Scotland a rare taste of success in heat eight and then Craig Drescher scored a maximum for himself by winning his fifth race on the trot. The result was not in any doubt by this time with the North running out comfortable and worthy winners. Craig, by the way, was the only driver to win all his races at the meeting and his Yokomo Dogfighter is proving to be a wise choice in 1990 – some feat – it was tough out there!



**Steve Haynes & Lawrence Harris work on getting their cars in the A Final.**

The final race of the meeting was significant for two reasons, the first one being that Jamie Booth racing for the South packed up his 2WD Astute, threw on his Tamiya Egress and blew seven seconds off FTD in beating Kevin Moore. Secondly, the mere fact that Jamie TQed in the last race of the day proved that the Bury Club had prepared the track well, for although there were signs of wear it had held up resolutely for 50 heats. An excellent win by the North, who put up a good all round performance on the day admirably captained by the eloquent Robin Smith, who made sure that all were on their metal.

### Final Results Winners:

North .....	759 points
South .....	720 points
Midlands .....	558 points
Scotland .....	547 points

The meeting was run in splendid fashion with no problems and plenty of enjoyment all round. Thanks must be extended to Steve Glover as Race Director and Commentator (along with Ian Haywood) to Derek Bradby and Maureen Smith for their efforts in lap-counting and scoring, to the rest of the bunch at Bury and to the competitors who I'm sure will look forward to a repeat in 1991.

Mustn't forget the sponsors, Parma and Schumacher, without whose

generosity the meeting may never have taken place.

### Top Ten Drivers

1. C. Drescher	N	50
2. K. Moore	S	48
3. P. Gilbert	S	47
4. L. Harris	N	45
5. R. Isherwood	N	45
6. K. Hirons	N	44
7. L. Wright	S	44
8. J. Dell	S	43
9. W. Mitcham	S	43
10. M. Buckle	N	42

### Phil Davis makes it two from two BRCA National Series 4WD Round Three – Medway

Schumacher's likeable Phil Davis had a very successful weekend, Mid-June, when he won both meetings in Round Three of the BRCA National Series.

Phil had just returned



**Lawrence Harris driving for both LRP and Nosram for the 1990 season.**



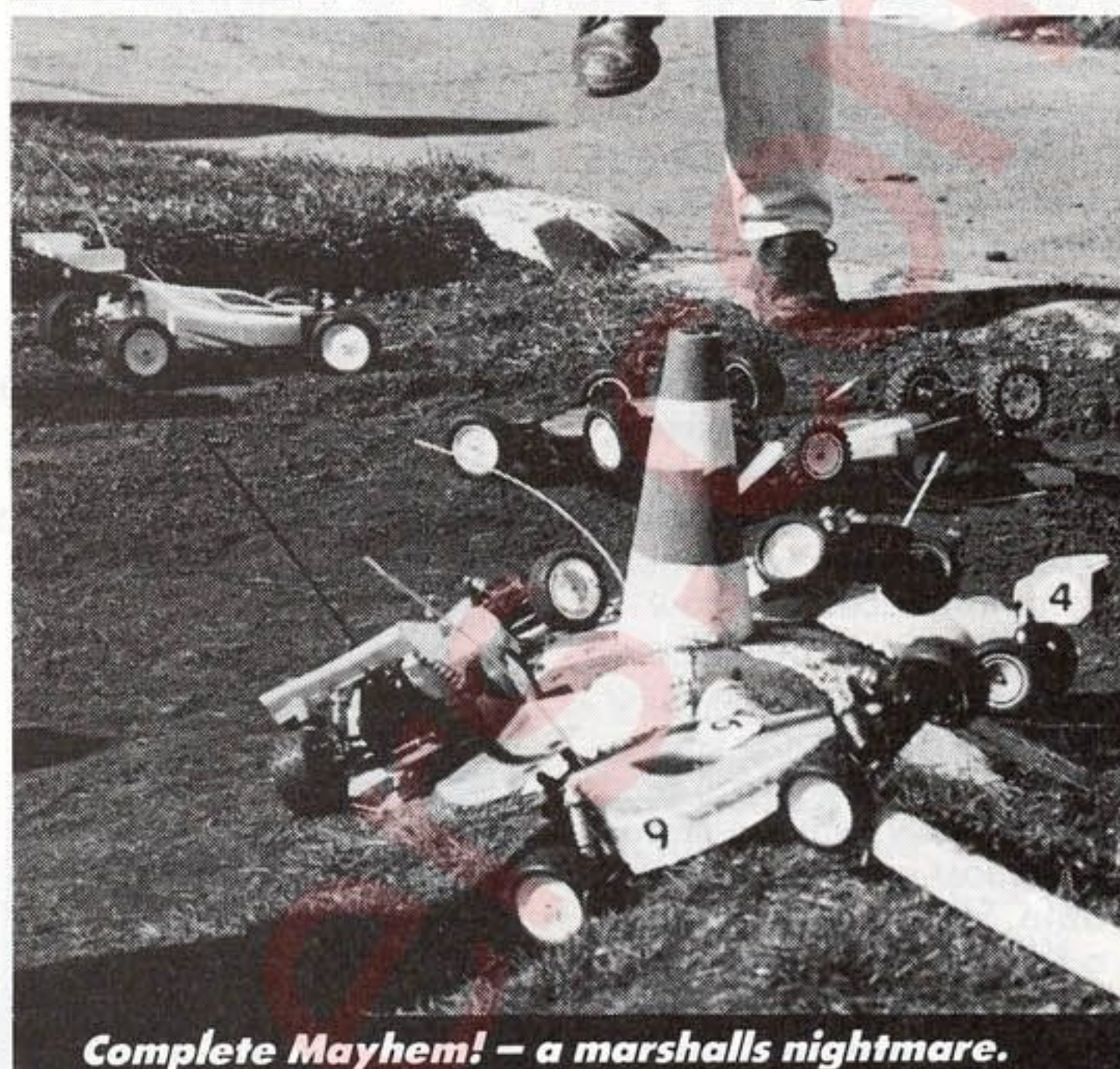
from Austria where he had finished sixth in the European 1/10 Circuit Championships and showed he still had the bit between his teeth when he experienced his most successful weekend's racing on 'home soil' (I use this term very loosely – read on!).

The third round of the 4WD National Series was held at Medway, in Kent. Their track is situated at the Elm Court Garden Centre and is now basically a tarmac track with loose gravel on top to create minimal grip. Whether or not this surface aspires to 1/10 offroad racing is debatable, although it must be said that conditions remained the same throughout the dry part of the day and lap times improved when the rain came to dampen the dust. I feel that last year's track at Medway was more in line with what is required but suspect that wear and difficulty repairing the surface was the major reason for change. The layout of the track comprised of a long straight followed by a sweeping bend containing a hump to catch out the unwary driver. The buggies then negotiated a series of narrow chicanes, a smaller straight at right angles to the rostrum and a succession of twisting bends leading back to the main straight. In conclusion a difficult circuit to drive on a surface which made racing even more hazardous. The lack of grip allied to the cramped infield made overtaking a real problem.

Three rounds of qualifying began at 10.00am after an extended length of practice. The three rounds which has been prevalent so far this year is in my view totally unsatisfactory and I hope that next year we bring in legislation to ensure that four rounds are run (except in dire circumstances). At this meeting for example we had competitors who had travelled 300 miles to race three rounds and a final? Maybe the whole concept of Nationals should change so that the BRCA committee organise the event from

start to finish. This could allow neutral venues to be used say at Model Fairs or Motor Shows, where the general public would be entertained and where more publicity would help to attract more drivers to the sport.

Back to the racing . . . Round One saw Clayton Collins successful in heat one defeating Andy Duncan with 13 laps 324.12. Clayton's average lap times being around 24 seconds. John Zottl was 15 seconds faster when winning heat two and Martin Ellis was not on the early pace but won the third run in 12 303.21. After wins by Spenser Wood and Gary Simms, Tamiya's Darren Styles steered home his Egress in Heat Six with the fastest time so far just missing 14 laps by 2.30 seconds and recording average lap times of 23.25 seconds. Heat Seven saw Nick Heath beat Paul Gooda in the first 14 lapper with a time of 317.27 which placed him in the top ten at the end of the round. Two home based drivers fought out heat eight with Ryan Georgakis just getting the better of Wayne Darrell to win in 13 308.38 and in the next race Andy Carter's Procat came home in front of Schumacher's Tim Walden, both drivers making 14 laps. In heat 11 Phil Davis, who has a liking for this venue as he won here last year at a 2WD National, knocked in a scorching 15 lapper in 319.96 to lead the competition. The last heat of round one was somewhat



**Complete Mayhem! – a marshalls nightmare.**

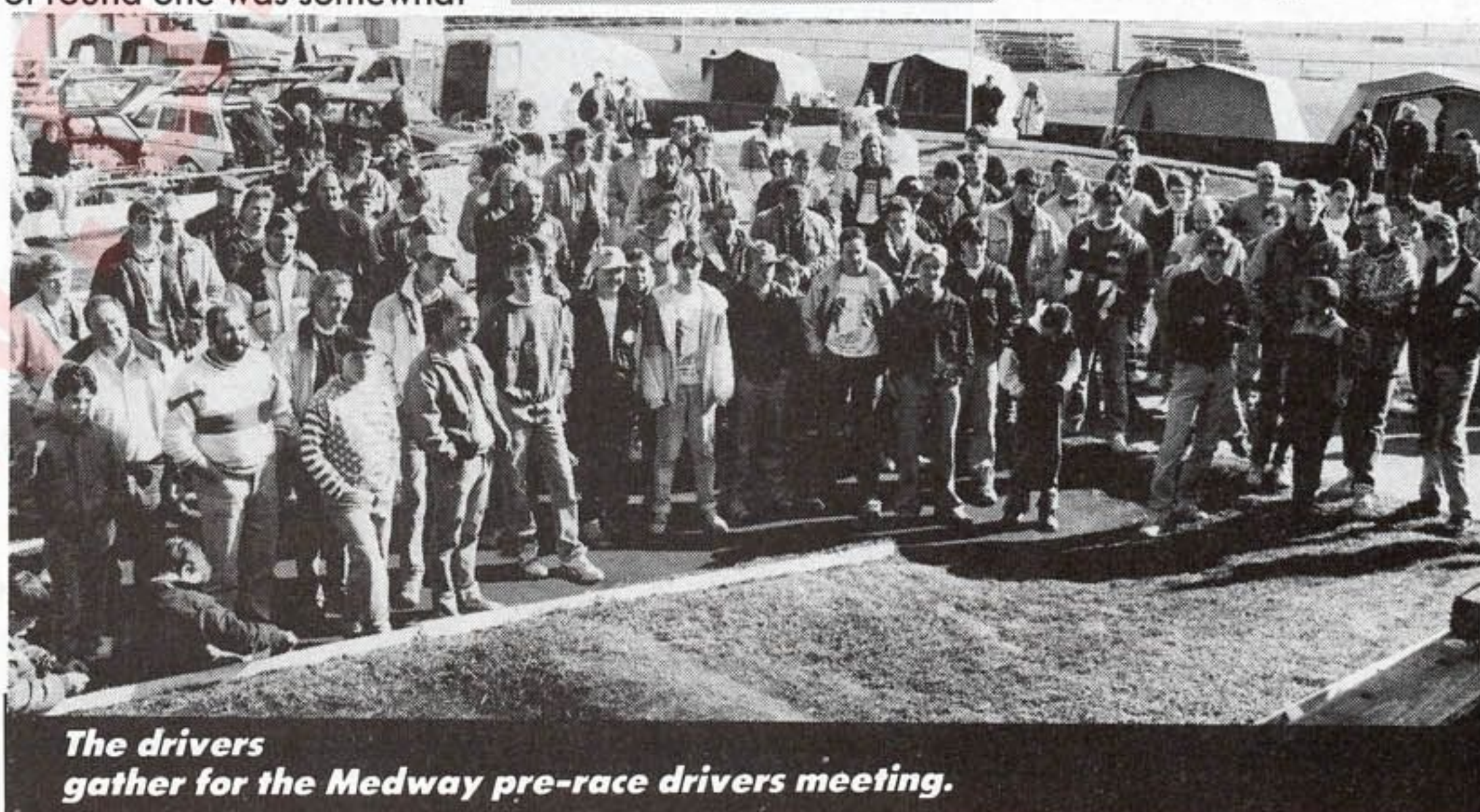
controversial in so far as three drivers were awarded penalties for various offences – Craig Drescher jump started and lost out on the FTD, Ellis Stafford was given a driving penalty and Pete Stevens' Yokomo also jump started. Even after the 10 second adjustment Craig made the top ten leaving a veiled threat of better things to come!

As is my wont, a nosey round the pits found me eyeing Schumacher's new charger, called a Nicad Management System. This combined charger/discharger meter, which Tim Walden is very enthusiastic about, includes all the usual facilities expected of a high class charger as well as the unique ability to be able to compare cell packs from new throughout their lifecycle. It will store, in memory, the maximum energy of up to nine packs of cells so that at a later date their present condition can be compared with what they were like when new.

This will be a boon in checking for packs that are beginning to go off. The Schumacher NMS will peak or thermal charge and

#### Round one positions

1. P. Davis
2. C. Drescher
3. R. Cull
4. K. Moore
5. M. Tatman
6. B. Sturnham
7. J. Booth
8. N. Heath
9. A. Carter
10. T. Walden



**The drivers gather for the Medway pre-race drivers meeting.**



displays amp hours as well as percentage discharge. See photo. Hope to get my grubby hands on one soon to review . . . watch this space!

The second round started at 11.40am with the same drivers in heats one and two winning with improving times and John Zottlwent one lap faster in 14 321.21. Duncan Wood just missed 14 laps in heat three, by 0.20 seconds and 14 laps was becoming commonplace. Matthew Needham and Cy Lapwood duelled for success in the next run and made 14 316.21 and 14 316.47 respectively with the closest and most exciting finish to date. Steven Harris, racing a Kyosho Laser beat off the challenge of Mark Buckle's Procat in heat five with a quick 14 311.27 and four drivers in heat six all made 14 laps with Chris Fowle's Procat coming home first in 313.37. Heats seven and eight saw victories for Steven Swan and Wayne Darwell with quick 14 lappers and in the following run Kevin Moore beat Jamie Booth to record the FTD to date, in 15 308.58.

William Mitcham had a stormer in heat ten to win in 15 315.56 which would see him in the top ten at the end of the round and this was duplicated in heat eleven by Ben Sturnham in 15 319.02. Craig Drescher cast aside the disappointment of the first round penalty to conclude an excellent round with the FTD of 15 308.17, beating Steve Brace and Rory Cull who both had 'A' final runs.

#### Positions after Round Two

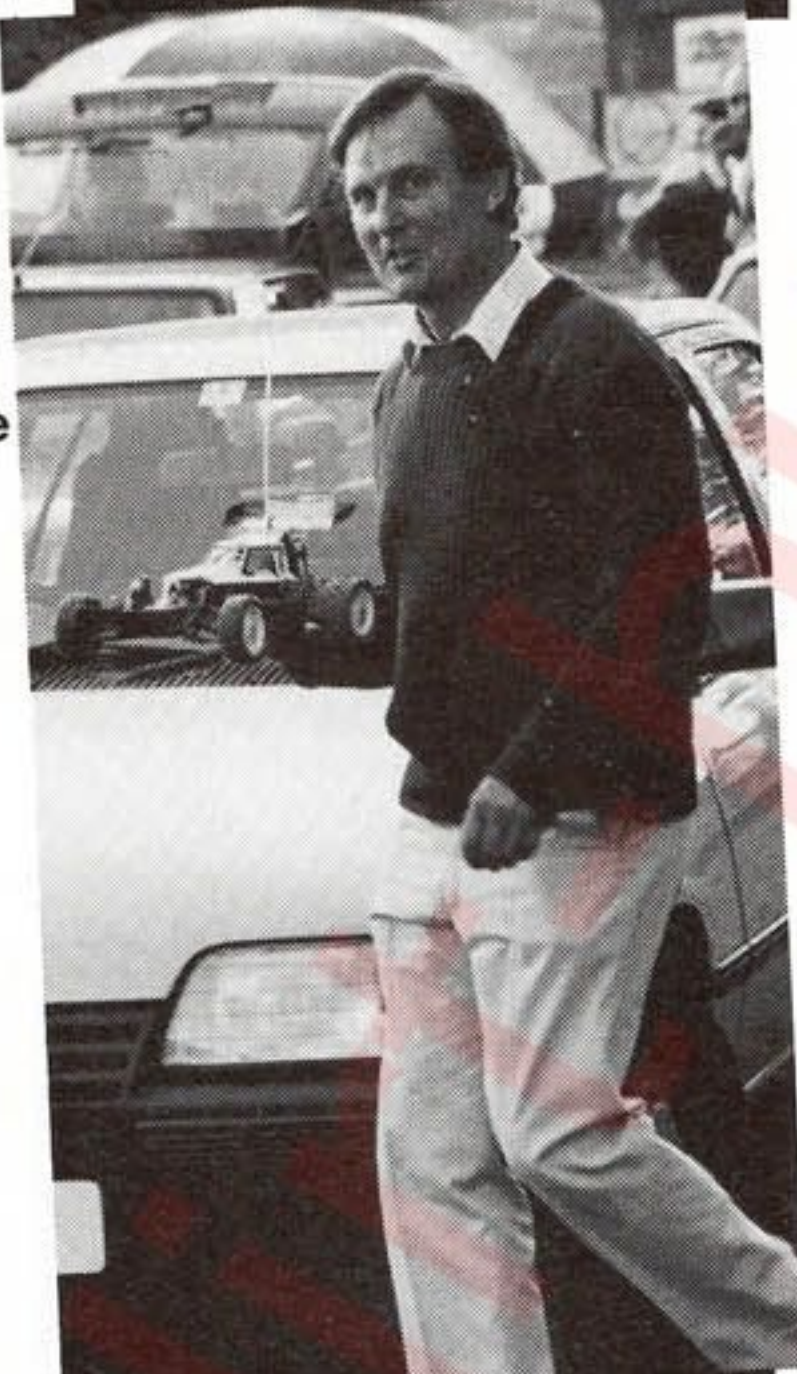
1. C. Drescher
2. K. Moore
3. J. Booth
4. W. Mitcham
5. S. Brace
6. B. Sturnham
7. P. Davis
8. R. Cull
9. A. Harman
10. M. Tatman

Round three began during a shower of rain and most competitors were of the opinion that the track would race slower as a

result of this. In fact the opposite occurred, with the rain dampening down the dust, especially off the racing line, to improve the grip all round. Subsequently, most drivers put up their best times in this final round and to a degree made a lot of the previous results redundant. The British climate struck yet again! As the round unfolded it became apparent that a minimum of



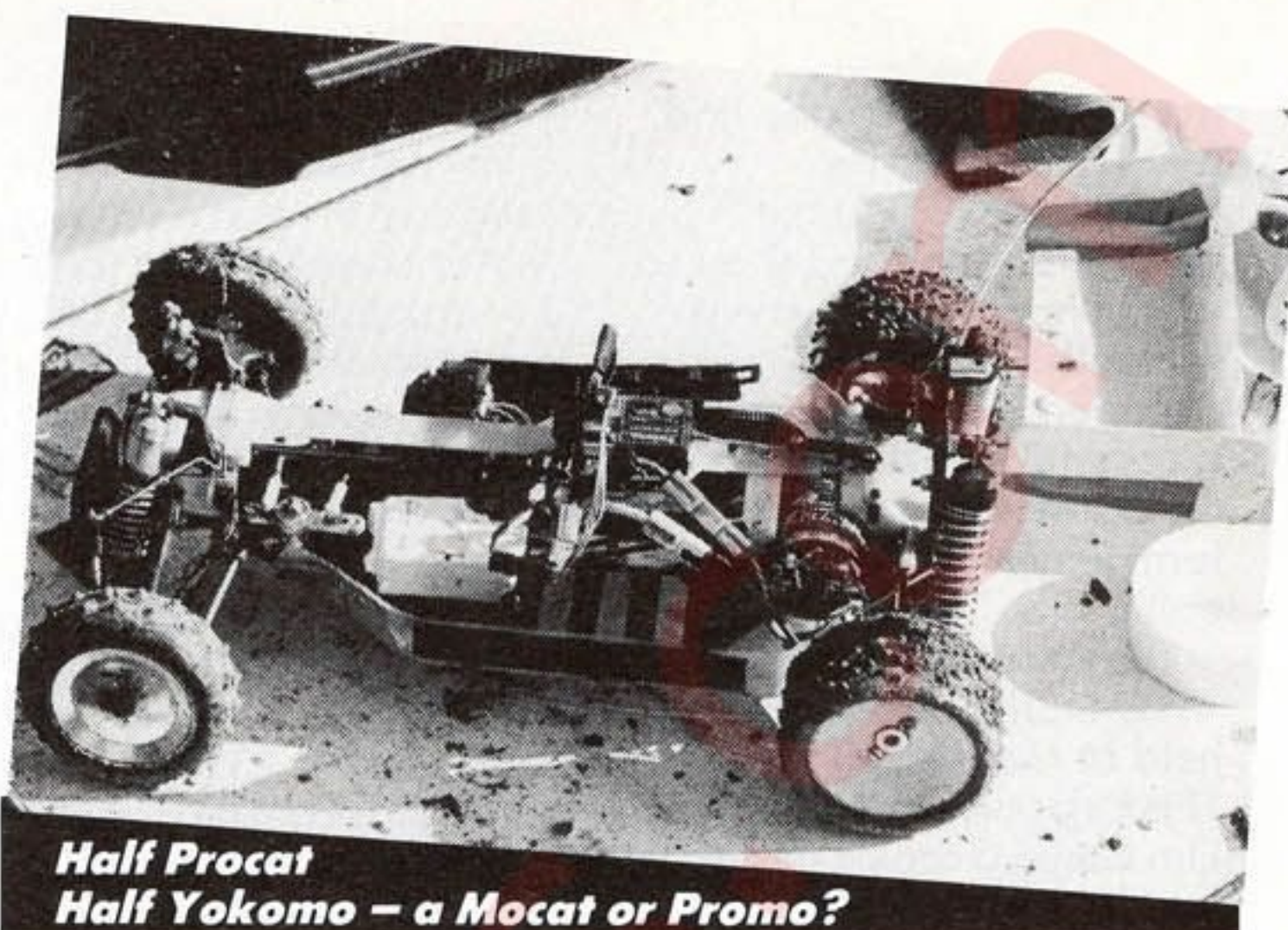
**Steve Haynes Egress meets an immovable object.**



**It's that Mr. Mitcham again - looking after Williams Procat.**

15 laps would be needed to reach the top ten.

Encouraged by the extra grip everyone was striving to improve and heat two saw James Robelou move into the 'F' final with 14 321.37. Duncan Wood won heat three with 14 310.58 to make the 'D' and, in the next heat. Matthew Needham scored 14 307.01 a result which placed him eight places higher in the 'C'.



**Half Procat Half Yokomo - a Mocat or Promo?**

Steven Harris won heat five in 14 305.41 and Chris Fowle, in the following run, became the most unfortunate driver of the meeting because his time of 14 300.10 left him one place outside the 'A'. Paul Goods beat Peter Madden in heat seven both drivers qualifying in the 'B' final in 14 302.74 and 14 304.34 respectively. Ryan Georgakis also improved to move up to 15th overall with 14 302.04 and Luke Burley's time in the same heat left him pole position in the 'C'. Kevin Moore and Jamie Booth had slower 15 lappers than their previous runs in heat nine, but in the tenth heat Steve 'Woodchopper' Haynes and his Tamiya Egress made sure of a top ten place by making 15 318.45. This time was amended to 15 328.45 because of a ten second driving penalty. Steve was fortunate in that only ten drivers made 15 laps, so he remained in the 'A' in spite of the incurred penalty. Steve, who works in a wood yard, was lucky to have made 15 laps and had better not make a habit of 'chopping' corners!

Heat eleven saw Phil Davis take the FTD in 15 304.48 with Ben Sturnham in second on 15 312.69 and Mark Chaplin in third place with 15 315.17. Three of the six fastest times of the day. Steve Brace who is fast becoming 'driver of the year' (which year?) put in a fast 15 318.83 in the final qualifying race to move into eighth overall and Pete Stevens in this heat ran out 12 place on the list with 14 301.32.

#### Top twenty qualifying positions

1. P. Davis
  2. C. Drescher
  3. K. Moore
  4. J. Booth
  5. B. Sturman
  6. M. Chaplin
  7. W. Mitcham
  8. S. Brace
  9. R. Cull
  10. S. Haynes
  11. C. Fowle
  12. P. Stevens
  13. E. Stafford
  14. N. Cochrane
  15. R. Georgakis
  16. P. Gooda
  17. A. Harman
  18. L. Edwards
  19. PA. Madden
  20. M. Tatman
- FTD: P. Davis**

#### The Finals

The first leg of the 'A' finals was won by Rory Cull. Jamie Booth was the first lap leader after the top four qualifiers along with Ben Sturnham were away round the first bend. Phil Davies was in second place followed by Rory and Craig Drescher. On lap five, errors by Jamie Booth and Phil gave Rory his chance and he made the most of it to take over in front with Jamie second and Craig third. Craig slipped up on lap seven dropping back to fourth but only for one lap as it was Phil's turn to fall foul of the track. Up front Jamie was trying everything to get on terms with Rory, who's Procat was clocking consistent 20 second laps. The four leading positions did not change for the rest of the race giving Rory Cull a well earned victory with an error-free drive. Jamie had closed the gap during



the latter stages to be within half of a second at the end.

The second leg saw the only 16 lap run of the day. Kevin Moore was away at the start followed, in close proximity, by Jamie, Phil and Craig. All ten cars were within 1½ seconds at the

first bend pile-up, fought his way determinedly through the field to finish in third place and William Mitcham emerged from the pack to earn a merited fourth spot. Keven knew he needed a superhuman time to win the meeting and pulled out all the stops to get it, failing to make a 16 lapper by 0.12

# iN THE ROUGH

place to become the overall winner.

### Final placings

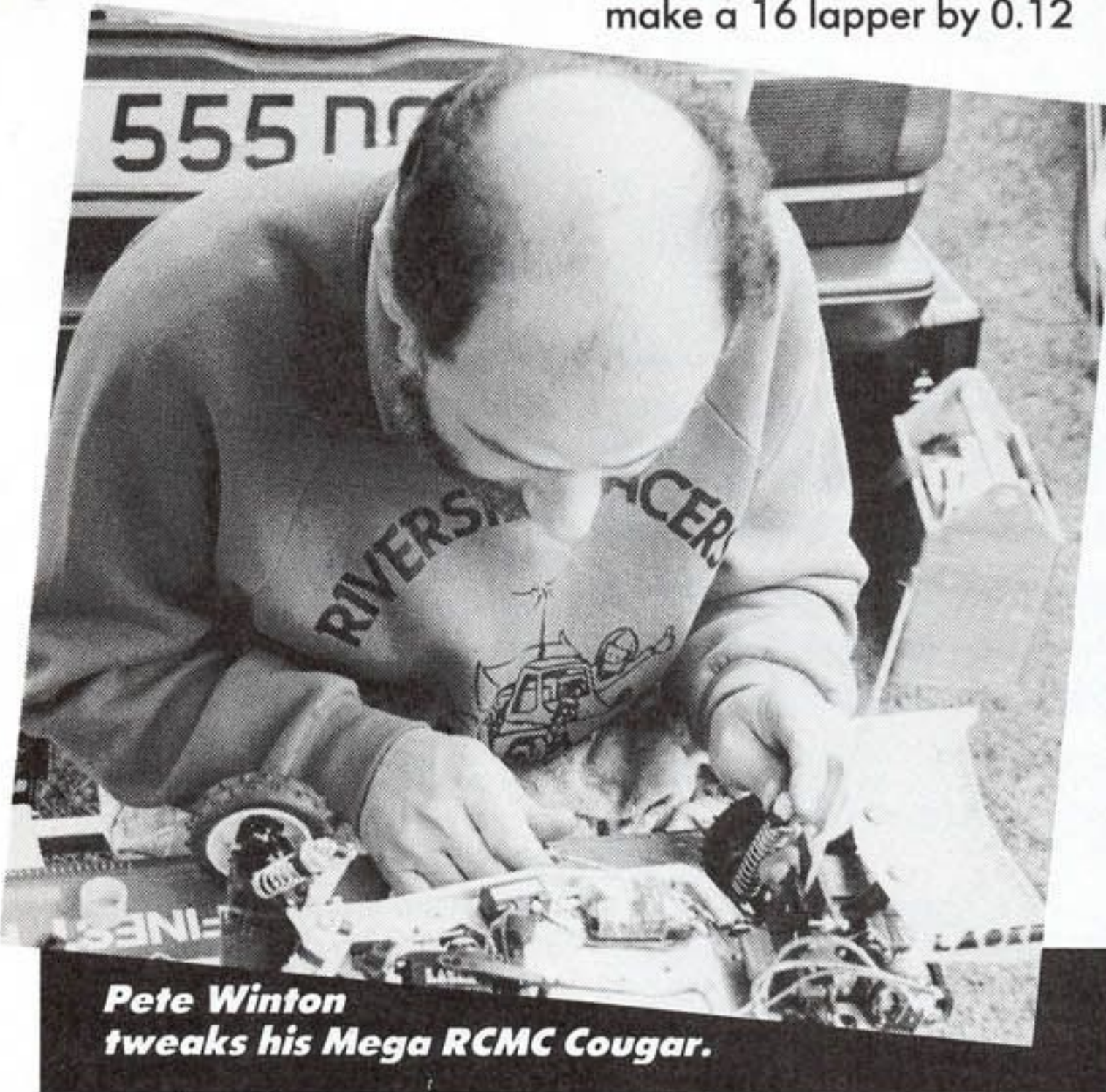
1. P. Davis
2. K. Moore
3. J. Booth

We had seen some competitive racing during all the finals culminating in a creditable performance from Phil Davis. There was criticism of the track from notable quarters and personally, I am not in favour of racing on a tarmac track which in my opinion should be kept for circuit racing. I appreciate that wear is the major problem for any club who has a permanent track but a mixture of surfaces, as at Southend, seems much the better compromise. There is a lot of enthusiasm and

support for buggy racing in the South East and full marks must go to Pete and Joan Darwell and the rest of the crowd (as well as 'Mr. Mouth,' commentator Nick Damon) for the obvious hard work put in to make the meeting a success. Pete, I'd put a guard on the generator next year!

### BRCA National Series 2WD Round Three – Eden Park

The Eden Park Overlanders venue at the London Transport Sports Ground hosted last year's British Grand Prix. Round three of the 2WD series of our National Championship was held on one of the two areas that were used for the G/P events. In fact, the



**Pete Winton tweaks his Mega RCMC Cougar.**

end of lap one after a remarkably clean start. (I had to pinch myself to see if I was dreaming!). Phil Davis took over from Kevin on lap two and held a two second lead for the rest of the race. In this very fast final the duel for second place developed over the next few laps as Jamie, who was four seconds down on Kevin, began to pull in the leaders. Kevin drove a well judged race to hold on to second place with Jamie third and Steve Brace, who had worked his way through from down the field, taking a creditable fourth spot.

So after two legs Phil Davis and Jamie were in front on 17 points with Rory and Kevin close behind on 16 and 15 respectively. A win from any one of these four could spell victory, with Jamie and Phil favourites.

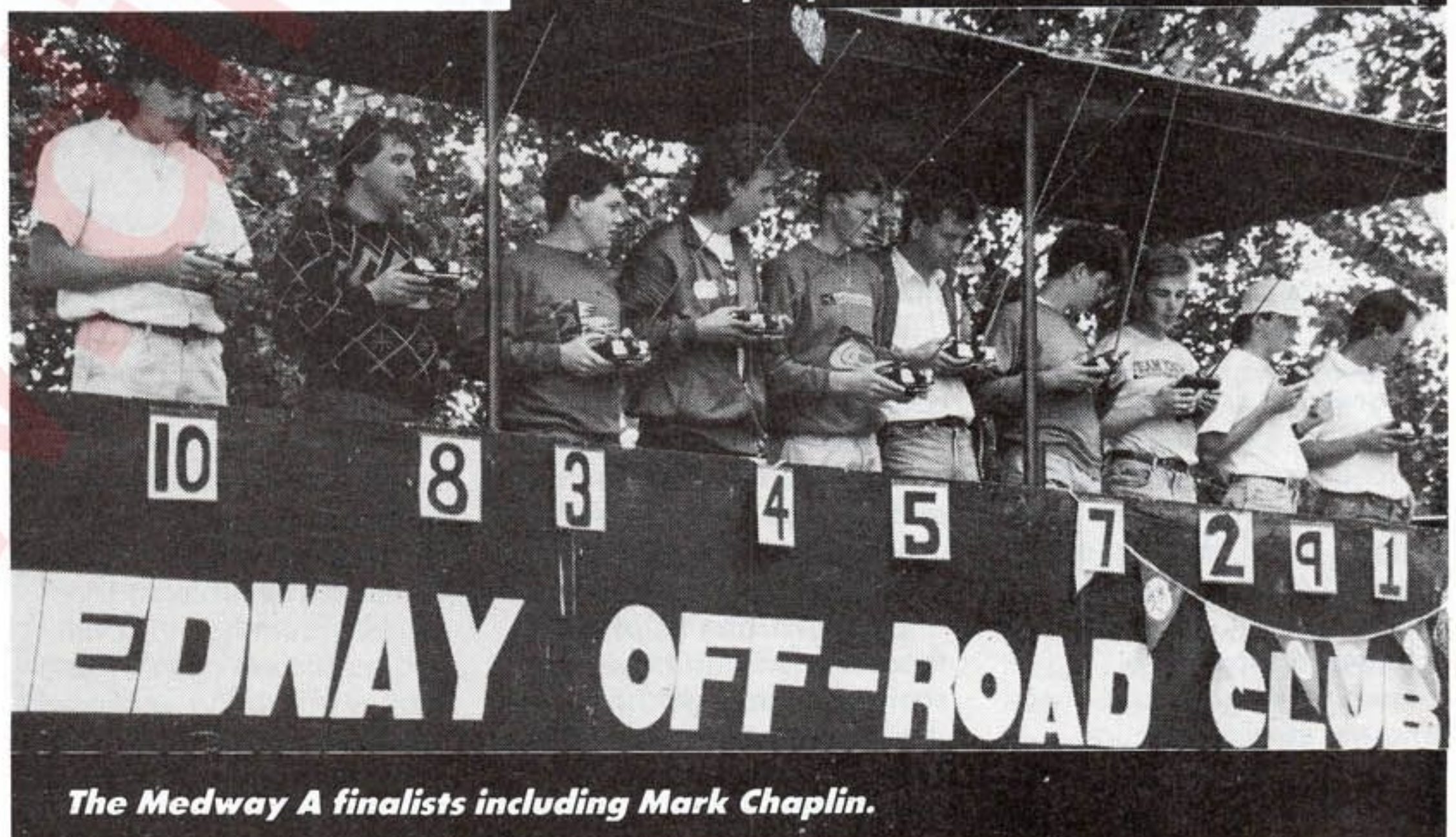
The third leg of the 'A' Final was Kevin Moore's race. He took over the lead from Phil Davis on lap two and held it till the finish. Craig, who had a terrible start because of the usual

seconds. A time which was second fastest of the meeting.

