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MODEL CARS

SHEER TERRA!

Tamiya's Terra
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CUSTOM CAR

Kyosho's Optima
Mid Custom Review

NUREMBURG
MODEL FAIR REPORT

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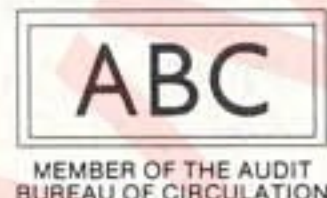
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PRO10 Racing features in both Circuit Racing & Track Torque this month



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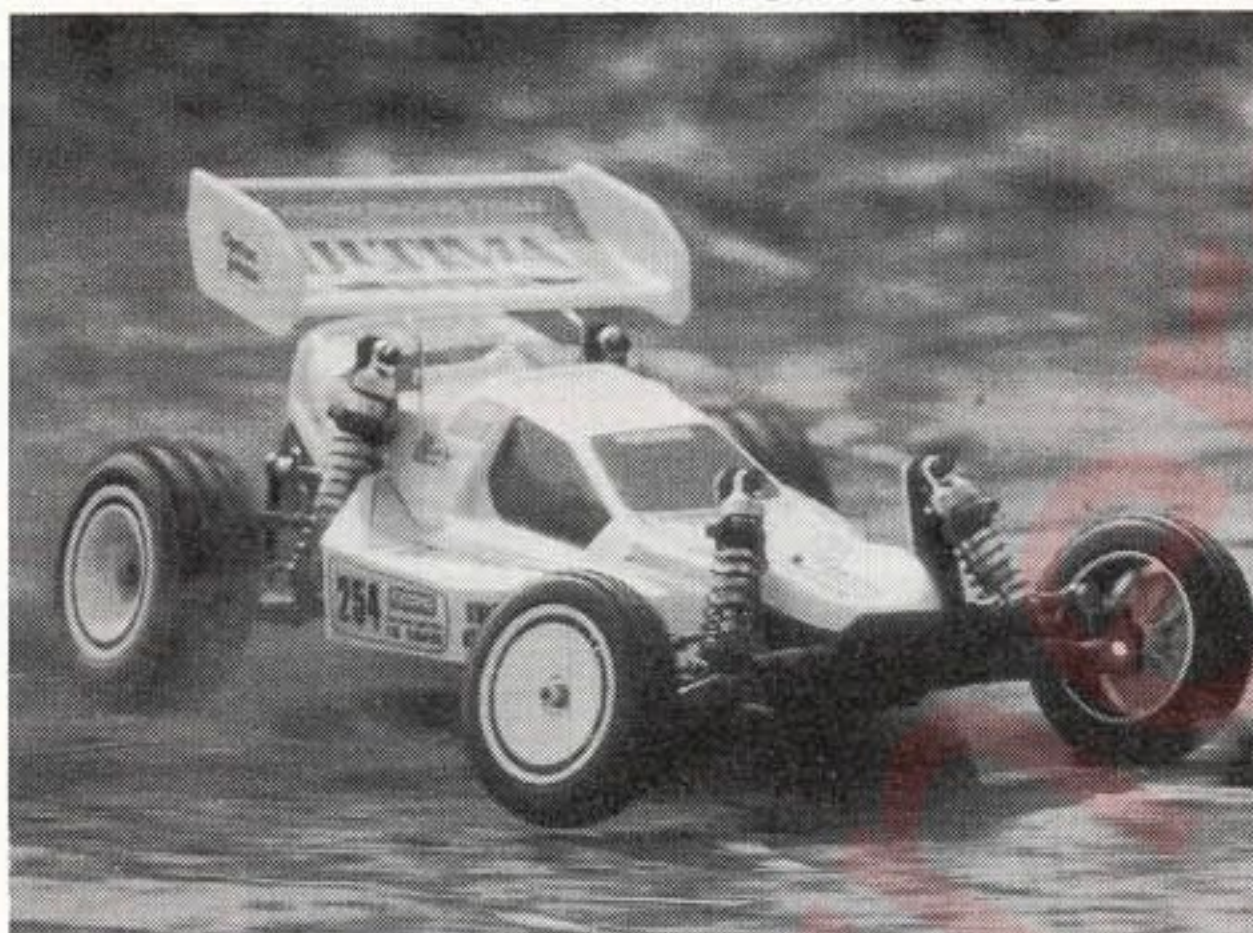
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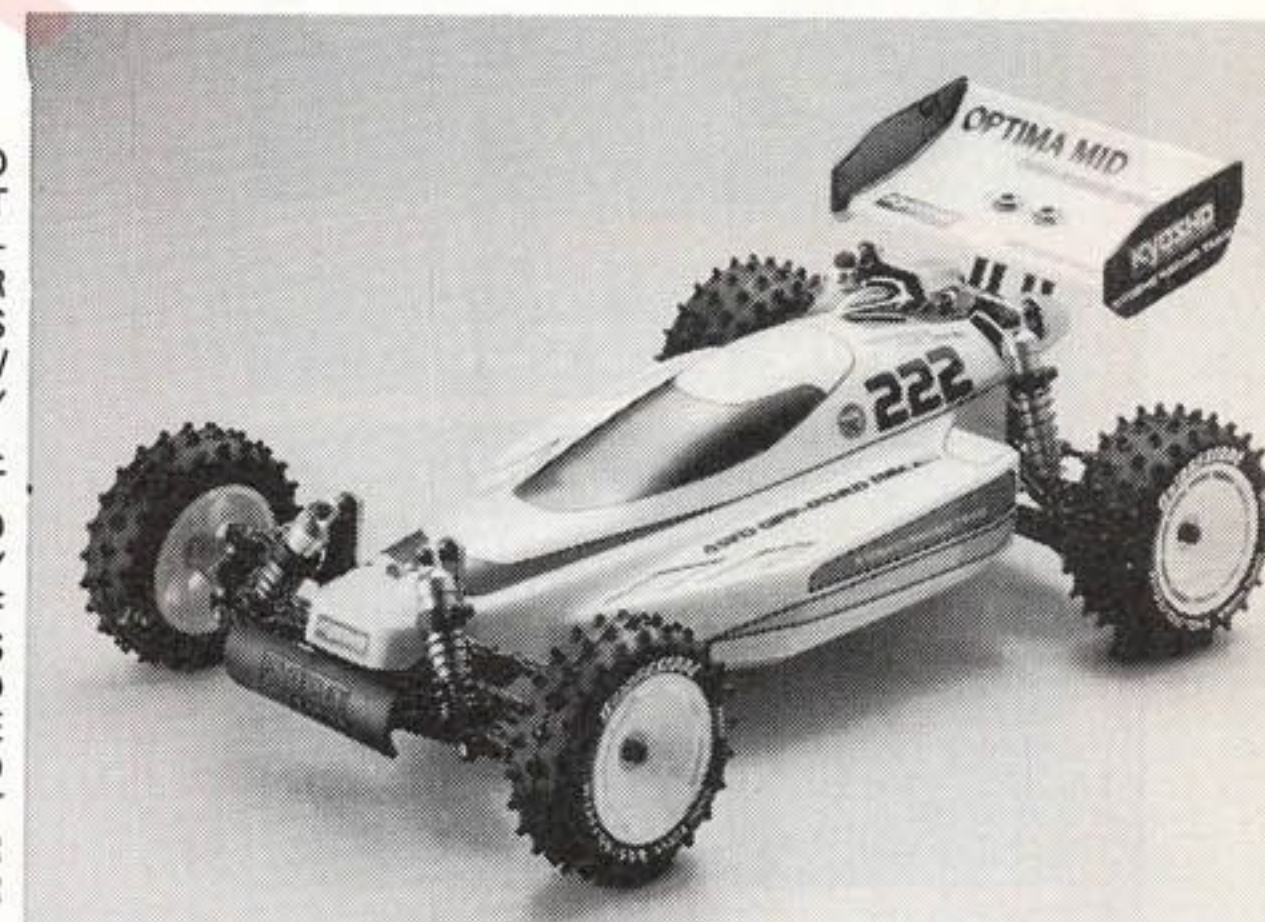
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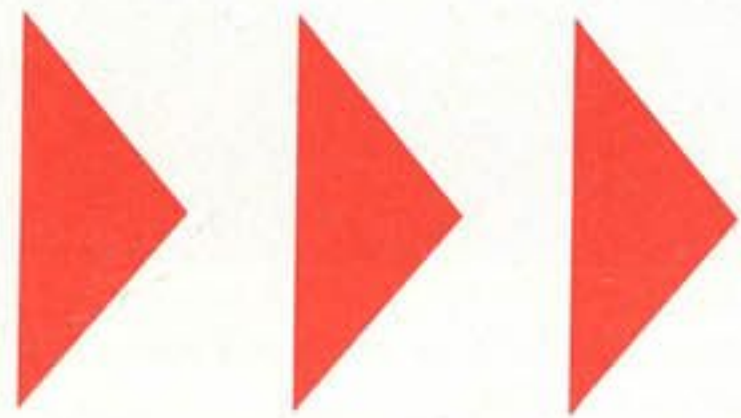
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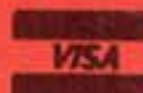
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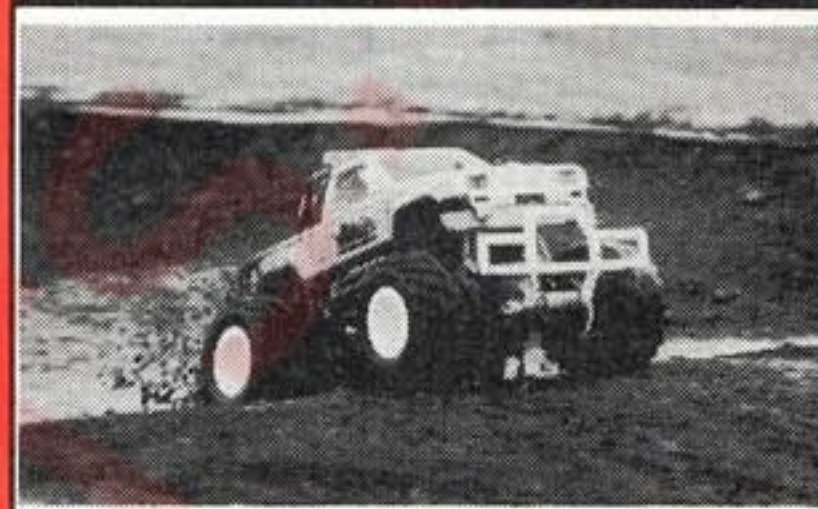
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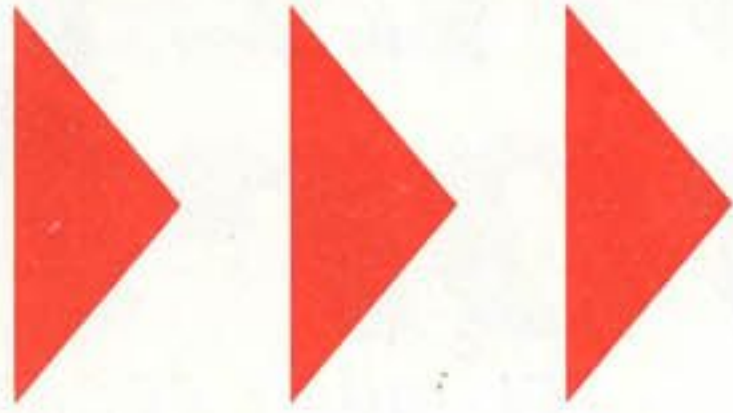
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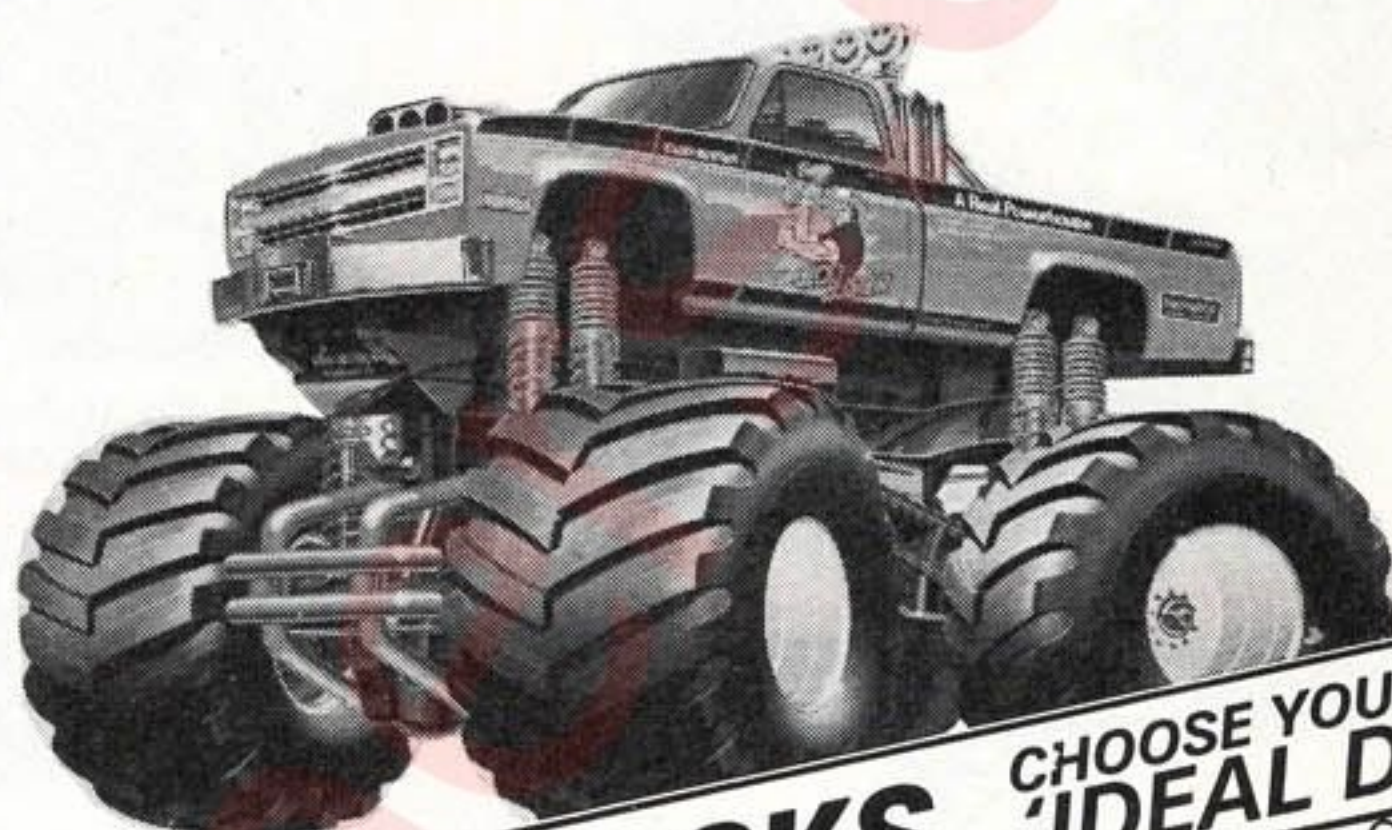
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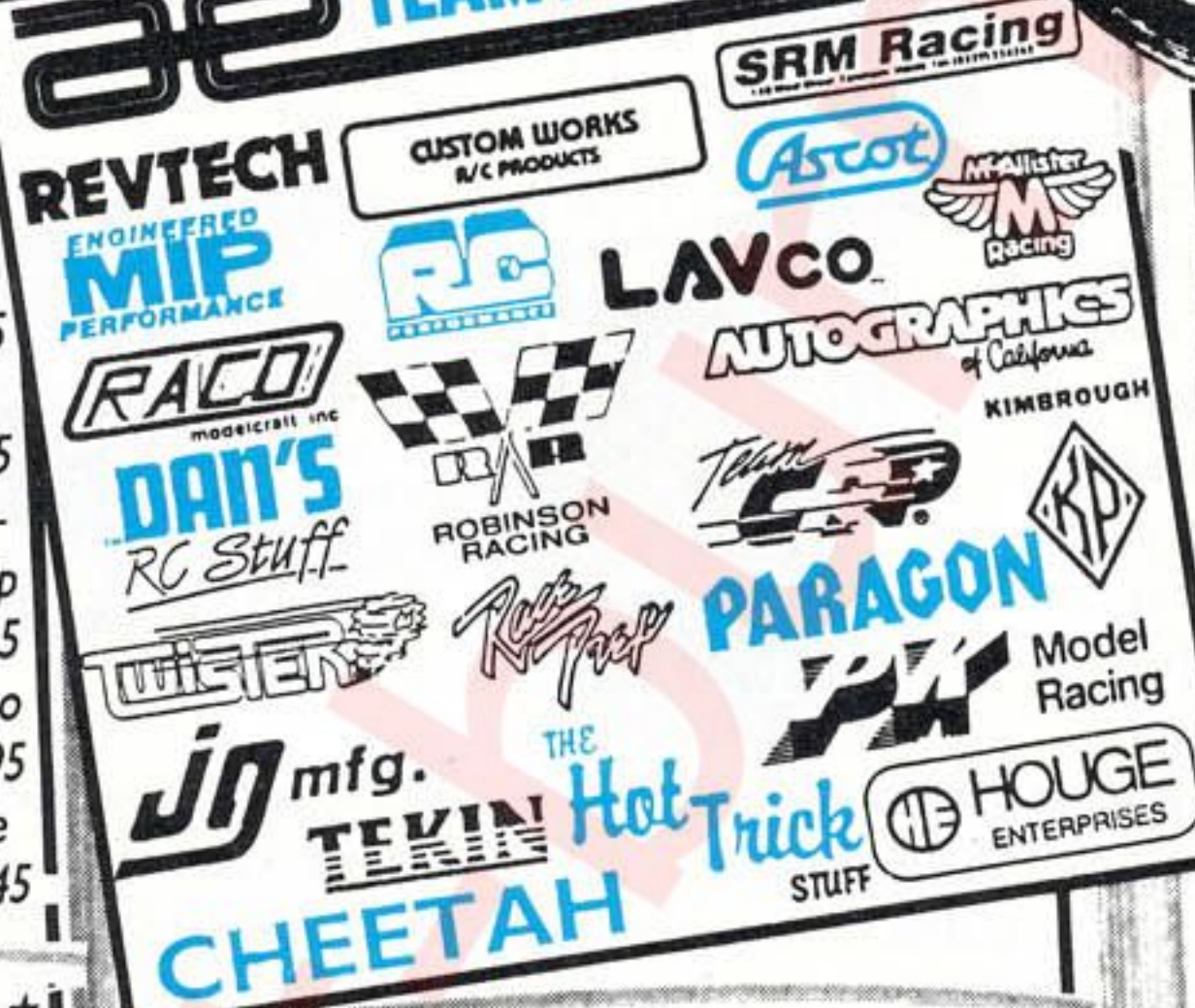
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..... £3.95
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and take the guesswork out of choosing a ratio
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for the new industry standard 48DP which offers
a wider choice of ratios than
32DP combined with the smoothness
associated with 64DP but without the
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Ultima/Optima (32DP in kit).
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Optima Mid 4 (.6 Module in kit).
Yokomo (48DP in kit).
All the above £1.40