Phil Davis's position in second place was threatened near the end of the race when he was pressed hard by Craig who came within 0.40 seconds of him on the penultimate lap. The finishing line came none too soon for a relieved Phil who held on to second

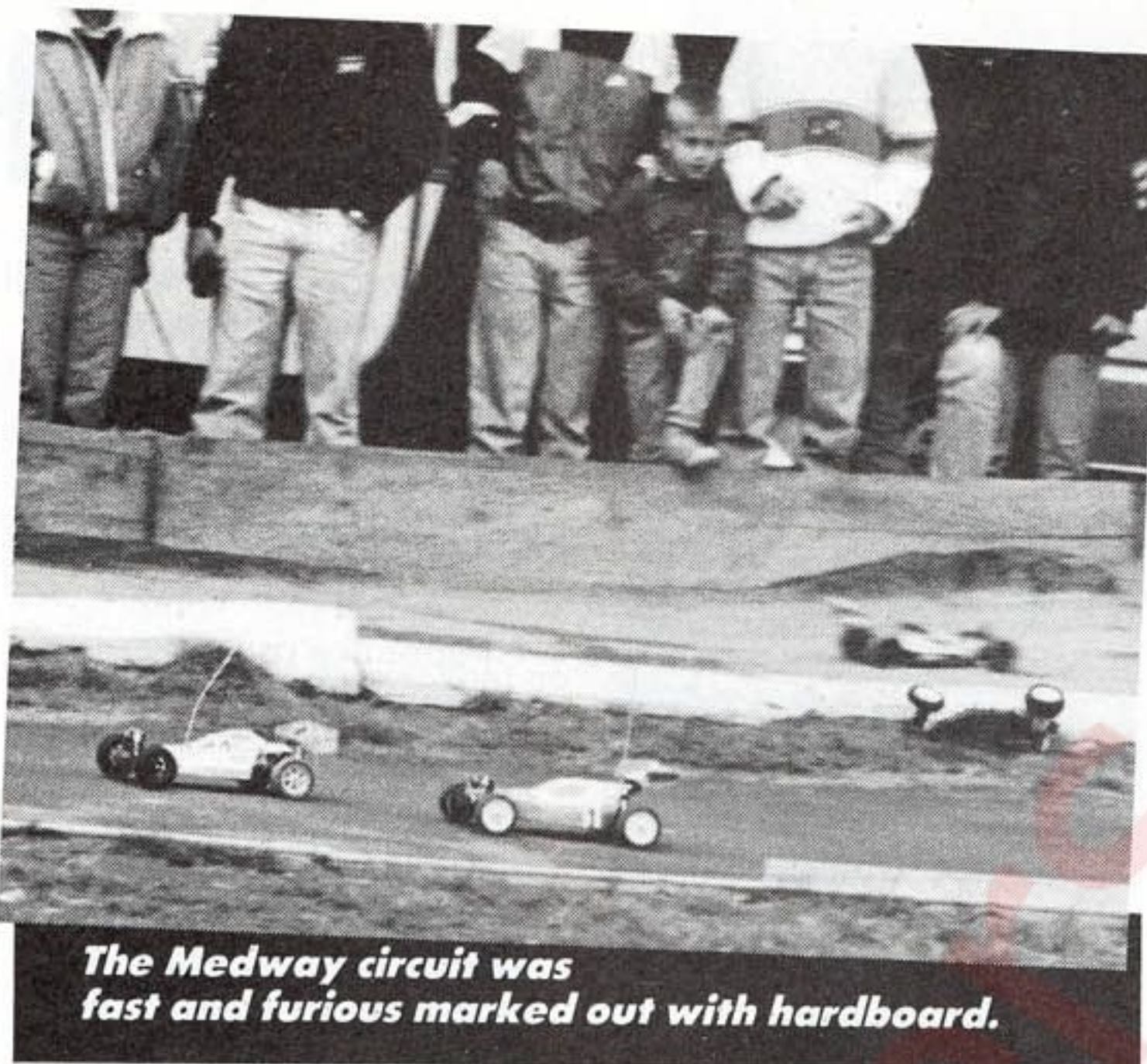
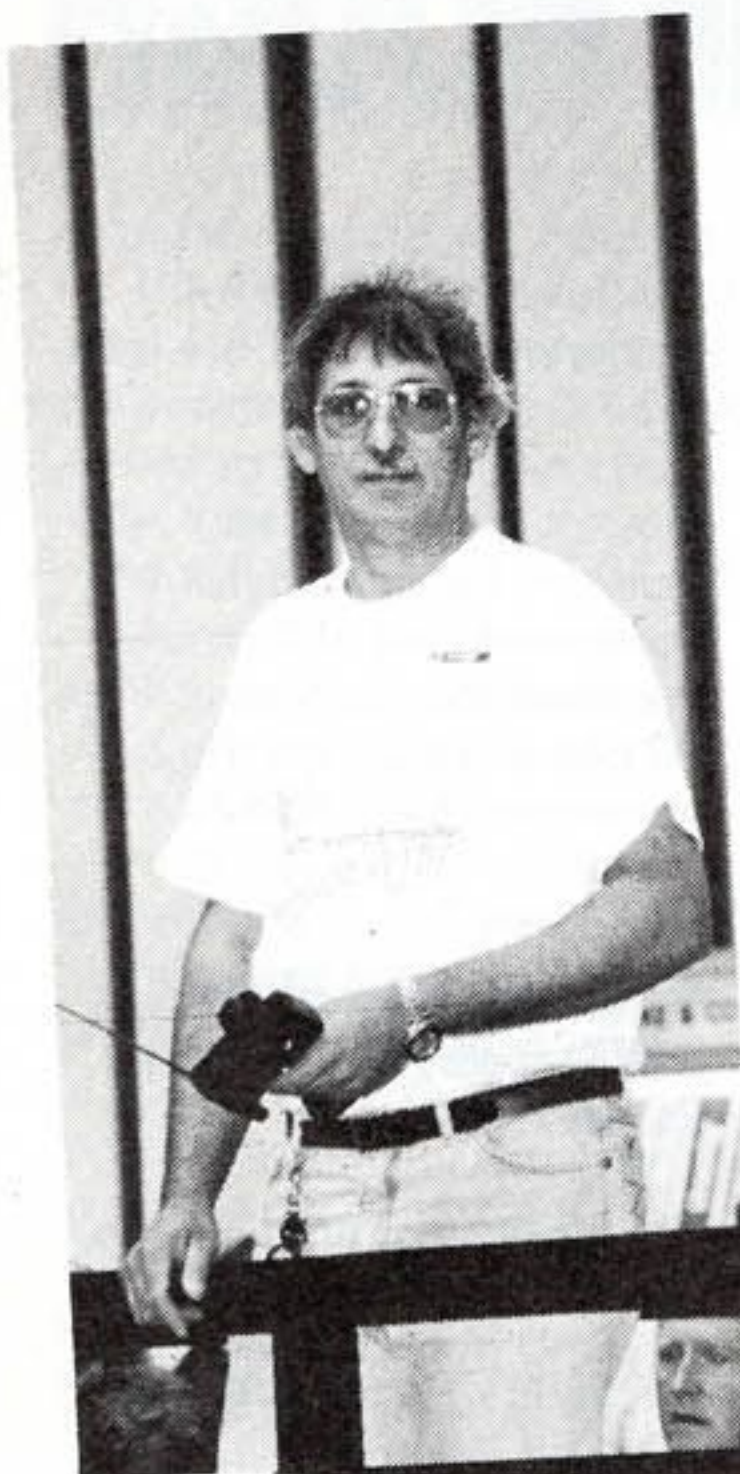


**Nick Damon, Maureen Smith & Joan Darwell ran the meeting – well done people!**



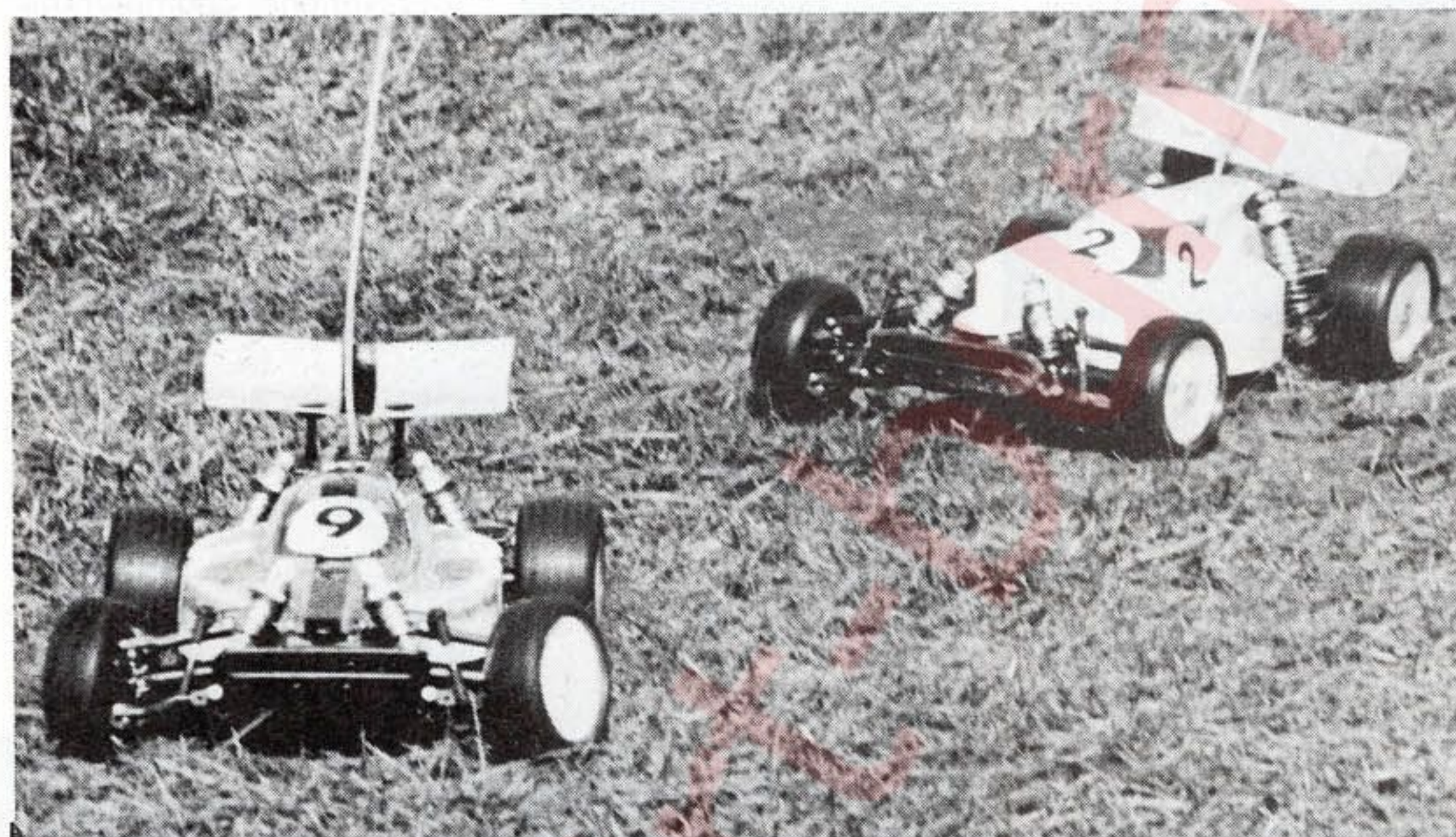
**The Medway A finalists including Mark Chaplin.**





**The Medway circuit was fast and furious marked out with hardboard.**

**Left: The Man himself – Harold-I-Twest alias Es West your scribe and 1/10th Off-Road secretary.**



**Procat battle, Schumacher are certainly winning the numbers battle – Procats being the UK's favourite choice.**

meeting was held on the site which housed the 4WD track and was an all grass surface which began with a long straight leading to a fairly tight banked turn. This banking became smooth and dusty as the meeting progressed and played an important part in the later proceedings. Following this, another straight led to a hairpin bend, then up a banked area onto the infield section. The track continued through a sweeping dogleg and onto another straight section which led back to the start. To my mind there were too

many straights and not enough variation, horsepower was a necessity – and (as is too often the case!) so too was a good start.

The first of three qualifying rounds commenced at 9.45am on an overcast morning which threatened rain but, in the end, turned out to provide us with ideal outdoor racing conditions.

Georgie John Elliott set the early pace in heat one scoring 13 laps 306.62 and this time was bettered in the second run with Duncan Wood recording one second

faster. 13 lap scores were recorded in the next four heats. First Nick Caro was timed at 324.12, John Zottl was three seconds faster, Andy Pattison had 313.4 and Mark Chaplin, off to a poor start by his standards, with 13 310.59. In heat seven Lee Wright was fortunate not to have his time doctored because he forgot his AMB transponder. This, to the unenlightened, is a small radio receiver about the size of half a matchbox, which is placed in the buggy by each competitor prior to the start of his heat. This

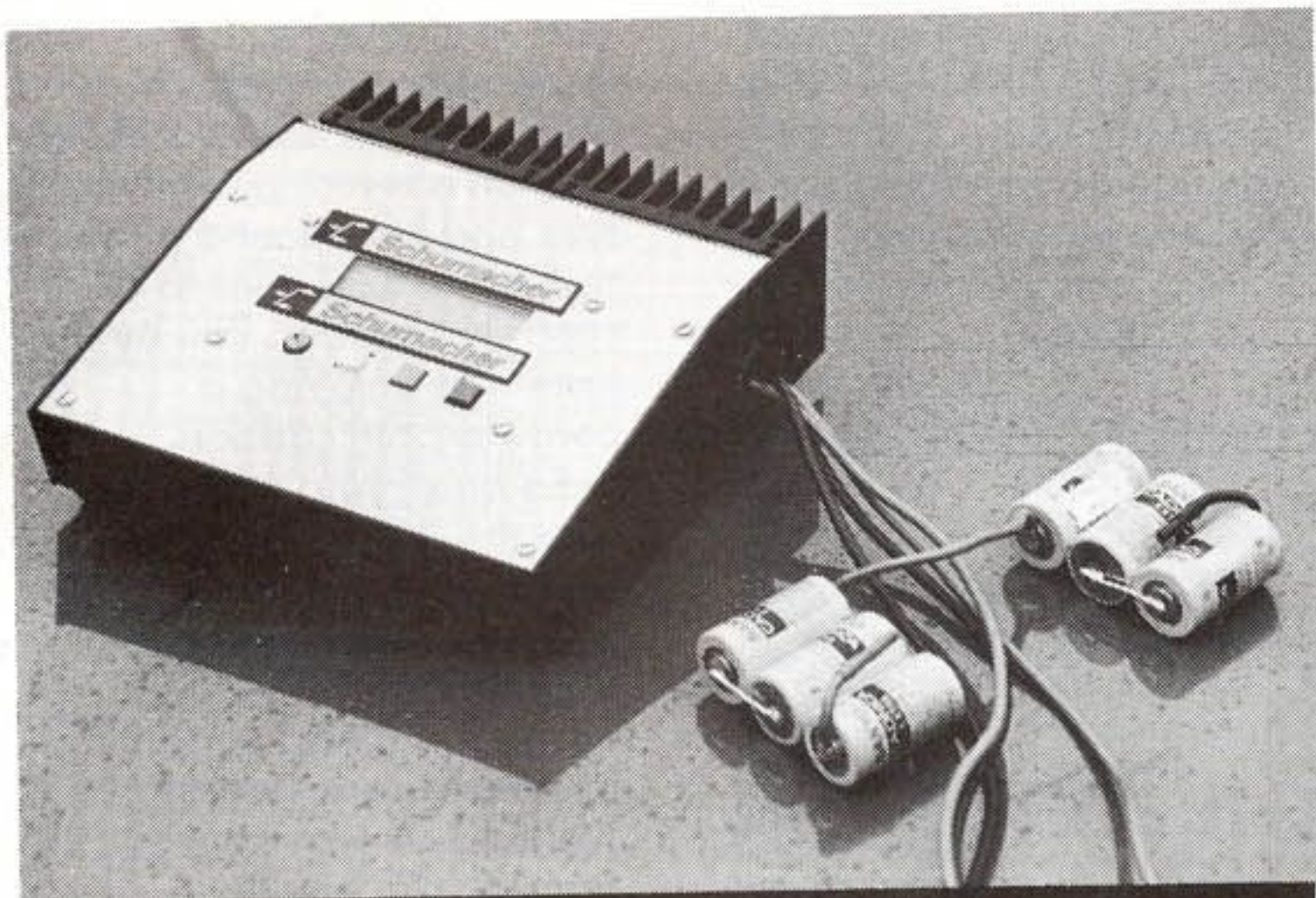
transponder transmits a radio signal which is picked up by the automatic lap counting equipment when crossing the start line on each lap and records precise lap times. Lee had to have his times recorded manually and his time of 14 laps 321.18, which was the quickest so far, was allowed to stand by a benevolent Race Director, Derek Clarke. Alan Harman, driving an Associated RC10, recorded a quick 14 322.79 following Lee home. After David Edmed had made 13 318.41 in heat eight, Ben Sturnham and Rory Cull put up the fastest two times to date in the next run. Their times of 14 314.06 and 315.56 would leave these two in third and fourth place at the end of the round. Craig Drescher posted an excellent time of 14 309.90 to move into pole position in heat ten and then it was William Mitcham's day to sparkle with 14 316.50 in the penultimate heat of the round with Mark Tatman also making a creditable 14 317.12. Three drivers all made 14 laps in the final run with Jamie Booth taking the current TQ spot off Craig, with Phil Davis and Steve Haynes taking ninth and tenth spot on the list respectively. Their times: 14.309.34, 14 323.83 and 14 327.83. So Jamie, unusually for him this year in the struggle to come to terms with his Tamiya buggies, was leading the field starting round two. In both classes neither the Tamiya Astute or Egress had taken TQ after five National Meetings.

#### Round One Top Ten

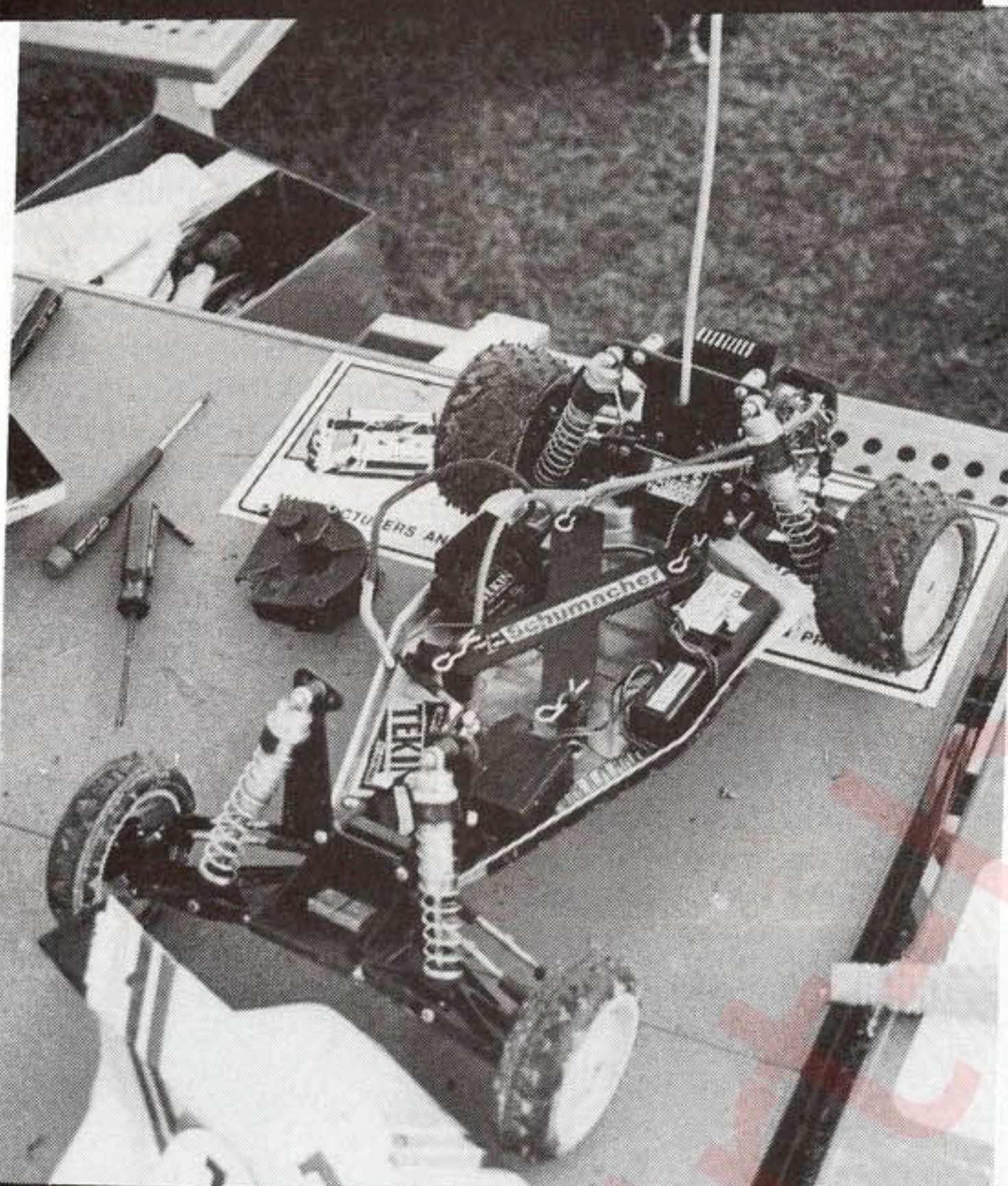
1. J. Booth
2. C. Drescher
3. B. Sturnham
4. R. Cull
5. W. Mitcham
6. M. Tatman
7. L. Wright
8. A. Harman
9. P. Davis
10. S. Haynes

Round two was underway at 11.25 and John Elliot was successful, but with a slower time than his first run, in heat one as was Duncan Wood in the second race.





The latest technology from Schumacher.



Pete Smith's neat Cougar with fibre battery clamp.

Nick Caro won heat three improving his time by 11 seconds to 13 313.12 John Zottl moved up to 24th place with 13 305.92 and in heat five Les Hewitt scored 13 318.78 to win from Andy Patterson. Mark Chaplin's Schumacher Cougar improved to 25th on the list with 13 306.16 and Scott Innes made a good time in second place. In heat seven the brilliant Alan Harman (he is if I say so – he pays my wages!) could not better his 14 lapper of the first round but had a good scrap with Lee Wright and Jon Pridman,

Jon finishing second on 13 307.53. Unfortunately his buggy failed to satisfy the scrutineers and this time did not stand. Jimbo Pearson looked good winning heat eight but was disappointed with the time of 13 315.40. Rory Cull progressed to 14 309.40 winning the ninth heat of the round and Ellis Stafford made a move up the qualifying list, in heat 10, along with Danny Conway. He was beaten by Craig Drescher but finished with 14 311.39 to lie in fifth spot overall and Danny was pleased I'm sure to come home third with the time of

14 316.93, which would place him eighth on the grid. Steve Brace won the eleventh heat with a time which would leave him eleventh overall and in the twelfth Kevin Moore won with a new FTD of 14 308.44 while Phil Davis moved to tenth place with 14 319.22.

#### Round Two Top Ten

1. K. Moore
2. J. Booth
3. R. Cull
4. C. Drescher
5. E. Stafford
6. B. Sturnham
7. W. Mitcham
8. D. Conway
9. M. Tatman
10. P. Davis

The remaining qualifying round started with a win for John Elliott, he posted 13 302.1 which would place him in third on the 'C' final grid. Duncan Wood had to settle for a 'C' final place also in heat two and in the fourth run John Zottl made 14 322.41, a time he would be pleased with, to lie 17th overall. Mark Chaplin finished well down the field after Scott Innes had made 13 302.61 to move to 25th on the list, in heat six. The seventh run saw Alan Harman improve his time slightly with 14 321.66 to leave him midway in the 'B'. Ben Sturnham was still pressing for the FTD honours in the next run and came close with 14 310.55.

In this heat Robert Gammon was unlucky to finish on 14 319.87 to be pole position in the 'B' final. Ellis Stafford made another excellent run to consolidate his position in the 'A' in heat ten and William Mitcham moved up a couple of places with 14 310.33. Pete Stevens' time of 14 321.53 took him to 14th overall. The final qualifying run saw Pete Winton's Cougar take off like a greyhound and lead for half the race, but a major error saw him slip back down the field to finish 22nd on the qualifying list whilst Phil Davis moved up to fifth with 14 309.95 in winning the heat. Pete says

there's nothing wrong with his driving or setting up – his problem being that his thumbs are 15 years too old! (Steve Brace says it's more like 50 years, but who's counting!). It gets to us all Pete, ask George.

So qualifying was over and the ifs and buts had beens settled. It was time for the finals, home club driver Kevin Moore was Top Qualifyer, and judging by the times posted by the top nine drivers, (four seconds split all of them) the 'A' Finals promised to be very competitive.

#### Top 20 qualifying positions

1. K. Moore
  2. J. Booth
  3. R. Cull
  4. C. Drescher
  5. P. Davis
  6. W. Mitcham
  7. B. Sturnham
  8. E. Stafford
  9. M. Tatman
  10. D. Conway
  11. R. Gammon
  12. S. Brace
  13. L. Wright
  14. P. Stevens
  15. A. Harman
  16. S. West
  17. J. Zottl
  18. S. Haynes
  19. L. Burley
  20. T. Walden
- FTD:** K. Moore

#### The 'A's

Leg one began with first blood to Kevin Moore. He steered his Schumacher Cougar into the lead around bend one with Rory Cull in close attendance and Ben Sturnham third. The banked turn at the end of the straight had dusted up resulting in low grip and it only needed one buggy to lose control to take several others out with him. This, unfortunately, happened and gave some drivers no chance of a good result and allowed the front runners a more than generous breathing space. Kevin increased his lead to ten metres and Phil Davis closed down Ben to overtake at the end of lap two.





**RCMC test driver  
Ellis Stafford or his real name Alice Staffard.**

The three front runners were pulling steadily away from the rest of the field at this stage with Craig Drescher lying fifth and Jamie Booth sixth. Craig's RC10 began to edge closer to the leading pack. On lap eight Rory was overtaken by Phil whose Cougar was extremely quick and then tragedy struck for Kevin Moore on lap eleven when he put his buggie into a tyre and gave Phil a chance to pass. On the same lap Ben slipped up also, giving

Craig a chance to move into fifth place. The final three laps of the race were really an anticlimax and concluded with Phil winning, Kevin second and Rory in third place. The first leg had been thrilling to watch and there was more to come . . .

The start of the second leg was mayhem. Most drivers drove around the first bend without mishaps only to be part of a second bend pile-up which destroyed any chance of a good result for them and

left William Mitcham out in the lead followed by Ellis Stafford, some distance behind. In third and fourth places were Ben Sturnham and Jamie Booth. As the race progressed two battles raged. One developed between William Ellis for the lead and other between Ben and Jamie who were dicing over third place. Ominously Jamie was pushing Ben all the way and looking for a chance to get his Tamiya Astute by. He was never given the chance by Ben. Disaster struck on lap 12 for Ellis Stafford who stuffed his Cougar into a tyre allowing Ben the chance to speed by. Totally unpressured William was driving a beautiful race up front, lapping with his RC10 every 21.60 seconds, a run which produced the best time of the day (14 302.98). He kept his nerve to win comfortably from Ben Sturnham and Jamie, who made the most of another mistake by Ellis on the last lap to take third place with Ellis fourth.

So, Phil or William were favourites to win the meeting . . . a win for either in the third leg would put victory beyond any doubt. After sheer havoc at the first two bends, it was Phil Davis who came out of the pack with Kevin Moore in hot

pursuit chased by Ben Sturnham and William Mitcham. On lap two Kevin had an altercation with a tyre and lost second place to Ben, to had a lot to do catch the leader. Phil by this time was enjoying a considerable cushion.

So qualifying was over and the ifs and buts had been settled. It the field with a Cougar which couldn't have gripped the track better if it'd had Araldite on its tyres! Craig Drescher was working his way slowly through the bunch eventually passing William to take over third position. Lap four saw him move into second place after Ben had flipped his Cougar and Kevin Moore had made another error. Phil's lead was now four seconds and he continued to drive an excellent race to steer the Cougar home and ensure certain victory. Craig had been unfortunate at the start but showed his metal to take a well deserved second place and could well have won had there been a couple of laps remaining. Kevin Moore, who I considered favourite to win the meeting, surprisingly wilted in the finals to finish third after Ben had had a disastrous lap 10 and allowed Kevin through.

Phil Davis had continued

**Medway 4WD National - 9/6/90**

Final/Name	Sponsor	Buggy	Motor	Cells	Speedo	Servo	Radio Gear	Tyres		Qual. Pos.	Points 'A' Final Legs		
								Front	Rear		A	B	C
1. P. Davis	Schumacher	Procat	Reedy Green Dot	Schm.	Schm. Traco	KO FET	JR Apex	11x12 Blue	15x12 Blue	1	4	1	2
2. K. Moore	Schumacher	Procat	LRP Pinke	Schm.	Nosram TL	KO FET	JR Apex	11x12 Blue	15x12 Blue	3	5	2	1
3. J. Booth	Tamiya LRP Nosram	Egress	LRP Orange	LRP	Nosram	KO FET	Apex	Tamiya Egress	Losi X Pattern	4	3	10	3
3. C. Drescher	Reedy Yokomo KO Novak Keil	Yoko Dog-fighter	Reedy Gree Dot	Keil	Novak TI	KO FET	KO Esprit II	Yoko TFS	Losi X Patt	2	3	6	3
5. R. Cull	Schumacher Reedy	Procat	Reedy Green	Reedy SCE	Nosram	KO FET	JR Apex	Hard CAT STD	Losi X Pattern	9	1	5	8
6. S. Brace	Parma Schumacher	Procat	Cyclone II	Parma SCE	Tekin 610	131 SH	Apex	11x12 Blue	Losi X Pattern	8	7	4	5
7. W. Mitcham	Performance Plus	CAT XLS	Twister 14x3	Gale Force	Novak T1	131 SH	JR Apex	11x12 Blue	Losi X Pattern	7	9	4	7
8. S. Haynes	Nosram LRP Tamiya	Egress	LRP Pink	Nosram	Nosram	131SH	Futaba Attack	STD CATS	Losi Direction ALS	10	9	7	6
9. M. Chaplin	Schumacher Orton Models	Procat	LRP White	Orton Models SCEs	Nosram	KO FET	JR Apex	11x12 Blue	Losi X Pattern	6	8	8	7
10. B. Sturnham	Schumacher PAP	Procat	Twister 15x2	PAP SCR	PAP Racer	KO Fet	JR Apex	Blue Studs	12x15 Blue	5	10	10	5



his run of success to complete a winning double over the weekend using, incidentally, a new Schumacher speed controller called a Traco which is due for release in the not too distant future. Well done Phil. Kevin Moore had also put a broad smile on Tim Walden's face finishing in second place at both meetings to make it first and second for Schumacher. Third place went to William Mitcham, who showed he only needs a break to be pushing the top drivers for the honours. Apart from the usual problems with penalties that have dogged us for the series, it had been an excellent meeting and Eden Park Overlanders, in particular John Cheeseman, must be congratulated for the obvious efforts that had been put in. I know John will have been pleased that we had no problems with the lap-counting equipment. Well done all.



1. P. Davis
  2. K. Moore
  3. W. Mitcham
- On to Dumfries for the next round...

Tim Walden and Phil Davies – a good weekends work. Right: Phil, Kevin Moore and Mrs Moore at the excellent Eden Park meeting. Jamie's works Astute and Kevin's Cougar.

### Eden Park 2WD - 3rd round - 10/6/90

Final/ Name	Sponsor	Buggy	Motor	Cells	Speedo	Servo	Radio Gear	Tyres		Qual. Pos.	Points 'A' Final Legs		
								Front	Rear		A	B	C
1. P. Davis	Schumacher Reedy	Cougar	Reedy Blue	Schm.	Schm. Traco	KO Fet	JR Apex	Ribbed Spike	12x15 Blue	5	1	7	1
2. K. Moore	Schumacher	Cougar	LRP Pinke	Schm.	Nosram	KO FET	Apex	Ribbed Spikes	15x12 Blue	1	2	6	3
3. W. Mitcham	Performance Plus	RC10	Twister 14T	Gale Force	Novak T1	131 SH	JR Apex	Hard Stubs	Cut Blue STD Cat	6	1	5	3
4. C. Drescher	Associated Reddy Novak Keil KO	RC10	Reedy Green	Keil SCE	Novak T1	KO FET	KO Esprit II	Hard Cats	Hard Cats	4	4	5	2
5. B. Sturnham	PAP Schumacher	Cougar	Twister 14D	PAP SCRS	PAP 'Racer'	KO FET	JR Apex	Studs Hard	15x12 Blue	7	5	2	7
6. E. Stafford	Parma Schumacher RCMC	Cougar	Parma 15x2	Parma SCE	Tekin 600	KO FET	Futabo 3EGX	Stud Hard	15x12 Blue	8	9	3	4
7. R. Cull	Associated Reedy	RC10	Reedy Green Dol	Assoc. SCE	Nosram	Futabo 131SH	JR Apex	Hard CATS	Hard CATS	3	3	9	7
8. J. Booth	Tamiya LRP Noscrum	Astute	LRP Blue	LRP SCE	Nosram	131 SH	JR Apex	Styds Hard	15x12 Blue	8	7	4	10
9. D. Conway	Parma Radio- active	Cougar	Cyclone II 15x2	Parma SCES	Tekin 600	131 S	Sanwa Gemini	Hard Stubs	Blue Mini Spikes	10	8	10	6
10. M. Tatman	Schumacher PAP	Cougar	Twister 14x1	PAP SCE	PAP Racer	131 SH	Futabo 3EGX	Hard Studs	15x12 Blue	9	10	8	8



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Multi Bond  
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E	X	O	R	S	T	E	U	I	O	U	V	P
U	W	C	R	T	I	R	A	D	G	H	A	E
L	B	T	W	R	P	G	K	L	M	K	R	R
G	G	I	L	E	Y	L	F	J	U	Q	T	G
R	N	T	Q	N	T	U	D	Q	L	Y	X	L
E	W	E	O	G	Y	E	E	C	T	N	L	U
P	V	N	M	T	J	3	H	F	I	Y	E	E
U	Q	P	O	H	L	I	K	E	B	X	G	M
S	D	P	A	A	H	N	N	M	M	Z	E	A
L	L	M	V	T	Q	A	W	A	U	X	U	T
A	V	E	A	W	J	B	P	N	L	G	L	I
N	E	T	Q	O	P	O	D	G	T	K	G	C
I	Q	K	L	R	Y	T	E	S	I	V	R	K
G	G	Y	P	K	A	T	H	L	B	X	E	V
I	Q	P	Y	M	B	L	J	G	O	O	P	P
R	C	B	N	V	X	E	A	S	N	D	U	R
O	G	L	A	S	S	B	O	N	D	U	S	O

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NOTE \* FOR TOP CAT ALSO

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U606C Hi torque Pro-Cat trans. set, rear ..... £19.50  
includes: Drum diff., rear belts, layshaft, repair kit, thrust race, etc.  
U575E Body moulding - Pro-Cat ..... £7.99  
U576F Undertray moulding - Pro-Cat ..... £7.99  
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T679W	N.A.	N.A.	15 x 12 Minispike	- Rear
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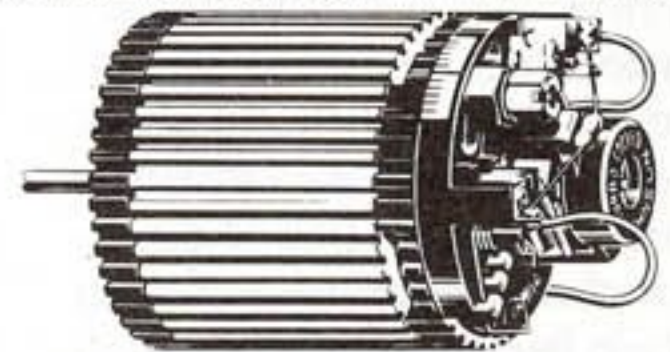
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# CIRCUIT RACING

## Dave Gale opens a regular look at 1/10 and 1/12th on road racing

Mark Barford  
with his TRC car

Hello, and welcome to the David Gale column. In this and future issues I shall be attempting to take over in the absence of Rob Roy, who has moved on to other things. I shall mostly be reporting on Electric Circuit Racing, i.e. 1/12th and 1/10th, and where possible focussing on the lighter side of things. For those of you fortunate enough to have never crossed my path, I have been racing model cars since I was 16, (11 years ago) and like any other racer who has been around so long have witnessed a fair number of changes, both for the good and bad of the hobby. 1/12th scale will always be my favourite class, as it is the only class of racing where it's you against the track and other drivers, without any of the aspects of luck involved in outdoor racing. This does mean that technically 1/12th scale is very demanding, but this is another part of the challenge which so many drivers enjoy. 1/10th circuit racing has grown very popular over the last couple of years, helped by the amiable spirit which marked last season as one of the most enjoyable ever.

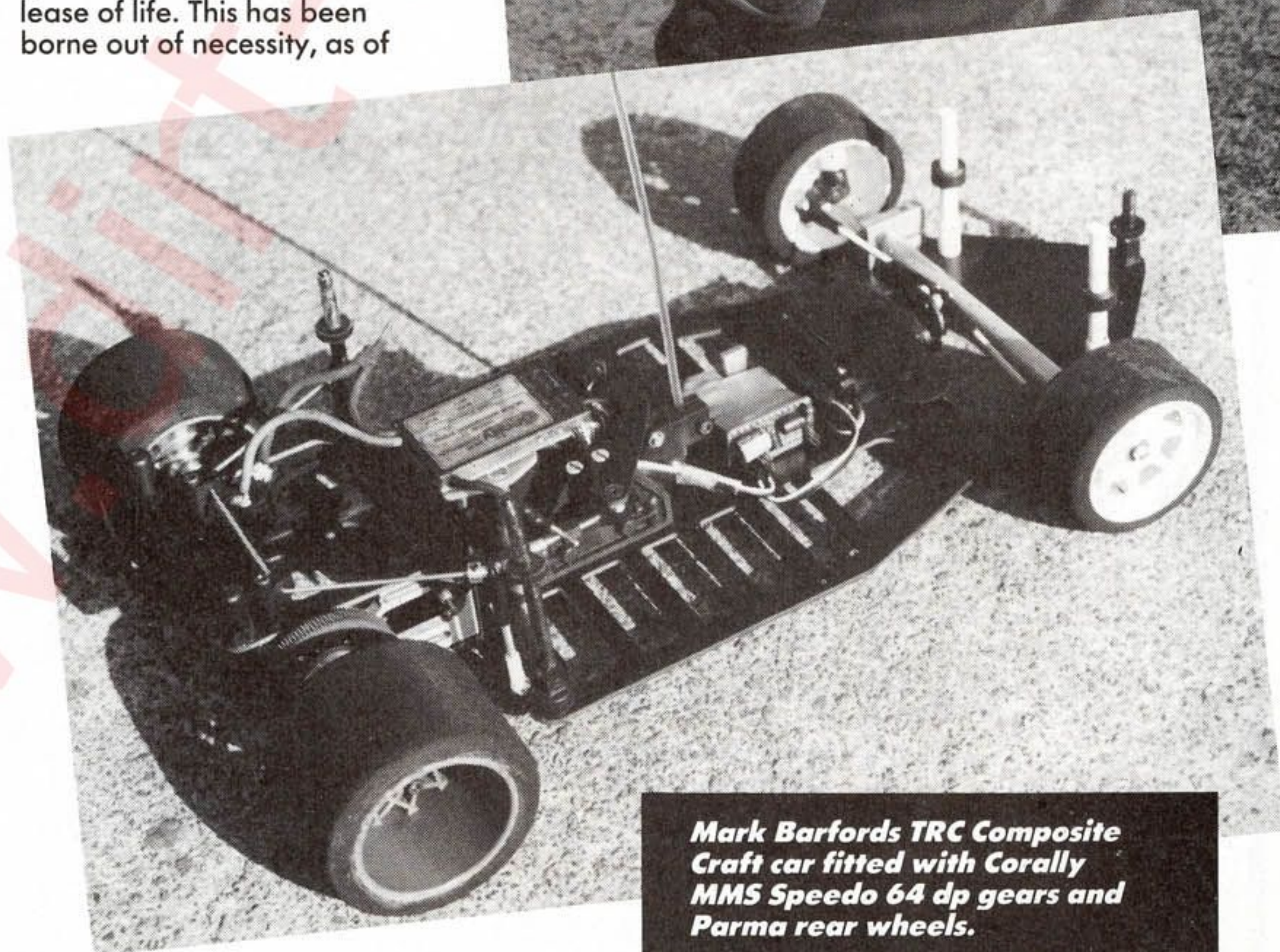
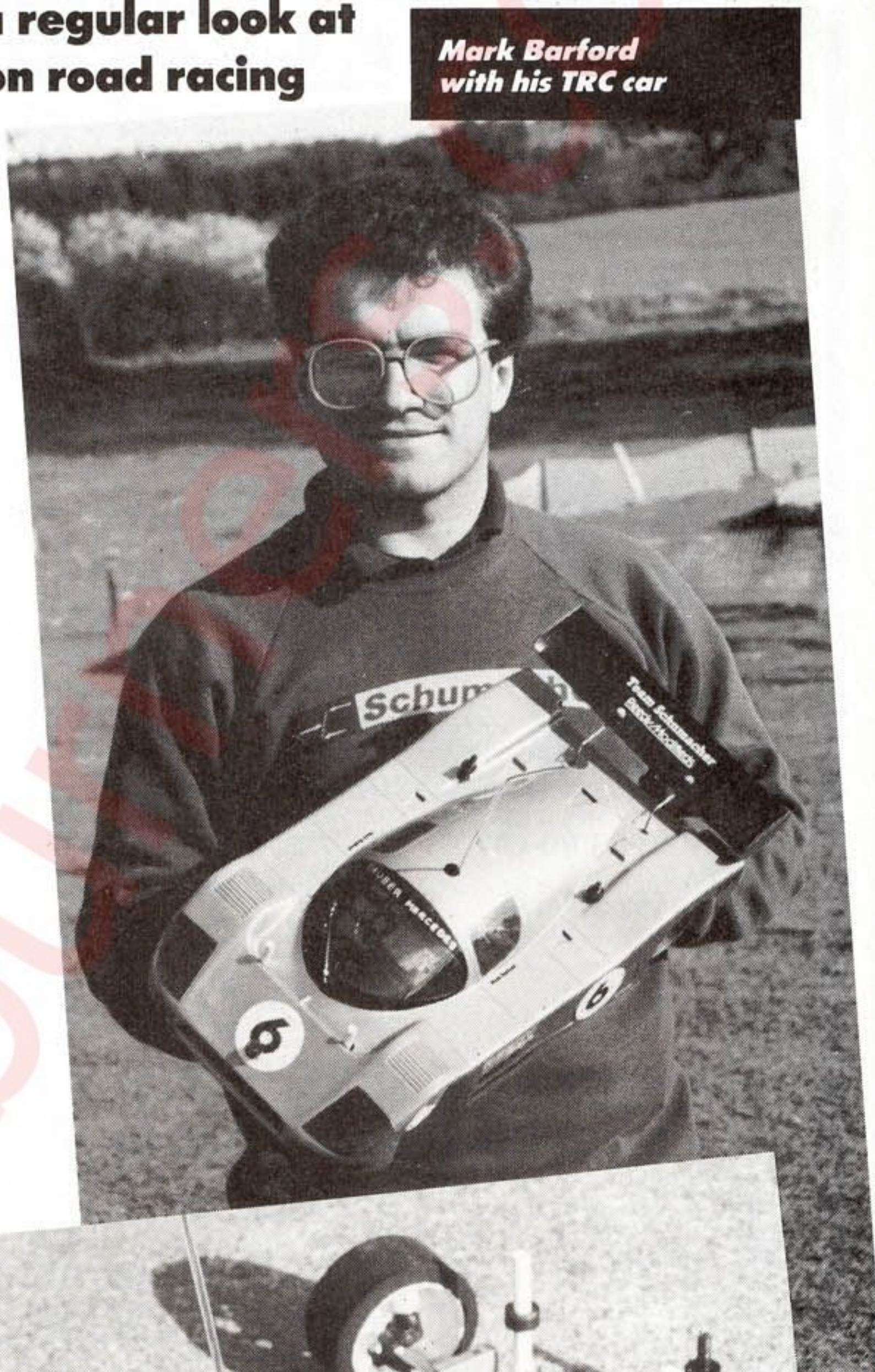
Anyway enough of the Spiel, and onto an important announcement for drivers of all classes and abilities. Jim Spencer is organising the 1990 British Grand Prix for 1/12th scale cars at the Oakley Leisure Centre, Crewe. This is an important meeting as far as Britain is concerned, as it marks our attempt to prove that we are capable of holding the next World Championships to be held in the EFRA section. Jim assures me that anyone is welcome to race over the three day meeting and wants to make it absolutely clear that whatever your ability it will be a very friendly and relaxed

atmosphere, where 1/12th scale racing can be enjoyed at its very best. So lads (and lasses) if you are free on August 31st, September 1st and 2nd, give Jim a ring on 0270 69051 for an entry form, or write to Jim Spencer at 1 Balmoral Avenue, Crewe, Cheshire, CW2 6PL. Hopefully there will be a contingent of European Drivers, so this should add to the flavour of the meeting.