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range of adaptors. SRM Tufnol 48DP spurs and
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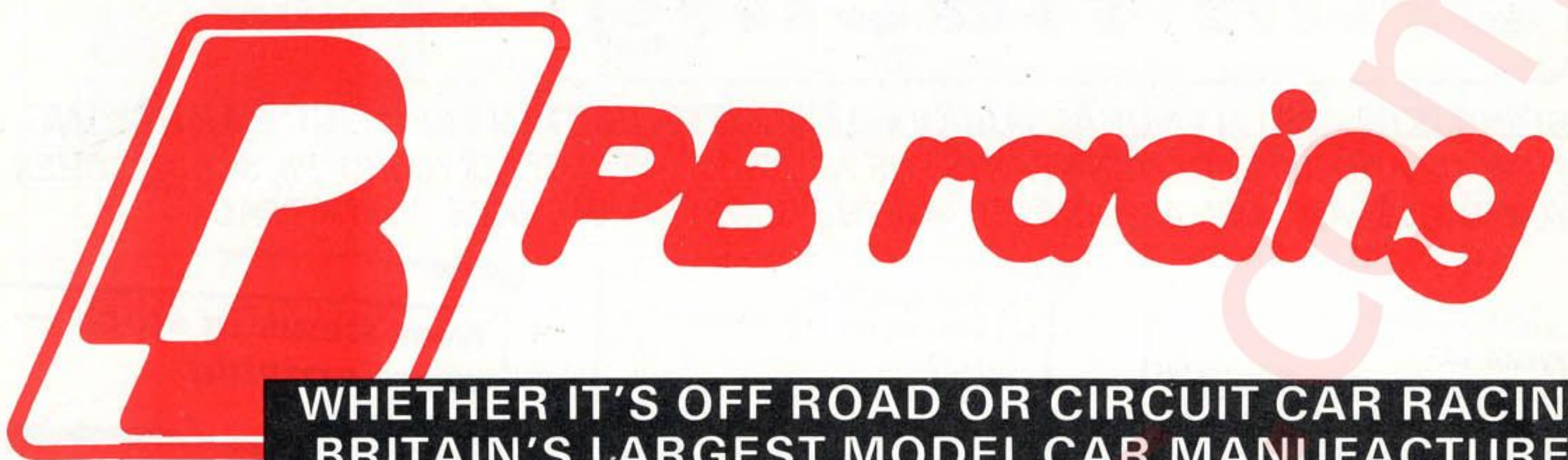


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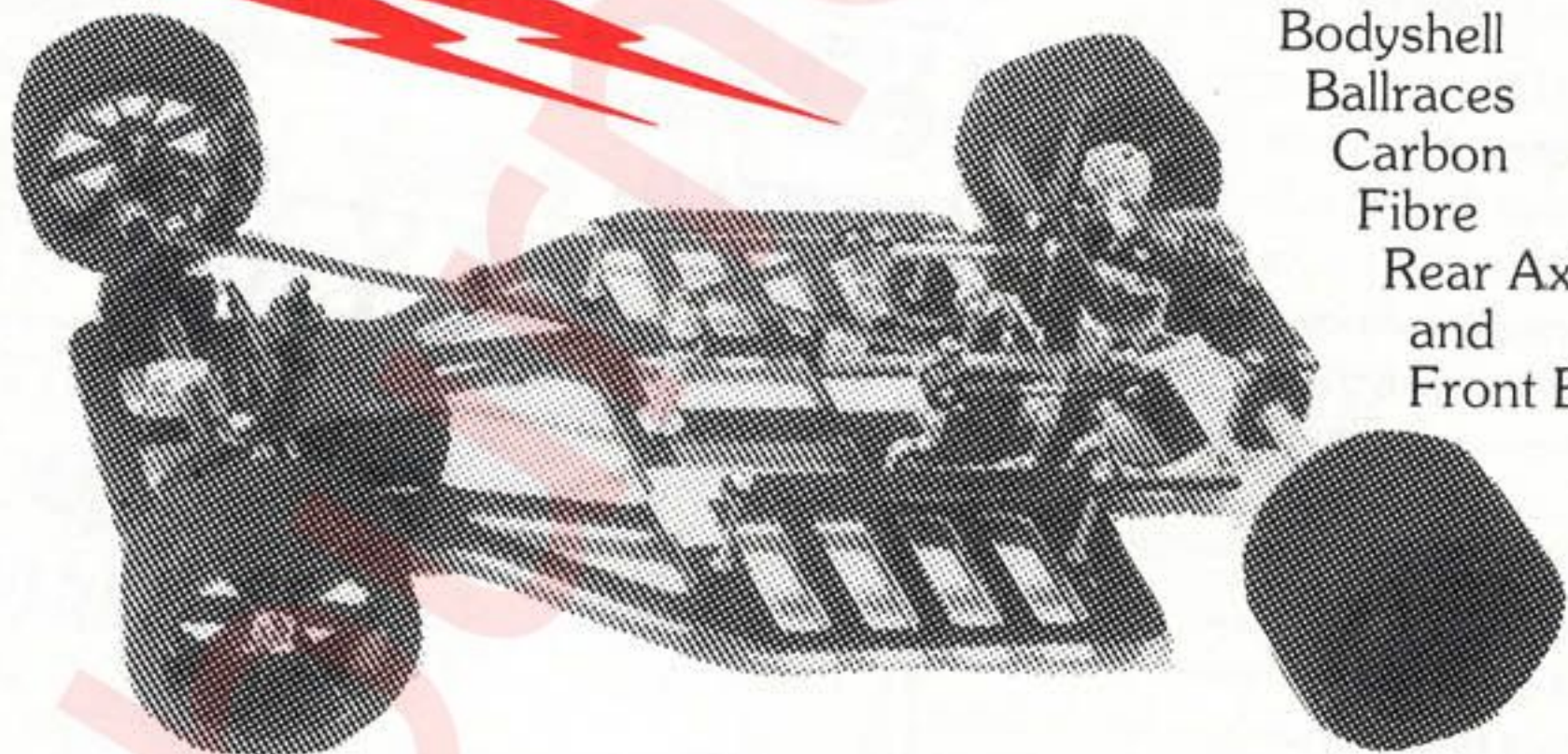
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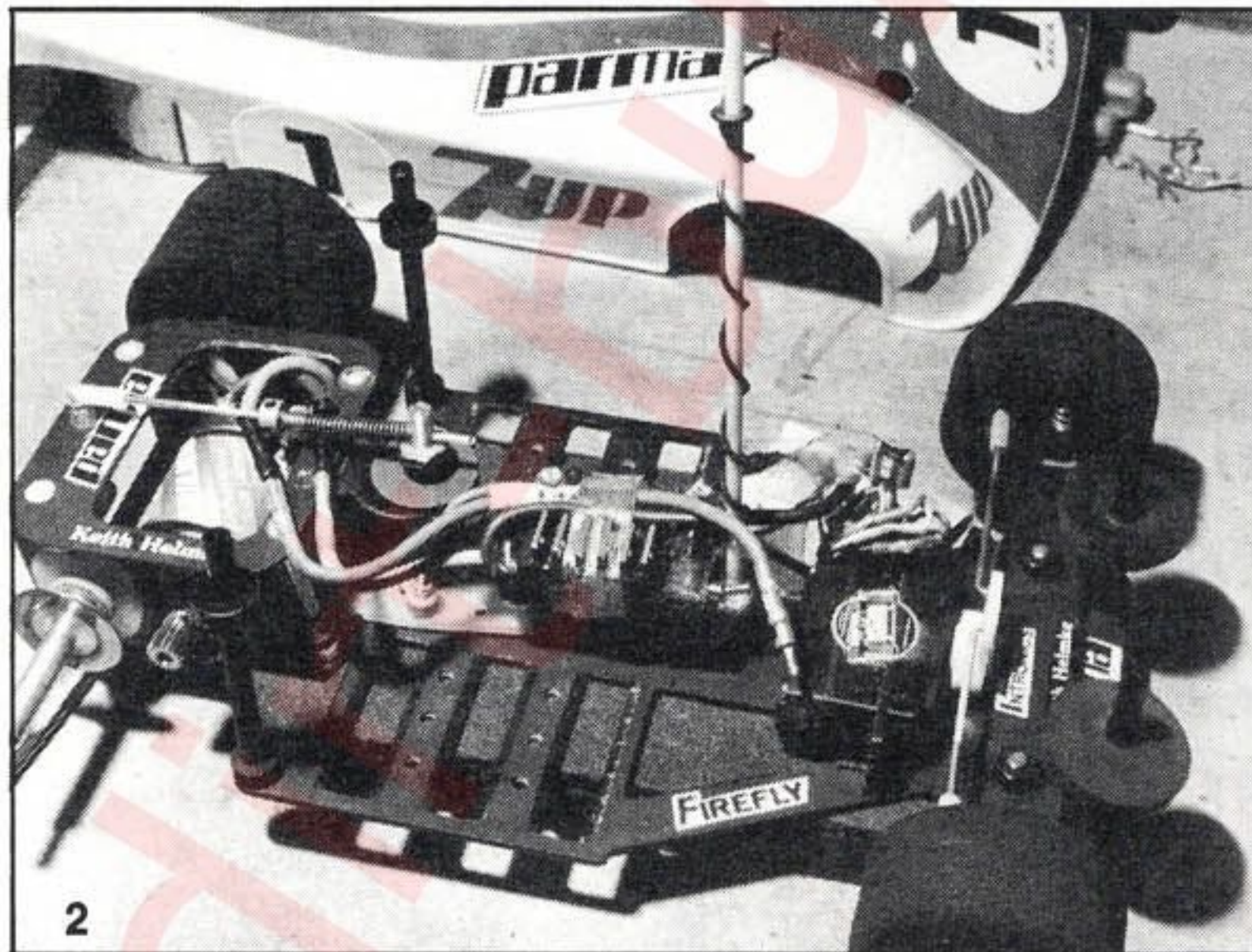
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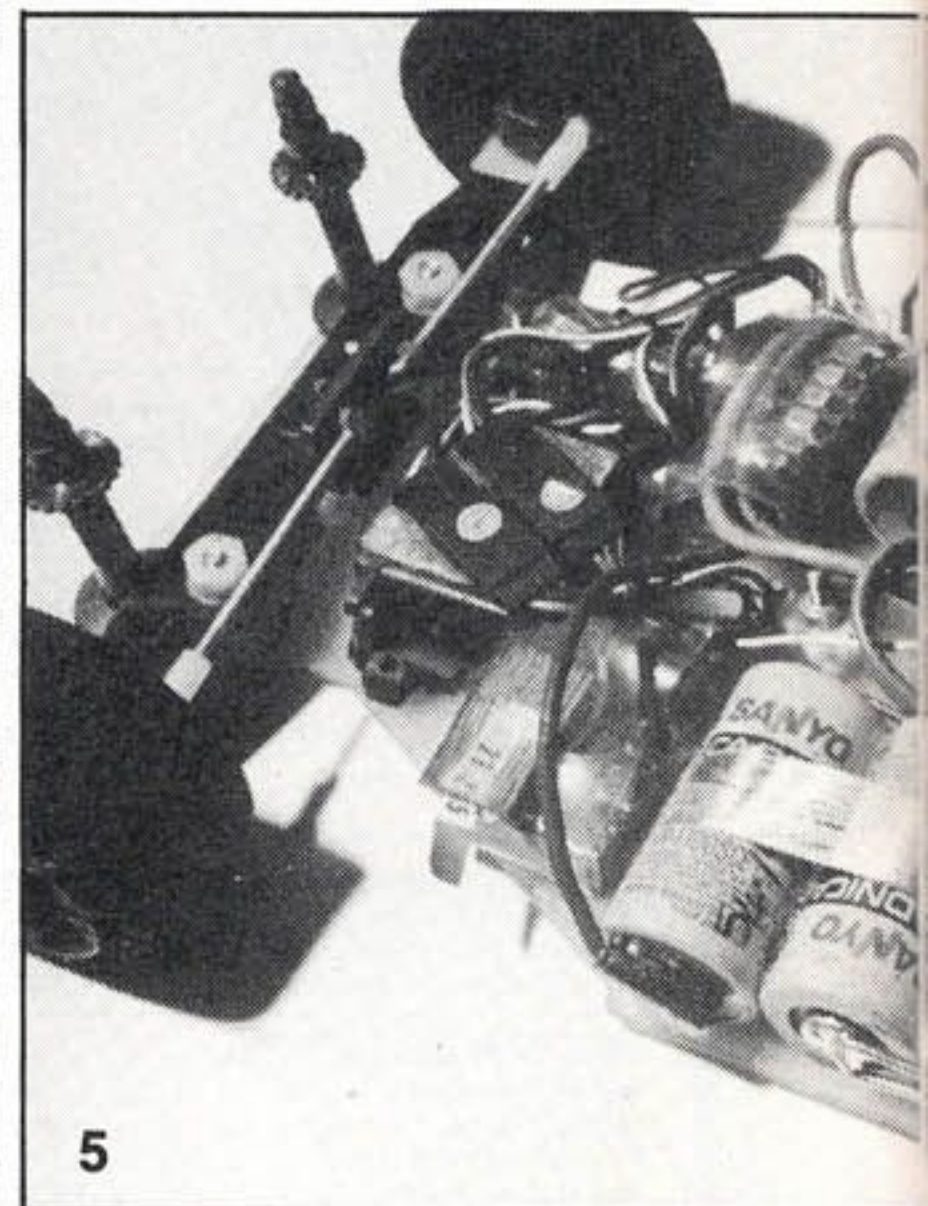
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MODELLEN