### Tyres, tyres, tyres

As any racer will know, these little round black things can make an awful lot of difference to the performance of the car. Without the right tyres it's possible to make a complete and utter fool of yourself and being a past master of this I think it only fair to pass on some recent news.

Firstly in 1/12th scale the ubiquitous Grand Prix C tyre has been given a new lease of life. This has been borne out of necessity, as of



Mark Barford's TRC Composite Craft car fitted with Corally MMS Speedo 64 dp gears and Parma rear wheels.



late the rubber grade has been rather hard, giving about as much grip as an oil slick on ice. Since the basic problem has been due to the hardness, rather than the rubber itself, Chris Evans has invested in a gadget to measure the hardness of the rubber and hence from now on the rubber is graded according to density. The softest tyres are 171kg per cubic metre, going up to 220kg per cubic metre, compared with some of the previous grades at around 230kg per cubic metre. 191's seem to be about the most popular, giving a level of grip just slightly lower than the Yokomo rubber. The softer tyres do give more grip, but are prone to losing grip during the race as the tyre wears. As with most Grand Prix model products the price is as usual very low, around £4.50 for a set.

In 1/10th circuit racing, there is even more of a premium on tyres, as the lack of additives means the grip is entirely down to the rubber characteristics. Last year, drivers struggled to find grip, but a reasonably well balanced car could normally be realised using 'Greens,' 'Blues,' or 'Yokomo's.' However, recent developments for 1/8th scale cars, have now resulted in an improvement in the tyre compounds, which has been borne out by the fact that lap scores at the three nationals held so far this year are almost one lap faster. Elite Models 'Gold' tyres have been used by the three A final winners so far, and come very highly recommended at around £12 for a set of 1/8th rears. Elite Models 'Silver' tyres are slightly softer, giving more grip, but finding a balance is more difficult. Both grades are obtainable trackside from Jimmy Davis, as 'Jimmy's' Golds and Silvers.

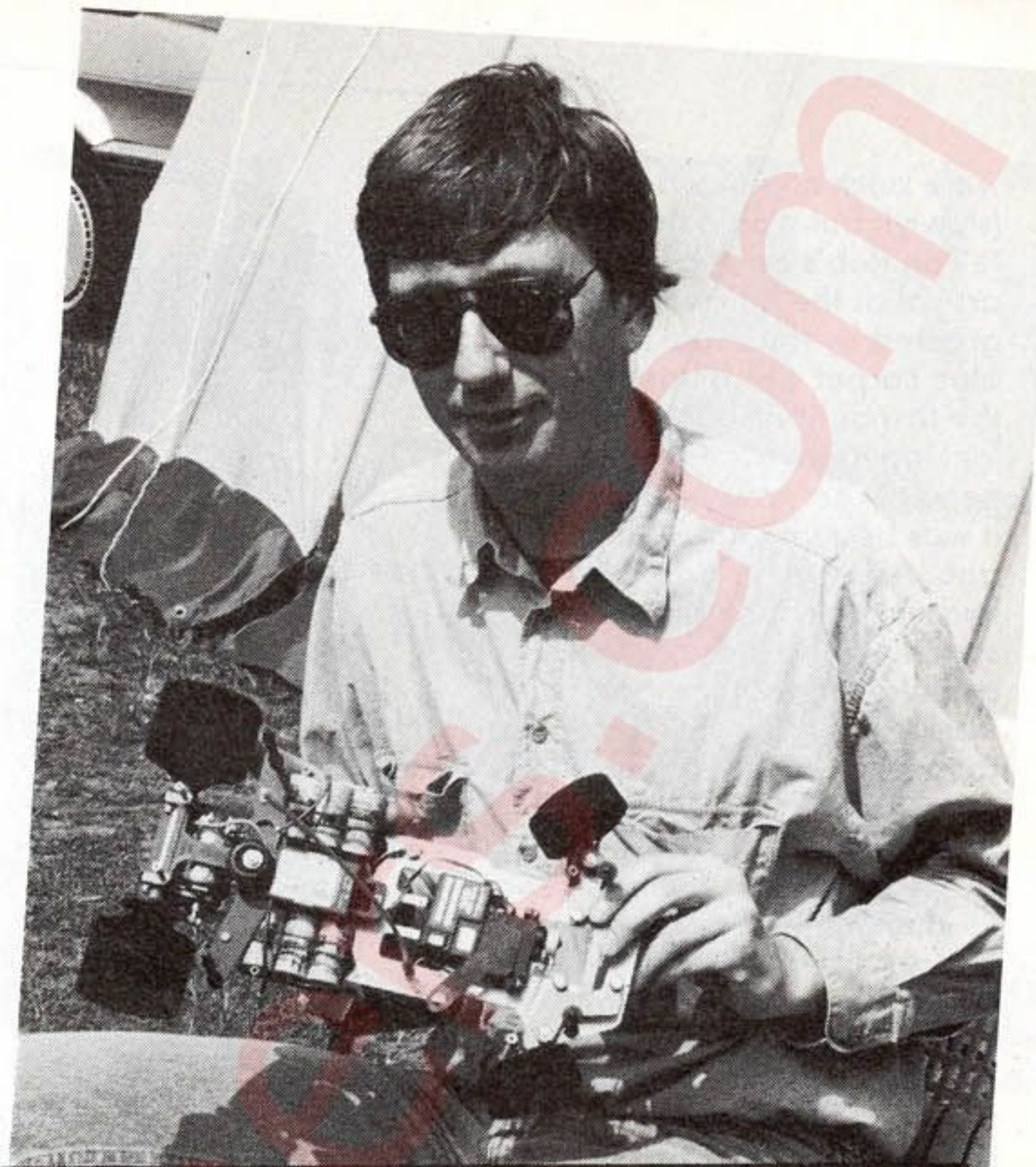
PB have introduced two new grades, 'Lilacs' and 'Golds' (very imaginative!), with the Lilacs being very similar to the Elite Models Gold tyre, although they do seem to lack the consistency of the former. The 'golds' are sold as fronts to go with 'Lilac' rears and give a very

good balance, but if required can also be mounted as rear tyres to give another high grip tyre. The PB tyres are cut for 1/10th circuit cars and are very realistically priced at £2.95 for fronts, and £7.95 for rears.

All the above tyres come highly recommended and seem to have become the standard to follow in 1/10th circuit racing.

### **Chesterfield 1/12th scale meeting**

The last weekend in May is traditionally reserved for the Chesterfield national meeting and as usual was superbly organised by the Chesterfield club under the guiding hand of Sheila Goodyear. For information the Chesterfield club is one of the oldest in the country and races every Saturday evening at the Sharley Park



**Your new regular columnist David Gale 1/10th on road National Champion & Corally team driver.**



**William Mitcham driving the Sizzler for PB Racing Products.**

Leisure Centre, Clay Cross, between 7 and 10pm. Unfortunately I was unable to attend Saturday for the standard class meeting, but I believe there were some splendid performances from some of the younger up and coming drivers. In Formula One, Mick Farrell dominated qualifying with his Agitator car, but was beaten to first on the last counter by David Spashett in the A final. This must seal David's chances of winning the Standard class national Championship, as his nearest rival, Mark Barford was struggling down in seventh place. Dave Hall won the B Final, after a race long battle with Andy Sawyer.

In Formula Two there were fine performances from Malcolm Ross and Andy Griffiths, who wrapped up the A final, with times that would have been competitive in the Formula One A Final. In Formula Three Jody Allen beat Lee Hodge to win the A final by three seconds, having both lapped the field.

Sunday started badly; letting a very nice officer of the law stop us with information regarding the speed limit and how our actual speed differed. After exchanging pleasantries we



were back on our way (slowly!) but would the toll tell on Rob's driving? On arrival at the hall we were greeted by the usual royal blue carpet which has stood the test of time, but sadly looking more than ever in need of replacement, since it was bought eight years ago. As ever the track was laid out with the ubiquitous sand filled fire hose, which as usual meant that the track changed from round to round, like the shifting sands of the Kalahari Desert. I wish more clubs would use solid, unmovable markers at the apexes of corners, like we had at recent Euros in Gateshead, as this makes life a lot fairer on all concerned. Personal whinge over, this was a small error on the part of the organisers, as it has sadly become the norm.

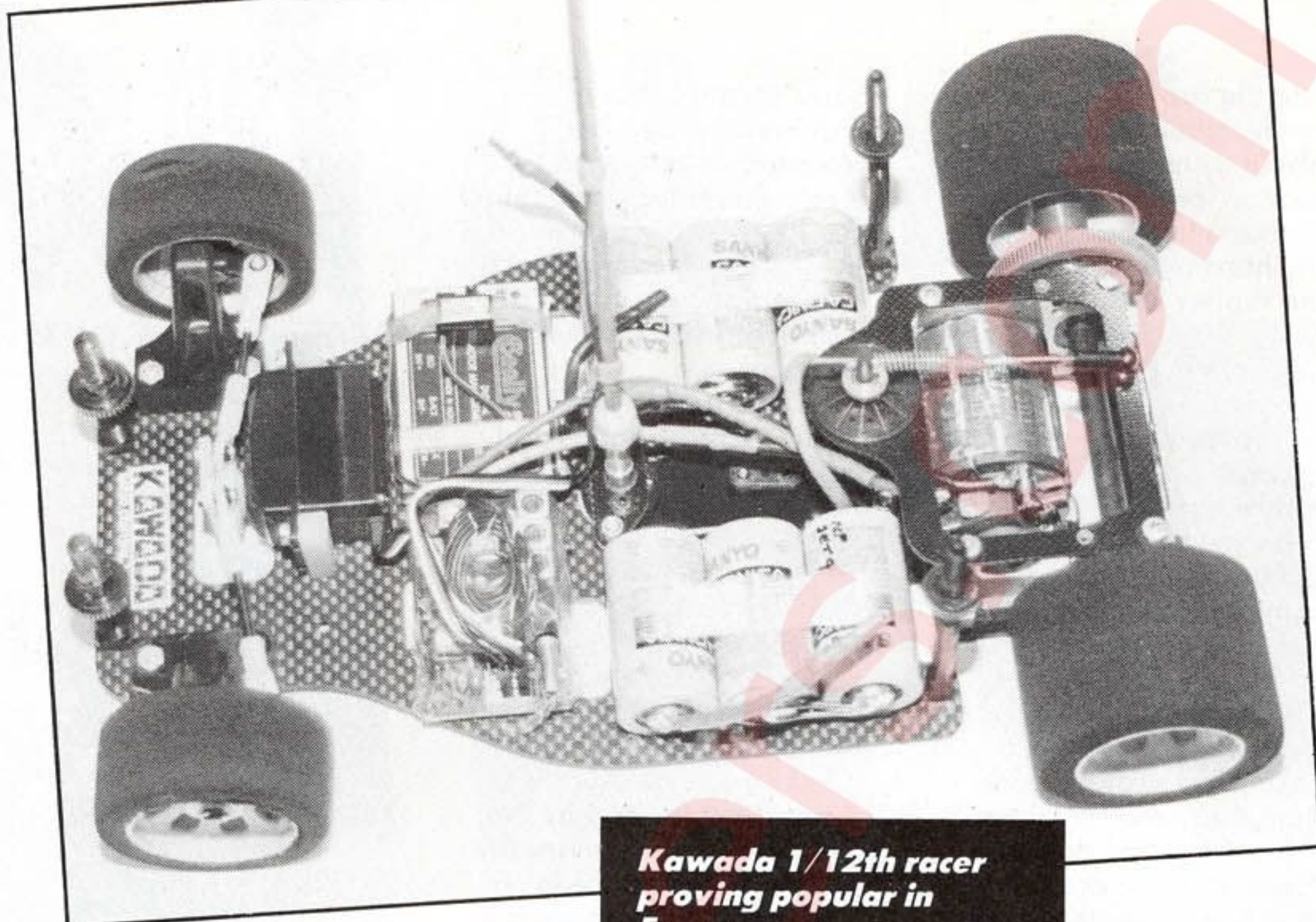
In Round One Phil Davies calmly dominated, with a time that many people found hard to believe given that this was his first heat without any practice. I think Phil was also a little surprised, as in future heats he could only just improve. I was surprised to find that the number nine transponder in my car was tuned to my radio frequency (40.765) so that every time I crossed the AMB timing loop I was given a short sharp and every effective burst of interference. This was cured by changing to transponder number six. David Spashett fared equally badly, as Fatima the ancient god of electronic speed controllers dealt his Corally MMS a deft blow to the FETs. During the lunch break, Yorkshire 'meat pie' was on the menu and judging by its popularity, it is clear that few people worry about Mad Cow Disease when important things like gear ratios still need to be decided.

After three rounds of qualifying, Phil was still on pole position, with David Spashett and Rob in second and third places respectively. Dave Hall stunned everyone by qualifying for his first Formula One A final – congratulations Dave. Another outstanding

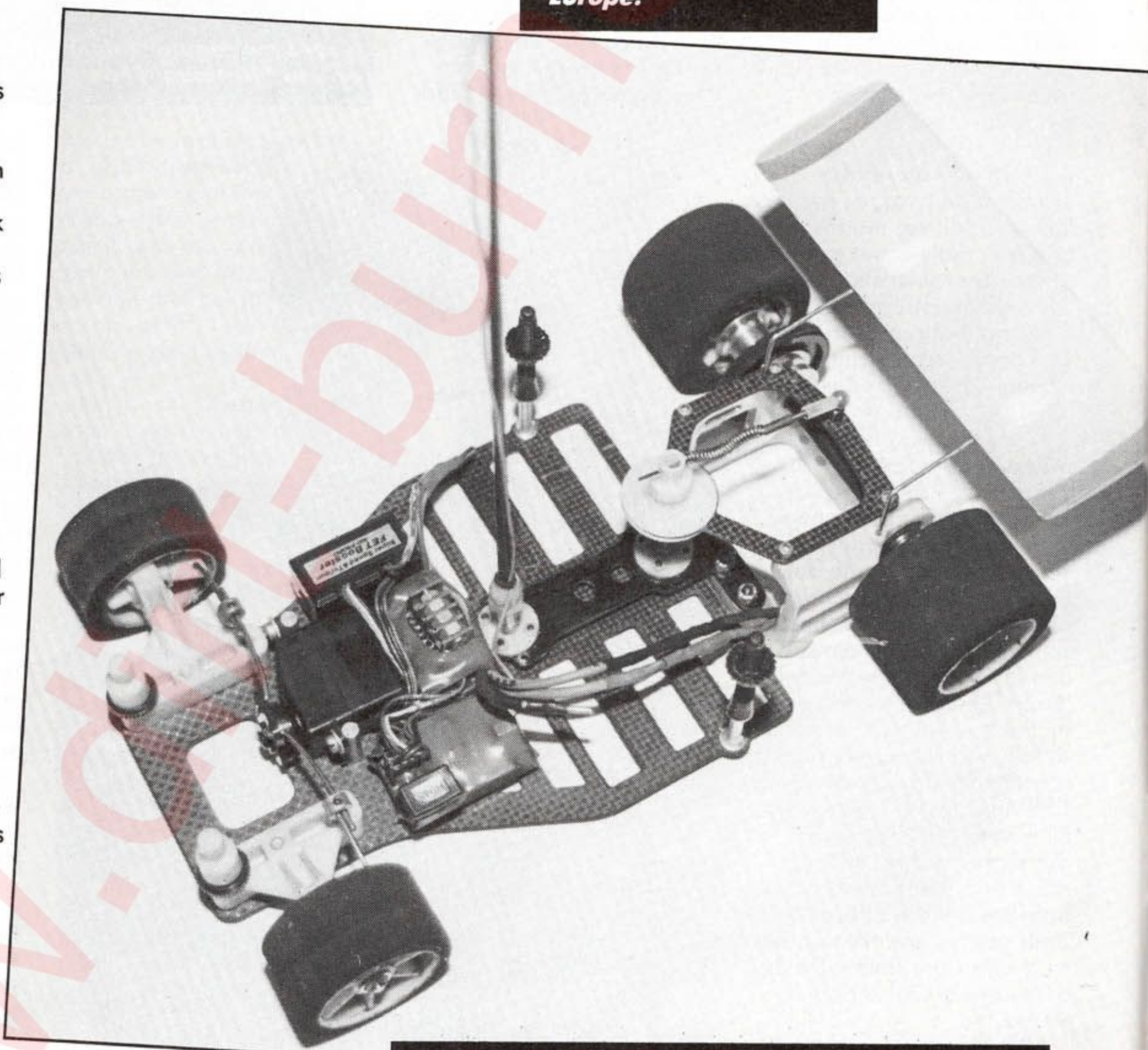
performance from Andy Griffiths saw him on pole for Formula Two, just ahead of an equally outstanding Andy Sawyer, both of whom would have qualified for the Formula One A. It's great to see these up and coming young drivers doing so well,

as old 'fogies' like me see the future of twelfth scale racing being determined by the younger set, as this is the age where the body's natural reactions are at

their finest. Sometimes it feels like once you are past 19 years of age everything starts to blur, until at 25 you feel like an old boot, worn out and trodden underfoot.



**Kawada 1/12th racer proving popular in Europe.**



**Associated RC12L the most popular choice in the U.K.**





**Mike Haswell receives a trophy from George Land of Parma.**

Of course the advantage of growing older is that you have more money to throw away, and can prepare a car with greater skill, which is normally enough to maintain the status quo with the youngsters. In Formula Three S pole was suitably on pole position, almost two laps clear of Bob Hepple, again with a time which put to shame some of the Formula One drivers.

At long last we have a top driver in the form of Mark Barford running the Kawada M300 car with support from Brampton Radio Models, so fourth qualifier on the car's first outing shows that the car is amply competitive – watch this space for details.

#### **Finals . . .**

In the Formula Three A, S pole extended his qualifying advantage to three laps over Bob Hepple, and I

think will find promotion to Formula Two an instant and painless journey.

The two Andy's, Griffiths and Sawyer battled it out in the Formula Two A final, with polesitter Andy Griffiths eventually taking the flag after a race long battle. Richard Pickering tried his best to get on level terms, but the pace was just too much and was thwarted by a Major League Dump.

Being a reluctant spectator, the Formula One A final was very interesting, as it is a change to watch how much of an advantage Phil has over the other drivers, rather than be subjected to his usual humiliation like Christians to the lions. At the start Phil went slightly wide, allowing David Spashett into the lead. This didn't last long, as Phil soon repassed David. For the next ten laps or so, David stayed in touch, but



**Ian Spashett & George Land pose for the cameras.**

as they started to lap back markers, Phil soon edged out a slight lead which proved too much for David to make up. At the start of the race Rob had been bashed out, leaving Mark Barford and Jim Spencer to take up the battle for third. At approximately four minutes Jim's car suddenly slowed going down the straight. This was a bit unfortunate, as Rob was in his wheeltracks at the time, and the resulting accident cost them both, especially as Rob gentlemanly waited for Jim to get going again. All this left Mark in a clear third position for a while, but an accident with an errant back marker put Rob back into third. After the race it was found that one of Jim's cells had shorted, lowering the pack voltage and causing the loss in performance. Towards the end of the race, David started to dump, allowing Rob to catch, but the positions remained the same until the finish.

Despite my best efforts, Intronic's/Corally A won the team prize, which I think

was enough to clinch the Championship. Phil would also have scored enough points to win the National Championship, but due to an anomaly in BRCA rules must compete at the Watford National to be classified in the points table. So all in all another successful meeting, but I think that the Chesterfield club must seriously think about re-juvenating the carpet, as the effective racing line with grip, was very narrow due to the amount of dust which seems to have ingressed into it. This meant that going wide on some corners was a fatal mistake because tyres would pick up the dust brushed to the outside of the track.

I believe that it is possible to steam clean the carpet, as done at the Stafford club, but requires a very large area to allow the carpet to dry. Another point to be noted is that the major cause of dust is probably from the sand filled fire hoses used to mark out the track. Roll on Watford!



# COMING SOON!



## AVANTE 2001

**Y**ou may think you've seen it before, but this Avante is the latest release from Tamiya. "Avante 2001" uses plastic shocks, lightweight wheels and Egress suspension parts. The new car will hopefully be more economically priced than its big brother so that everyone can enjoy the beautiful lines of Tamiya's best ever body shape. See RCMC next month for more details.



# TOYOTA PICK-UP



*Developments*

**T**his Racing version of a Toyota pick-up gets the Tamiya treatment this time. The excellent King Cab chassis is mated to a new set of spiked and ribbed tyres that balance out the handling to create Tamiya's latest full race monster truck. Long stroke CVA shocks and Lexan bodyshell are also included in the Pick-Up package.

# FROM TAMIYA

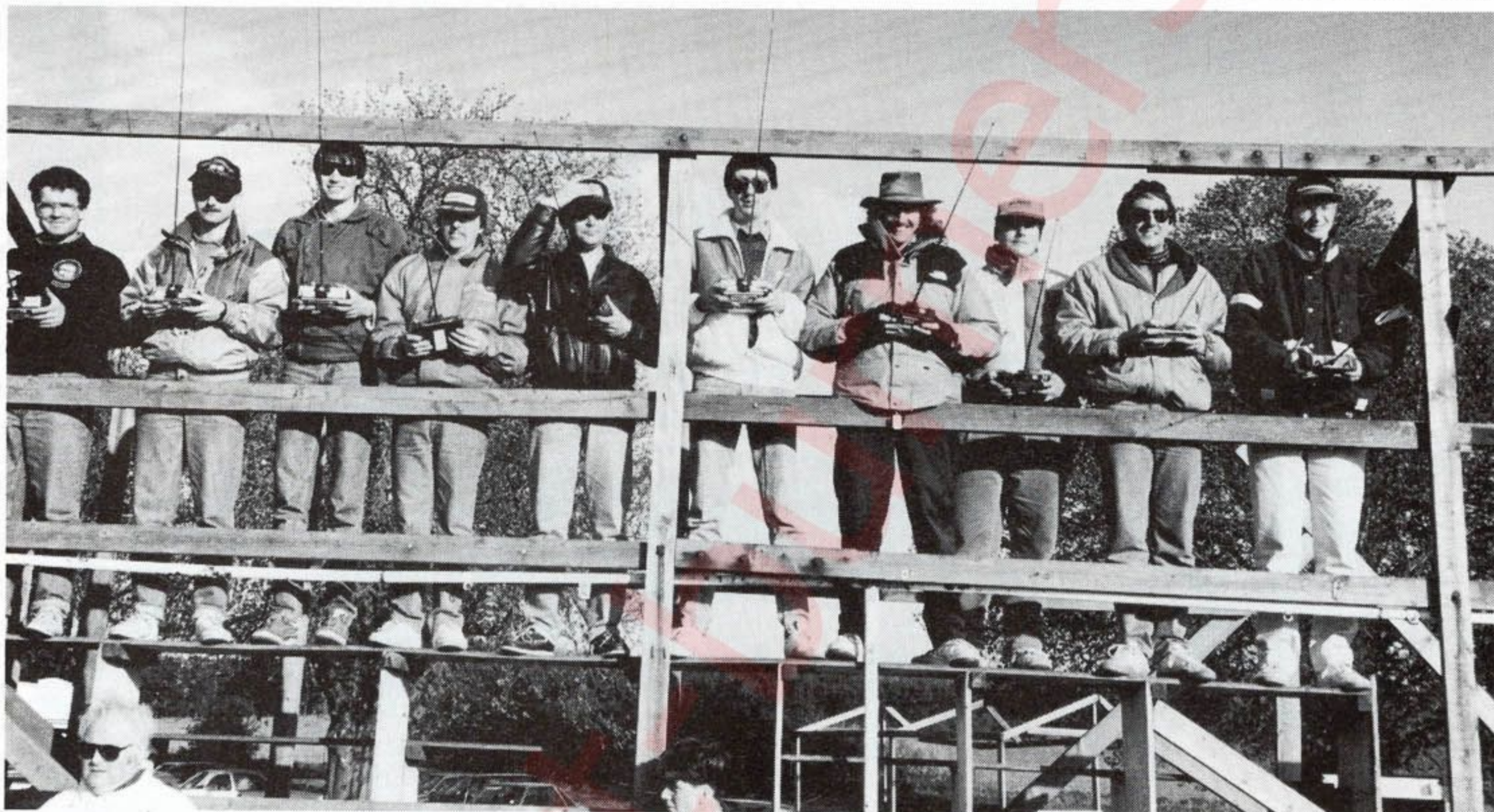


The very first BRCA 1/10th Circuit National was held at Lilford Park near Northampton on Sunday 8th April. Not only was it a first for the BRCA but there were several other firsts as well. Several of the top drivers had changed equipment during the 'off season' most notably last year's Championship winner, David Gale, who was running the Corally SP10 chassis together with team mate Rob Roy, time will tell if David has made

# Circuit

the first three spots, a very good run from Clive Stockham just clinched tenth place overall for him, at the other end of the scale last year's A, B, C finalists Neil Stringfellow, Mark Hewitt and Les Hewitt were struggling in the bottom ten.

Round 2 saw both Mark Barford and David Gale register 18 laps, moving them in front of Pete Stevens who could not improve on his Round 1 time Ashley Whenman improved his time by 9 seconds to move into fourth



the correct choice by switching from the very successful Associated 10L. Also on show was the TRC/CC Lynx II chassis driven by Phil Davis and Mark Barford. The third new chassis on show was the new Parma 'Apollo' chassis so named for obvious reasons when you see it. Glyn Pegler, Steve Brace and Pete Smith were running these. Walking round the pits other items which caught my attention were Peak Performance motors making their debut in the National series, these motors are imported from the USA by No. 1 Race Supplies and marketed through MJS models of Halifax. At least two drivers were equipped with the new Nosram International Torque speed controller

## John Stringfellow goes National on road circuit racing

designed to compete with the Corally MMS controller, (for my own peace of mind I hope it replaced the Corally, at least the Nosram does not interfere with the AMB lap counting system). Also a first was the new closed in cockpit body shells, I was particularly impressed with the new Sauber Mercedes body shell and also the Jaguar XJR8 GTP from Parma.

Sorry for the long winded introduction but there were so many new items around I thought it worthwhile to mention a few, so onto the racing, the track itself was in superb condition having just

had some £6000 spent on resurfacing. The previous week had seen a 1/8 Midland league meeting on the track so fortunately the grip was not too bad for a new surface. Seventy cars entered the meeting which was pretty good going considering the lack of advance publicity. Pete Stevens showed that the Associated 10L would still be a car to reckon with by setting the fastest time for Round 1 with 17 laps in 303.58 secs., Pete was closely followed by Mark Barford, David Gale, Rob Roy and Phil Davis, so three different types of chassis in

place in front of Jimmy Davis who clipped 5 seconds off his time to move into fifth spot. Peter Smith added a full lap to his time and moved into eleventh spot just in front of team mate Steve Brace, the third team Parma car was Glyn Pegler in eighth place proving that the new chassis could live with the Associated, Corally and TRC chassis.

Round 3 saw no movement in the top two places with both Mark Barford and David Gale unable to improve their times, however, Rob Roy moved into third spot when he just missed out on 18 laps by 0.16 seconds, Rob Hammett made the top ten for the first time when he improved his time by 11 seconds, moving him into





**The latest sports car bodyshells were all to be found at the first two National meetings.**

seventh spot pushing Phil Davis out of the top ten for the first time, Phil Greeno just hung on to tenth place. The grip was obviously improving as times were just beginning to improve by a few seconds, the next round was going to prove very interesting as, apart from Mark Barford and David Gale who looked to have secured their A final places any one of at least sixteen other drivers looked

capable of a top ten finish.

Round four showed what in my opinion was the best drive of the day, Phil Davis improved his previous best time by a full lap when he recorded the third 18 laps of the day, when Phil drives this way it is a joy to watch and certainly something for the younger, less experienced drivers to follow, Phil Greeno made

sure of his A final place by clipping a further 9 seconds off his best time no mean feat when you consider they were lapping at something around 17 seconds. Rob Hammett improved his time to ensure an A final spot behind Ashley Whenman and Graham Creasey, the latter who proved just what a good driver he is by improving his time in every round to remain in the top ten all day. Rob Roy, Pete Stevens, Glyn Pegler held on to the other three A final places. So no place in the A final for Jimmy Davis or Mark Cousins who finished 12th and 11th respectively.

1st final of the day was the G final won comfortably by Ian Spashett from Dave

Fletcher and Roy Baker. The F final was won by Tony Bretton from Matt Taylor and Les Hewitt (not the real Les Hewitt) can't be, not in the F final I would have though you had enough trophies by now, Les. The E final was won by Paul Shape from Lee Hughes and Pete Orkenden. The D final was won by Mike Haswell with 17 laps in

319.01 secs. a time which would have put him sixth on the grid of the B final second place in the D final went to Mark Hewitt followed in third by Andrew Worley. Danny Conway was the winner of the C final from Alan Wilkinson, Andy Griffiths and Terry Stockham. An excellent run from Clive Stockham clinched him first place in the B final followed by Jimmy Davis who just pipped Jason Deardon on the line fourth place went to Mark Cousins followed by Terry Eddleston, Dave Splasnett, Peter Smith, Steve Brace, William Mitchum and Dave Fletcher. But for a very unfortunate event the A final would have been won by Phil Davies as it was Mark Barford was the clear winner in front of Graham Creasey, David Gale, Rob Roy, Phil Davies who had to settle for 5th place in the end, Phil Greeno 6th, followed by Rob Hammett, Pete Stevens, Ashley Whenman and finally the unfortunate Glyn Pegler who retired at the end of the first lap with mechanical problems.

**Lilford Park played host to the first BRCA National Pro 10 race.**





Diary dates for the 1/10th Circuit are as follows:

regarding the GEC Stychfield (Stafford) meetings can be obtained

advertising, then send the information to me, care of Radio Controlled Model

meeting to give anyone who wished a day's practice a chance.

## PRO 10 RACE MEETINGS CALENDER

23/24 June	EFRA Grand Prix	Germany
24 June	Open Meeting	Stafford
1 July	BRCA National Round 4	Ashby
15 July	Open Meeting	Stafford
29 July	BRCA National Round 5	Crystal Palace
25/26 August	EFRA Grand Prix	Stafford
2 September	Open Meeting	Stafford
22/23 September	EFRA Grand Prix	Belgium
23 September	BRCA National Round 6	Stafford

A couple of bits of information for you; the Lilford Club have formed a 1/10th Circuit section and are open for anyone wishing to join for further information contact Peter Dicks, 62 Woodlands Road, Irchester, Wellingborough, Northants (0933 59570).

The Ashby track is open every Sunday from 4th March to 28th October for further details contact Dave Tomlinson, 49 Appletree Road, Hatton, Derby DE6 5EF.

Further information

from John Robson, 1 Aldersleigh Drive, Wildwood, Stafford ST17 4RY (0785 662242).

Further information regarding EFRA Grand Prix meetings can be obtained from Mike Drescher; address and tel. no. in the BRCA handbook.

### New Clubs?

If there are any clubs out there who would like details of their clubs published or any meetings they want

Cars and I will do my best to publish it for you.

### Southampton BRCA National 1/10 Circuit

Southampton saw the second round of the BRCA 1/10 circuit National

Championships, in all 84 drivers took part on a glorious spring day. The Southampton club with Chairman Bill Jones at the helm held an open meeting on the Saturday prior to the

### Kick off!

The day started with some mild spluttering in the pits area as, in an effort to increase grip on the track, Bill 'watered' the corners with coke; I prefer Pepsi myself (gives more grip!). However, I think Bill proved his point as even the less experienced drivers were finding plenty of grip in the track. I suppose at the end of the day it's far more enjoyable driving round corners every time rather than spinning out.

Round 1 underway and a continuation of the AMB lap counting problems with Corally Speed Controllers, for some reason the AMB system and the Corally speedos don't like each other. The sooner someone comes up with the solution other than to use Nosram speedos the better!

Rob Hammett drove with his usual skill to post the fastest time in Round 1 followed by home town boy Mike Haswell who used his knowledge of the track to post 14 laps in 319.05 just one second behind Rob. The

### Lilford Pro-10 National - 8/4/90

Fin./Driver	Chassis	Motor	Batteries	Speed Controller	Tyres Front	Tyres Rear	Radio Servo	MM per rev	Body	Qual.
1. M. Barford	TRC/CC Lynx II	Reedy Yellow	Schumacher SCE	Corally MMS	TRC Green	Don't know	JR Apex 131	40	Andy's Sauber (W)	1
2 G. Creasey	Associated 10L	Demon 17DbI (PK)	Greeno Pro Pack	MRT Micra FET	JAP 35	PB Gold	Sanwa 9401	42.65	Associated Toyota	7
3 D. Gale	Corally SP10	Twister 17 Triple	Gale Force SCE	Corally MMS	Belsport Platinum	Belsport Platinum	JR Apex JR4051	43	Associated Toyota (W)	2
4 R. Roy	Corally SP10	Twister 17DbI	Gale Force SCE	Corally MMS	Belsport Platinum	Belsport Platinum	JR Apex 131	44	Frewer Jaguar(W)	4
5 P. Davis	TRC/CC Lynx II	Reedy Yellow	Schumacher SCE	Tekin 600	TRC Green	Don't know	JR Apex 132H	36.5	Associated Nissan	3
6 P. Greeno	Associated 10L	Reedy Yellow	Greeno Pro-Pack	Tekin 700	Associated Green	Associated Soft Green	Sanwa 132H	39	Parma Sauber	6
7 R. Hammett	Associated 10L	Demon 16 Quad	Glyn's Parma SCE	Corally MMS	Blue	Red	Futaba 132H	40-ish	Parma Toyota	9
8 P. Stevens	Associated 10L	Twister 17 Triple	Pete's Awesome SCE	Tekin 700	JAP 30	Pink	Sanwa 132H	47.3	Parma Sauber	5
9 A. Whenman	Associated 10L	Twister 17 Quad	Pete's Awesome SCE	Corally MMS	JAP 32	Pink	Sanwa KO FET	45	Parma Toyota	10
10 G. Peglar	Glyn's Parma Pro-10	Parma 16 Triple	Glyn's Parma SCE	Tekin 700	JAP 30	Pink	KO Esprit 132H	43	Parma Toyota	8



rest of the top ten read like a who's who of 1/10th circuit with Jimmy Davis, Pete Stevens, Mark Barford, Phil Greeno, Terry Eddlestone, David Gale, Mark Eddlestone and Graham Creasey filling the top ten positions. Team Nosram driver Jonty Walkenden was in eleventh position followed by a long haired Mick Langridge who drove extremely well to register a time of 13 laps in 313.53 secs.

**Round 2** saw Rob Hammett still sitting on pole position with his first round time but Jimmy Davis was close in second place just 2/100 sec. behind. Mike Haswell hung on to third place with his first round time followed by Phil Davies, Pete Stevens, Glyn Peglar, Mark Barford, Phil Greeno, Terry Eddlestone and David Gale rounding off the top ten places. Jonty Walkenden maintained his good form by improving his time to remain in eleventh place. Darren Coombes and Neil Stringfellow both posted good times to give themselves top twenty positions.

**Round 3** and Mark Barford drove a storming race to register 14 laps in



**Above: Rob Roy sits in 4th place in the championship standings. Right: Danny Conway and Below: Mark Barford both had good results.**



**Tony Bretton receives his trophy from 10th on-road chairman George Land.**



**BRCA National 1/10 Circuit Championship Standings after Three Meetings**

	Lilford	South-ampton	Bourne-mouth	Points
1. P. Davies	96	100	100	296
2. M. Barford	100	97	98	295
3. D. Gale	98	92	99	289
4. R. Roy	97	95	94	286
5. J. Davis	89	98	97	284
6. P. Stevens	93	96	92	281
7. R. Hammett	94	94	89	277
8. G. Peglar	91	93	91	275
9. } G. Creasey	99	82	93	274
9. } C. Stockham	90	89	95	274
11. W. Mitchum	82	86	96	264
12. T. Eddlestone	86	90	84	260
13. M. Haswell	70	91	86	247
14. P. Smith	84	81	81	246
15. M. Cousins	87	63	85	235
16. M. Eddlestone	76	83	75	234
17. T. Stockham	77	78	77	232
18. N. Stringfellow	72	72	87	231
19. M. Langridge	74	71	80	225
20. I. Pratt	65	69	71	215
21. } S. Smiley	71	80	63	214
21. } A. Norley	68	76	70	214
23. A. Wilkinson	79	68	54	201
24. M. Hewitt	69	77	51	197
25. T. Lammerton	54	67	74	195
26. P. Greeno	95	99	-	194
27. J. Snewin	64	57	67	188
28. J. Hammonds	52	66	66	184
29. A. Whenman	92	-	90	182
30. B. Gilyatt	63	56	57	176

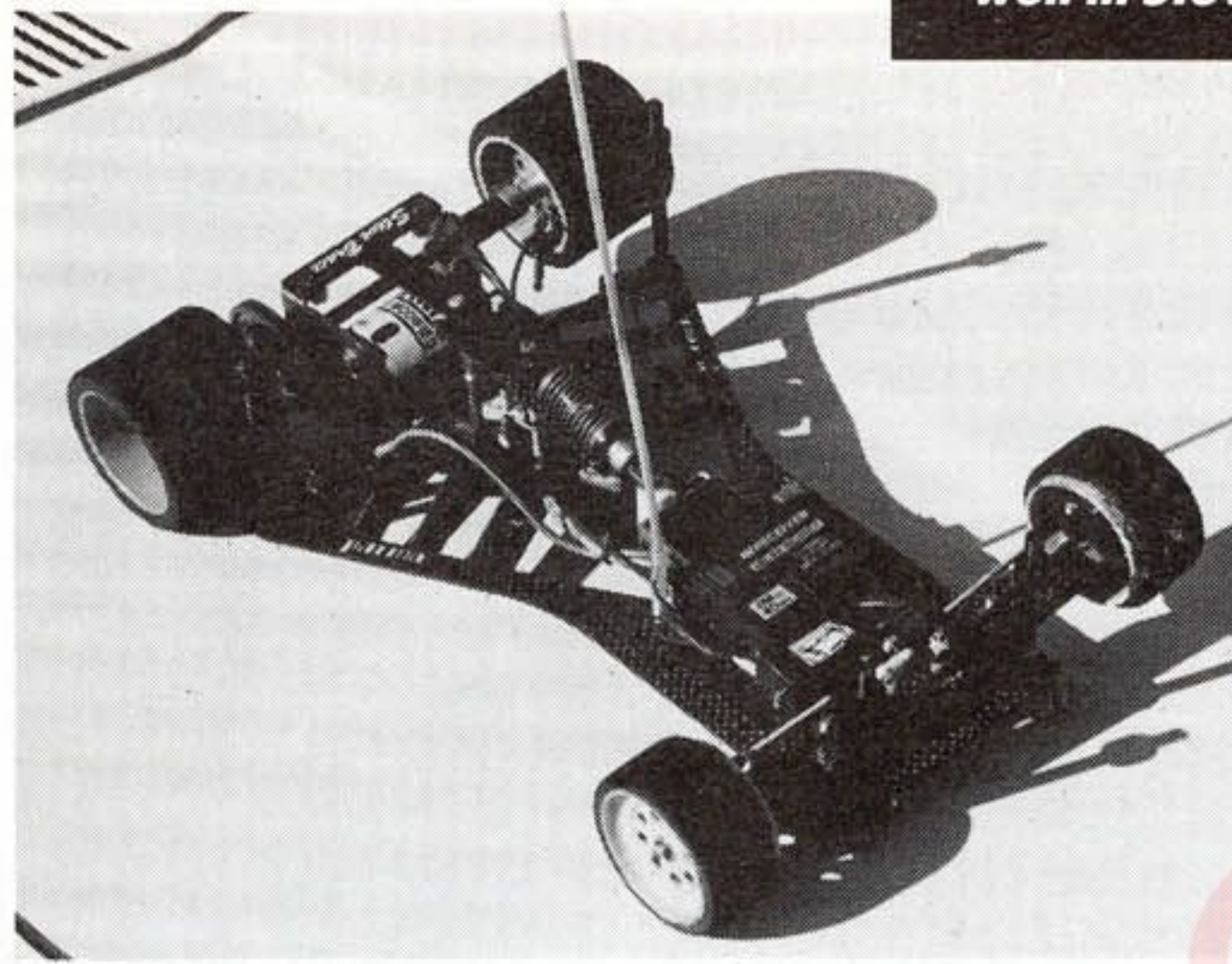


316.85 secs. to take over pole from Rob Hammett who still could not improve his first round time. Clive Stockham finally got to grips with the track and just managed to take tenth position with 13 laps in 302.68 secs. It was obvious the grip was coming up on the track with eight drivers all registering 14 laps.