1. The West Hall at Alexandra Palace which housed the car racing circuit. A George Land designed circuit tested drivers skill. 2. Keith Helmke's development Parma which won the 'B' final. 3. Schumacher 'C' cars were popular. 4. Matt Fords Corally complete with credit card size speed controller. 5. Another development Parma Pro 12. 6. SRM Racing RC12L fitted with KO servo - now a popular choice. 7. Glyn Pegler leads Pat Hodge in the 'A' final. 8. Rob Roys RC12L complete with SRM coloured 'Toj' bodyshell.



2



5



3

MODEL CARS 1/12 RESULTS

A FINAL

1. David Gale
2. Mark Barford
3. Richard Isherwood
4. Glyn Pegler
5. Tim Biggs
6. Pat Hodge
7. Chris Arnold
8. Danny Conway

C FINAL

1. Pete Margetts
2. Robin Streeter
3. Ryan Georgiadis
4. Martin Allen
5. Ellis Stafford
6. Trevor Williams
7. Adrian Brunt
8. Ian Spashett

E FINAL

1. Richard Boldison
2. Adrian Fulcher
3. Les Heath
4. Lee Hodge
5. Doug Heath
6. Ian Cutter
7. Graham Tomkins

B FINAL

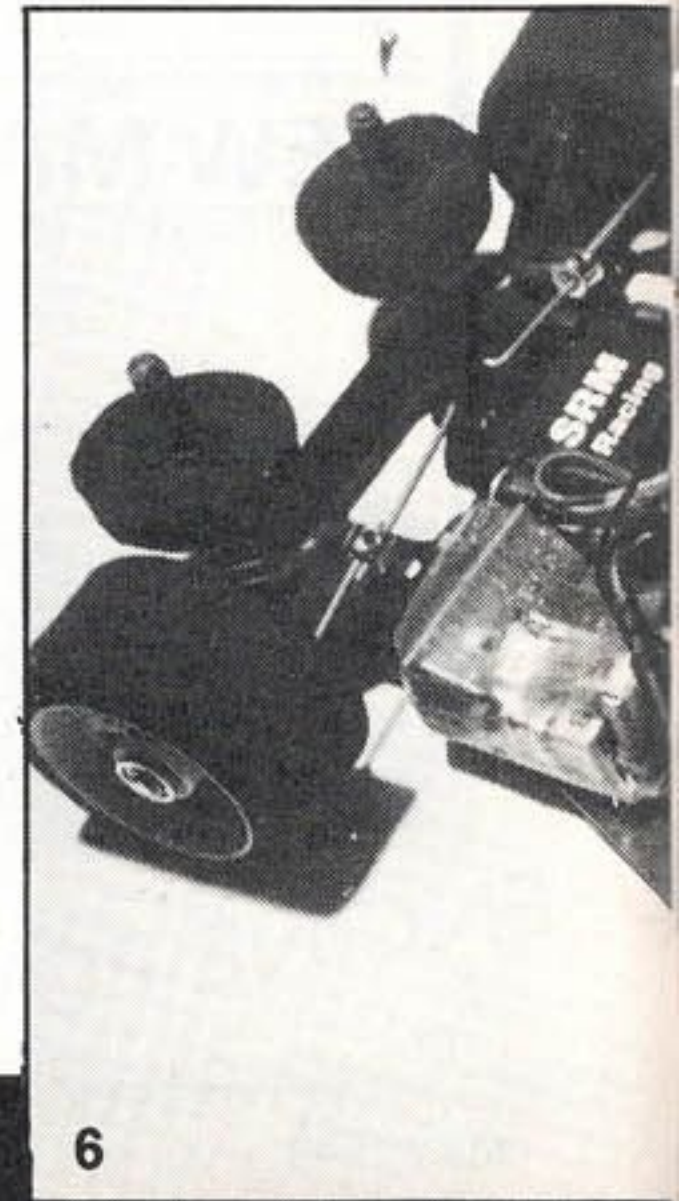
1. Keith Helmke
2. Mat Ford
3. Bill Boldison
4. Richard Sellens
5. Steve Brace
6. Mike Haswell

D FINAL

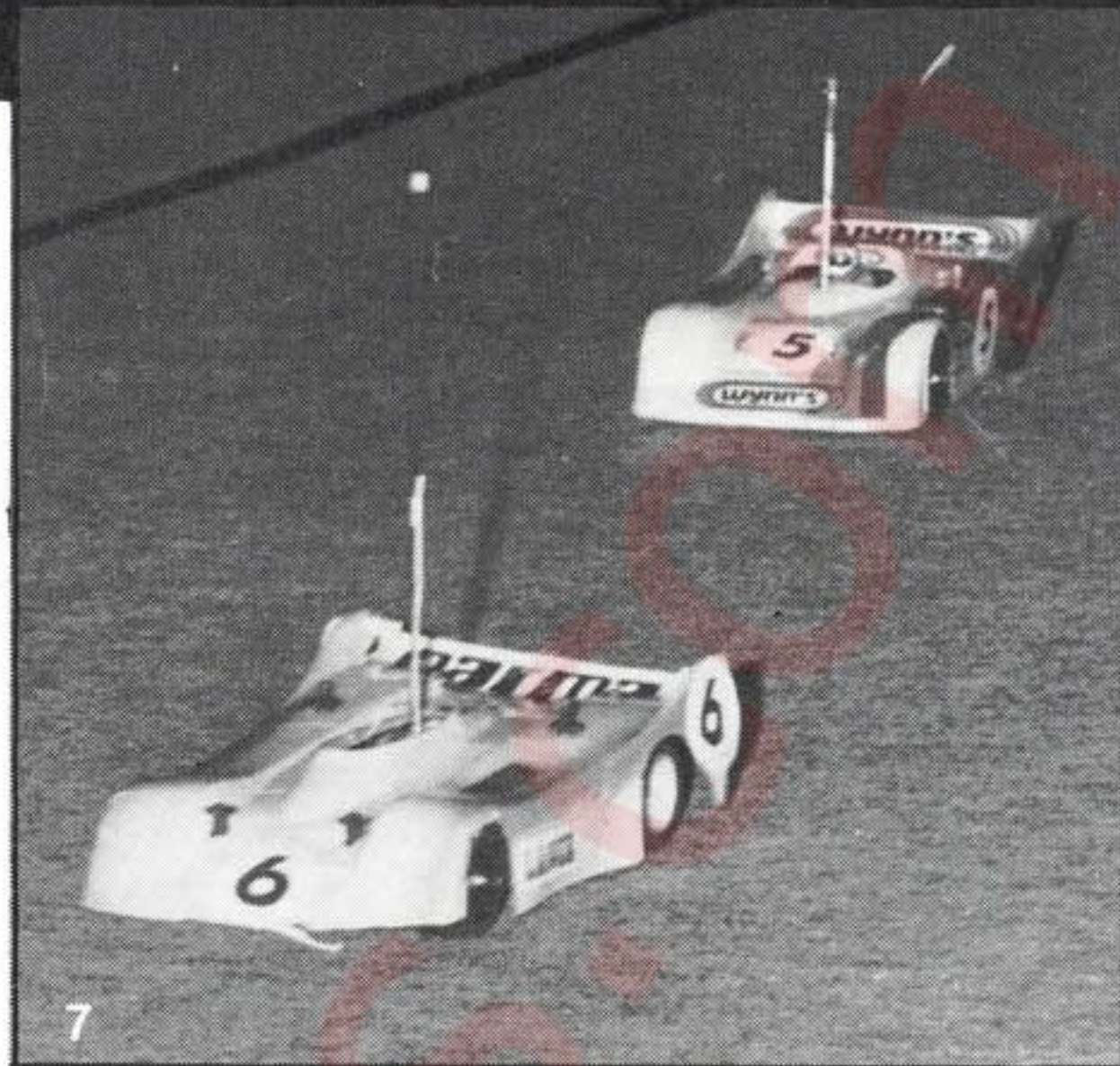
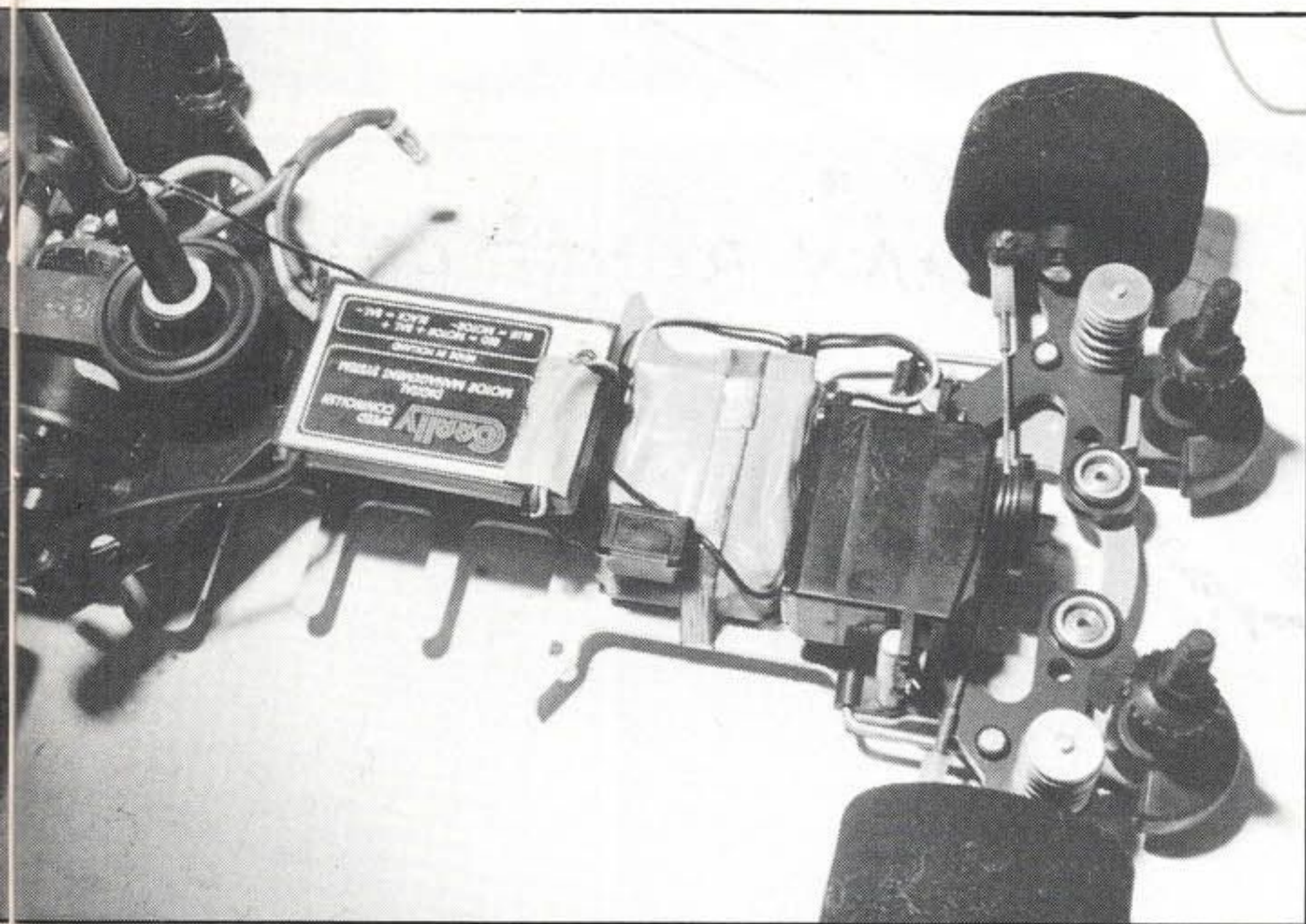
1. Andy Boldison
2. John Green
3. Chris House
4. Dave Sellens
5. Ian Sellens
6. Chris Alder