**Round 4** and the last time to qualify Mark Barford with the assistance of some dubious lap counting reduced his time by seven seconds to take pole position and register the fastest time of the day with 14 laps in 309.78 secs., second came Rob Roy just two seconds behind followed by Mike Haswell, Rob Hammett, Phil Davies, Jimmy Davis, David Gale, Pete Stevens, Phil Greeno and Glyn Pegler. Nine of the ten A finalist registered 14 laps with only some ten seconds separating all of them.

#### Finals Time

The finals began with the H which was well won by Giles Whitehead followed by Ashley Aldridge and Colin Eddins. The H final was won by Bob Whittington some consolation for him being beaten by over a lap by Sharon. Second was Mark Winslow followed by Ian Spashett and Owen Hansford. Jon Winter took the F final from Ken Johnson and Vincent Coombes. The E final was won by Gareth Bell from Sharon Whittington and Nigel Jones. Ellis Stafford in an unaccustomed role took the D final from Ian Pratt and Alan Wilkinson. Stu Smiley won the C final in a close race from Adam Stevenson, Terry Stockham finished again a very close third probably the closest race of the day was the B final where just 15 seconds separated nine of the ten drivers, Terry Eddlestone taking the honours from Clive Stockham and Jonty Walkenden. The A final saw Phil Davies at his brilliant best edging out Phil Greeno, Jimmy Davis, Mark Barford and Pete Stevens who all finished within 6 metres of each other. Rob



Roy took 6th place followed by Rob Hammett, Glyn Pegler, David Gale and finally Mike Haswell.

#### Bournemouth BRCA National 1/10 Circuit

Round three of the BRCA National Championship was held at Bournemouth and once again the sun shone all day long, unfortunately only sixty one drivers turned up for what for me was the best meeting of the year so far. I think it maybe had something to do with a brain wave from Rob Roy and David Gale who suggested moving the AMB loop to a fast part of the circuit. This certainly worked in that, in spite of the notorious Corally MMS speedo, in the region of 95% of the laps were counted automatically.

The same old faces were up there at the end of round 1 although it was good to see William Mitchum and Peter Smith record times that put them in the top ten along with Jimmy Davis, Rob Roy, Phil Davies, Clive Stockham, Pete 'Awesome' Stevens, David Gale, Mark Barford and Graham Creasey. Seventeen laps was the order of the day with three drivers in the first round finishing with 17 laps and several more not far behind.

**Round two** saw a tremendous run from Phil Davies knocking virtually half a lap off the previous fastest time in fact no fewer than four drivers beat the round one fastest time and six drivers registering 17 laps. Phil Davies just missed 18 laps by four seconds and with Phil driving as only he can and the car looking

good; the question was not *if* he could break 18 laps but *when*. A good run from Jason Deardon improved his standing from 57 place to 17; obviously Jason had got to grip with his new Nosram speedo.

**Round three** and the inevitable happened. Phil Davies who was absolutely outstanding on the day broke the 17 lap barrier with 18 laps in 316.15 secs. leaving the rest of the drivers wondering what they could do to catch him. Meanwhile behind Phil seven drivers were separated by some 15 seconds and it was obvious that William Mitchum and Glyn Pegler would have to improve their times to remain in the A final. Again Jason Deardon improved his time and stood just outside the A final in eleventh place.

At the end of round four no one had come up with the answer of how to beat Phil Davies. David Gale came closest but could only manage 17 laps in 302.26 two seconds behind was Jimmy Davis followed by Mark Barford, Rob Roy, Glyn Peglar, Pete Stevens, William Mitchum whose sterling final qualifying drive got him in the A, Graham Creasey and Clive Stockham rounding off the A final places. Spare a thought for Peter Smith who had been in the A final all day long until the last run of the day when Glyn Peglar just edged him out.

Finals underway, and Mark Ivy decided not to run in his final as he was the only driver present. Chris Grainger won the F final from John Fenton and Sid

Evans. After total confusion the A final was won by Ken Philbin, who was running with Mark Hewitt's transponder in. Mark being stood at the side of race control taking no part in the final. Seven seconds behind Ken was Andy Bocking followed by Colin Taylor. The D final was won by Andrew Norley followed by Richard Mee and Neil Mead. Mick Langridge won the C final with an exhibition of fast driving skills which I didn't know Mick possessed, (sorry Mick, joke); second was Fred Singleton and third was Brain Stephenson.

Ashley Whenman led from almost start to finish in the B final never in too much trouble from Rob Hammett who finished second. A real scrap for third place between Adam Stephenson, Neil Stringfellow and Mike Haswell, all three drivers entering the final chicane at the same time with Adam just pipping Neil to the line with Mike just touching Neil's rear bumper.

The A final was an absolute classic from a driving skill point of view Phil Davies led from start to finish registering thirteen consecutive 17 second laps, David Gale and Mark Barford stuck with Phil all through the race but even when Phil slowed a little in the final three laps they still could not catch him. Jimmy Davis finished fourth in front of William Mitchum, Clive Stockham, Rob Roy, Graham Creasey, Peter 'the finger' Stevens and Glyn Peglar.

Surprise of the day, Pete Stevens, who cut his finger to the bone at the end of round one, went to hospital and came back with two stitches in his finger in time for his second run and still made the A final not bad for a Southerner Pete!

#### Next Month!

Anyway that's it for me, I now hand over to a proper columnist David Gale from the next issue, David will be writing a regular 1/12 and 1/10 circuit article, I wish him the very best of luck and look forward to reading his articles.



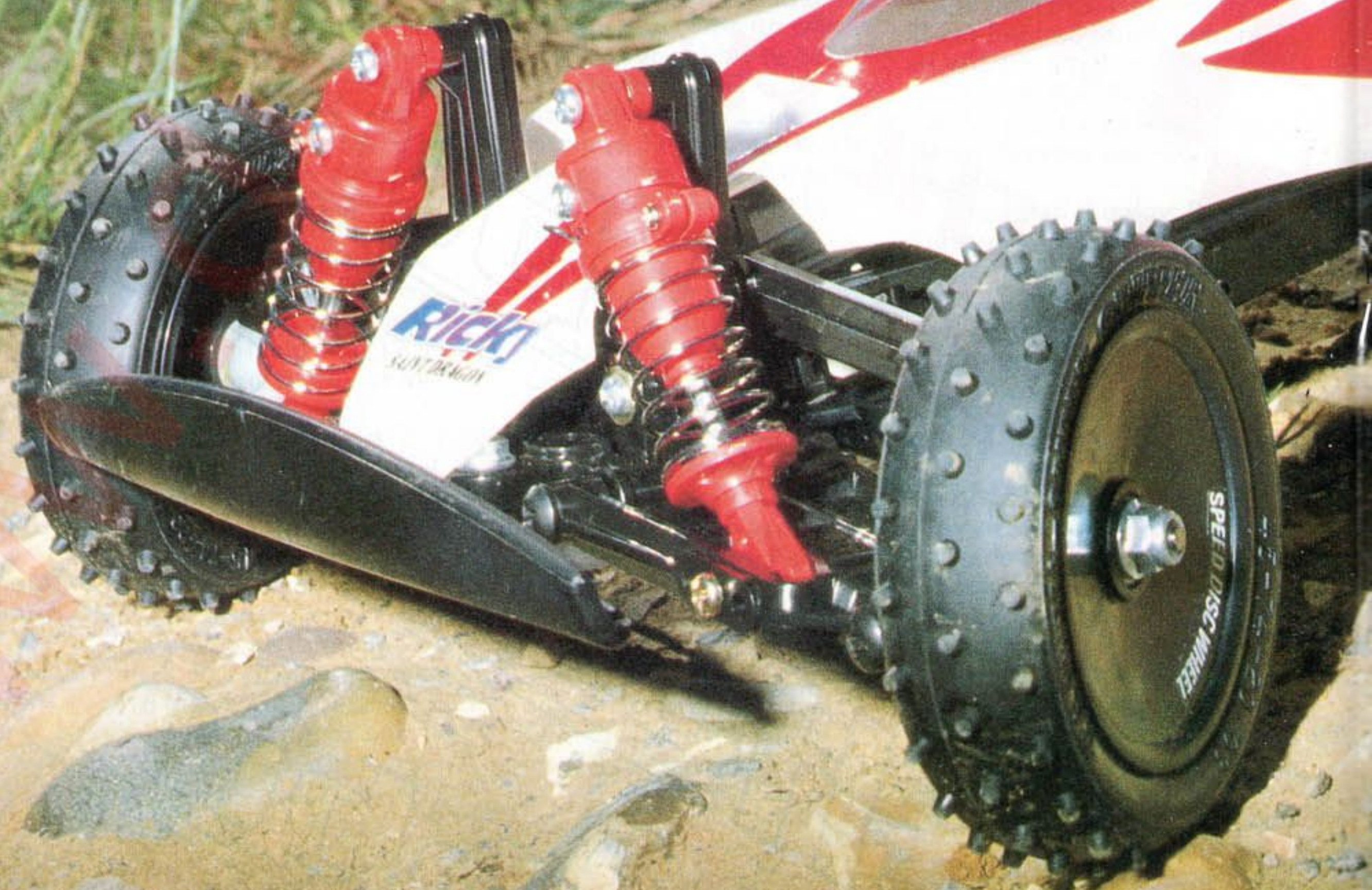


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# ENTER THE

# Dragon





**SUPER SLEEK OR  
UGLY? WHATEVER  
YOUR OPINION SAINT  
DRAGON IS HERE**







# ENTER THE *Dragon*

*Saint Dragon has a neat purposeful chassis keeping the electronics safe from water and knocks.*





**T**amiya's latest release certainly takes the biscuit in the strange name battles of the Japanese manufacturers. Apparently Japanese children read two inch thick comics weekly – and one particular strip contains the battle of the R/C cars! Amazing it may seem but these comics are so popular that Tamiya have produced one of the characters as a R/C kit. So if you want to know all about 'Saint Dragon' the cartoon character go to Japan – if not read on to find out what Tamiya's version is all about.

### Family Ties

Saint Dragon shows strong ties to both the Madcap and Astute. The car is based on the same Madcap plastic tub



chassis which is light, strong and gives good weather protection to the radio equipment – what else could you ask for?

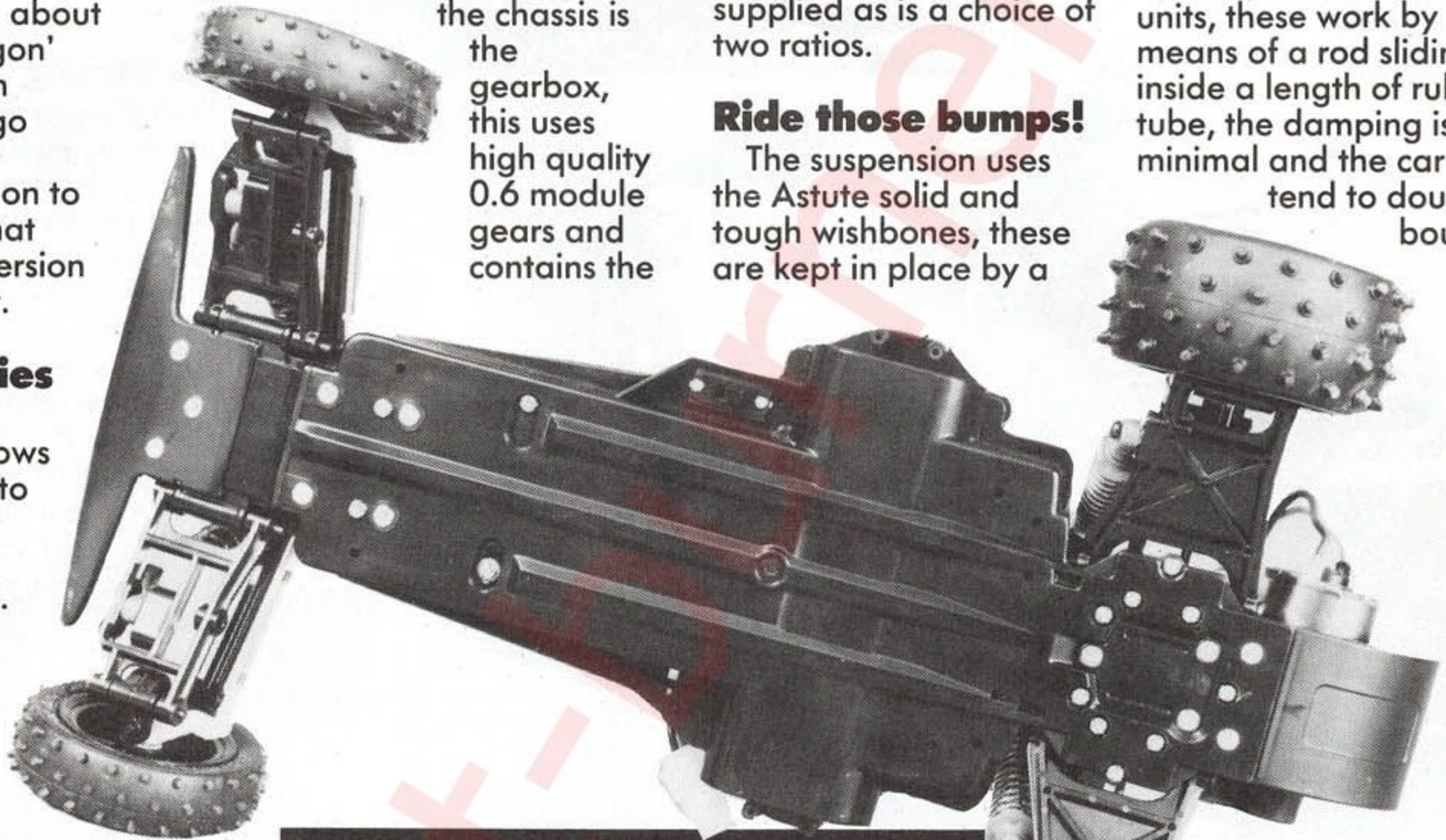
Slotted neatly to the chassis is the gearbox, this uses high quality 0.6 module gears and contains the

Astute ball diff. Bronze bushes are supplied for the diff to run on which can be easily replaced with ballraces. The usual Tamiya 540 motor is supplied as is a choice of two ratios.

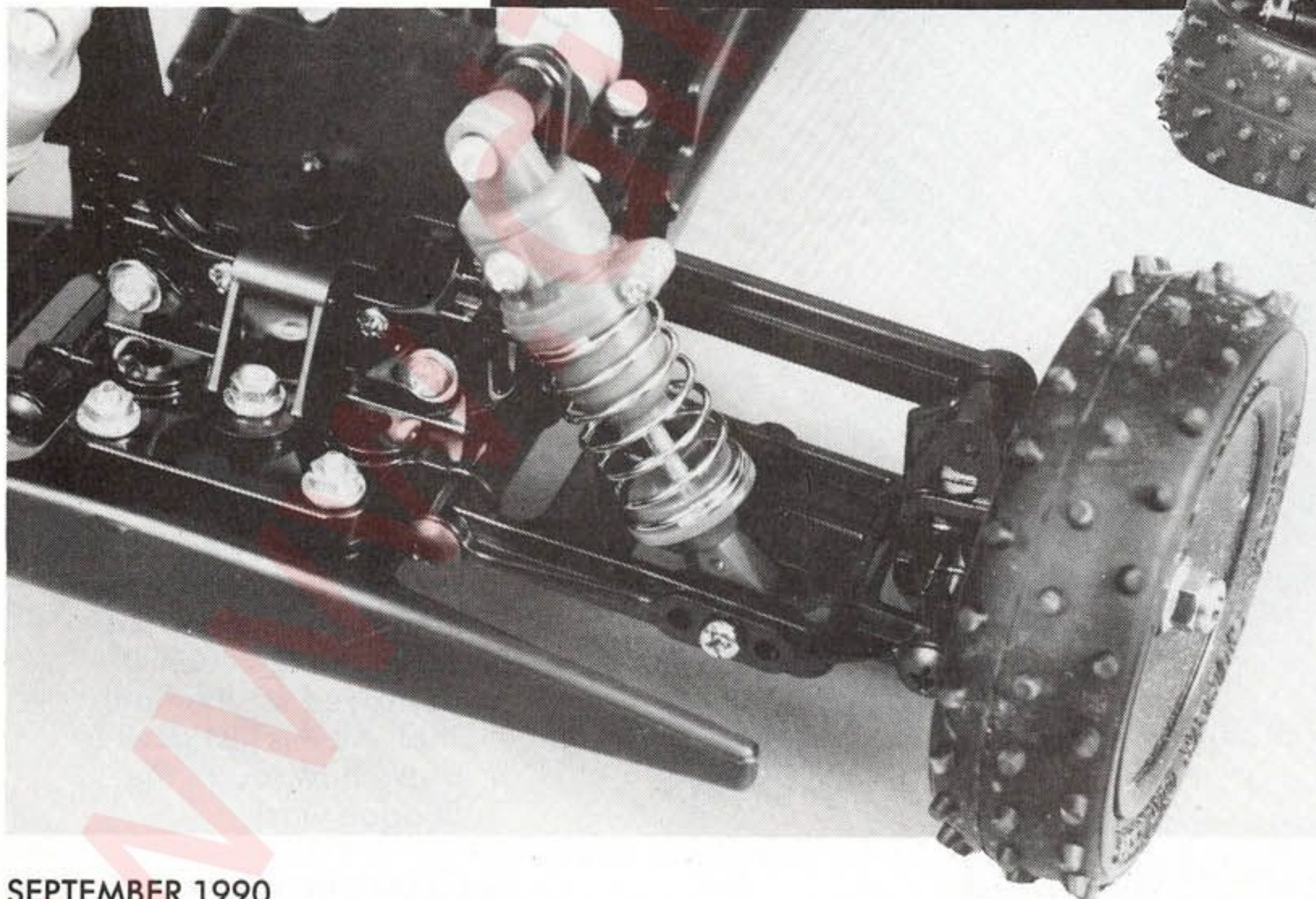
### Ride those bumps!

The suspension uses the Astute solid and tough wishbones, these are kept in place by a

solid toplink producing a standard parallelgram set up. The damping is by red plastic friction units, these work by means of a rod sliding inside a length of rubber tube, the damping is minimal and the car does tend to double bounce



*Saint Dragon's smooth undercarriage. Below: Red Friction dampers.*



when driven over anything but a smooth surface.

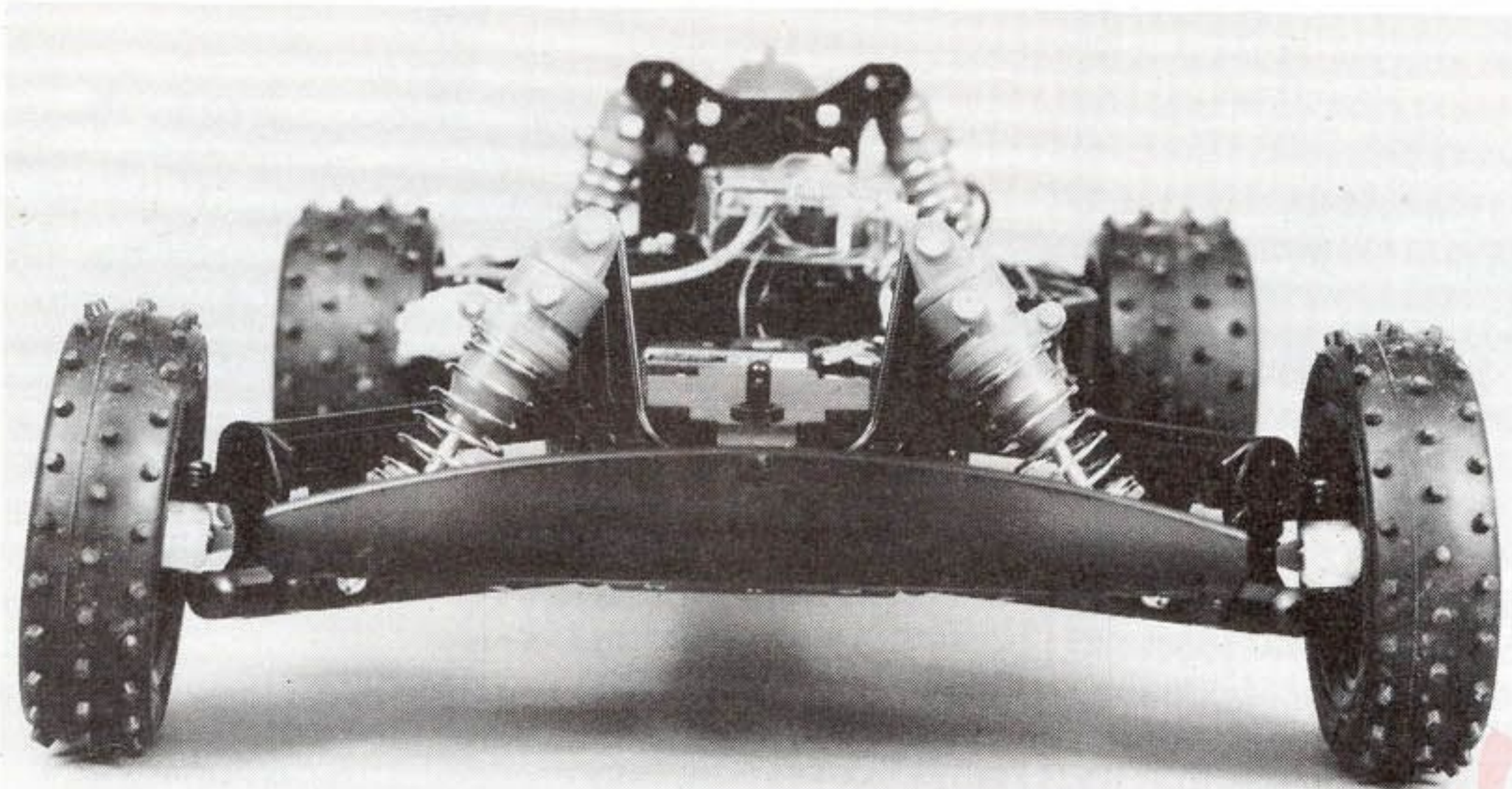
The steering set up is simple and neat, gives good lock and

produces almost no bump-steer. Be careful during assembly as its easy to put the steering arms on upside down!

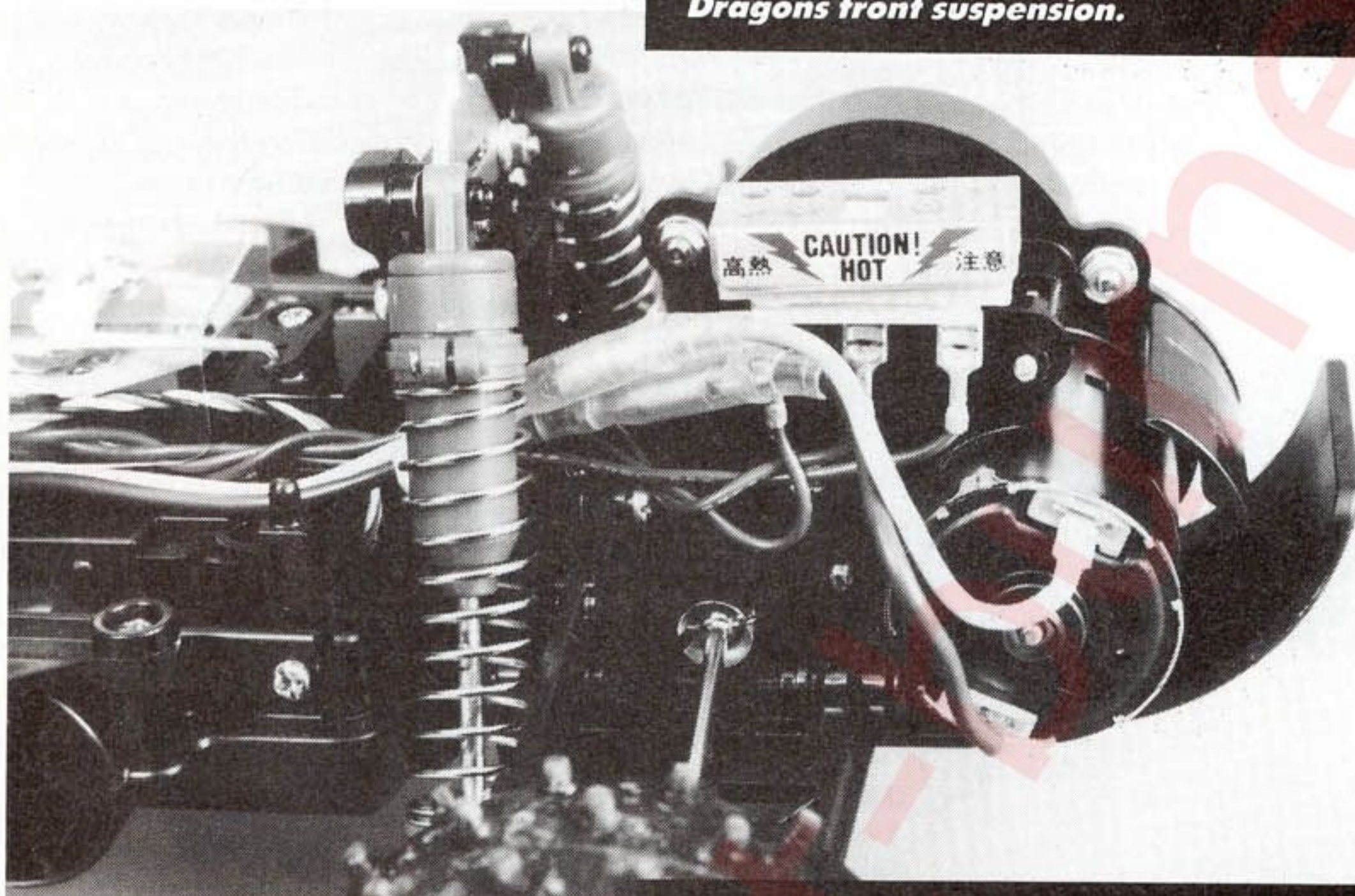
The radio installation couldn't be easier, the servos bolt in simply on adjustable mounts and all the connections are supplied.

The speed controller is 3 speed and has a clear plastic cover to keep the weather out – no more

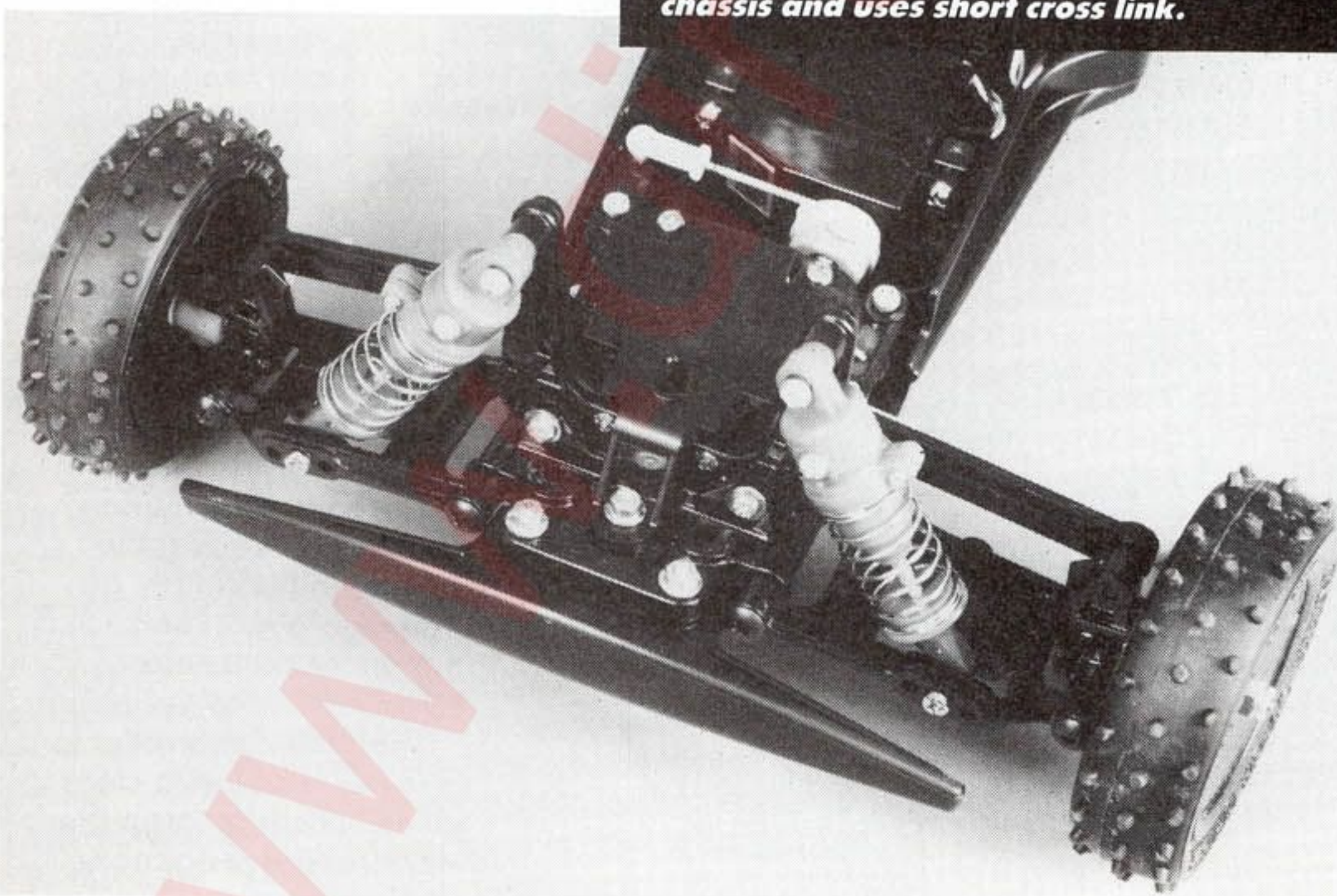




*Wide front bumper protects the Dragons front suspension.*



*Steering servo sits across the chassis and uses short cross link.*



black Tamiya Rubber balloons I'm afraid.

Well that's enough on how the chassis goes together but what makes the Saint Dragon different apart from its name is the way out bodyshell. Most people who've seen it either love it or hate it but you can't ignore the Stingray like appearance which is basically really weird!

### **How Strong**

Well there is not much more really to say, the Dragon is basically a re-bodied Madcap, the performance is very similar in that the car has a good turn of speed and reacts well to commands, spares are easily available but RIKO (the importers) tell us that these will be in limited numbers. So if you fancy a 'Dragon' get yours soon.

### **Footnote**

RCMC was recently involved in some filming of a new series of the BBC's Grange Hill, the storyline basically contained some school kids running R/C cars – ending in tears when the car was accidentally crashed under a lorry!

RCMC stunt driver Alan Harman took along a Saint Dragon chassis to be destroyed and when the crunch came was amazed that the car was still fully operational! The only damage being a bent shock tower. Infact scissors and a screwdriver had to be taken to the car to make it look destroyed for the final shot! All this just goes to prove how tough the Dragon was!



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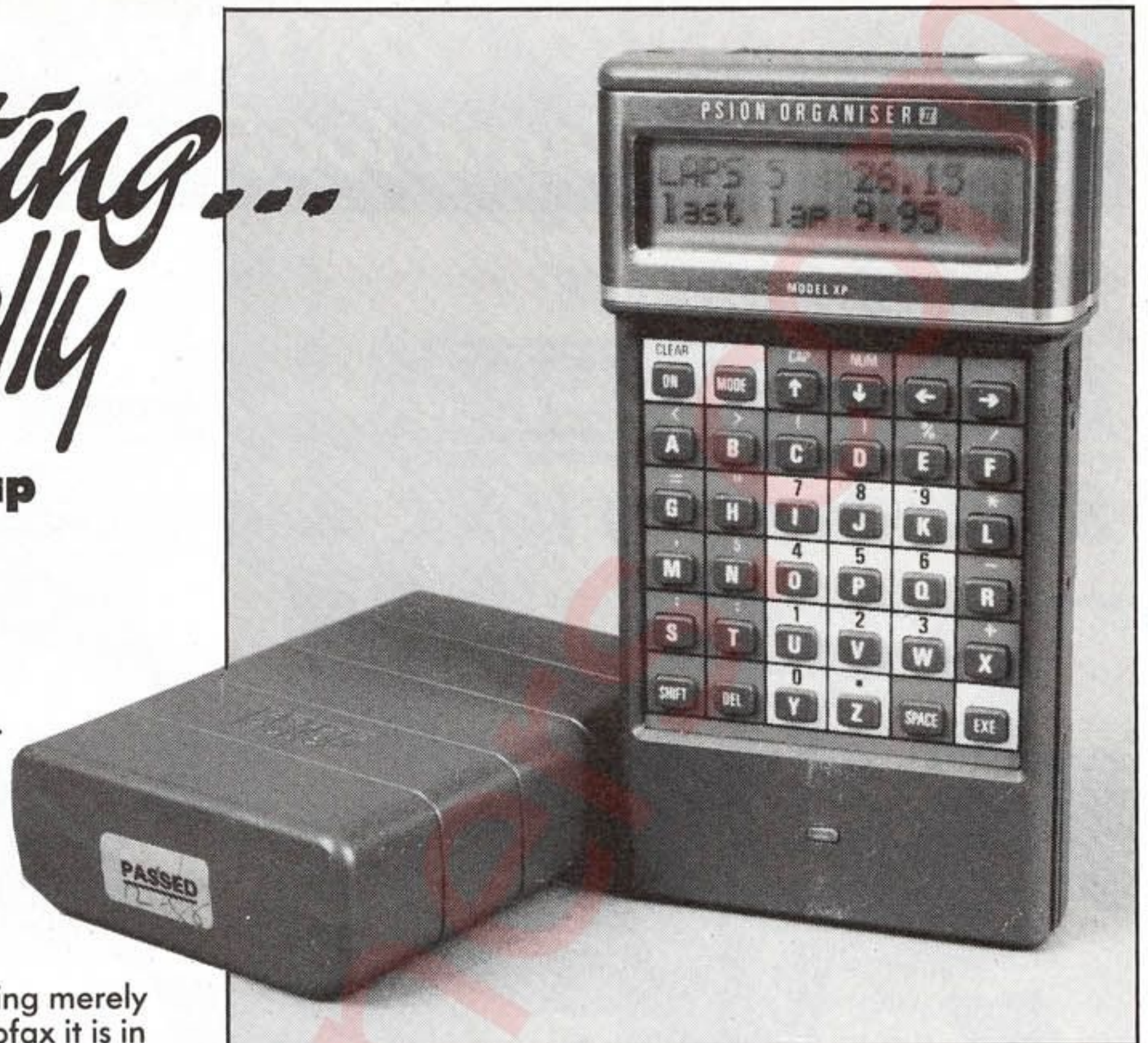
# Lap Counting... Psiontically

**Russel Buckner outlines a lap counting program for the PSION organiser**

Many's the time at a race meeting or while practising, it would have been nice to have something more sophisticated than a stopwatch to keep track of things. Even today's electronic watches with their lap time facilities aren't

really adequate.

The Psion Organiser in its various forms has been around for some time now and far from being merely an electronic Filofax it is in



## Main Procedure

```
LAP:
GLOBAL P%, Z%, Y(102), T, Q, Y
KSTAT 1
Z%=2:Y=0:
POKEB $007C,0
CLS
INIT:
POKEW $20CB,0
DO
TIME:
UNTIL T,=M0*1200
Q=Z%
BEEP 300,200
DO
TIME:
UNTIL Z%=Q+1
AT 1,1
PRINT"          " (17 spaces)
AT 1,1
PRINT Z%-2; " LAPS "; " ";Y(Z%)/20 (2 spaces)
AT 1,2
PRINT " last lap ";(Y(Z%)-Y(Z%-1))/20
GET
CALC:
```

## 2nd PROCEDURE

```
INIT:
LOCAL S$(1)
AT 1,1
PRINT " PRESS KEY 8 TO"
AT 1,2
PRINT " RECORD A LAP"
PAUSE 70
CLS
PRINT " PRESS A KEY TO "
PRINT " START RACE "
IF S$=GET$
STOP
ENDIF
BEEP 200,800
CLS
```

## 3rd PROCEDURE

```
TIME:
T=PEEKW($20CB)
AT 1,1
PRINT "LAPS";Z%-2;" ";T/20 (3 spaces)
AT 1,2
PRINT "last lap ";(Y(Z%)-Y(Z%-1))/20
IF KEY=74
COUNT:
ENDIF
```

## 4th PROCEDURE

```
COUNT:
BEEP 20,800
Z%=Z%+1
Y(Z%)=T
P%=Z%-1
```

## 5th PROCEDURE

```
CALC:
LOCAL N%
SHOW::
N%=2
CLS
AT 1,1
PRINT Z%-2; "LAPS ";Y(Z%)/20;"SECS"
DO
AT 1,2
PRINT "LAP ";N%-2;" ";(Y(N%)-Y(N%-1))/20
GET
N%=N%+1
AT 1,2
PRINT"          " (19 spaces)
UNTIL N%=Z%+1
AT 1,1
PRINT " ANY TO REPEAT "
AT 1,2
PRINT " OR Q TO QUIT "
IF GET$="Q"
POKEB $007C,1
STOP
ELSE GOTO SHOW::
ENDIF
```







# The Limit is Your Imagination



## **BIG BOSS**

Monster Truck with the performance and detail that counts. Ford F250, car crusher bodyshell with replica 'blower' motor, masses of chrome and dynamic coloured decals. 4-wheel, independent, double wishbone suspension, oversized 'coil-over' truck shocks, extra wide 5.8" diameter tyres and Stock 05 power motor.

Scorching on the flat, exhilarating over the rough.

A Power House Truck.

## **CORVETTE ZR-1**

The 'Mean' street machine. Internal Combustion Engine (I/C), easy 'no hassle' pull start, 2-wheel drive, 4-wheel independent suspension combined with Kyosho's stunning new 3D Image 'Vette' body and reproduction wheels give the ZR-1 the looks and muscle to take your breath away.

## **LAZER & RAIDER**

Fresh from the World Championships the Lazer was designed to compete. 4-wheel drive, extra long suspension wishbones, three differentials and adjustable Power Torque drive, deliver the winning edge.

From the same design studio, the 2-wheel drive Raider in ready built or kit format is the ideal introduction to off-road racing.

## **PEUGEOT 405**

To compete in the rally world, it's survival of the fittest. Easy pull start I/C engine for real power, 4-wheel drive for ultimate traction, independent all round suspension for competitive handling make Kyosho's 405 the leader in it's class.

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# RALLYCROSS

## Racing

RallyCross got off to an unbelievably good start last year and has attracted huge interest from National Manufacturer's and the media area of our sport/hobby. I feel it is therefore prudent to introduce a few ground rules (as listed) regards appearance of body shells/chassis before it gets out of hand. RallyCross appeals to the general public. They can identify with it, possibly get interested, possibly join your club which at the end of the day is what we need. Last year we all saw some poor examples but as the year progressed the presentation improved no end. Let's keep it up.

### RULES

As per the current B.R.C.A. Modified 1/10 Off Road Rules PLUS: Modified motors with a minimum of 14 turns; All body shells must be painted; All tyres/wheels must have no more than 10mm protruding outside the body shell whilst wheels are in a straight line; All body shells must be kept intact - i.e. No cut out rear panels; No cut out windows; No additional wings - see body shell list.

You may drill no more than 12 (twelve) 8mm holes in the rear bumper line to aid air flow.

The idea behind RallyCross is to follow the R.A.C./B.R.D.A. and E.R.A.

RallyCross formula and standards as close as possible. We therefore list below the only body shells that will be permitted to race.

Ford Cosworth RS500*	Peugeot 205 T16*
Ford Sierra XR4	Peugeot 405 T16*
Ford Escort XR3i	Lancia Delta S4
Ford RS200	Lancia Rally 037
Porsche 911*	Audi Quattro A2
Porsche 935*	M.G. Metro 6RA*
Porsche 944	Toyota Celica GT4
Astra GTE	BMW M3

\* Denotes body shells that come with a wing. Only these wings may be used on the correct body shell - i.e. No 911 wings on Astra GTE.

**SATURDAY 25TH AUGUST**  
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**SUNDAY 26TH AUGUST**  
4WD Southend - RCCC

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**SUNDAY 30TH SEPTEMBER**  
Newham Buggy Club (Nr Mainault)

Malcolm Joyce  
14 Mordanunt  
Dagenham  
Essex RM9 6ER

There is also to be a three car team event at Newham Buggy Club on 19th August for RallyCross cars.

Entries to Newham Buggy Club, Alan Smart, 33 Field Road, Forest Gate, London E7 9DW.

## October Issue

Ferrari F189 Tamiya\*

Rallycross Track Torque Taking Stock

Kyosho Lumina

Free Competition

# Next Month..



A brand new chassis, new diff, new suspension, new wheels and a fantastic F189 Ferrari body shell all feature on the latest release from Tamiya. RCMC will bring you a full build and running test next month in full colour - don't miss it.



# On TEST

## Tyre Truers

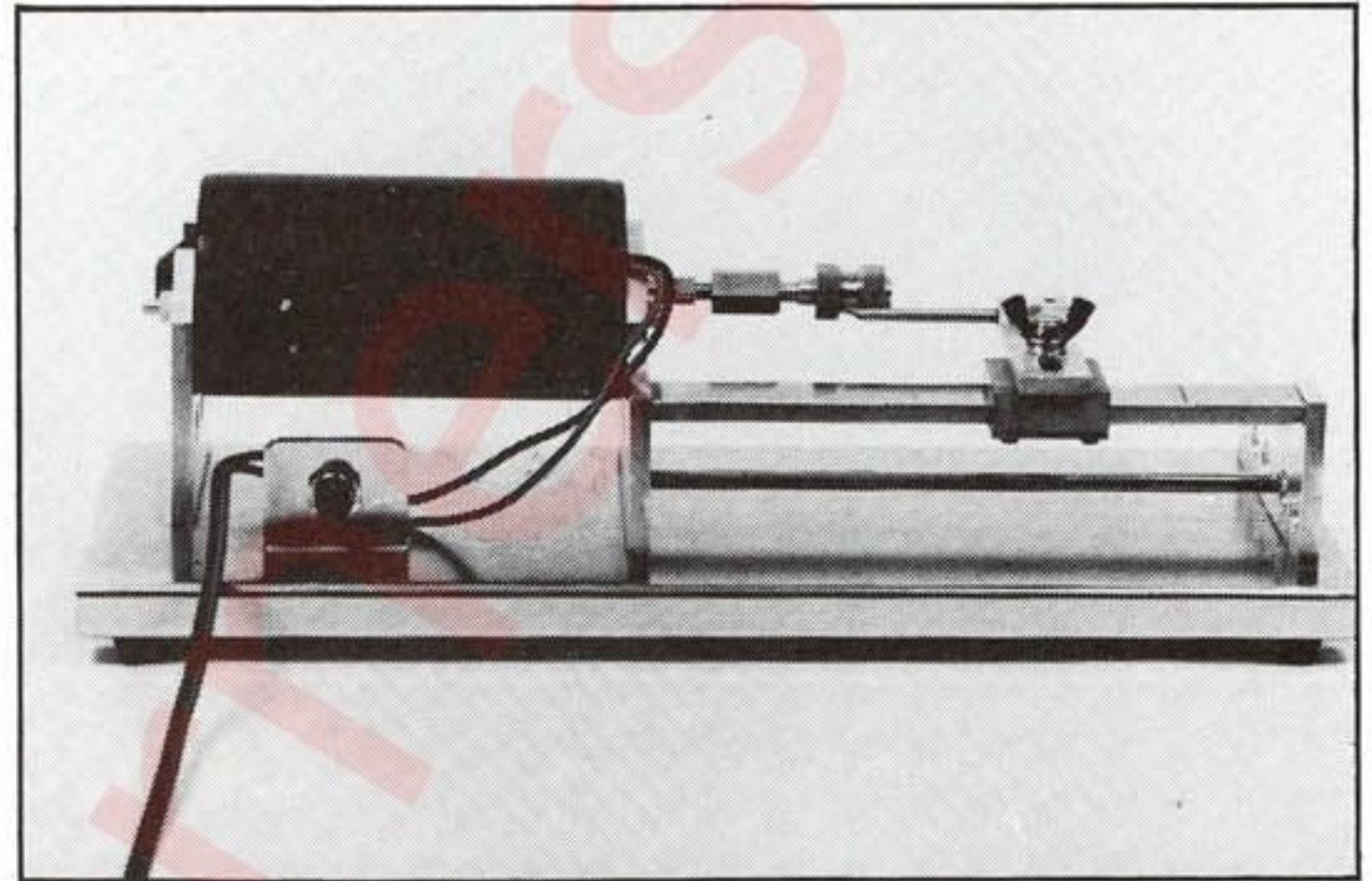
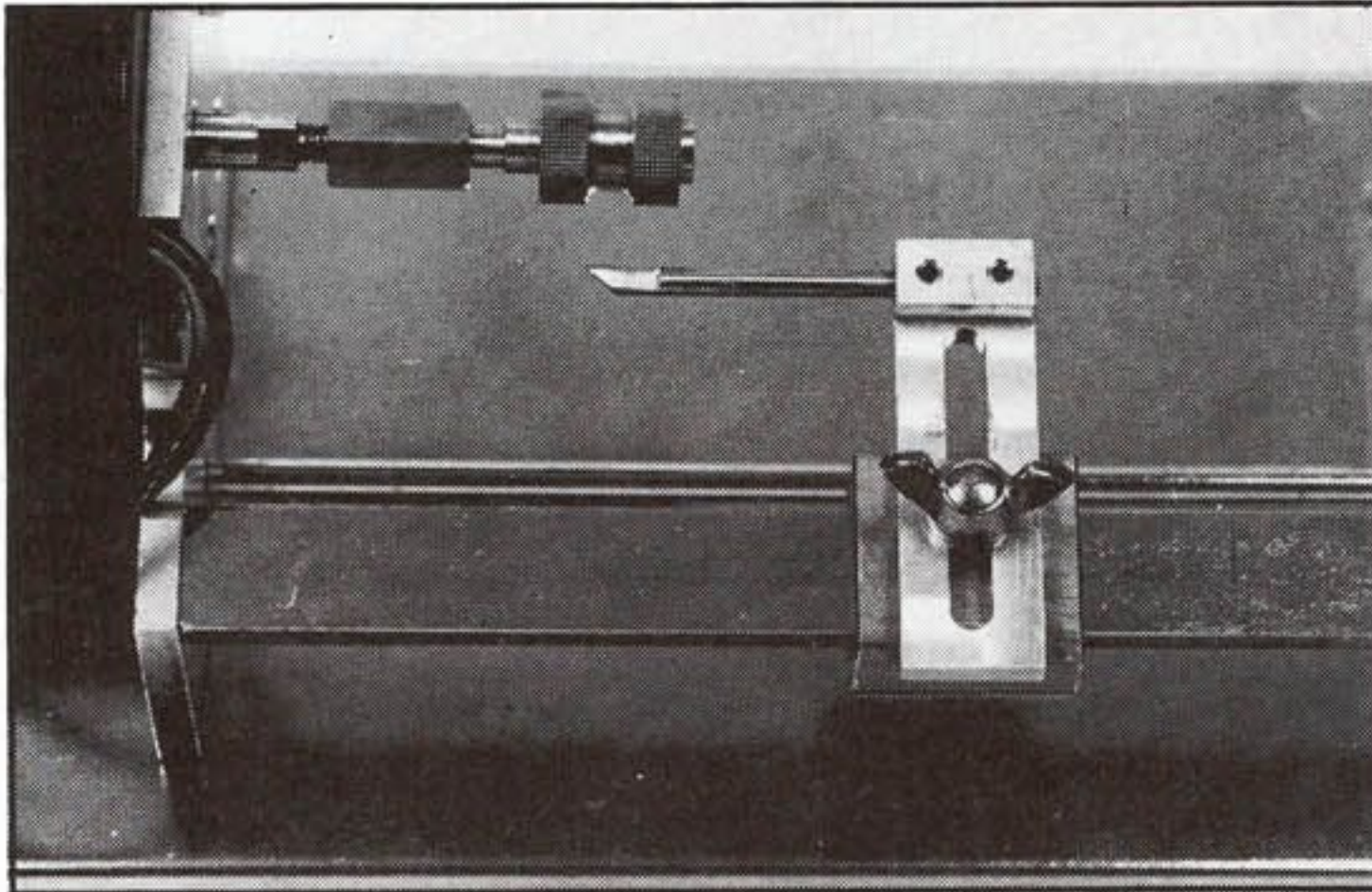
**T**yre truers are a necessary bit of kit for the PRO10 and 1/12 fraternity. Until recently we had to either leave it to the specialised supplier to fit and true, or resort to the Black and Decker with bits of glass paper. The latter might give a satisfactory finish, sometimes even circular, but

often tapered. Nice looking but strange on the handling.

Now the AYK truer is creeping in to the UK. A quick look at one of these machines shows it to be all metal construction, powered by a substantial 12 volt motor and built on battleship lines. In fact the motor looks large enough to double as a starter for IC cars. Truing is by a steel blade which is passed across the tyre face. I have

not tested this as yet but it should work well. From the USA there is a C&M truer. This time only pictures to see how it works. I think it best to reserve judgement on this until I try it.

Not to be outdone, a somewhat smaller Japanese company Kawada have also had a go at a small tyre truer. Yet again I have not heard of an importer for these although the 1/12 Kawada cars are sold in the UK.



## BATTERY CHARGING & MATCHING

**T**he Turbochargers from Competition Electronics, as well as being a sophisticated charger, allowed the charge/discharge cycle of cells to be monitored giving you all the information to provide matched packs. The system works well, despite the somewhat laborious process of doing one cell at a time. The original Turbocharger is a pulse current charger. This has now been supplemented by a linear charger, designed (according to Competition

Electronics) to get the best out of SCE batteries. For those wishing to do something else in those long winter evenings apart from watching the display on the Turbocharger Competition Electronics have introduced the Turbomatcher. This monitors six cells simultaneously letting you get on with the useful things like watch TV or read *RMC* magazine etc. etc. Charge rate is adjustable from 2 to 10 amperes and discharge rate variable from 5 to 20 amperes. The system

operates on a DC supply from 13.5 to 15 volts and is provided with two Centronic parallel printer outputs.

One output gives a graphical output of time against volts and the other output provides: discharge time, average volts, charge amperes, discharge amps and cell serial number, makes the tea and sings Rule Britannia, no, no, I'm sorry it's a mistake, it's coffee it makes.

Anyway with all this information to hand you can provide matching for

yourself and others as good as anything to be found anywhere. Now the bad news is the price. Sadly I do not have an accurate figure. Based on US prices (and if you can find an importer) it should be around £1000. For those with even more money to spend there is a more expensive super version. Anyone really serious about spending this sort of money, I suggest you contact the dealers who regularly import goods from the US such as Ted Longshaw or Demon Products.

**W**hilst speed control developments thrust forward the man that was in at the beginning of electronic speed controllers had (I thought) all but left of that market, but not so. For the last few years Nick Adams has concentrated on expanding his range of Demon products for the RC enthusiast. (See later).

Now the ever faithful Demon Pro King is to be supplemented by the 16

FET K80 ACE model. This forwards and brake speed controller uses the finest high performance temp. FETs. Should anyone manage to overheat the unit (heaven knows how) the FETs will automatically shut down so preserving the FET bank. With all those FETs you would expect

performance to be outstanding, and you will not be disappointed. A theoretical voltage drop of only 0.002 carrying 677 amperes continuous and a staggering pulse current rating of 2188 amperes. Interestingly and surprisingly the actual voltage drop is stated on

the spec sheet which is 0.037 volts whilst delivering 10 amperes. I was rather pleased to see this splash of honesty and reality creeping into specifications as opposed to the pointless and unrealistic claims made by some manufacturers, 10 points to Demon for its inclusion. Also included in



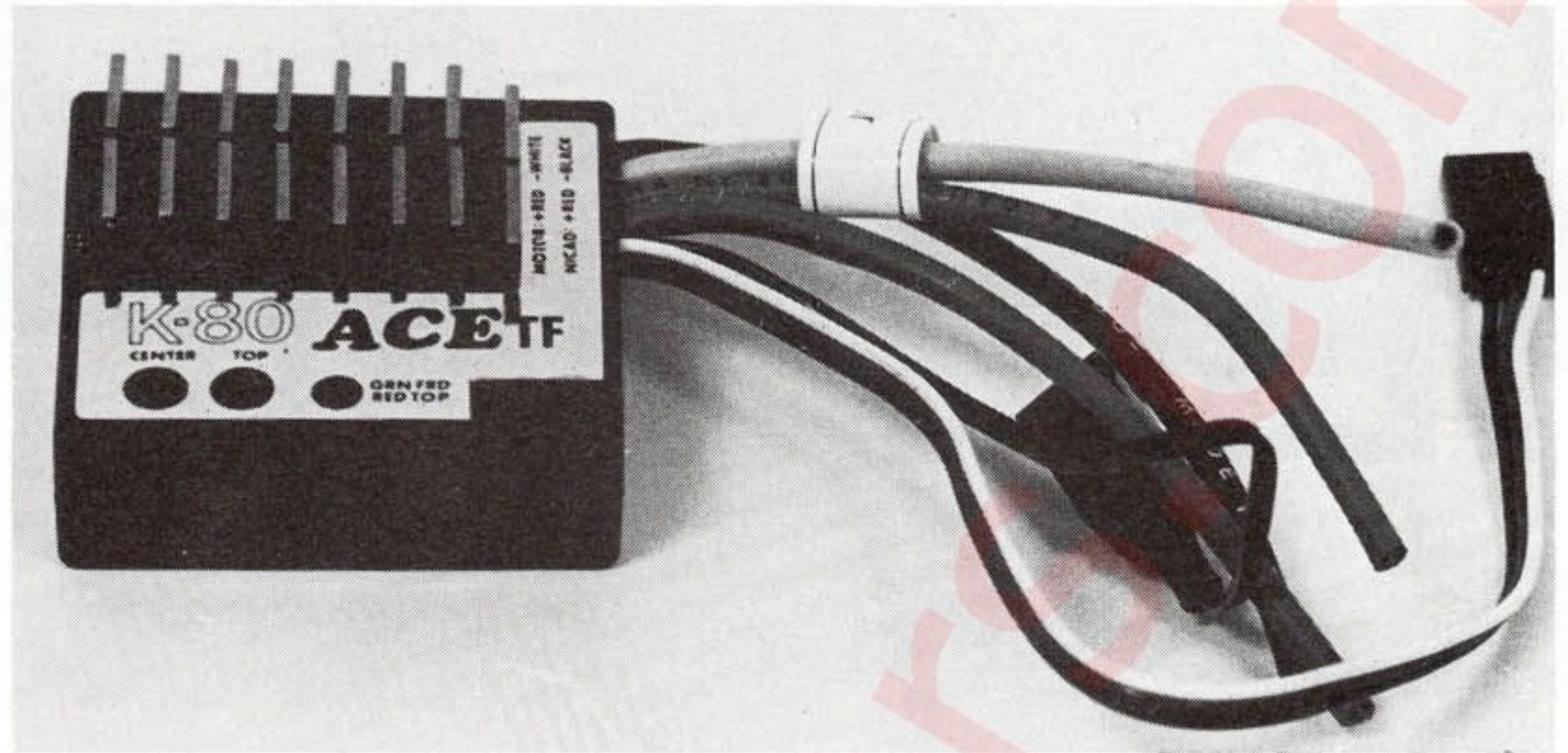
the specifications is the response time of 15 to 25mS. I must say I do not know quite what to make of that. As my reaction time is likely to be measured in minutes I guess the speedo wins hands down.

A final point about setting up. The method chosen is a colour changing LED. This is quite popular these days and virtually foolproof.

Size is very modest and should fit just about any 1/10 car, on or off road.

44mm x 42mm x 15mm and weighs in at just 60gm.

Price is equally sensible for such a high performer at £99.50.



In previous issues of RCMC we have given details of Demon Products' outstanding top of range charger. As promised a new budget priced charger has just been released. Couple this to a specialised transmitter/receiver charger and you can see the reasons why the speed controllers on which the Demon range became established has taken a back seat for a while.

To develop and manufacture, then to distribute any product take a considerable amount of effort and a lot of time. So after substantial period of testing and refining Demon have released the System 2 charger.

Like its larger stable mate the charger is a peak sensing type, which will prevent overcharging. Current selection is adjustable by means of a

## New Demon Low Cost Nicad Charger

central control giving from 1 to 6 ampere selection. The constant current system is by far the best way of ensuring a long life from your nicads, especially SCE (1700) types.

A pulse trickle charge ensures that once the peak has been reached the optimum level of charge is maintained prior to use.

An LED gives an indication of the charge status and an easily changed car type fuse is mounted on the front panel, although I did think that the fuse carrier was a bit close for comfort to the case, Demon say that they have had no reports of problems in this area.

A neat, compact, robust and versatile charger from Demon Products. Price £39.95.



No sooner had I just finished putting fingers to the keyboard in praise of the Nodis Tru-Arm and

Tru-Arm junior. "Well," I said, "are you just determined to saturate the world with commutator truers, or perhaps do you

is supposed to have said "if it looks right it must be right." I cannot give much in the way of detail, but from the description given, the

Non stressed sections are made from Tufnol and this allows the priced to be substantially less than the original Tru-Arm which I

# Commutator Truing

the phone rings. There was Don Ison, boss and chief guru of Nodis Racing telling me that he had just finished the prototype of the

just like making them." Don did admit to quite enjoying creating something new which looked good and worked well, and like Brunel

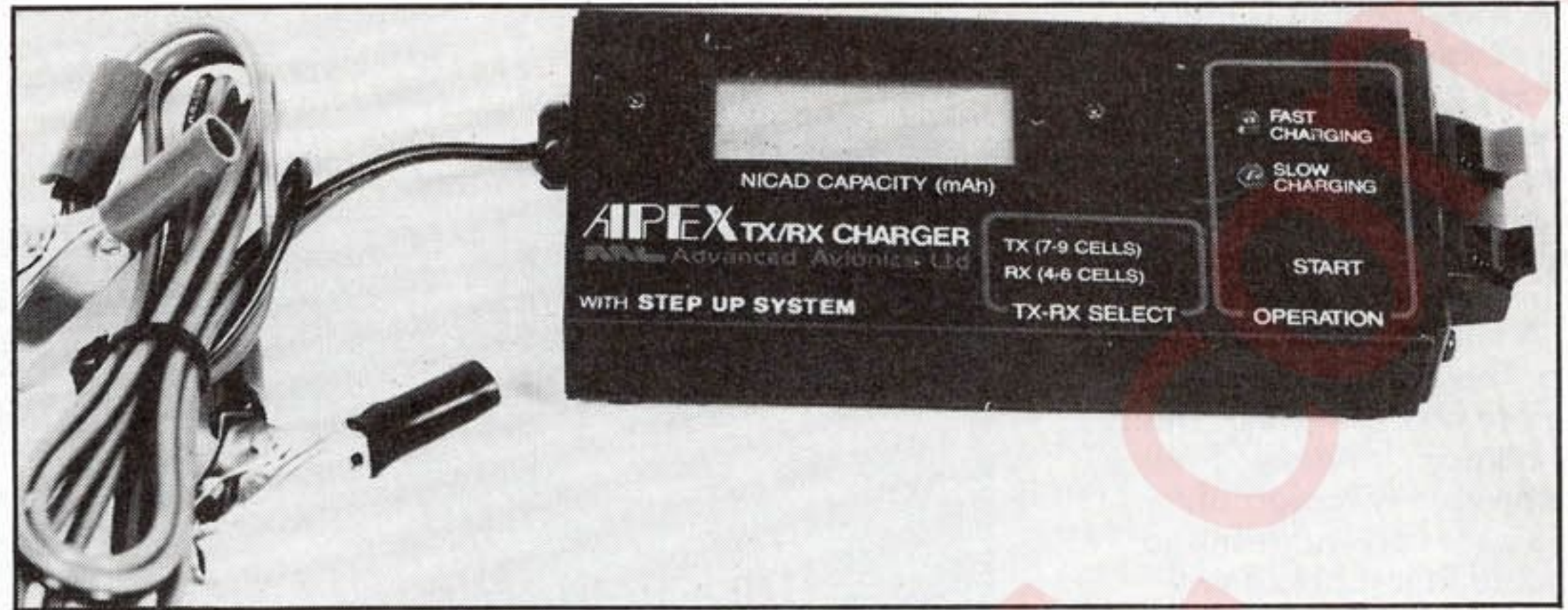
Junior version is based on the same principles as the larger and older (if only by a few weeks) stable mate. The saving is in materials.

should emphasise is still available.

Details from Nodis Racing Developments, 28 Brunwins Close, Wickford, Essex.



# On TEST



## THE APEX TRANSMITTER/RECEIVER CHARGER

This attractive little unit is likely to prove a real star with all types of RC enthusiast, not just the car driver.

Firstly the charger embodies all the sorts of safeguards we have come to expect as standard of nicad chargers, that were, in fact missing just a few years ago.

1. Over charging is prevented.

2. It is possible to charge up to nine nicad cells using a 12 volt source.

Now you do not have to be smart at sums to work out that  $9 \times 1.2$  volts = 10.8 volts. To satisfactorily and

rapidly charge a nicad you need a source that is reasonably higher than that of the battery you are charging. I grant you that 12 volts is greater than 10.8, but to ensure a satisfactorily rapid charge rate the Apex unit incorporates a step up system.

3. A constant current of one ampere allows fast charging of transmitter and receiver cells. When this is reached the charger automatically switches to trickle charge.

4. A digital capacity meter indicates the charge applied to the battery. This

will allow comparisons to be made between different nicad packs.

Quite frankly this is a long overdue piece of equipment. Offering as it does rapid charging of transmitter cells I reckon that this could be a real life saver for all users of RC equipment. It looks pretty good as well.

Charging a completely flat set of cells should take around 15 to 20 minutes. Another use I have discovered is that I can charge the built in nicads on the Tamiya Quick Drive cars. A word of warning about this. For safety

reasons Tamiya never offered a quick charger for these cars, I successfully managed a charge, but with the cells inside a closed area heat build up could be a problem. Nevertheless with care and commonsense it can be done. In fact this charger has so many uses from battery powered shavers to transistor radios the list could be pretty long, this will be a good long term investment.

Price £70.00.

Demon Products, PO Box 12, Aldershot, Hants.

I was wondering whether the RC industry had gone into premature retirement, with not a lot happening either at home or Japan. However with the Shinzouka hobby show just over there are a few interesting tasters on the horizon. Firstly a newcomer to competitive RC racing, but not to the toy trade is Tomy. This company is big business in the toy world and now with the Tomy TXB-001 (the code name) it look as though they are keen to enter the competitive world of 1/10 off road. This newcomer although obviously untried as yet in the UK (at the time of writing) has some interesting if not novel features.

The information to hand is from a Japanese translation and may have lost something in the travelling.

The basic car has independent suspension all

round. An adjustable tensioned belt drive transmission of 2mm pitch. The motor is fitted to magnesium mounts. Fourteen ball races for minimal transmission loss and ultra lightweight ball differentials. The really

interesting thing about the

car is that you can choose transmission configurations.

1. The centre differential





provides a torque split of 6:4 thus ensuring more torque to the rear wheels and presumably more traction. Just like some of the more sophisticated full size off roaders, or for those of you who can remember the original Jensen 4x4 system of years ago.

2. As above with one way clutch for the front hubs.

3. Direct drive to the rear with one way clutch for the front hubs.

4. Direct drive to both front and rear axles.

Dimensions:  
405mm length  
245mm width  
160mm height  
272mm wheelbase  
208mm/197 track ft/rr  
1600gram weight



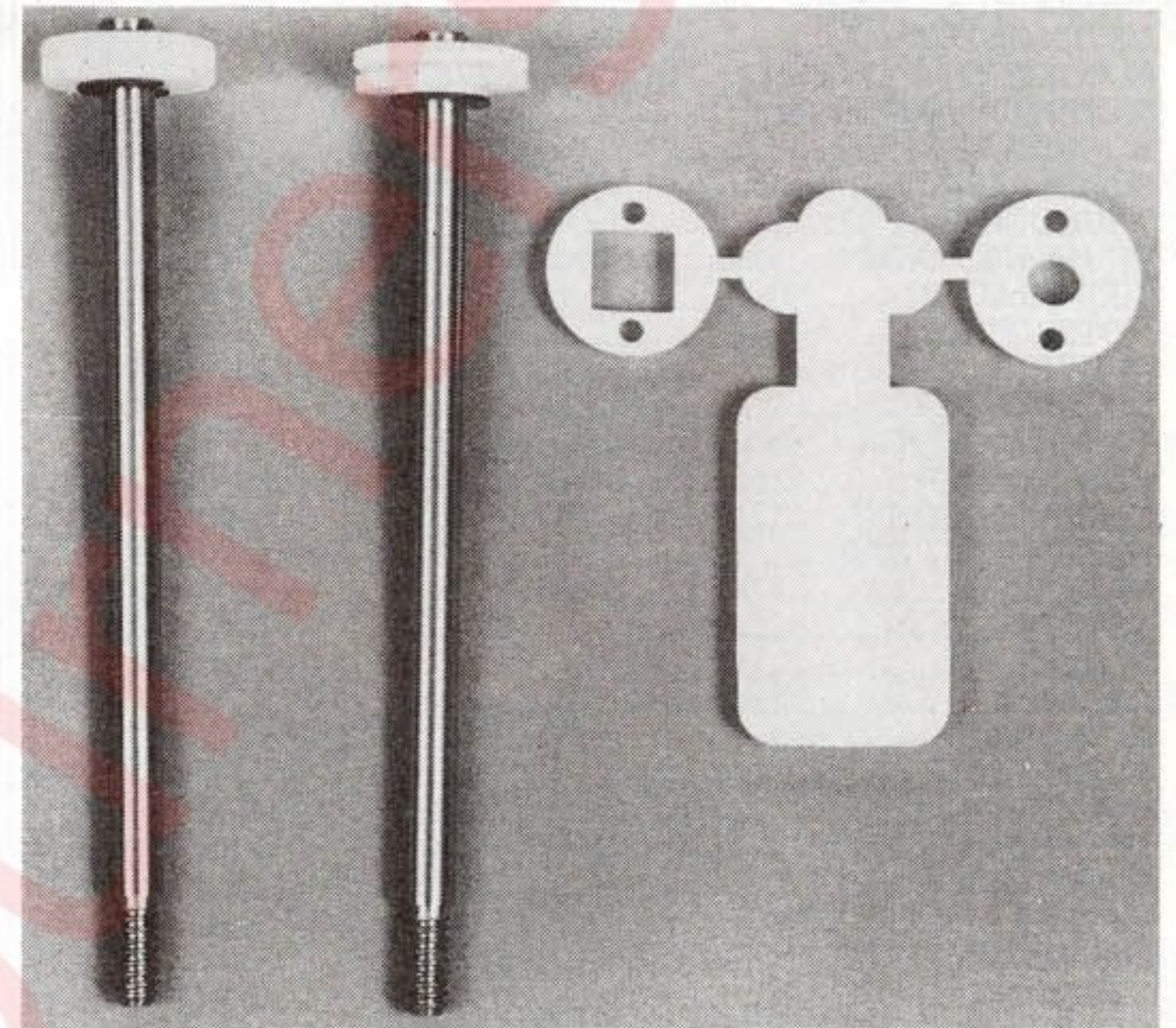
**J**ust arrived from the USA is a 'Valve-A-Matic' piston from TM Racing components. This interesting little fitting replaces the existing piston on Associated, Kyosho and JR-X2 shocks. The objective is to allow the wheel to move up quickly when it encounters a bump, yet to be damped for the return movement to the normal road wheel position. The idea is, as all good ideas, elegantly simple. The piston comprises two precision moulded plates with holes at 90 degrees to each other through which the oil can flow. On the up stroke the plates are forced apart allowing the oil to flow through virtually unimpeded. On the down

stroke the plates are forced together restricting the flow of oil from one side of the piston to the other. This cuts out rebound bounce. In the words of TM Racing Components "making the car more stable on landing."

The TM company is keen to sell in Europe and would welcome trade enquiries.

TM R/C Racing  
Components,  
49679 Leona,  
Mt. Clemens,  
MI 48045,  
USA.

## New Shock Piston from US



## KO'S Finest

**F**rom the world's finest RC manufacturer (their opinion and one with which I have some sympathy) comes yet another KO offering. The EX-5 is added to the already virtually unobtainable other KO sets.

Perhaps some good news is that at last the Esprit 2 can be fitted with a 40MHz FM module, also available is the new receiver. This allows you in the same unit the option of 27MHz AM or 40MHz FM and should you travel further afield there

are other frequency options available. A pretty comprehensive set up.



## TANAPLAN GOODIES



Those men from Team Tanaplan are at it again, now producing high quality tune-up parts machined by CNC in alloy. Various Cougar shock brackets are available for £6.99. As well as front, rear brackets are also available for £4.00 as are rear bulkhead strengtheners. Available direct from Tanaplan. 081 883 0869.



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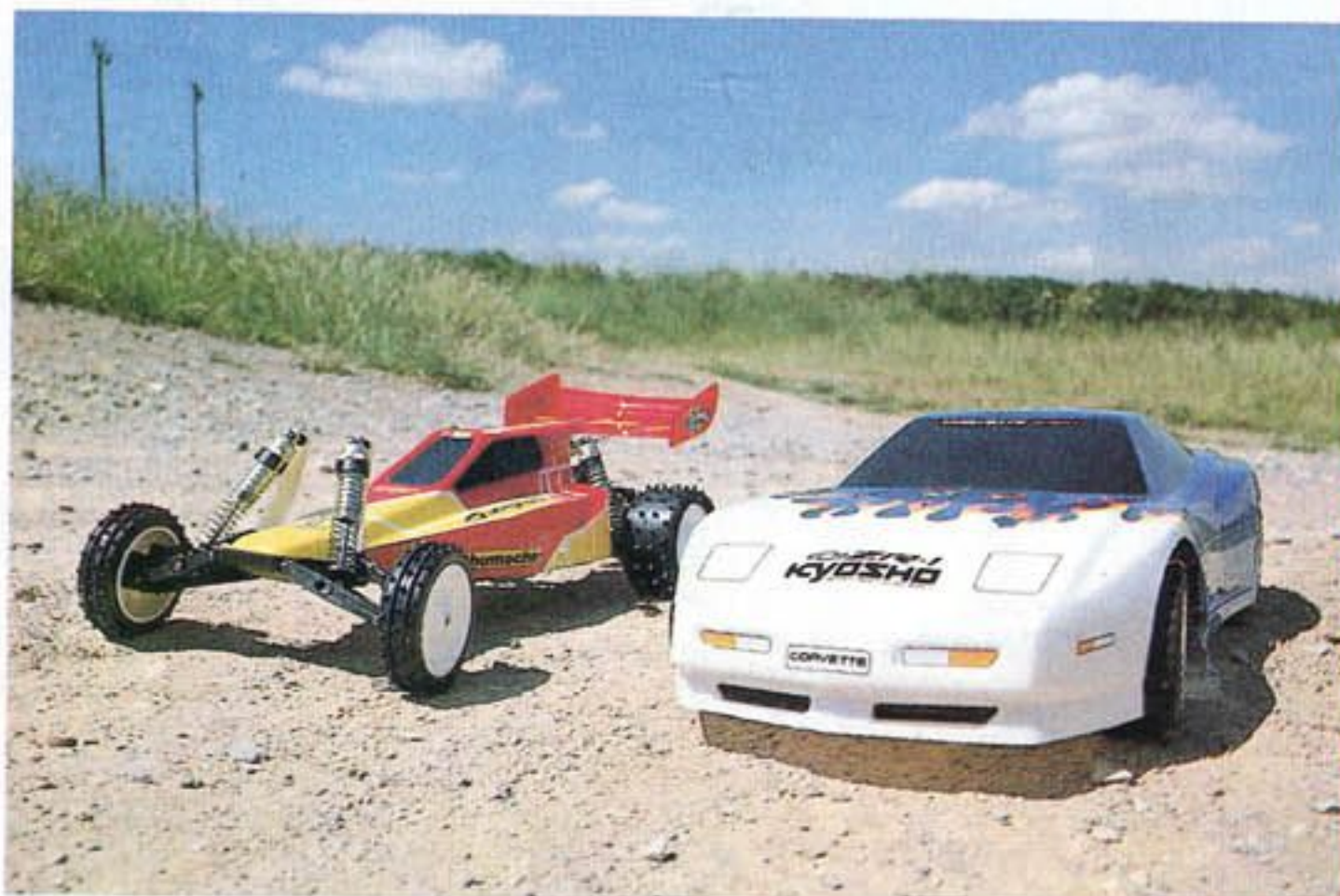
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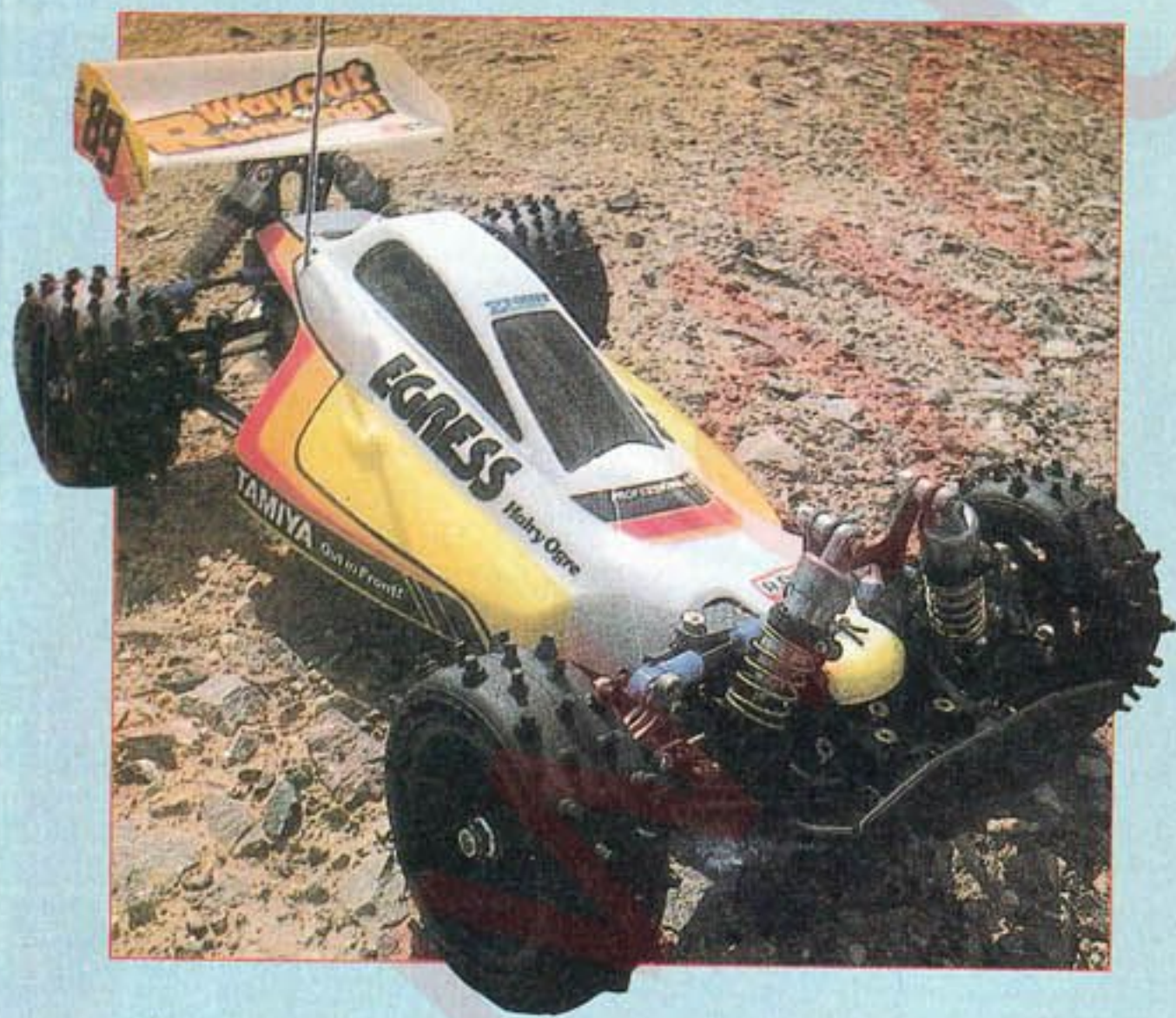
# On TEST

Available on August 10th is this RCMC Racing Special 1990 – there's up to date kit, motor and speedo surveys, a great painting article, a motor maintenance guide, plus a whole host of racing tips, local clubs and other goodies you can't do without. Priced at £1.95 and available from all good newsagents or direct from Select Subscriptions Ltd, 5 River Park Estate, Billet Lane, Berkhamsted, Herts, HP4 1HL for £2.55 inc P&P.