F FINAL

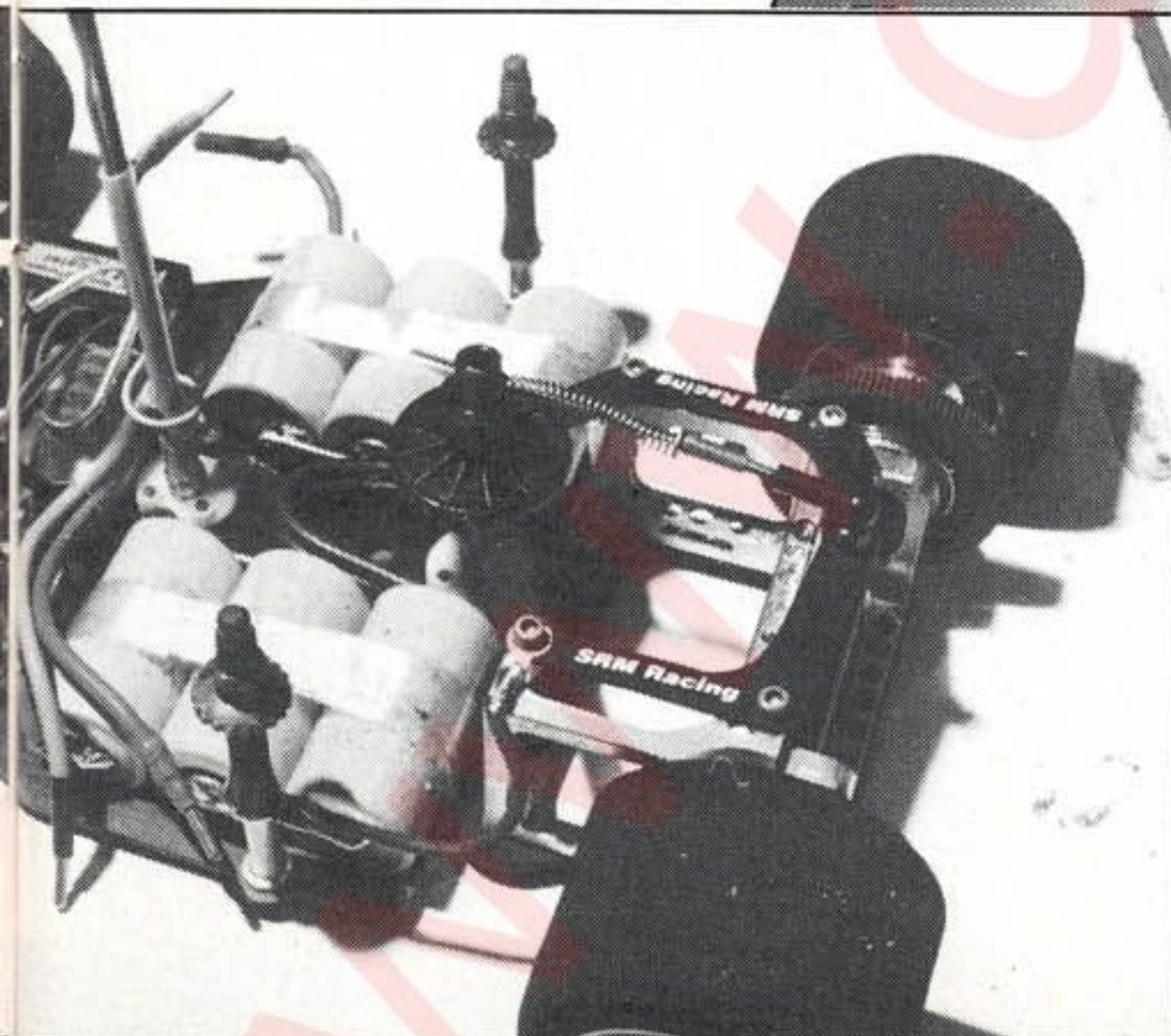
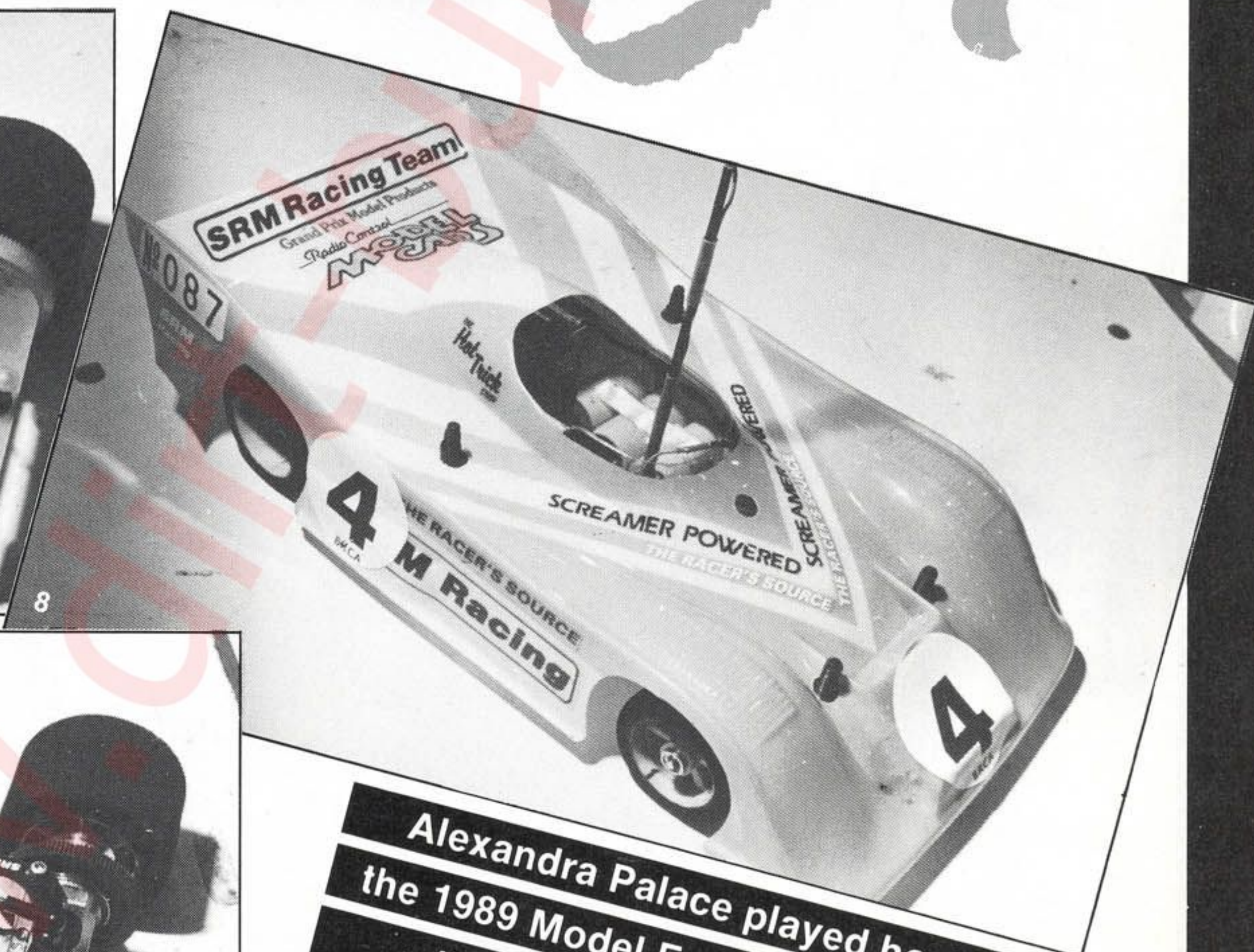
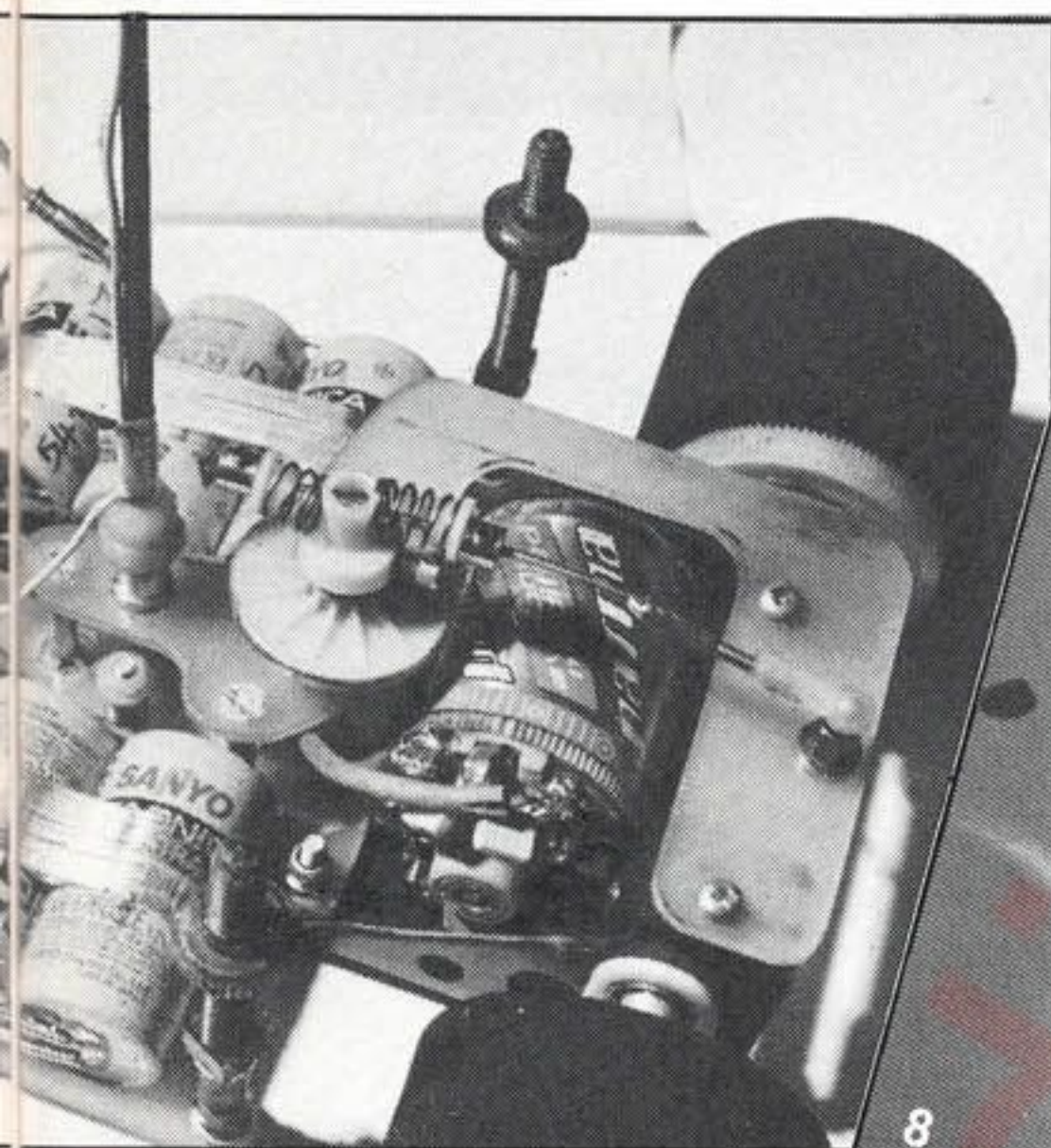
1. John Thurlow
2. Wayne Tomkins
3. Geoff Reeves
4. Gordon Brice
5. Roger Tomkins
6. Jess Saunders
7. Nigel Graham
8. John Raven