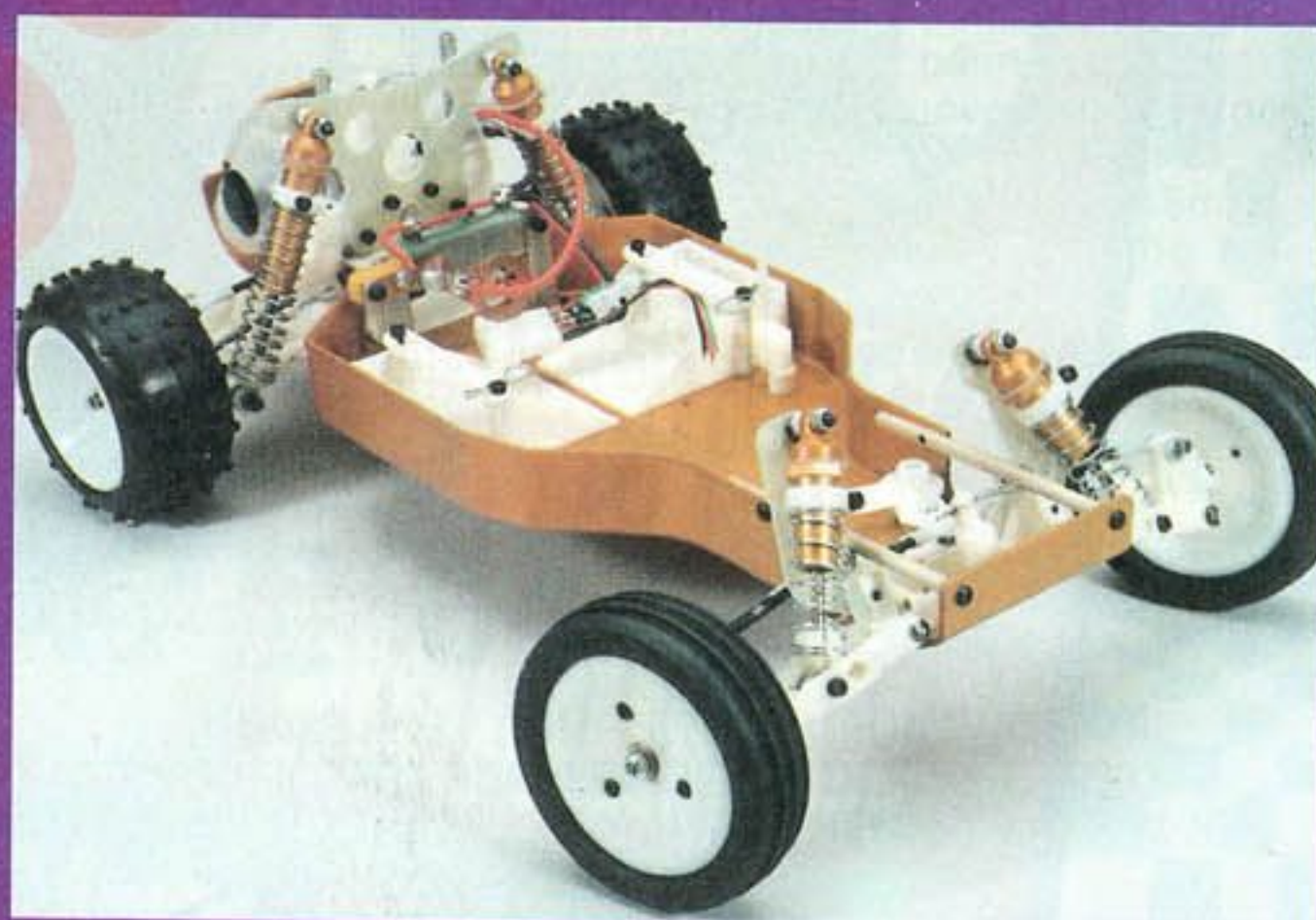
## Two winners from ARGUS

### THE OFF-ROAD BUGGY BOOK



**Alan Harman**

In this new book, Alan Harman, editor of *Model Cars* magazine, gives a comprehensive guide to all aspects of the sport. He sets out the various forms and scales of buggies, describes building, preparation and racing, electric buggies, rallycross cars, radio control systems and driving techniques, available from local model shops, priced £5.95.



### LATEST RC10.

A new championship edition of the RC10 has just been released. The kit includes: gold alloy chassis, adjustable wheelbase, high volume shocks, adjustable ball diff, quick change battery mounting and new nylon suspension parts.





# Nodis Com Truer

## The Nodis Commutator Truer (TRU-ARM)

**I**t's funny how things happen. For years we have been sending our armatures away for truing, or perhaps finding a friendly lathe operator who will do the job as a favour. Then, all of a sudden, a new product appears on the market allowing us to do the job ourselves, then another appears and another. This is not copycat production because they all come onto the market at virtually the same time. There must be some other force at work producing simultaneous inspiration.

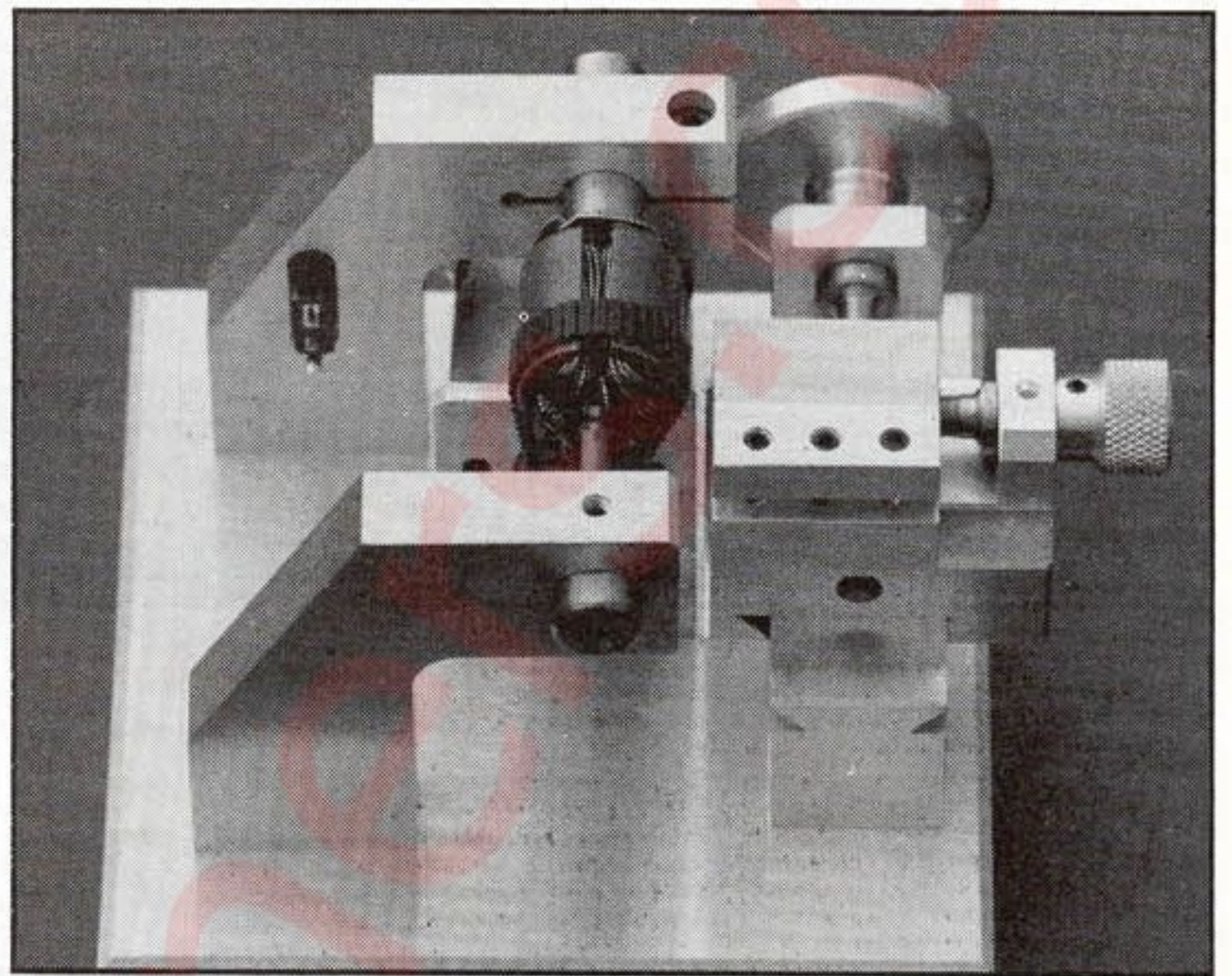
Whatever the reason for this deluge of comm. truers, it is the machine produced by Nodis Racing Developments that is the subject of this article.

Nodis have always been renowned for the quality of their products, be that individual gears, gearboxes or complete transmission systems. I would have been more than surprised if this new product from Nodis was anything less than engineering excellence. At the risk of boring all readers, it is just a matter of looking at the pictures to see that the quality is as I expected.

Manufactured from machined components throughout. Although not a criticism of other manufacturers who might choose to use press steel components or plastic there is, in my opinion, nothing quite so nice as machined parts. Dural is the material chosen for the major components. The base plate started life as a 12mm slab on which is secured the armature support brackets and the fully machined tool carrier. With all machine tools it is the solid base that is all important. The more rigid the base plate the less distortion is likely to creep in to your turning. A plate this size should provide all the rigidity necessary.

The tool carrier can be moved in two planes exactly the same as a conventional lathe. Precise control is achieved by means of steel lead screws which operate both the cross slide and carriage. The V slide can be adjusted for wear by means of adjustable gibs, in fact, it is in all respects a very specialised portable lathe. The use of Dural provides the necessary strength yet keeps the machine to an all up weight of 1.2Kg.

Powered by a motor requiring 4.8 volts, a belt



**Machined from high quality alloy to a very high standard.**

runs from the drive motor pulley around the armature body which is, itself, supported in precision ball races.

All that is required is a 4.8 volt battery and away you go. The unit comes with a high speed tool which will give an entirely satisfactory finish. Of course, if you want to try your hand at using a diamond tool, all that is likely to stop you will be money. Nodis have had a diamond tool manufactured specifically for the Tru-Arm. A word of warning, you could obviously find a supplier and buy your own tool, but buying a diamond tool is not quite the same as nipping down to the corner store to buy an ice-cream. You must choose precisely the right sort of tip made from the right type of diamond for the best results. It is not a matter of a quick re-shape on a grindstone, once purchased that is it, no turning back. Having said that, manufacturers of diamond tools will help with advice.

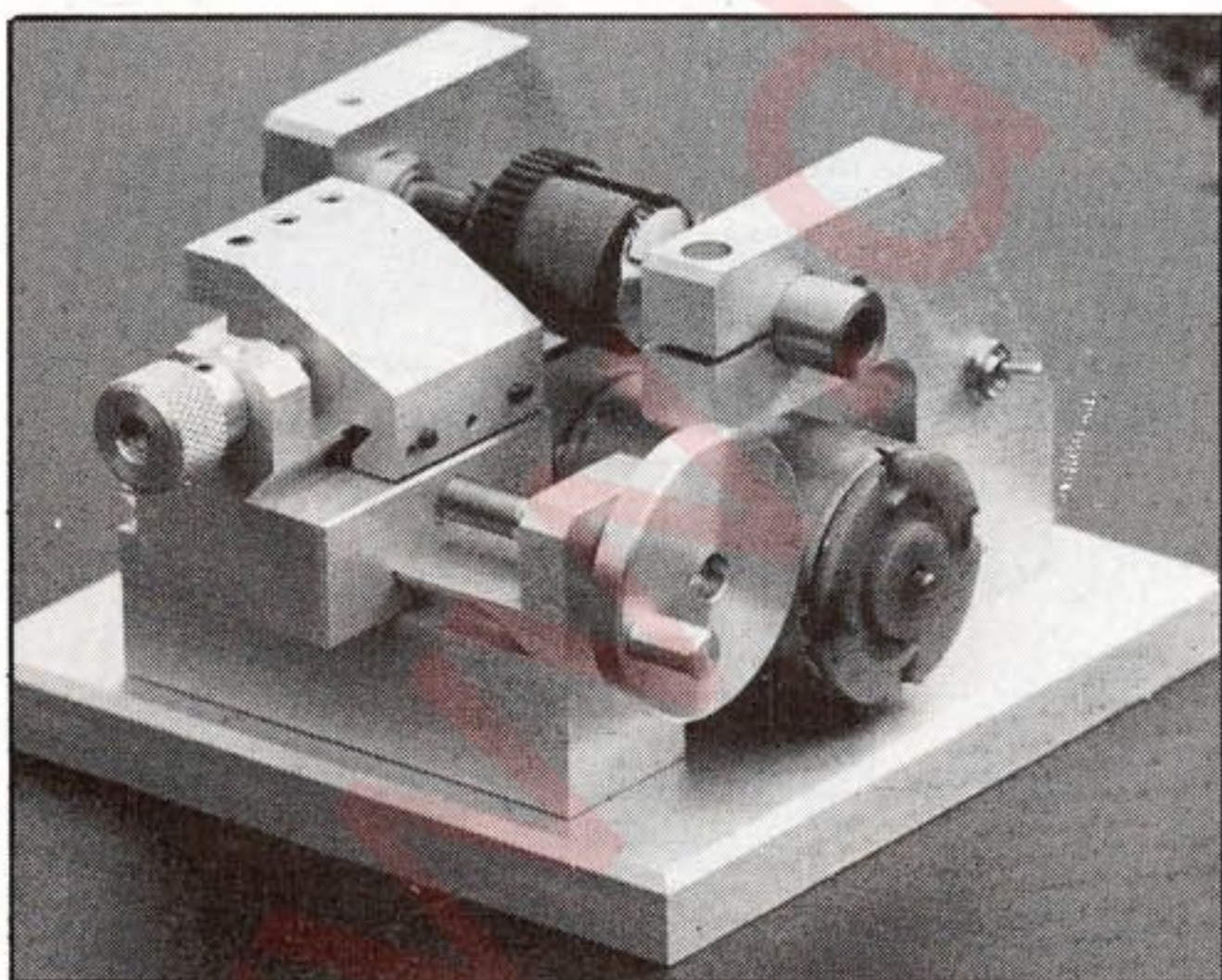
Back to the Tru-Arm. The model in the photograph is a prototype, by the time this article is in print, the production version will look a little different with detailed changes to the

armature carrier and a graduated handwheel. The basic construction of the machine will remain the same.

Priced at £161.00 this new precision tool will provide all sorts of opportunities. For retailers to offer a service in house, virtually while you wait comm. truing. For those among you who have dozens of motors, the cost of one of these tools could keep your motors in tip top order and save you money. Finally, here is an opportunity for clubs to do the sort of thing that they could easily afford and buy a tool for members to use (maybe at a small charge). The opportunities are endless.

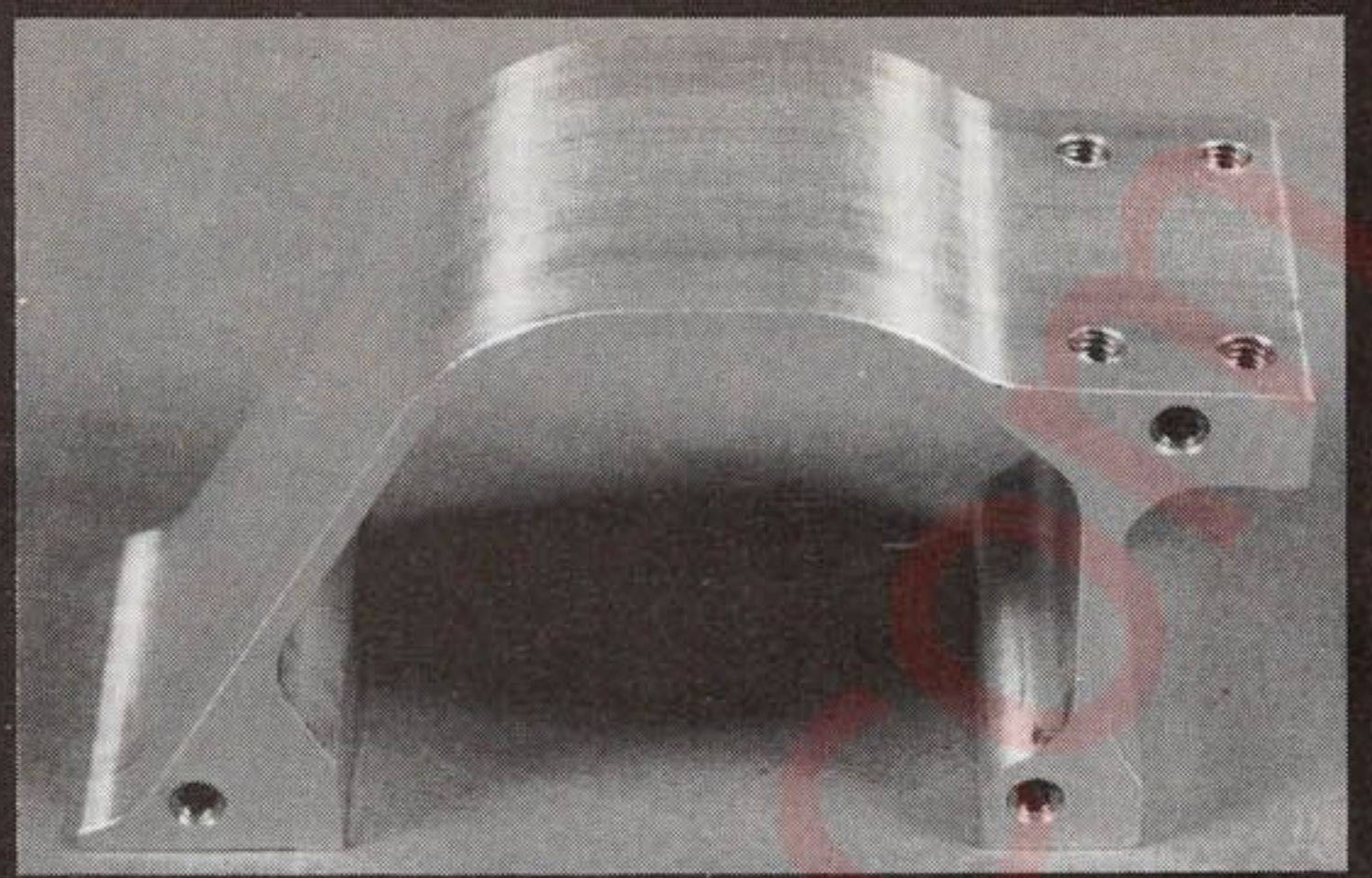
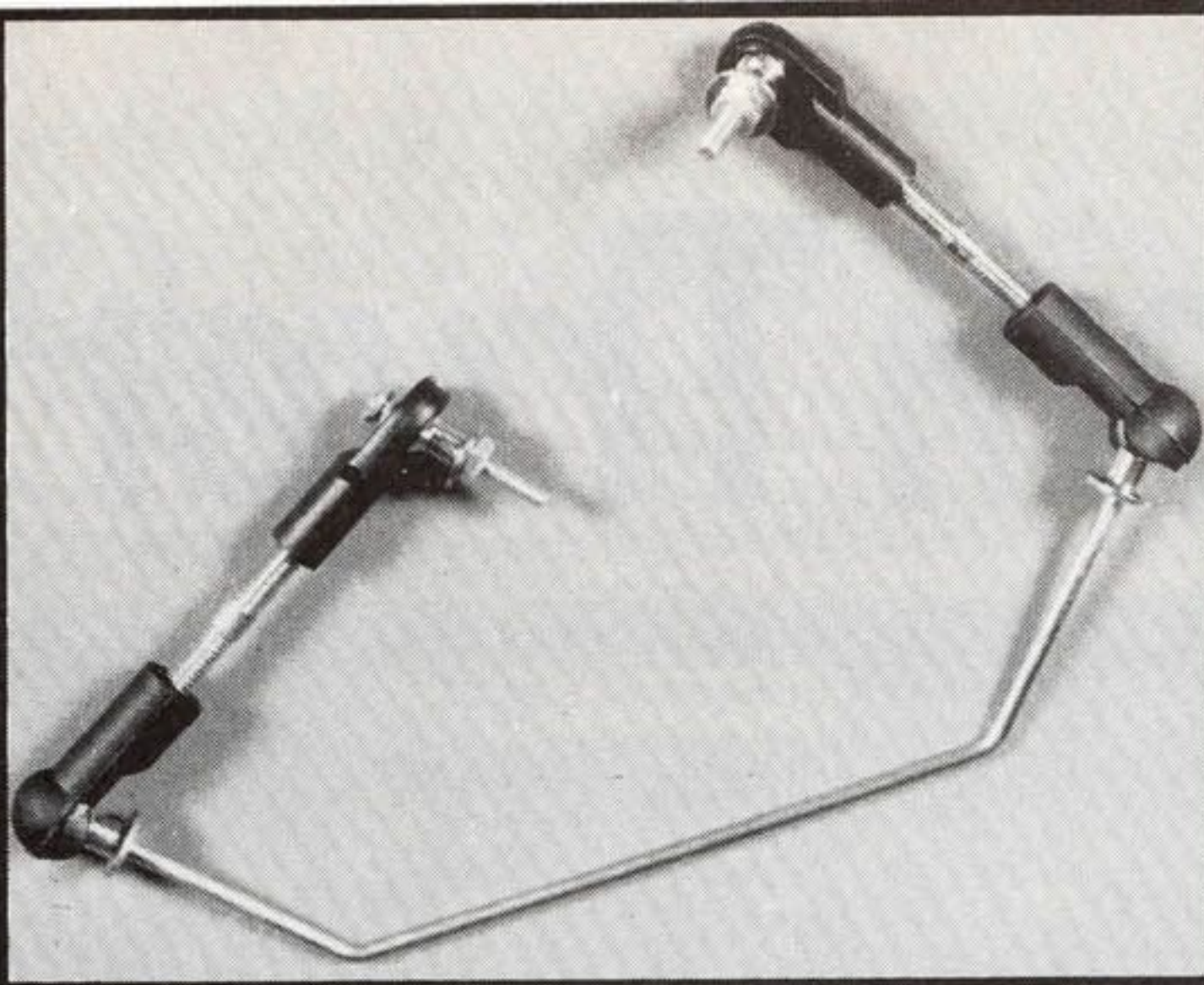
Quite frankly you would have to look a long way to find a piece of equipment better designed and better constructed than the Tru-Arm commutator truer.

**Overall dimensions:**  
128mm x 128mm x 82mm;  
**Weight 1.25Kg;**  
**Price £161.00 including VAT.**  
**Available from: Nodis Racing Developments, 28 Brunwins Close, Wickford, Essex.**



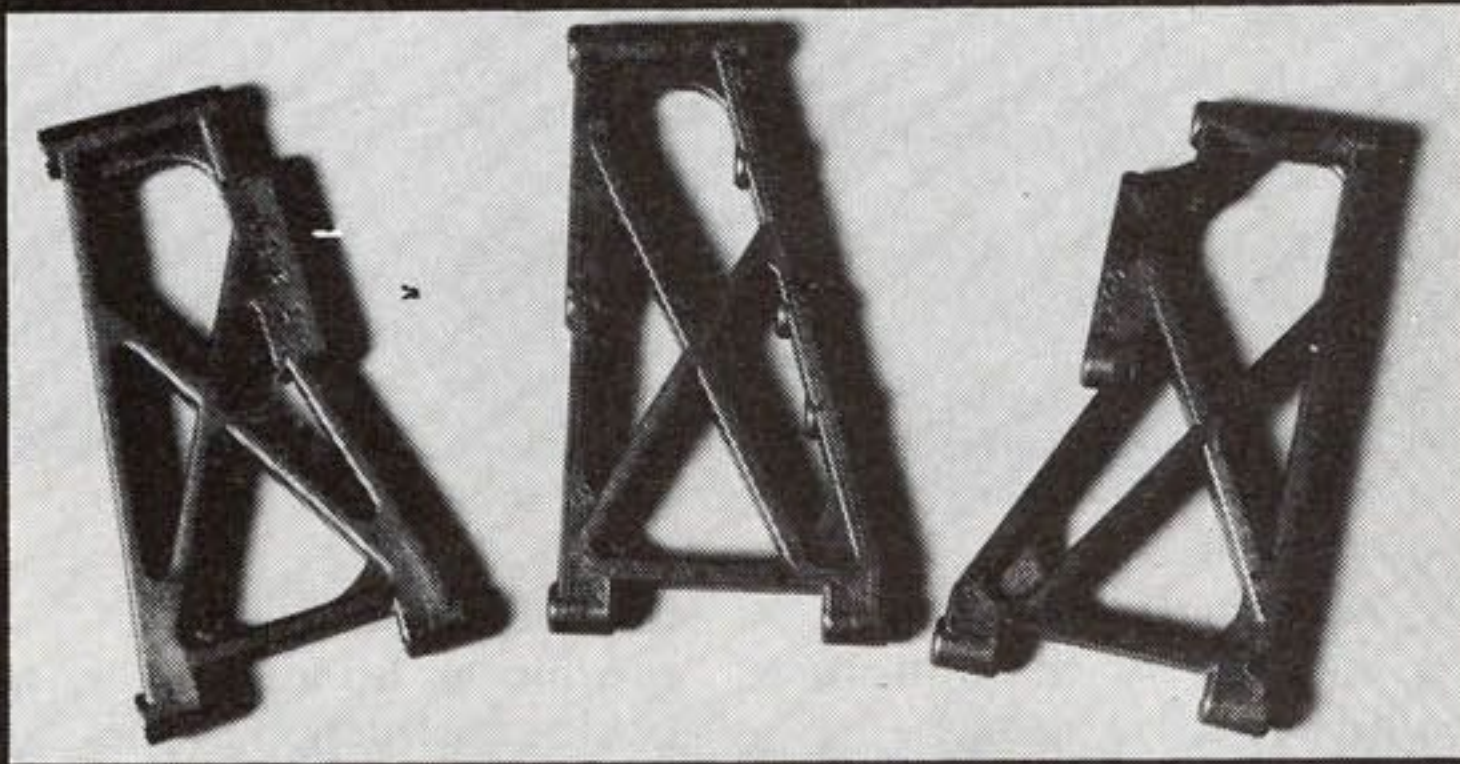
**Neat design fitted with standard 540 kit motor.**





pulley saddle pack holders, priced at £3.99, £3.99 and £4.99 respectively. Lastly are the alloy eccentric bearing housings, these are beautifully machined and give accurate alignment. Priced £22.50. All available from your local model shop.

## Schumacher Speed Secrets!



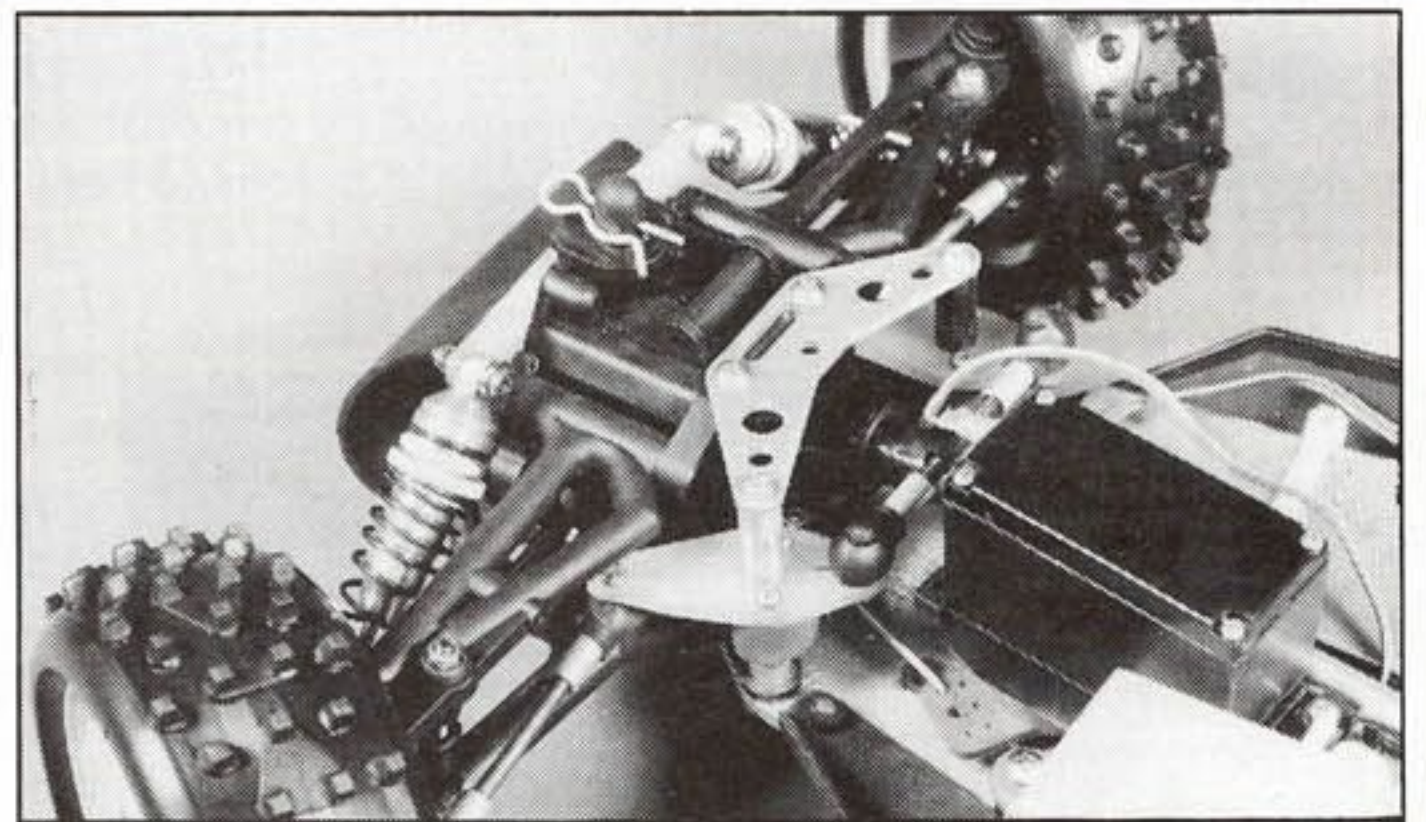
A range of new products are now available for the Cougar and Procat, firstly a roll bar set for both the Cougar & Procat. These include all the necessary fittings. An alloy transmission housing is also produced from solid alloy – expensive at £82.50, but gives an excellent base for the rear alignment. Super diff – is the name given to the ballraced alloy diff which is also available for both 2 & 4WD. In plastic are the new wishbones, front overdrive



## New Tyres from Motile

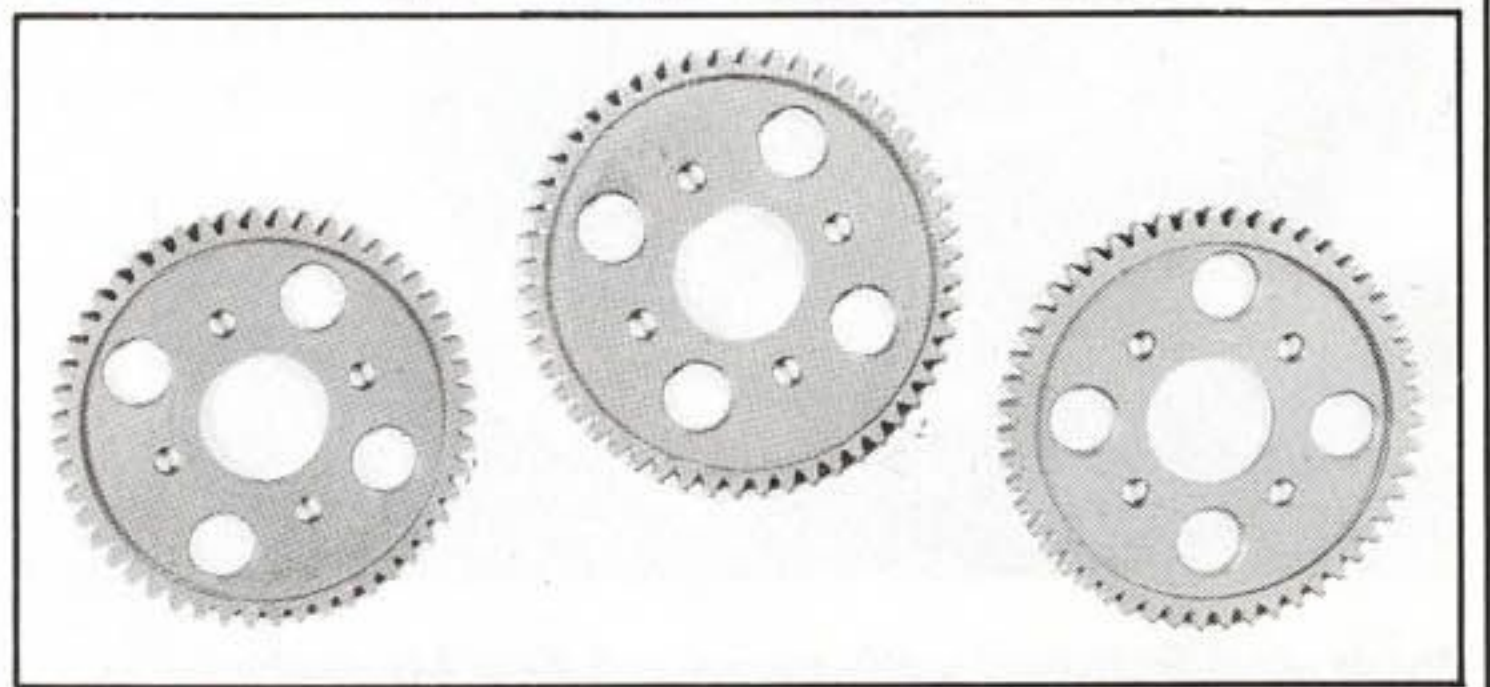


A new range of tyres are available from Motile Developments. Medina D and B rears at £4.97 pair and Super Soft rears at £5.50 pair, available from Motile on 0282 691665.



## GB Techno Tune-Ups

GB Techno are now producing ballraced steering systems for both the Burns & Mugen. Also available are steel centre gears as well as other 1/8th rallycross accessories. All available direct on 0442 54065.





# JS Racing

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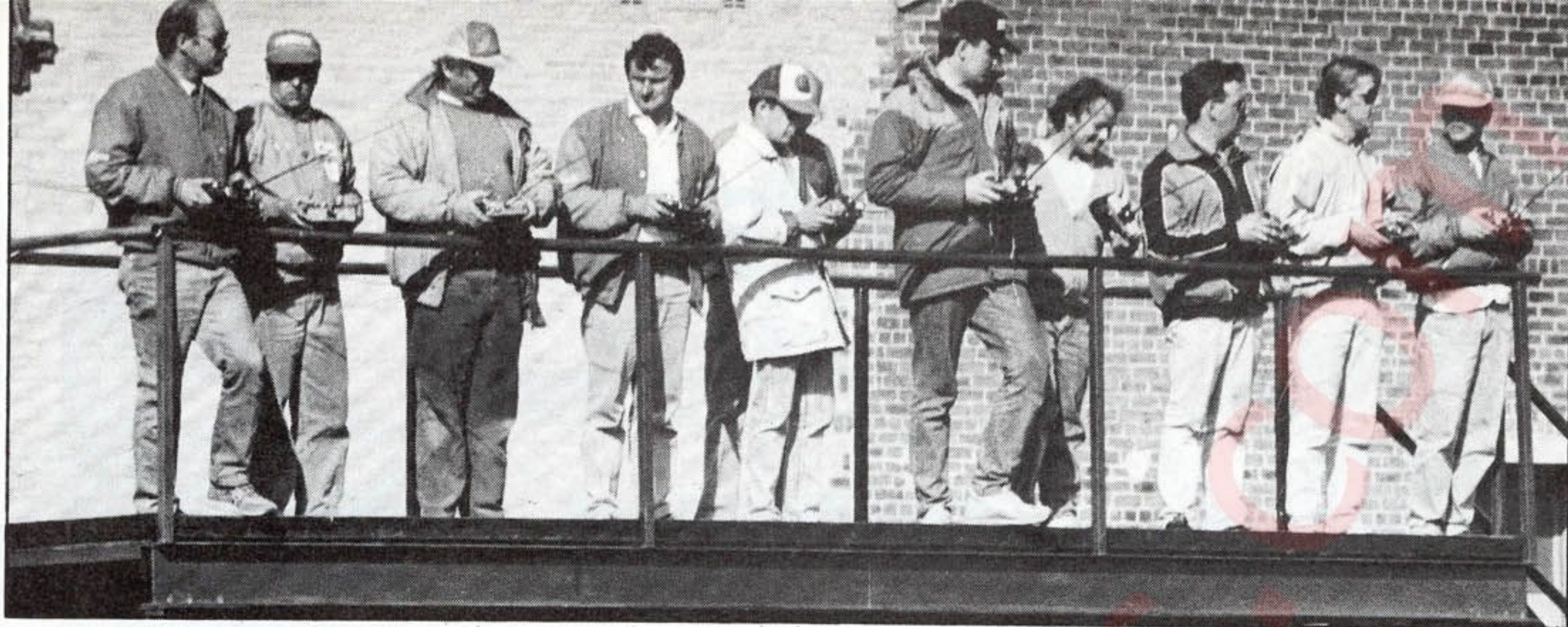
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**Above: The open sports GT Finalists at Halifax. Bottom: The Mendip Mob, Mark Stockford, Roly Hamblin and Dave Swift.**

**M**ay 4th and it's time for us to set off on the long haul from Kent to Halifax. Mind you, getting through the Dartford Tunnel takes almost as long as the rest of the journey. In marked contrast to Southampton, the weather on this, the first day, is

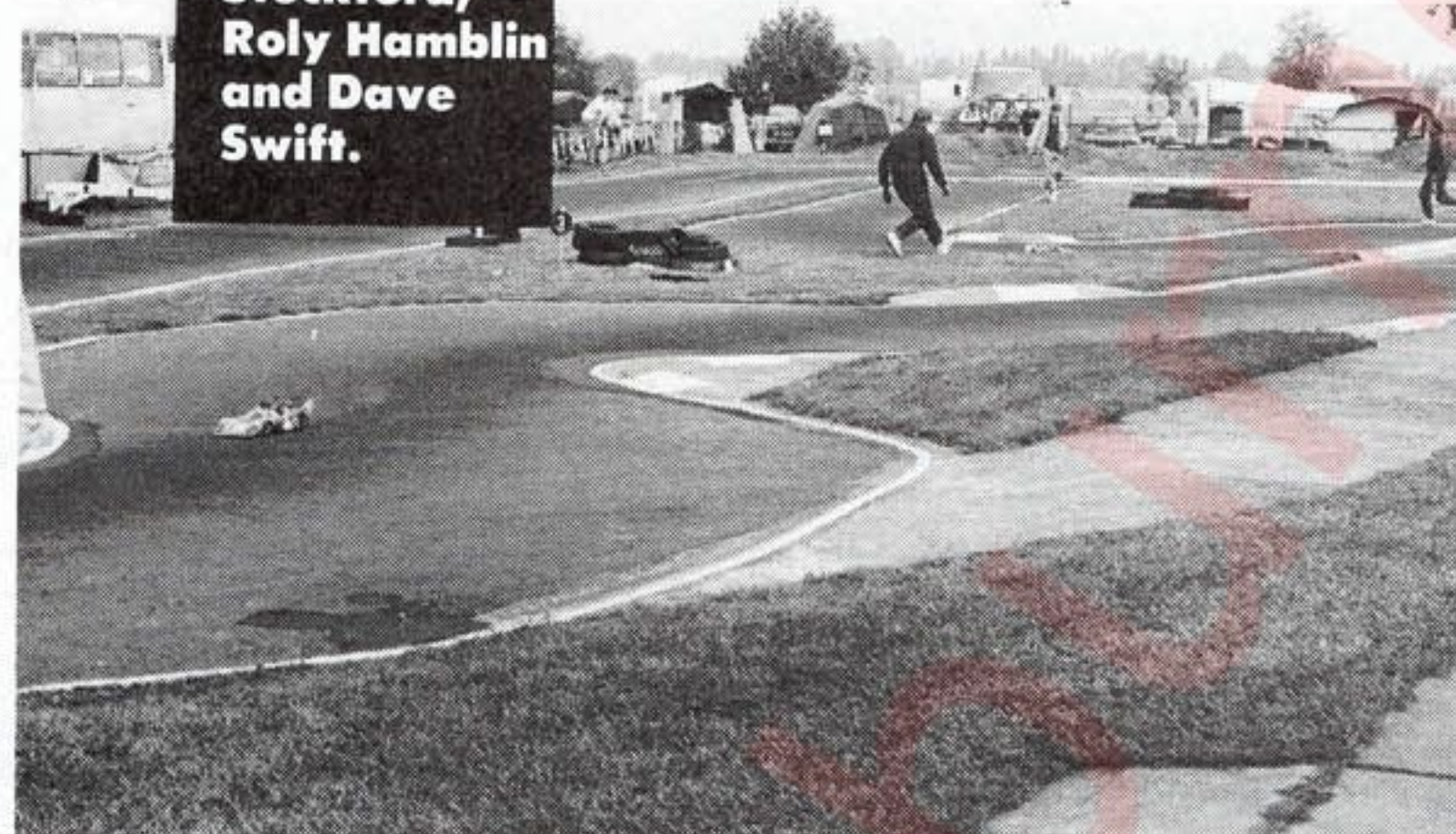
sunny and very, very hot. As ever at Halifax, the track surface started dry and dusty and the grip was slow to come up. Many drivers who thought they had their cars well sorted out early on, found, to their surprise, that the handling had totally changed by the time their first heat arrived.