6



ENGINEER



Alexandra Palace played host to
the 1989 Model Engineer Exhibition
- the most successful to date.
RCMC reports on the R/C car racing

MODEL ENO



Ever Ready Clubmans Challenge 1989 Final Positions

JUNIOR A

1. Eugene Galley
2. Richard Hollingworth
3. Karl Marsden
4. Olly Vaux
5. Ben Quirk
6. Mark Burgin

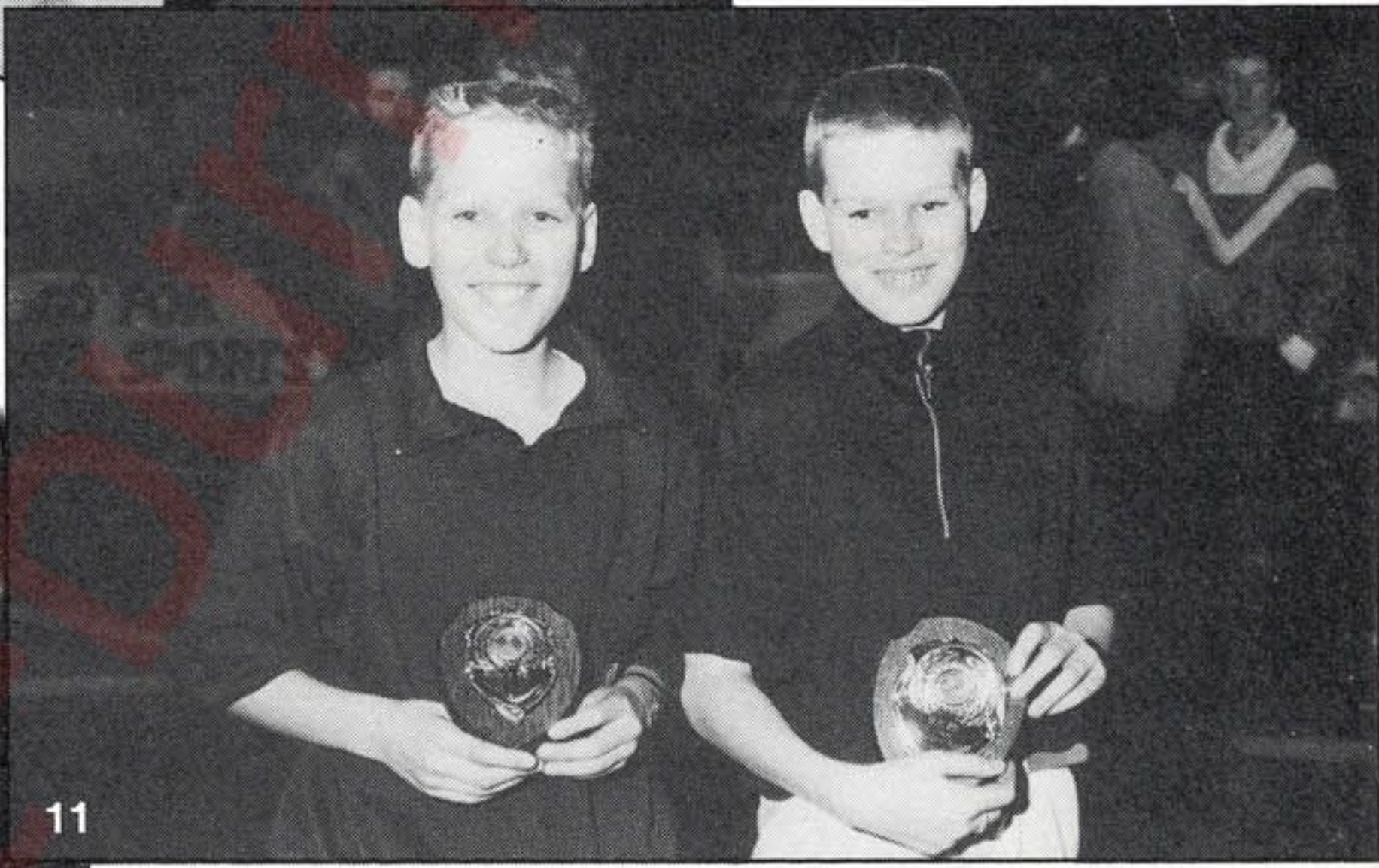
JUNIOR B

1. Nicolas Galley
2. Trevor Cadby
3. Adam Rubinace
4. Stuart Fisher
5. R. Adrian
6. Neil Taylor

JUNIOR C

1. Paul Wadsworth
2. Andrew Bottomley
3. Robert Cockerton
4. David Bottomley
5. Steve Akroyd
6. Andrew Hunter

9



11



12

9. Senior Ever-Ready champion Mark Russell from the Chesham club collects his trophy from Dave Sellens - BRCA secretary. 10. The two Ever-Ready champs with cars and trophies. 11. The Craddock twins came in 1st and 2nd on the final Sundays 'J' final. 12. Eugene Galley became Junior Ever-Ready champion at Alexandra Palace driving a Schumacher CAT.

JUNIOR D

1. Matthew Bolton
2. Graham Andrews

SENIOR A

1. Mark Russell
2. Ian Christian
3. Andy Park
4. Ian Ryan
5. Andrew Christian
6. Simon Hadley

SENIOR B

1. Natham Mercer
2. Peter Cousins
3. Paul Hill
4. Pete Davis
5. Russell Woodhouse
6. S. Oglosby

SENIOR C

1. Greg Breeze
2. Nick Fisher
3. James Archer
4. Lee Marshall
5. Toby Shaw
6. Doug Cadby

SENIOR D

1. Charlie Scheribri
2. Simon Guttery
Steven Jones
4. Gavin Davis
5. Mark Roberts
6. Graham Sweeney

SENIOR E

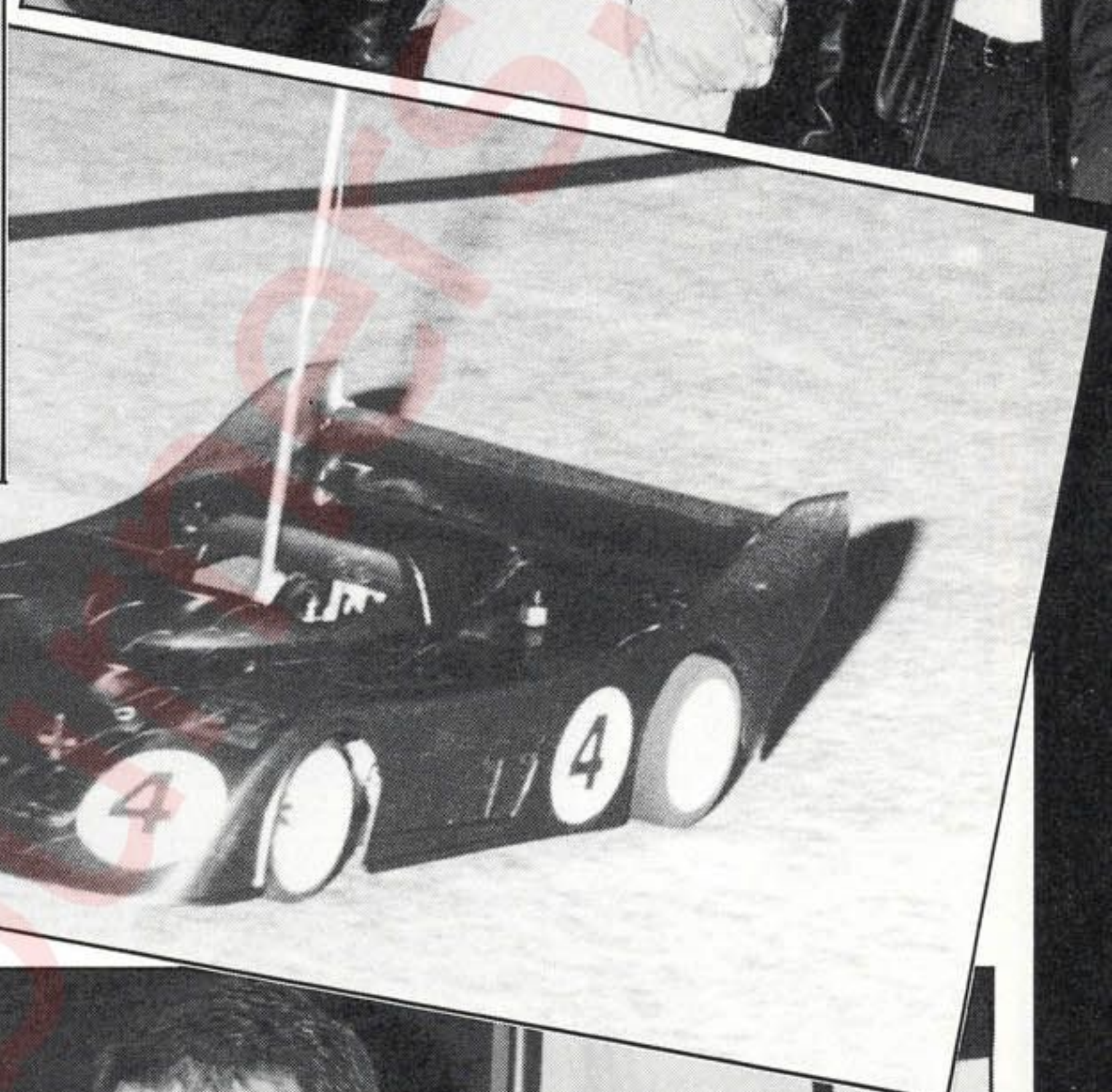
1. Pete Satcliffe
2. Graham Warder
3. Nick Hatton
4. K. Harvey
5. David Adrian
6. Ian Taylor