In qualifying, Chris White was very much the driver in form. His PB seemed to have an uncanny ability to soak up the bumps and looked as steady as a rock. He took F.T.D. with a series of lap records. A measure of just how well he was going can be gauged from the fact that he was the only driver to break the seventeen lap barrier. Not content with having done so in the first round, he rubbed salt into the other drivers' wounds by doing it again in the two following rounds.

Interestingly enough, although Chris had a works' Turbo Nova Rossi at his disposal he, like his brother, Steve White, elected to run with a standard non-turbo Rex to prove that the expensive works motors were not an essential prerequisite of winning.

Behind the flying PB of Chris came Ripmax driver Bob Errington with his Turbo Rex powered Blitz. Boy, you should have heard the revs his motor was pulling down the straight! Next up in the qualifying stakes came the massed Serpents of Dave Dixon, Mick Kruschell, Roly Leonard and Steve White. All had removed their S power motors and changed to Rex engines. The first three were all Turbo engines.

The first final, as always, was the D Final. Steve Taylor was the winner with thirty-eight laps just four seconds ahead of the second place driver Paul Haigh. Bryan Denton came third five



# T R A C K T O R Q U E

**Halifax played host to the 1/8th scene recently - Colin Leake reports.**



laps behind the two leaders.

Tony Garton ran away with the C Final to make it a fine win two laps ahead of the second place driver Tony Rodda. Les Baldry was third a further lap behind.

That a driver of Ian Anderson's class should find himself taking part in the B Final shows just how competitive it has become at the top with a whole host of new drivers competing in group A. A fine drive to a well deserved win was no doubt some consolation for him. Pete Taylor came second one lap behind with Tony Littlewood third a further lap down.

Steve Tilly and Shaun Jackson, with their PBs, were the two top qualifiers for the A Final. They duly turned the A Final into a PB victory by taking first and second place. Dave Preston was the only Serpent driver to get anywhere near them in third place and only one lap behind. Shaun Leake, having made a spectacular charge from the back of the grid, looked as if he could do something about the flying PBs for the first half of the race until forced to slow with a mechanic's error and settle for fourth place (I failed to pre-tension the 'C' clips when I changed the front shock absorbers and one duly came off with dire effects on the handling).

The Open Final started off badly for Steve White. He lost one of the little plastic moulding that locates the springs on the bottom of the front shock absorbers and lost much time pitting for a replacement.

Chris White, as expected, took off from pole position and left the rest trailing hopelessly in his wake. Bob Errington initially led the chase but soon started to drop back with an engine that had gone lean. The inevitable pit stop to have matters put right dropped him out of effective contention.

Roly Leonard took up the chase of Chris until the seven minute mark when Dave Dixon moved into second place and set off after Chris. Even at this early stage it was evident that the handling of Chris White's car was beginning to deteriorate.

By the ten minute point the Serpents of Dave Dixon, Roly Leonard and Steve White were massing behind Chris, poised to take advantage of any further deterioration in his car's handling. Steve White, in particular, was rapidly making up the time he lost at the start and his car looked very stable and tidy.

Just after the half distance fuel stops, disaster struck for Chris White when his car cut shortly after leaving the pits. When they went to start the car the reason for his handling problems became clear. One of the engine bolts had worked loose and was catching on the track. He could,

of course, easily drive on with three bolts, but it had become so bent it took some time to remove it, putting Chris out of contention.

Now Dave Dixon took over the lead with Steve White second, Roly Leonard third and Mick Kruschell fourth.

As the race entered its final ten minutes things began to look interesting. On the face of it, Dave Dixon seemed to be in the lead, but Steve White was up to his old tricks and indulging in six-minute fuel stops. Thus with one stop less to make he was effectively level with Dave Dixon and there was no doubt that he was going faster.

The race may have been in its closing stages but we still had drama to come, when Dave Dixon suddenly pulled off with a blown plug. Dave quickly got going again, but it had

quickly forgot the team's successful debut at Southampton. They were to find themselves unable to tune their SG cars into the bumpy Halifax circuit and, not to put too fine a point on it, quickly developed a massive fit of the sulks. Those who accept works' drives have a duty to those who have been good enough to provide them with the drive. They are expected to stick with it through thick and thin. If the cars they have chosen to drive turn out to have problems, then they should knuckle down and help solve those problems, not slink off and give up. To make matters worse, they spent most of the day in the pits telling all and sundry what was wrong. In so doing they did irreparable harm to the car's importers, Windsor Models. Hardly a way of thanking them.

For the record, the problems



**Mark Plested of PB with chief team manager at the Aldershot BRCA National.**

handed the race to Steve White on a plate and allowed Roly Leonard and Mick Kruschell through into second and third places. Dave did well to hold onto fourth place ahead of the Blitz of James Haydon.

There was a touch of irony in the manner in which Bob Errington's race came to an end in view of the comments he made recently about fine pitch belts, such as those used by PB and Serpent, being prone to jumping, and that coarse pitch belts such as those used by Blitz were more reliable. The reliable coarse pitch rear drive belt on his Blitz failed when all its teeth were stripped off!

The day ended in controversy in the SG camp. The two works drivers, Mark Green and Frank Chung,

concerned certain parts that were wearing out rather quicker than they should have. At Halifax it was the drive shafts and cups that were causing most of the problems. The irony is that action is being taken to rectify these problems and, by the time this appears in print, I understand they will have been dealt with.

Equally unforgivable to my mind was the fact that Blitz driver James Haydon, who had travelled up with them, was given the stark choice at



short notice of either packing up and going home with them, or arranging to find a lift with another London driver. Fortunately for him, Pete Margetts was able to oblige and Bob Errington lent him a jacket to replace the one they had taken home in the van.

Just to add to the misery of Windsor Models, Paul Leach seems unable to come to terms with the car. He tells me that he is considering changing to another make.

Day two dawned cooler than the previous day, and indeed at one point it looked as if it would rain.

Fortunately it held off and remained dry all day. With F1 bodies on and the grip improving all the time, the racing was getting much faster. Competition to make it into the last few places of the Open Final was very fierce. Just a few seconds making the difference between qualifying or finding oneself in the middle of the A Final.

### **Errington ????**

Bob Errington was the fastest qualifier with a series of new lap records. It seems that, just as Old Wally predicted earlier, the improvements which have been made to engines and tyres in particular, are causing records to tumble this year. Gary Culver gave Bob a run for his money but was thwarted in his attempt by heavy traffic. Paul Cook, under the guidance of his mentor Walt Bailey, was third fastest with the PB of Chris White, fourth fastest.

It was at least nice to see the Rex domination of the Open Final broken, thus proving that one does not have to ditch one's existing motor and purchase a Rex to be competitive. Paul Cook qualified using one of the old Serpent five port motors and Shaun Leake using one of his trusty Mondials.

Steve Taylor scored his second win of the weekend with a runaway victory in the D Final three laps ahead of second place driver, R. Smithurst. Paul Haigh came third two laps further behind.

The tall man, Colin Perrin, won the C Final by a clear lap. The race for second place was a closely run thing between Tony Rodda and Tony Garton. In the end, Tony Rodda was the victor by just eight seconds.

The standard in Group A is so high now that a driver who has a bad meeting or two can easily find himself down in the B Group. Class driver Ian Anderson found himself in just that position this weekend. It was no surprise to find him running away with the B Final for the second time of the weekend. Glyn Beal did well to come second only two laps behind Ian. Roger Doran chased Glyn all the way to the line to take third place just five

seconds further back.

One look at the driver line up for the A Final was all that was needed to see that it had all the makings of a very competitive race.

Steve Tilly was yet another driver to take his second win of the weekend with his PB. To win a race by over one lap against such strong opposition was no mean feat. Roly Leonard managed to prevent a PB domination of the race by slotting his Serpent into second place a whole one point two seconds ahead of the PB Of Dave Ashton. Chris Wilkinson took fourth spot, also driving a PB.

The Open Final started with the traditional ten minute delay. This time requested by Steve Hart. When the cars did start they all got cleanly away with the exception of Shaun Leake, who suffered a broken wing wire just before the off and had to miss the start while a new wing was fitted. Our thanks to Ken Hewson for the rapid loan of his wing.

Pole place man, Bob Errington, was the early leader with his Blitz followed by the massed Serpent ranks of Gary Culver, Steve White and Mick Kruschell. By the four minute point Gary Culver had made a slight mistake and Steve White was through into the lead. Chris White was flying with his PB and by this point had made it up to fourth place.

With only twenty-six laps gone, Steve White's race came to an end when the element dropped out of his glow plug and stopped the engine, fortunately for him with no permanent damage. This left Bob Errington and Gary Culver pulling clear of the pursuing field. Chris White found himself promoted to third place and Paul Cook began to show on the leader board in fourth place.

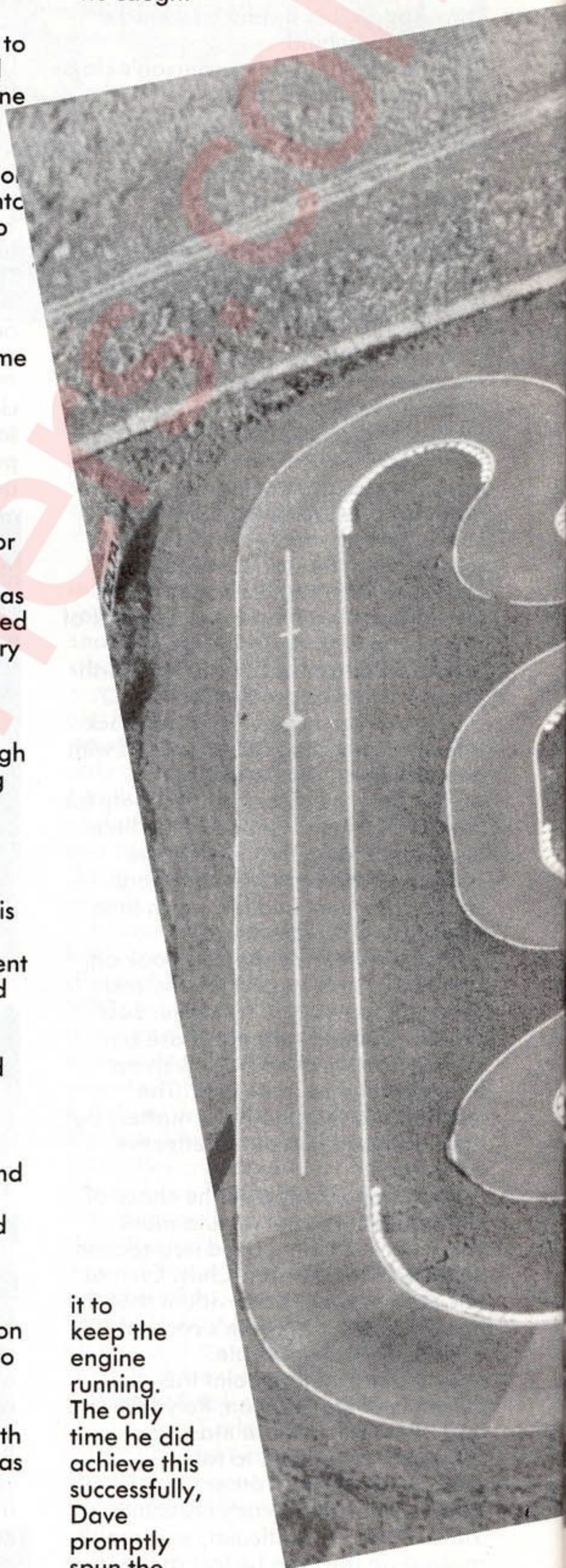
By the one third distance just four seconds separated Bob Errington and Gary Culver. Chris White was still third but was, by now, being pushed very hard by Paul Cook.

As the race approached the halfway point Bob Errington's car stopped with a stripped drive gear on the gearbox. He came back out onto the circuit only to suffer the same problem a second time. Now Gary Culver had a secure looking lead with his Serpent, the PB of Chris White was in second place. Paul Cook was still pressing hard in third place. Dave Dixon was in fourth position but, by now, he too had his problems. A broken spring in the clutch was believed to be the cause. Whatever it was eventually found to be, the effect was the same. His clutch was locked up solid, so that every time the car stopped so did the engine. His pit man was standing with me in the pits. He must have been very fit the way he kept sprinting off to retrieve Dave's car. Pit stops became a whole new

art. To keep the engine running he had to catch the car as it came into the pits and scoop it up as he caught

it to keep the engine running. The only time he did achieve this successfully, Dave promptly spun the car and stalled the engine!

The race order remained the same to the finish. Gary Culver played it safe and drove carefully to win by just over half a lap from Chris White. Paul Cook had been pushing hard but he had to settle for third place. The gap between the two was just 0.6seconds. After half an hour's racing that's close. Mick Kruschell was fourth three





# TRACK TORQUE

could expect the cars to be.

As I looked out of the caravan window at 6.30am. I remarked to the family, "Monday has dawned dry, but with ominous clouds overhead". Only the dog showed any interest. By the time I had eaten breakfast and took said dog for his early morning walk the clouds had gone and it was already beginning to warm up. By eight, when practice was due to start, it was raining!

It rained throughout the first round

## Strawberry fields

Fastest qualifier in the D Group was ex-World Champion Stock Car Driver Kevin Straw, who duly went on to win the final. It looks like Kevin is set to start climbing up the rankings. Second, two laps behind Kevin, was Steve Taylor with Nick Read, on the same lap, third.

Dave Martin, making a welcome return to circuit racing, was the fastest qualifier for the C Final and like Kevin duly went on to win. Future World Champion Steve Scott was second on the same lap as Dave. Why do I refer to Steve as a future World Champion? Well, I don't know how old Steve is, but he is certainly very young, yet he drives with the maturity of a driver twice his age, and he does much of the work on his car. His time would have been good enough for fourth place in the B Final! Third place was taken by Nick Coats one lap behind the leading duo.

In the B Group Ian Anderson continued the vogue for setting fastest qualifying time and winning the final. It was his third win of the weekend! Mind you, at least this time he had to work for it. The B Final was possibly the most closely fought and exciting race of the entire weekend. Second place went to Glyn Beal five seconds behind Ian and only half a second ahead of third place driver Trevor Kersey. When Glyn stepped down off the rostrum he was visibly shaking with the tension that the race had generated.

The A Final, as we have come to expect, was run at a furious pace and very closely contested although the cars did get a little more strung out towards the end. This time the

*The Halifax circuit – yes really – see text.*

laps behind the leaders.

London Club members James Haydon and Shaun Leake were having their own private battle further down the field for fifth place. In the end, the honour went to James. Shaun's borrowed wing had side dams extending downwards. They had nearly cut his rear tyres in half! Strangely it seemed to have no effect on the car's handling.

Monday was the day for sports GT and Group C bodies. Practice the night before showed just how fast we

of qualifying producing conditions that varied from wet to un-driveable. Fortunately a small patch of blue sky appeared out of the rain clouds right over the circuit. Miraculously, although it steadily grew smaller, it stayed with us for the whole day.

Fastest qualifier was Gary Culver who set yet another series of new track records with his Serpent. Ripmax driver Bob Errington was second fastest with his Blitz followed by the very much on form Serpent of Mick Kruschell with the PB of Dave Ashton fourth fastest.

weekend's domination of the top A final places by PB was broken by the Serpents of Neil Woodhead and Shaun Leake who finished first and second. Shaun Jackson managed to keep the PB flag flying when he just got the better of his race with the Serpent of Pete Margetts to take third place.

Bob Errington missed the start of the Open Final. He had a problem with his car but since the cars had been called to the line when the request for a delay was made it was too late for one to be granted.

The final started in a glorious fashion. The Serpents of Gary Culver, Mick Kruschell and Steve White



detached themselves from the rest of the field and tore round the circuit literally nose to tail. It really was a classic display of the standard of driving that exists at the top of eighth scale racing.

These three continued to battle it out for the first seven minutes then Mick Kruschell was off for a lengthy pit stop to have a flattened pipe replaced. Meanwhile, Bob Errington's race came to an end when his Rex motor suffered a big end failure.

Eight minutes into the race Steve White managed to get past Gary Culver to take the lead. One minute later, Gary hit the wall on the far side of the circuit and was back to the pits for repairs.

Fortunately all that was needed was for the front wheel to be put back on. Presumably it had worked loose and caused the crash.

Gary, so we all thought, was now so far back as to be out of contention. Steve White, as the sole survivor of the battle for the lead, was now left with a comfortable cushion of nearly two laps. In typical Steve White

far from uncompetitive. Both had far fewer top drivers present than Serpent. When this is taken into account they did rather better than a first quick glance at the charts would suggest. Blitz with Bob Errington and PB with Chris White managed to take an F.T.D. each with Gary Culver evening things for Serpent on the third day.

Perhaps the most significant thing the charts show is the almost total domination of the Rex/Nova Rossi motors. Paul Cook managed to qualify his old five

to a lesser extent turbo plugs were like gold dust trackside.

On the tyre front, the new Jap rears in their various confusing guises were the thing to have. Just why we have to refer to them as Purples, Pinks, Lilacs, Silvers and Golds I'll never know. Surely it would be easier if we referred to them by their hardness number as we do the fronts. All seemed to be wearing very well and the few distinctly dodgy tures that

were about at the end of last year seem to have disappeared.

We were using Elite Models' Le Mans Golds on the rear of Shaun's car and found that a single pair would outlast two pairs of Jap 30 fronts. I believe that many other drivers found the same thing. Significantly I heard no drivers moaning about the



### Preparing for the Finals – pit work at Aldershot.

fashion he settled down and drove to his second win of the weekend in his usual fast but unspectacular style.

Behind Steve the race featured a battle royal for second place between Chris White, Paul Cook, Nigel Sayles and Roly Leonard. At one time around the halfway point, only four seconds covered all four cars. Somewhere along the line Chris White ran into trouble leaving just Paul, Nigel and Roly fighting out second place. Or, at least they were until Gary Culver, having made up a two lap deficit, suddenly appeared amongst them and sliced through to take second place just two seconds ahead of Paul Cook, who was third.

Roly Leonard and Nigel Sayles were fourth and fifth one lap behind Paul but with less than four seconds separating them.

A fantastic race that brought the meeting to a fitting climax.

### Halifax Round Up

A look at the Open Final Chart shows that, much as expected on their home ground, Serpent dominated the meeting. A deeper look though reveals that both PB and Blitz were

second day but changed to a Rex for the third day. Shaun Leake with his Mondial was the only other driver to qualify without using a Rex motor, but he was only able to manage it on one day.

The general opinion amongst those using the Turbo heads was that they did give some small advantage. Most particularly in the width of the power band and the way in which the power was delivered.

The picture was much the same in the A Finals. One or two top drivers did try their Six Port S-Power engines but either gave up and took them out or struggled and came nowhere. In the A Finals the only engines that seemed capable of holding their own against the all conquering Rex motors were various Mondial and OPS motors. The most successful of these had been heavily modified.

However, all was far from well amongst the ranks of Rex users. On the fast, but bumpy, Halifax circuit their motors were proving to be very prone to big end failure. In manycases the big end bearing was found to have broken up and welded itself to the crank-pin. Con-rods and,

port  
S-Power  
motor on the

performance, life, or cost of their tyres. Just think we came very near to banning these tyres.

Our thanks to Ian Briggs, who was in race control all weekend, and his band of helpers. The fact that they managed to good humoredly organise such a large meeting and move it on at a reasonable pace without most drivers being even aware that they were being organised is probably the highest compliment I can pay them.

Finally, a tip from the meeting, courtesy of Steve White. Personally I never have any trouble filling Serpent shock absorbers without getting air trapped in them but I do know that many drivers seem to find it nearly impossible. Your troubles are over chaps. As far as I can tell, the Steve White method is virtually foolproof.

First, fill the body of the shock absorber with oil and work the piston up and down to remove any air that has been trapped beneath the piston. Next leave it standing for as long as possible to allow any air to find its way out of the oil. Then move the piston half way up the cylinder and make sure the unit is topped up with oil. Gently push the rubber cap down into the top of the cylinder allowing it to push out any excess oil. Now comes the clever bit. Pull the piston down so



that it creates a vacuum which will hold the rubber cap in place and then screw the top on. Brilliant eh? It seems to work perfectly every time.

## Aldershot

The poor little Aldershot Club always seems to draw the short straw when meetings are allocated. This time, many drivers, especially those from the North, who would have to travel, stayed away because it immediately followed a three day meeting which meant that there was not enough time available for them to prepare their cars and tyres, etc., properly. Still more stayed away because it preceded the Saloon Euro Championships.

There were no doubts that yet more drivers were put off by tales of the bumpy nature of the Aldershot circuit. Having heard some of these, we were a bit apprehensive ourselves. In the event it turned out to be no worse than in previous years. It is true that the circuit is bumpy but the bumps are relatively small and consistent all the way round the circuit. Most drivers soon discovered that the answer was to set the cars up with softish shock absorbers, plenty of pressure on the springs, and as much ride height as possible. Add to this the largest tyres you could find and the cars handled very well, soaking up the bumps as if they were not there. We knew this and set our cars up accordingly. The result was that they handled superbly from the very first moment they were put on the track. It's also true that the circuit is small and very tight. Nevertheless, it still produced some very close and exciting racing. Of those drivers who did take part, most appeared to enjoy it and I did not hear any complaining about the track. Mind you, the length of the rostrum was another matter. That will have to be extended next year to take ten drivers. Actually, it's amazing how quickly each final got started. Drivers quickly realised that it was important to get up on the rostrum and nab a good position! Fortunately, despite all this there was still a very healthy entry.

Saturday dawned at approximately 5.00am. I know, because that's the time I had to get up in order to have breakfast, pack the car and drive to Aldershot to get the pits set up in time for the start of practice. One tends to think one is the only stupid \*\*\*\* up at that time of the morning, but driving along the motorway it quickly becomes evident that many people who actively participate in a hobby are on the move equally early. Cars towing motor-bikes, racing cars, stock cars, horse-boxes, dinghies and even gliders are all on the move, not

to mention those with surf boards stacked on top of them.

## Whether or not?

The weather forecast was good. As it turned out though, for most of the day it was far from as fine as we had been led to expect, indeed it looked as if it would rain for much of the time. Fortunately it held off and remained dry. For the record, Sunday's weather was a straight repeat of Saturday's with the exception that we did enjoy a brief warm spell in the middle of the afternoon.

It was the Blitz of Bob Errington that set the pace in qualifying with an aggressive display to twelve tenths driving that only Bob could have got away with. The much more elegantly driven PB of Chris White was second fastest. Behind these two came the massed Serpent ranks of Steve White, Paul Pagdin, Neil Woodhead, Dave Dixon, Steve Leake and Nigel Sayles. Steve Hart made ninth qualifying spot with his PB and James Haydon just crept in with his Blitz. James's original Blitz car had been stolen during the week. The car he was driving at Aldershot was a new one that he had

Mike Critch managed to hold off Gary Underwood to take third place. Both were on forty-one laps.

Simon Parish was to find himself in the B Group on the second day. On the first, however, he not unexpectedly ran away with the C Final to finish in first place two laps ahead of second place driver Nick Wilcox. London and Avicrafts' Ken Hewson was third one lap further behind.

The gap between those drivers at the top of Group B and those at the top of Group A seems to have become a very narrow one of late. The B Final was run at a pace that relected this. Local driver Adrian Poole, who only just missed qualifying for the Open Final, took off from pole position and drive a copy book race to finish first. He may have reasonably been expecting an easy win but found himself hounded relentlessly for the whole race by the second fastest qualifier Dave Alison who eventually finished just four seconds behind. London club secretary Alan Bezzant's son, Steve, finished third, and Mr. Computer himself, Dennis Jones, who only just scraped into the final, came fourth.

The line up for the A Final looked like having all the makings of a good race but was soon to turn out to be a bit of an anticlimax as many of the fastest drivers ran into problems

that were to cause time-consuming pit stops. Dave Preston took advantage of all this to drive a typically steady and smooth race that would see him win by two laps.

The second place was a much more closely contested affair between the PB of Bill Jones and the Serpent of Shaun Leake. Top qualifier Shaun was none-too-pleased when a rear tyre disintegrated, losing him a great deal of time



**Chris White took an impressive win in F1 at Aldershot.**

literally built up overnight!

The D Final saw young Sean Douch drive a fine race to take what I believe is his first win since the old supporting class was dropped at the start of the season. His forty-four laps was two better than the forty-two of the second place man Steve Massey.

limping round whilst a spare was fetched from the pits. One of the few redeeming features of the race was his spectacular charge back up through the field. Bill was not finding the tight Aldershot circuit to his liking and was circulating



uncharacteristically slowly. It looked as if Shaun would just manage to take second place away from him but the luck ran with Bill. A bunch of backmarkers prevented the vital overtaking move being made on the last lap and Bill crossed the line in second place just two seconds ahead of Shaun.

Ian Anderson, back where he belongs in Group A was fourth, a further five laps behind.

I usually report on the Open Finals in some detail. Unfortunately, this time, I simply have little idea what went on. The problem was that I was pitting for Steve Leake and, from my position in front of the rostrum was totally unable to hear the P.A.

All I can tell you is that Chris White's PB ran consistently fast to win the race and that Bob Errington took an impressive second place with his Blitz. Steve White was also certainly well in the hunt until a wheel fell off his car! Paul Pagdin, rapidly returning to the status of Super Star now that he is driving a Serpent, was fourth two laps behind Steve White.

Steve Leake was up with the leader in the early stages of the race but two trips to the pits to have a needle valve assembly that had worked loose tightened, and one to have the car restarted after running out of fuel, when we tried to make up time by stretching the fuel stops, saw him relegated to a distant fifth place.

Gary Culver for business reasons is normally only able to drive on Sundays and Bank Holidays. This undoubtedly places him at a considerable disadvantages in comparison with other drivers who will have had the advantage of at the very least a day's racing and very often a day's practice as well. The way that under these circumstances he can regularly turn up and set F.T.D., with possibly only about twenty minutes' practice, shows just how formidable the combination of Gary's driving talents and his Dave Preston-modified Serpent is. Needless to say, he managed to do just that at Aldershot on the Sunday and in so doing, sent yet another lap record tumbling.

Behind Gary came the Serpents of Steve White, Dave Dixon and Paul Pagdin. The fastest PB was, as usual, that of Chris White in fifth spot followed by the two Ripmax Blitz drivers with James Haydon managing to out qualify team leader Bob Errington. Next up were the two PBs of Dave Ashton and Steve Tilley with Neil Woodhead just managing to qualify his Serpent.

In the D Final top qualifier Ken Ledger stormed away from the rest of the field to win with a magnificent forty-eight laps. Some idea of how well he drove can be gained from the

fact that his time would have been fast enough to have won the C Final! Ian Williams was second, three laps behind, followed by Gary Underwood in third place with Dave Dixon brother Brian fourth. Actually, Brian had a much better weekend than the remarks Dave was making about his driving would suggest.

In the C Final Mark Ashton was made to work hard for his win by second place driver Tim Dicks, who finished less than four seconds behind him. Two laps behind the leaders the battle for third place was finally resolved in favour of the man from Avicraft, Ken Hewson, when his car crossed the line five seconds ahead of that of Paul Hayward who had to settle for fourth place.

With the very fast local driver Adrian Poole hitting trouble early on, Dave Alison blazed away from the rest of the field in the B Final to an impressive win three laps clear of second place driver Steve Bezant. Nick Coats and Mark Plested finished



**Bob Errington collects his F1 FTD – the oldens can still do it!**

third and fourth both on the same lap as the second place driver.

The A Final, as ever, had all the makings of a fine race. The two Belsport drivers Steve and Shaun Leake occupied the first two spot on the grid with their Serpents, followed by yet more Serpents driven by Nigel Sayles and Dave Preston. Due to impending exams neither of the Leake brothers are due to race again for six weeks. The fact that both were clearly determined to finish on a high note promised to ensure a close race with no quarter given. As if that wasn't enough, at least five of the drivers lined up behind them were equally determined and all capable of winning.

The red Serpent of Steve Leake was away from pole position like a rocket at the start and beginning to pull clear of the field by the time they were halfway round the first lap. It must, therefore, have come as a considerable surprise to him to find his brother's blue and silver Porsche-bodied car nipping inside him to take the lead less than two laps later. He quickly woke up, regained the lead and with a display of very precise and consistent driving, did just enough to slowly pull clear of his pursuers and go on to win the final.

What had the spectators, and the pit-men for that matter, really on their toes was the race-long battle for second place that emerged between the Serpents of Nigel Sayles and Shaun Leake. I don't think I have ever seen such close racing that has gone on for so long. It's no exaggeration to say that for the entire twenty minutes, other than for the odd lap due to pit stops, the two cars were never more than five feet apart, and for much of that time, less than two, with the lead tending to change only when they became involved with backmarkers.

Pit-men, Terry Sayles for Nigel and Ian Anderson for Shaun, were quick to realise that, with the drivers so closely matched on the track the race could be won or lost in the pits. They turned out to be as equally well matched as the drivers with some very rapid pit work. Just how fast they were is illustrated by the fact that when I studied the lap times at the end, it emerged that Ian had gained no less than nine seconds for Shaun over his brother Steve, for whom I was pitting. Admittedly I was taking great care refuelling Steve's car, but I was still not exactly hanging about.

In the end the luck ran Shaun's way. With only a few laps left to race the pair of them came up to a gaggle of

back markers. Shaun, who happened to be in the lead at the time, got the cleaner run through them and emerged with a lead of some ten feet about which Nigel could do nothing.

The finish was unexpectedly close as Steve Leake, who at one time enjoyed a lead of nearly a lap, had begun to slow with an engine that was rapidly going off. The final gap between first and second place drivers was just four seconds with only one and a half seconds separating the second and third place drivers.

Steve Hart was fourth with his PB only one lap behind, with the previous day's winner, Dave Preston, fifth.

### **Open Final**

For the second time of the weekend I was to encounter difficulties in



# TRACK TORQUE

accurately reporting the Open Final. I normally watch the race from race control so that I can follow the cars on the computer as well as on the track. Unfortunately in the middle of the race the computer threw a brief wobbly. We assumed that we had the positions worked out to allow for this, but a later examination of the lap times revealed that the problem was more widespread than we thought.

At the start Steve White managed to get the drop on pole man Gary Culver. The running order was Steve White, Gary Culver, Dave Dixon and Chris White. It took Gary Culver all of three minutes to catch and pass Steve to take a lead he was to hold, and steadily extend, for the rest of the race to eventually emerge the winner by some three laps.

Dave Dixon's race was to end early on for the third time in four races with clutch problems. There are advantages of working on the clutch to get it to take up the drive at the right revs and in the best manner but it seems to me they are lost if that fiddling results in clutch failure. Dave tells me that part of the problem seems to lay with his unique system of using one way bearings to provide engine braking. It seems that one part of the system has been made from the wrong material and that he hopes replacing it will cure his problems. Certainly his system seemed to work well enough last year.

For the remainder of the race Gary Culver went on extending his lead over Steve White. Behind the two Serpents came the PBs of Chris White and Dave Ashton. As the two thirds distance approached, Chris White's engine suddenly leaned out necessitating a couple of extra pit stops to try and sort it out. These, coupled to the fact that his engine was still not right, enabled Dave Ashton to close up and eventually pass Chris to take third place for PB with Chris being reduced to fourth.

Paul Pagdin continued his return to form with a very confident looking drive to take fifth place with his Serpent.

Ripmax Blitz driver Bob Errington was not having one of his better days. He only managed to qualify seventh then, early on in the race, lost virtually the whole of the left front wheel arch of his body. The aerodynamics of his car were so badly affected by this that

the car became both unstable and, worse still, unpredictable. He battled on to take sixth place with some hard and, as a result of his problem, often spectacular driving.

## Round Up

Up north the previous weekend, the pits had very much been packed with Serpents. Down south, both PB and Blitz have met with far greater sales success. At Aldershot there were

and thus a great proportion of them are relatively inexperienced. There are, of course, exceptions to this, such as Mark Stockford who has, on occasions gone well this year. In contrast many of the PB drivers have obtained their cars from PB as works or semi-works drives. This has given PB a ready pool of drivers who compete in the A Group.

Secondly, I suspect that the very adjustability that is built into the Blitz cars may act against them. It's fine for the works drivers, who know how to take advantage of it, but may be more of a hindrance than a help down amongst the less experienced drivers.

Thirdly, it may just be that the PB is simply and, for that matter rather rapidly, turning into what may best be described as a \*\*\*\*\* good car.

Certainly three more top A Group drivers in the form of Messrs. Mark Green, Frank Chung and Paul Leach all seem to think so. I'm reliably informed that all three have joined the swelling ranks of PB drivers.



**New OPS car engine features modified liner porting. Also shown carb restrictors and new format glow plugs.**

considerable numbers of both cars in the pits. Given that there looked to be roughly the same numbers of each make of car, it's interesting to look at how they fared.

The works' Blitz cars in the hands of Bob Errington and James Haydon did well at the top of the field. However, further down the field, outside of the Open Finals, they did not seem to have managed to find the same degree of success.

By contrast, the PB drivers were very successful in these finals as well as showing well in the Opens. They have been especially successful in the A Finals all year.

I suspect that there are three reasons for this.

Firstly, outside of the works team, the Blitz drivers tend to be ones who have bought their cars in model shops

PB still have a little way to go to catch up with the all round refinement and competence of the Serpent package and, at some club meetings, it is still not possible to purchase PB spares track-side. However, PB are aware of the problems and working impressively quickly to plug the gaps. It's a personal view of course, but it seems to me that PB are rapidly emerging as the marque most likely to be able to make an impression on the almost total dominance of the sport that Serpent have enjoyed over the last few years in this country. I'm tempted to add, Vive la PB! but somehow I don't think Keith Plested would appreciate the French.

I must say it makes a pleasant change to be able to report the rapid progress PB are making rather than being critical of their inability to finish



aces as was the position a few years ago.

Being a small track, Aldershot makes less demands on the engines. For this reason few drivers were bothering to use their latest mega Turbo Rex/Nova Rossi engines. It was also noticeable that, with the engines being worked much less hard, their durability was much better. In fact, the only driver I saw blow and engine was Murray Collins. He managed to blow one of his on the starter box! Admittedly it was an old engine.

On the Sunday a track-side meeting of all drivers was called to discuss the current engine situation. It was agreed that, for the remainder of this season a separate championship within the main championship will be run. Drivers will score points according to where they finish in a final. The same number of points for each place being awarded irrespective of whether it is a D or A Final. To be eligible to score points, drivers will only be able to use engines from a nominated list. This will mean that a National Clubmans Series Champion will be able to emerge from any of the four skill groups.

It was also agreed that, whilst we could not change the present rules until the AGM something would have to be done then in order to reverse the trend for engines to become evermore expensive and fragile. It's not going to be an easy subject to deal with but manufacturers and importers alike should take note that the overwhelming feeling of the meeting was that the present situation is intolerable and that, in the light of that the BRCA is almost certain to bring in some form of legislation to deal with the matter.

The smart manufacturers should perhaps be thinking how best to tackle the subject and putting forward their own proposals. After all, it's in their interest as well as that of the racers to ensure that the sport remains healthy and is not killed off



**The Aldershot club members who together did an excellent job at their round of the National Championships.**

by becoming over expensive.

Next month, with less racing to report on I'll be taking a much deeper look at the situation and discussing a number of options that have been suggested. I will also be reporting on a long discussion I had with Gene Hustings of Associated about the engine situation in the United States, and speculating on why it is that they can buy engines that have been so extensively reworked that some of the components, such as the con-rod are totally new, for roughly the same prices as we in Europe pay for the standard engine.

Still on the subject of engines, news has just reached me that OPS engines are now being brought into this country by Barry Lever Models. Barry is one of the top nylon racers in the

World. A sport that depends on the performance of its motors even more than model car racing does. When I tell you that Barry was approached by OPS, rather than the other way round, one can see that he is held in very high regard by them. Having talked to Barry at length on the telephone, I can assure you that, when it comes to engines, he really knows what he is talking about. Perhaps now we shall see the fine OPS engines, which I have always held in very high regard, being campaigned more actively in the UK and giving the currently dominant Rex motors a run for their money. His address is: Barry Lever Models, Armour House, Brunswick Square, Southampton, Hants. SO1 1AR. The telephone number of 0703 335386.

### Open Final Halifax F.1.

Pos./Driver	Car	Engine	Laps
1. G. Culver	Serpent	Turbo Rex	97
2. C. White	P.B.	Rex	96
3. P. Cook	Serpent	S. Power	96
4. M. Kruschell	Serpent	Turbo Rex	93
5. J. Haydon	Blitz	Turbo Rex	90
6. S. Leake	Serpent	Mondial	90
7. D. Dixon	Serpent	Turbo Rex	81
8. R. Errington	Blitz	Turbo Rex	68
9. S. Hart	P.B.	Nova Rossi	44
10. S. White	Serpent	Turbo Rex	26

F.T.D.: R. Errington

### Open Final Halifax Saloon

Pos./Driver	Car	Engine	Laps
1. S. White	Serpent	Rex	94
2. R. Leonard	Serpent	Turbo Rex	93
3. M. Kruschell	Serpent	Turbo Rex	91
4. D. Dixon	Serpent	Turbo Rex	89
5. J. Haydon	Blitz	Turbo Rex	88
6. C. White	P.B.	Rex	81
7. N. Sayles	Serpent	Rex	80
8. S. Hart	P.B.	Nova Rossi	50
9. R. Errington	Blitz	Turbo Rex	30
10. N. Woodhead	Serpent	Rex	25

F.T.D.: C. White

### Open Final Halifax Sports G.T.

Pos./Driver	Car	Engine	Laps
1. S. White	Serpent	Turbo Rex	97
2. G. Culver	Serpent	Turbo Rex	96
3. P. Cook	Serpent	Turbo Rex	95
4. R. Leonard	Serpent	Turbo Rex	95
5. N. Sayles	Serpent	Rex	95
6. C. White	P.B.	Rex	76
7. D. Dixon	Serpent	Turbo Rex	69
8. M. Kruschell	Serpent	Turbo Rex	26
9. D. Ashton	P.B.	Nova Rossi	23
10. R. Errington	Blitz	Turbo Rex	8

F.T.D.: G. Culver



# TRACK TORQUE

Interestingly enough, looking at the latest pictures I have of the new 1990 OPS engines, I see that the exhaust port has been modified along the lines of that used in the engines that Shaun Leake has been running. If that means they perform as well as his does, then they will certainly be more than competitive for most drivers. This, coupled with the ease with which they can be set up and driven should make them highly desirable.

It was nice to see a large number of Group C bodies in use on the Sunday. Looking round at what drivers were choosing to use, it seems that the Sarik Porsche still rules supreme. Chris White used one to good effect on his PB and Shaun Leake came within a whisker of winning the A Final using one.

I have to smile as other manufacturers and, for that matter, Sarik themselves, keep producing a series of alternative bodies designed to compete with the all conquering Sarik Porsche. 'It handles just like a VDS Lola', seems to be the in phrase to describe each new body. Most make a brief appearance on some

willing driver's car then quite disappear. The only one that so far seems to have come near to giving the Porsche a run for its money is Sarik's own Mercedes which has been spoken very highly of by some drivers because it gives the cars more steering. Even that, when one looks at the bodies in use, seems to have

found very little favour with the drivers in the U.K. who are actually using group C bodies.

We did try the Sarik Nissan earlier on in the season but found that, although it was very fast and stable it just seemed to lack the nimbleness that is so valuable under race conditions with the Porsche.

## Open Final Aldershot F.1.

Pos./Driver	Car	Engine	Laps
1. C. White	P.B.	Nova Rossi	119
2. R. Errington	Blitz	Turbo Rex	118
3. S. White	Serpent	Rex	117
4. P. Pagdin	Serpent	S. Power	115
5. S. Leake	Serpent	Rex	106
6. N. Woodhead	Serpent	Nova Rossi	99
7. D. Dixon	Serpent	S. Power	93
8. J. Haydon	Blitz	Rex	92
9. N. Soyles	Serpent	Rex	89
10. S. Hart	P.B.	Nova Rossi	63

F.T.D.: R. Errington

## Open Final Aldershot Sports G.T.

Pos./Driver	Car	Engine	Laps
1. G. Culver	Serpent	Rex	122
2. S. White	Serpent	Rex	119
3. D. Ashton	P.B.	Nova Rossi	117
4. C. White	P.B.	Nova Rossi	117
5. P. Pagdin	Serpent	S. Power	115
6. R. Errington	Blitz	Turbo Rex	114
7. S. Tilley	P.B.	Turbo Nova Rossi	113
8. N. Woodhead	Serpent	Nova Rossi	113
9. J. Haydon	Blitz	Rex	96
10. D. Dixon	Serpent	Turbo Rex	91

F.T.D.: G. Culver

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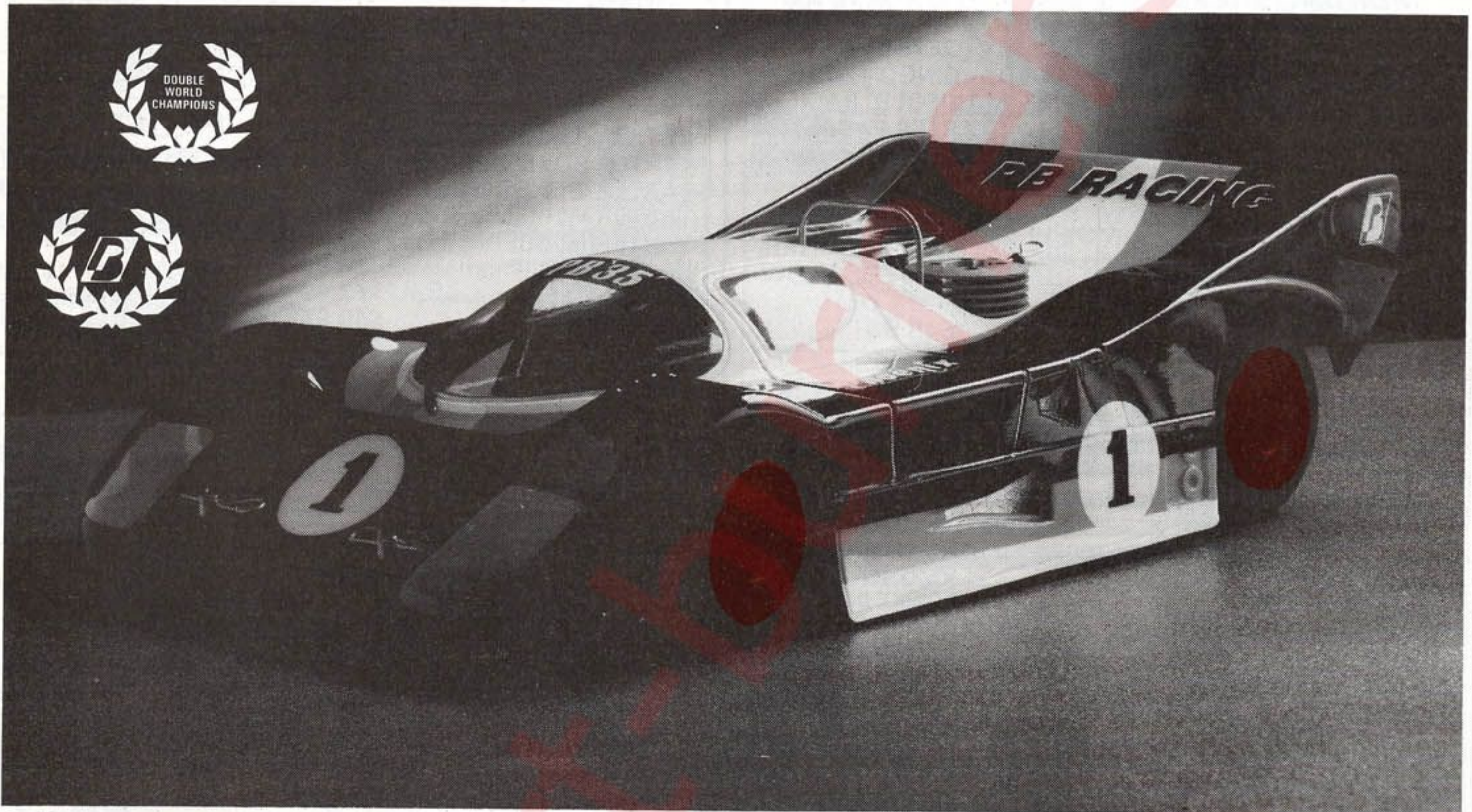




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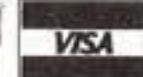


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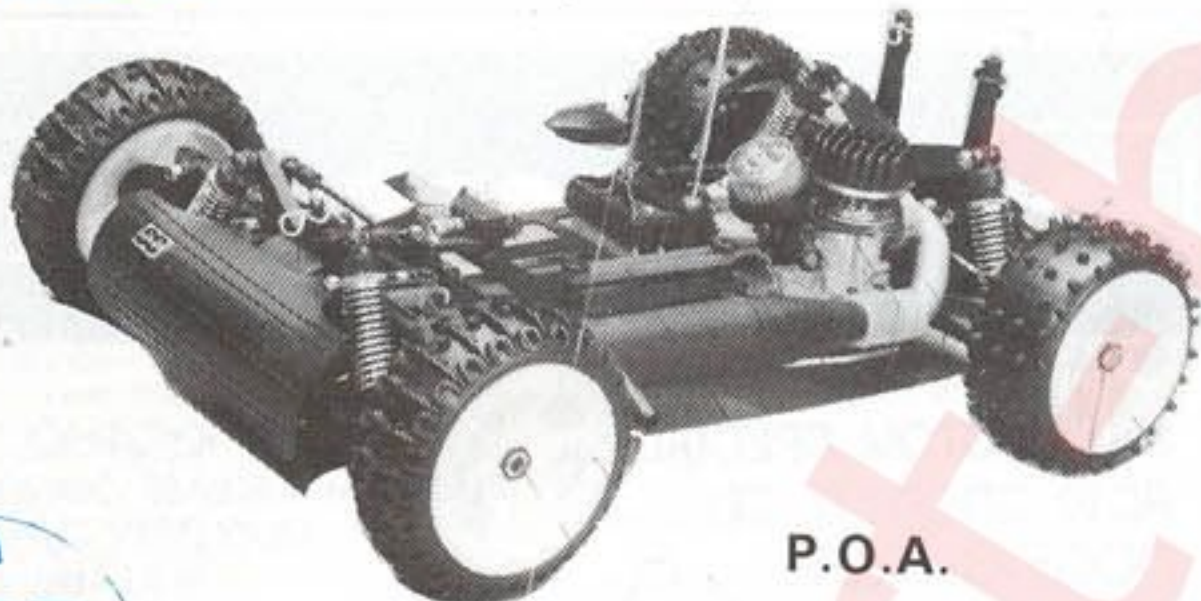
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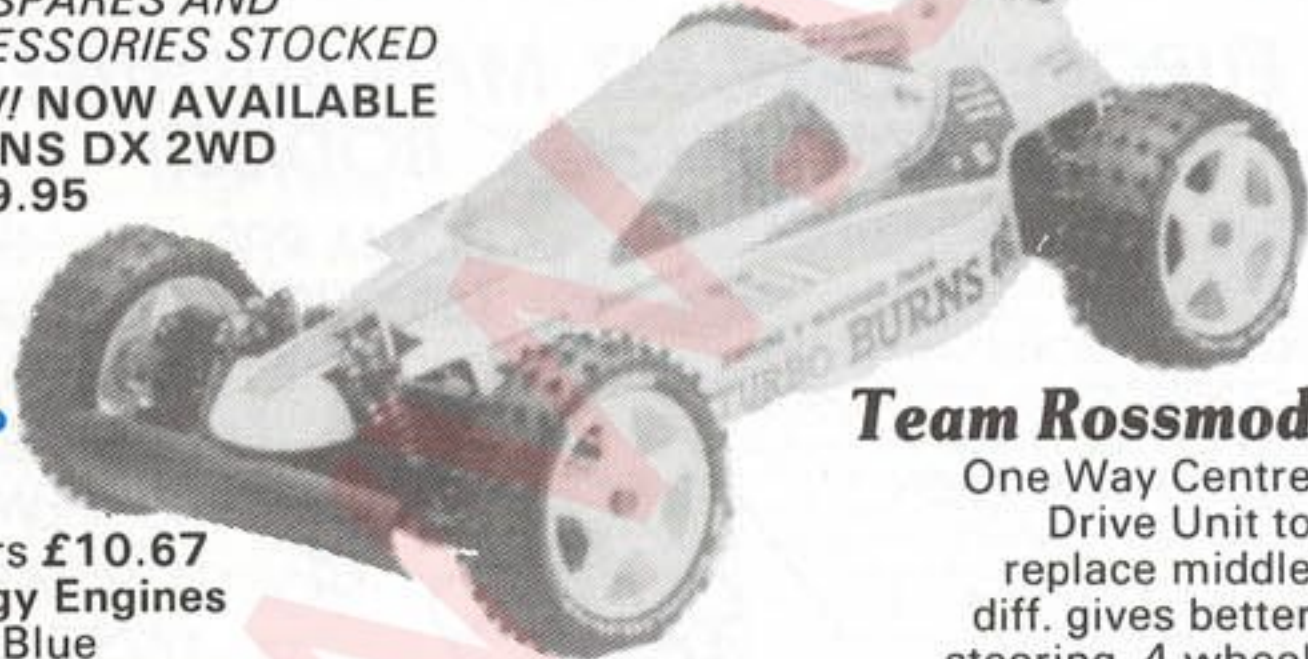


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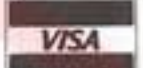
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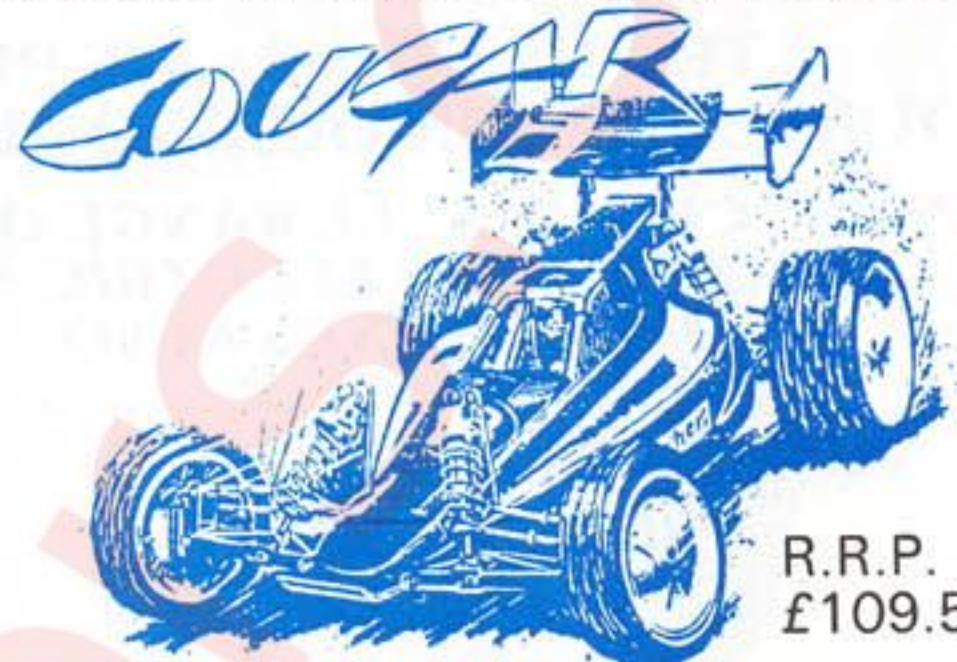
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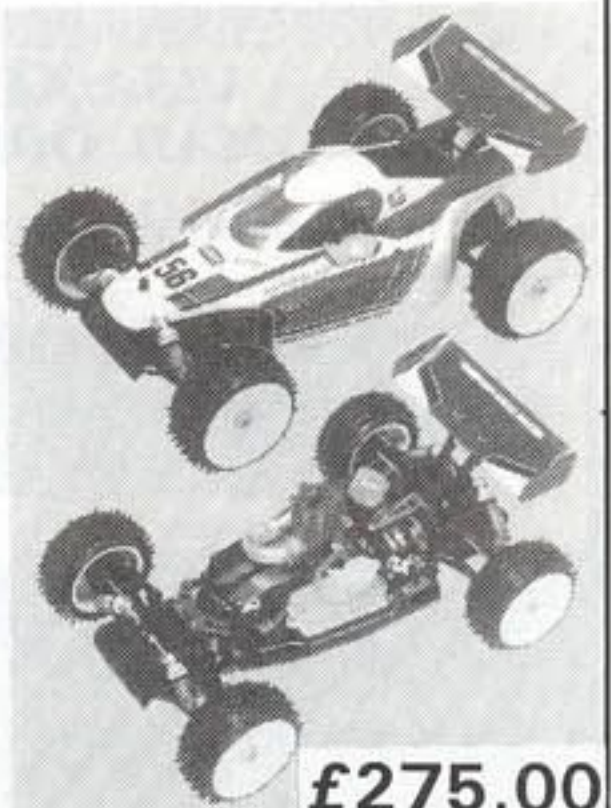
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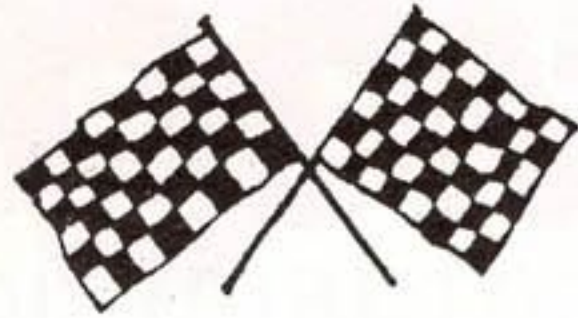
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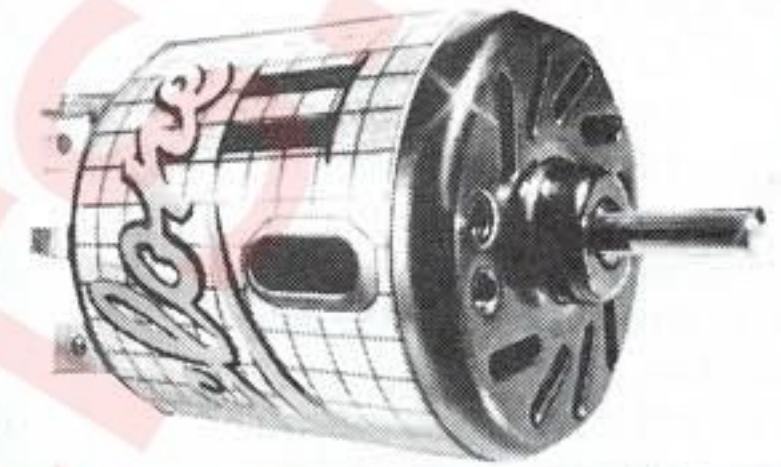
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# On TEST

## KO Esprit II

**K**O have built a reputation for quality, reliability and performance. This achievement is due in no small measure to the fact that the world champion in 1/10 off road and 1/12 circuit racing (Masami Hirosaka) uses KO equipment. I am sure that no-one would deny that the success of Hirosaka is going to rub off on the manufacturers of his equipment. Therefore it does seem a little strange that we in the UK are not ankle deep in importers trying to persuade us to buy KO equipment.

Recently, however, a few of the specialist companies have decided to try their hand at importing KO equipment. Now is an appropriate moment to have a close look at the equipment that made Hirosaka and Hirosaka made his own.

First of all the KO range of equipment.

For some years, KO have produced mainly steering wheel sets, plus one featureless stick unit that seemed to have little to offer other than the KO name. The popularity of this particular unit may remain a secret, as far as I know it never made it to this country in any quantity. More recently the 'Trendy', a budget priced, straight no frills 2 channel unit has been introduced. However, when it comes to steering wheel sets it must be said that KO have an outfit for every occasion. Their RC sets positively drip knobs and buttons and looked extremely '20th century', lots of plastic panels and shiny controls. Do not let this particular fashion look deceive you. These radios are of outstanding quality and excellent performance, but not everyone wants a steering wheel set.

So for years we have waited and waited for



something special in the stick style. That day has now arrived.

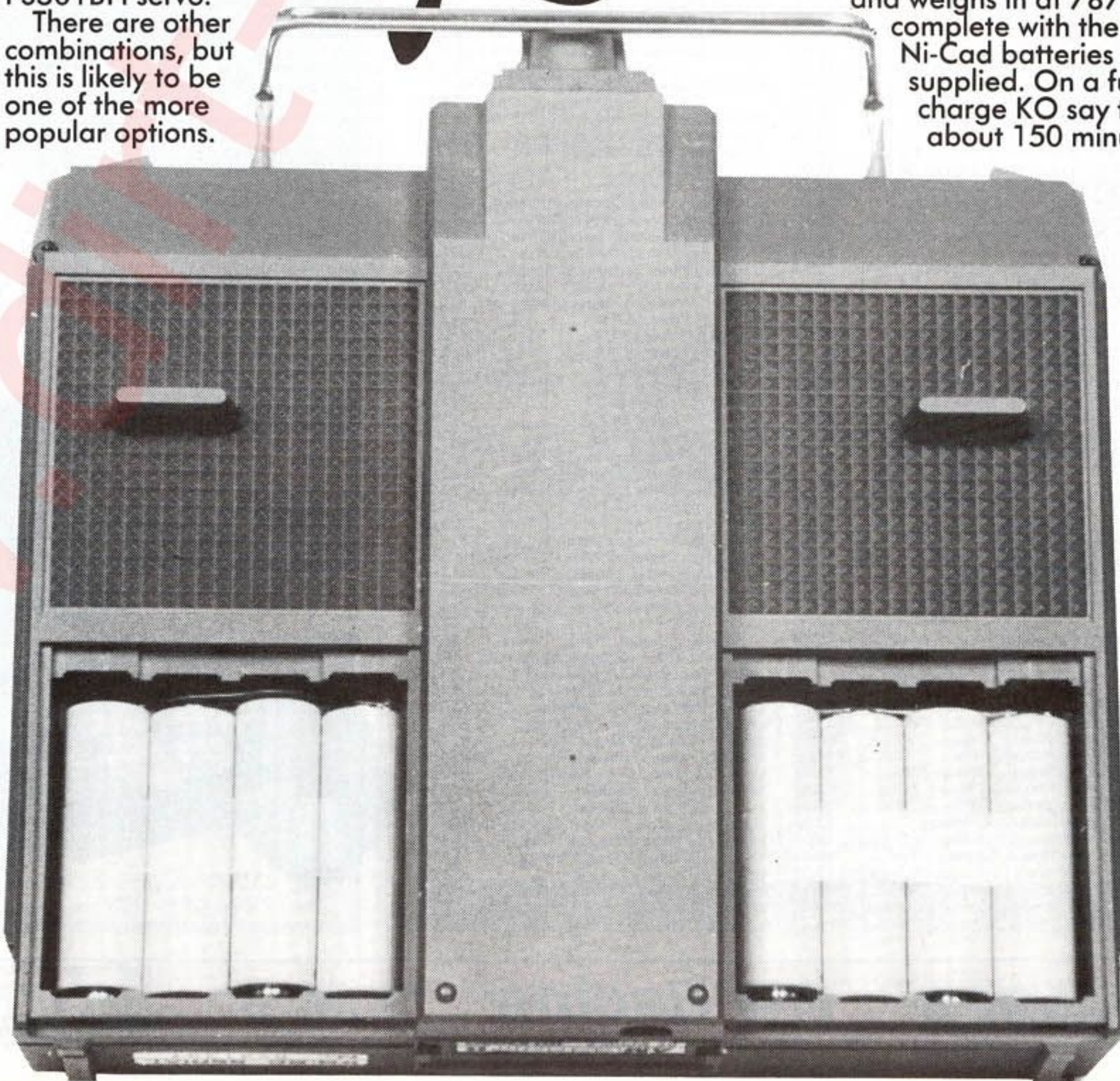
The subject of this review is the Esprit II, providing as it does all the features of KO's steering wheel transmitters on a stick set.

The kit I have reviewed comprises the transmitter, receiver (KR 385A), two PS301BH servo.

There are other combinations, but this is likely to be one of the more popular options.

## The Transmitter

This unit is not small. The main body measures 160mm x 160mm x 60mm and weighs in at 787gm complete with the Ni-Cad batteries supplied. On a full charge KO say that about 150 minutes





of continuous transmission is possible. The stick controls fall easily to hand and I found them just about the correct length for me. However, if adjustment is needed, stick length alteration could not be easier. Unlock the small socket screw in the centre of a stick and you can wind out the length of the stick to suit.

The set is in fact very comfortable to hold. The rear of the case has a notched surface providing plenty of grip for cold, wet and slippery fingers and a neat (what I can best describe as a) ledge to rest fingers on. Although the case does not look at first

are neatly hidden behind two slide off covers on the bottom left and right of the controller.

Behind the left slide off panel are the servo reverse switches for the two channels. Also within this section is the pre-set control for throttle adjustment, (the Push On Reverse). On the surface it may seem a little pointless to have a control to allow you to go straight to full throttle forward or

upper one is to pre-set the full throttle position. The other is to introduce the option of exponential control. This is a feature which alters the relationship between transmitter stick movement and actual servo (or speed controller effect). The idea is to reduce the initial servo movement compared to stick movement. The servo effectively catches up later. Perhaps a difficult idea to

grasp if you are new to the sport, but in practice it will give more control at lower speeds, particularly useful on slippery surfaces.

Behind the right panel are the pre-set controls for steering adjustment. These comprise a sub-trim adjuster to give a course steering set up, mainly to set the servo at its centre position when the stick is central. Fine tuning is still carried out with the trim control alongside

Part 5

sight as anything particularly special, it has been very carefully designed and is one of the nicest transmitters I have handled. There is a red LED on the front panel to show you that all is working and a power meter to show you battery condition. As with most battery condition meters (voltmeter) you need to recharge as soon as the needle hits the red area. Alongside the sticks are what appear to be the usual trim controls. Nothing new with that, but even a raw novice might wonder why, with a two channel set, there are three trim controls. More will be revealed later. Located between the joysticks is the main on/off switch. The other visible controls are:

1. Just above the steering stick is a steering travel adjustment. This allows you to pre-set the maximum limit of steering movement.
2. Mounted on the top left side of the case is a small button that provides instant, pre-set throttle opening, it is called the Push On Reverse button. More of this later.

Where then are the rest of the controls? In fact they

**Left near transmitter styling and Nicad installation - note grippy surface on rear of transmitter.**

reverse (especially as KO speed controllers are forward only). The time saved in shifting the stick compared to pressing the button must be marginal. However, I think that there is a case for pre-setting anything other than full throttle. Imagine tracks with slippery surfaces. It would be possible to work out the optimum throttle setting to use from the start line, avoiding excessive, non-productive wheel spin and just getting the edge on the opposition. If you think this is splitting hairs just look at the difference between top club drivers at the end of the first straight. Any advantage could be the difference between first and second. The other possible use would be to pre-set the amount of braking. So a single push on the button would apply exactly the right amount of braking.

There are two other adjusters in this section. The

**KO's CXIII speed controller comes with flashy Pulse checker.**



the stick.

Left and right steering limits are set with the balance control. The aim is to have the same amount of steering movement on the left and the right. Finally, another exponential control. KO call this the SSC (steering sense control). This allows steering to either to have a lot of movement compared to stick movement at the start of the stick stroke, or a lot of movement at the end of the stick movement. The final choice, of course, is to leave the control in the centre and



**The ultimate servo? Speed and power in the form of the PS 87Z.**



you have standard linear control.

Now for the other 'trim' controls.

Firstly, the control alongside the throttle stick. It is called the ALT. This adjustment alters the neutral position without effecting throttle high point. In practical terms, it varies the point at which the brakes come on. Used in conjunction with the ALT control is the final 'trimmer'. This sets the amount of stick movement over which the brakes come on. At one end of the scale you have fierce braking, a little stick movement but a lot of brake. The other end of the adjustment gives steady and gentle braking control.

All in all a pretty comprehensive set of adjustments.

Is this all I hear you ask? Well, in fact, no!

The set can work on 27 or 40 MHz. This is achieved by having a slide in module that fits neatly into the base of the unit. This slide in module also carries the interchangeable crystal. To be honest this was not the easiest of things to gain access too. I suppose it could be argued that being difficult to remove it is unlikely to fall out by accident. Personally, I have seen so many drivers doing a last minute crystal change in a rush, that I believe this operation on the KO will be so frustrating that the plug in unit will be damaged. I really think that KO should look at improving this part of the unit. The other feature of the set I found, if not annoying perhaps mildly amusing were the plethora of Jinglysh (Japan-English) phrases spread all over the transmitter. Some of these I reproduce in unexpurgated form.



**Standard receiver is small and neat.**

1. Most professional stick operation system for high technical racing.
2. Technical drivers communication professional high mechanic technology.
3. High performance for world racing conqueror.

Frankly most of this is, in my opinion better left unsaid, still that's a personal view.

Also on the bottom of the transmitter is the socket for connecting the Ni-Cad charger supplied with the outfit. To finish everything off there is a smart black aerial and a chrome top handle.

I found this set a pleasure to use. Largish but not ungainly, a bit weighty but easy to handle, comfortable and well laid out. On a very subjective note it gave me the feeling of solid robustness and definitely intended for the serious driver.

The receiver supplied is the KR385A.

The receiver weighs 43gm and measures 57 x 41 x 21. It is approximately the same size as most of the cheaper 2 channel types (usually sold as deals with cars). This receiver is in fact a three channel unit, although as yet I cannot think of a use for the third channel in a car.

This average size receiver could be changed for a more compact version the KR 285A type.

Should you be lucky enough to find yourself in a position to be able to buy the smaller, lighter KR 285A

receiver, it is worth noting that it does not have a battery input. This, on first sight will spread confusion and alarm to racers who have not come across the arrangement. The reason, is that power for the receiver comes from the KO speed controller and is fed along the wires that connect the controller to the receiver. Of course, if you intend to use a speed controller that is unable to supply receiver current or maybe you just prefer a separate battery supply for the receiver then something needs to be done. In fact, the solution is very simple. KO produce a special Y lead to allow you to connect a battery supply to a servo lead. So a single receiver socket looks after servo connection and power supply for receiver. Servo plugs are very similar to Futaba, but be careful. The connection are not the same, so items may not be interchangeable.

### Servos

The servo supplied with the set is the PS 301BH. This neat unit operates over its 60 degree range in 0.26 second and develops 3.8 Kg/cm torque. This will provide ample reserves of power for most of us. Weight is 45gm and it measures 41 x 35 x 21 mm. For those of you who require something very special in servos there is the PS 87.

KO have led the way in compact high power, high speed servos with their

renowned PS 87 originally known as the world championship limited edition. This device uses a separate FET amp to provide motor current. Other servos usually sacrifice speed for torque or vice versa. The PS 87 sacrifices nothing. The drawback is that you must find somewhere to put the separate FET amp and the extra bits of wire that the system uses. Now the PS 87 has been upgraded to the PS 87Z which includes metal gears. As far as performance is concerned it is outstanding.

To round things up. The quality of all KO products is excellent. They are robust, reliable and they deliver the performance. Within the product range they now have something for almost everyone. However, they are not cheap. The set I have looked at the Esprit II is offered at £275 complete with two PS301BH servos and the KR 385A receiver with a separate receiver battery box. High quality rarely is cheap, in my opinion KO is perhaps at the top of the quality league in Japanese made RC sets. What, of course, is more important is that people like Masami Hirosaka and Jamie Booth must think this way, otherwise why would they trust in KO equipment.

The sets and servos are on offer from a limited number of suppliers. I suggest you scan the pages of RCMC for the best deal. My thanks goes to Demon Products for the loan of the equipment for this review. My only regret is that I have to return it (until I can save the pennies), still, that's life.

Available from: Selected suppliers and Demon Products, PO Box 12, Aldershot, Hants.

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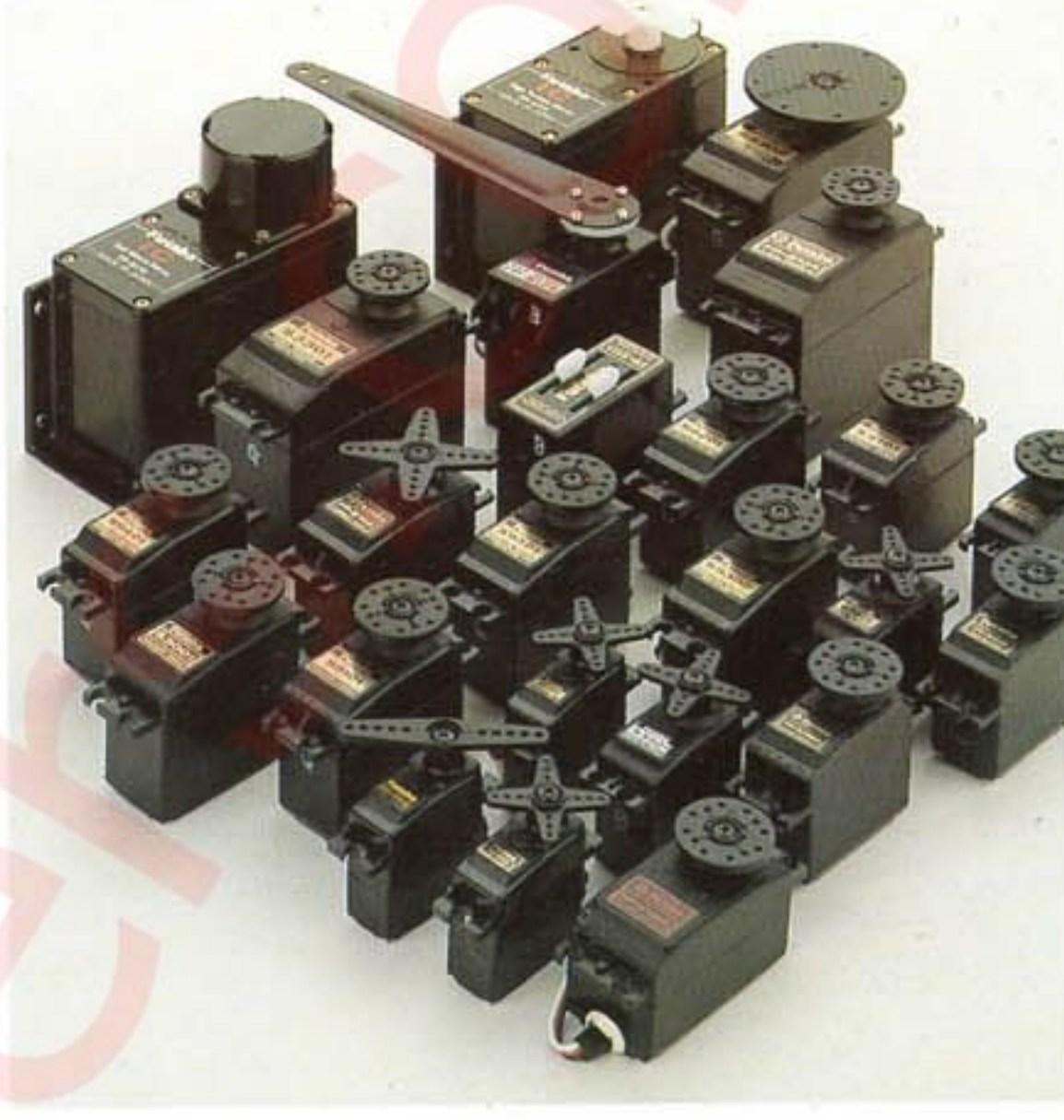
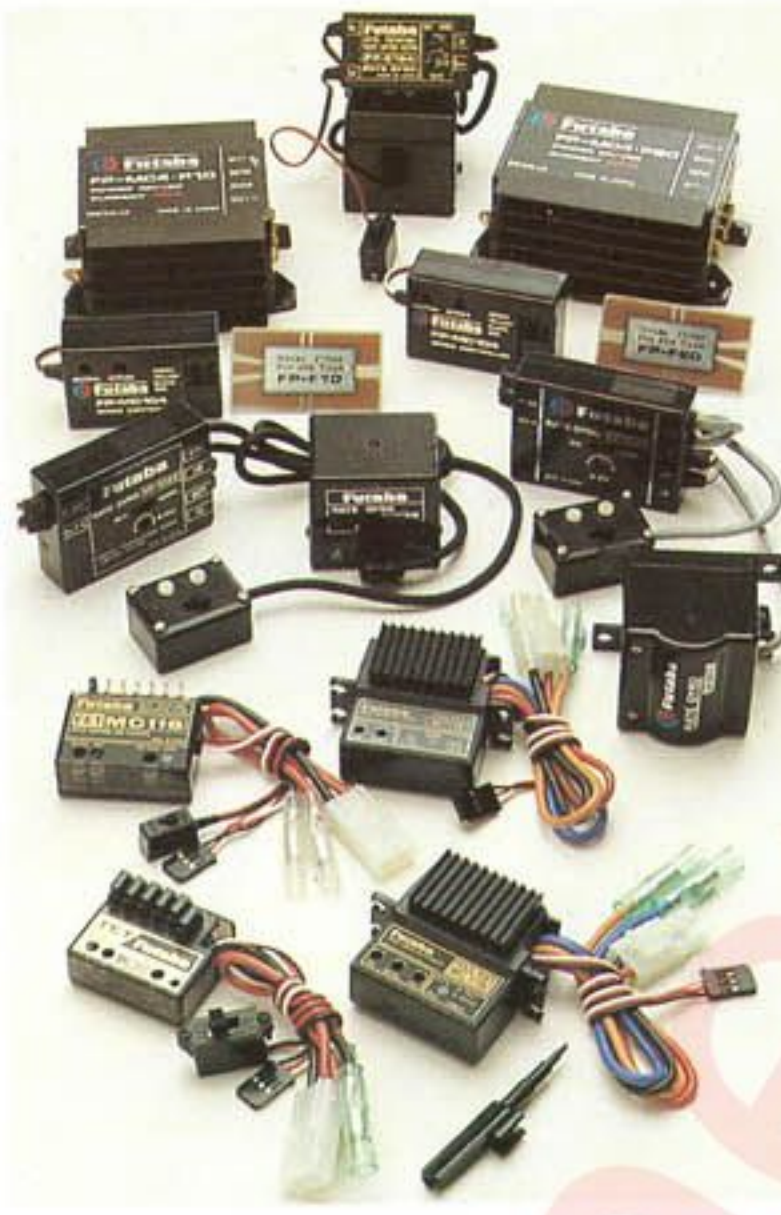
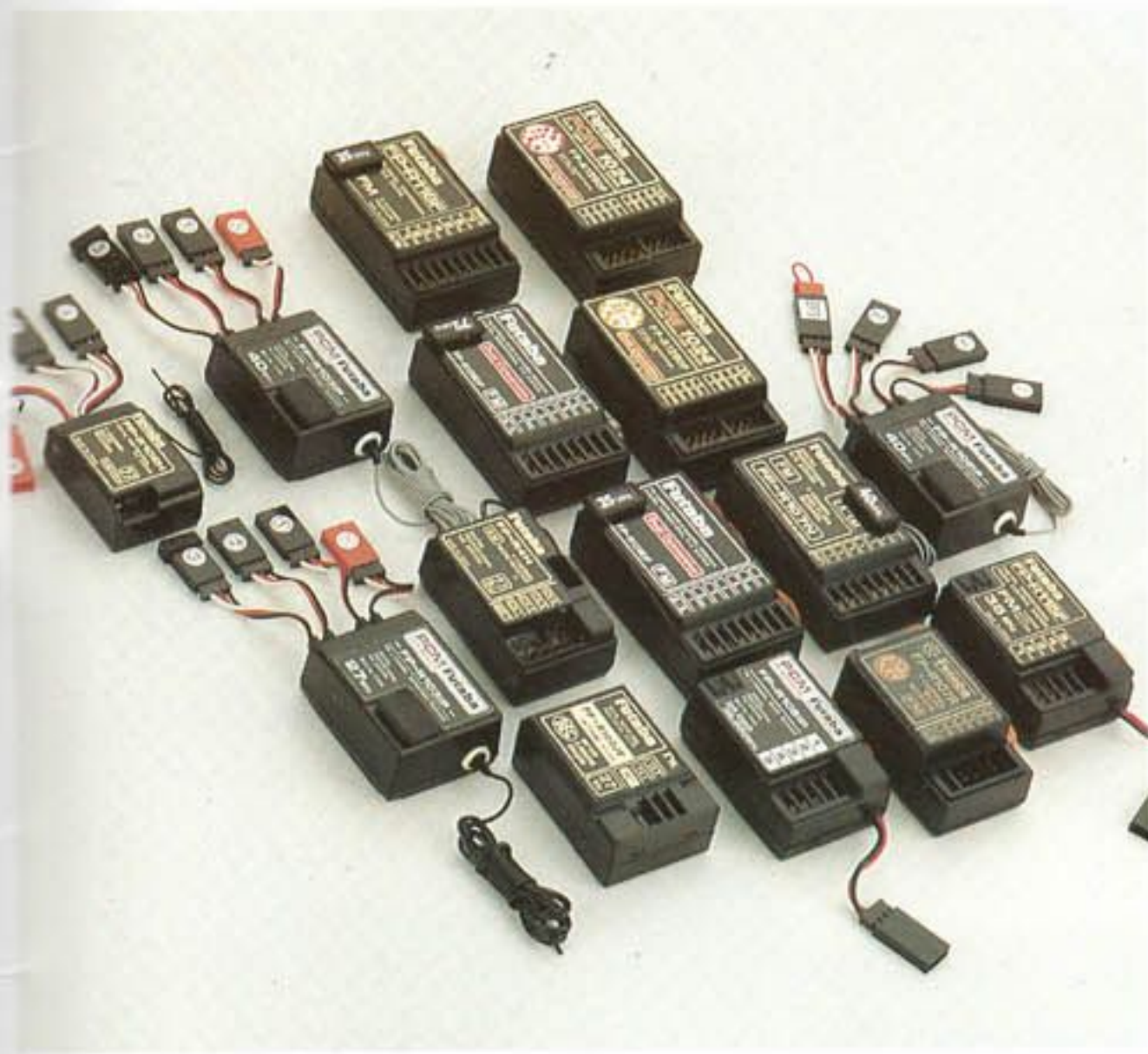
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