SENIOR F

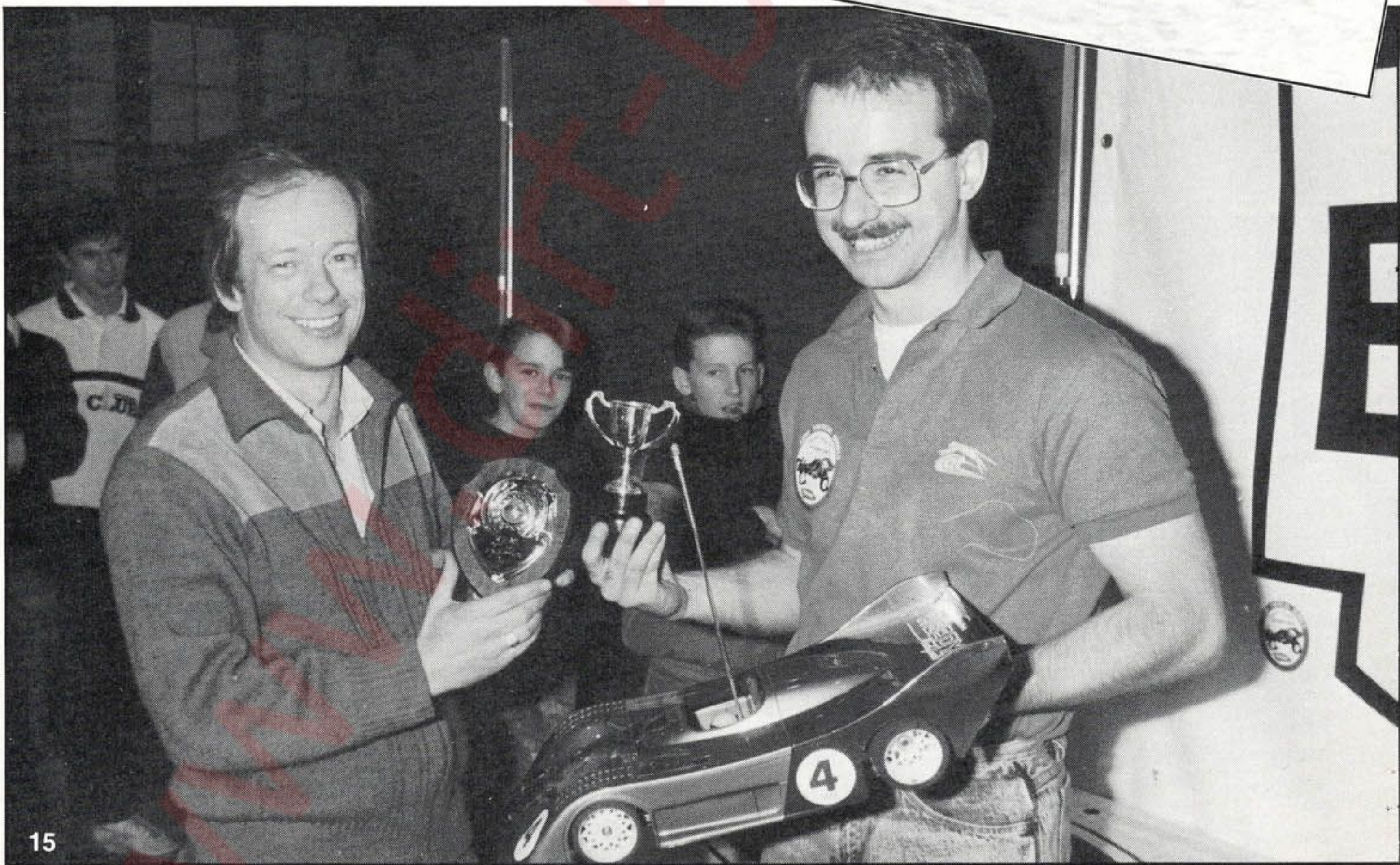
1. G. Hale
2. Paul Simon
3. Paul Read
4. James Bairstow
5. Daniel Hunter

SENIOR G

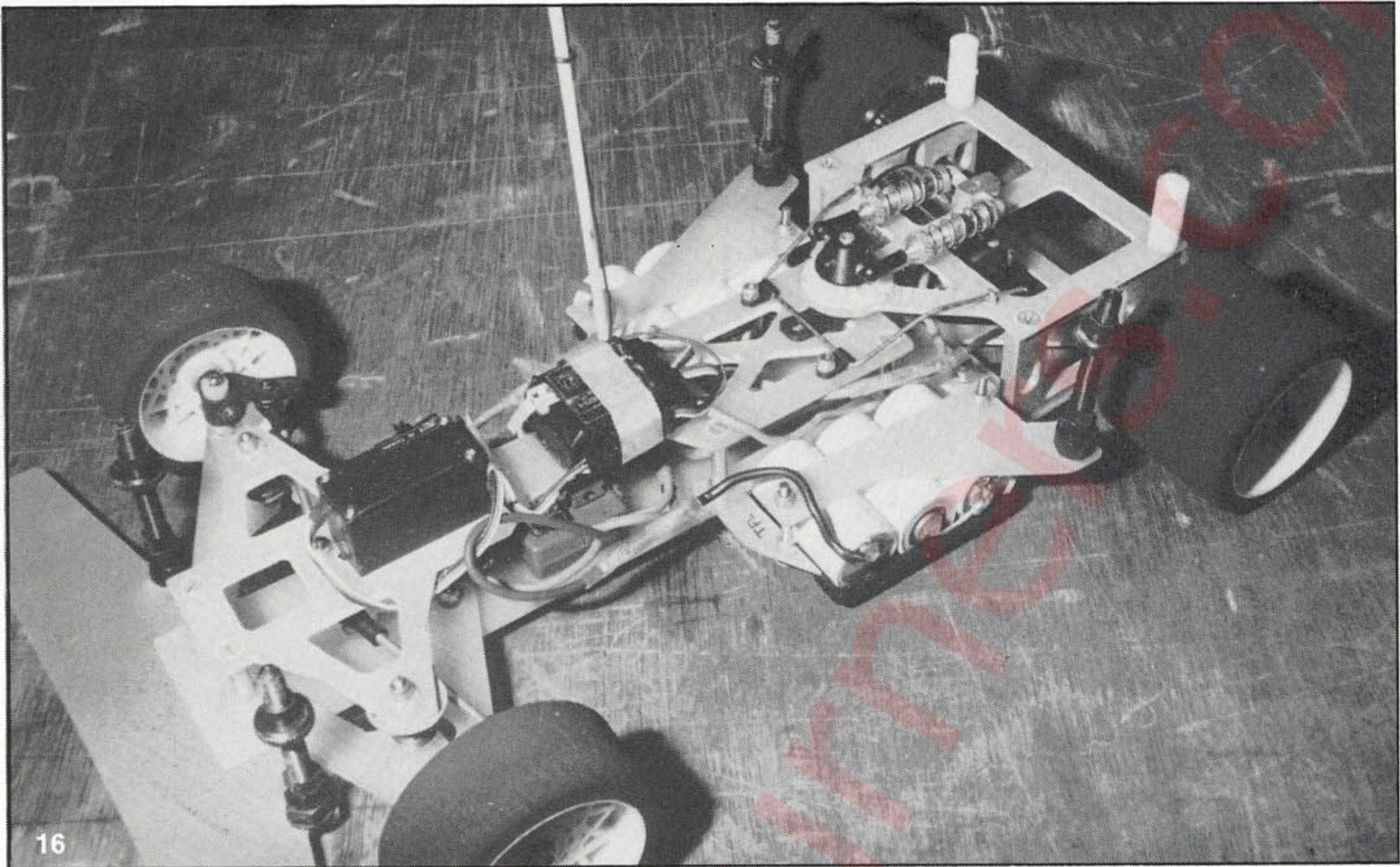
1. Dave Findlay
2. Tim Salmon



13. Mick Robertson from SKY TV was given a 'go' of Alan Harman's PRO10 car - with interesting results. 14. Phil Davies ran a Parma Osella bodyshell to win the Pro 10 day. 15. Phil Davies receives his 1st place and FTD trophies from sponsors Aero Nautical Model's Alan Woolwich.



MODEL ENO



1/10 A.N.M. ON ROAD

A FINAL

1. Phil Davis
2. Glyn Peglar
3. Mark Barford
4. David Gale
5. Jamie Booth
6. Jimmy Davis
7. Peter Smith
8. John Chamberlain

B FINAL

1. Pete Winton
2. Chris Arnold
3. Steve Brace
4. William Mitcham
5. Richard Isherwood
6. David Hill
7. Martin Allen
8. Dave Fletcher

C FINAL

1. Robin Ellis
2. Martin Raven
3. Eric Brawley
4. Paul Picnel
5. Brett Davis
6. Anthony Williams
7. Ian Diboll
8. Mick Langridge

D FINAL

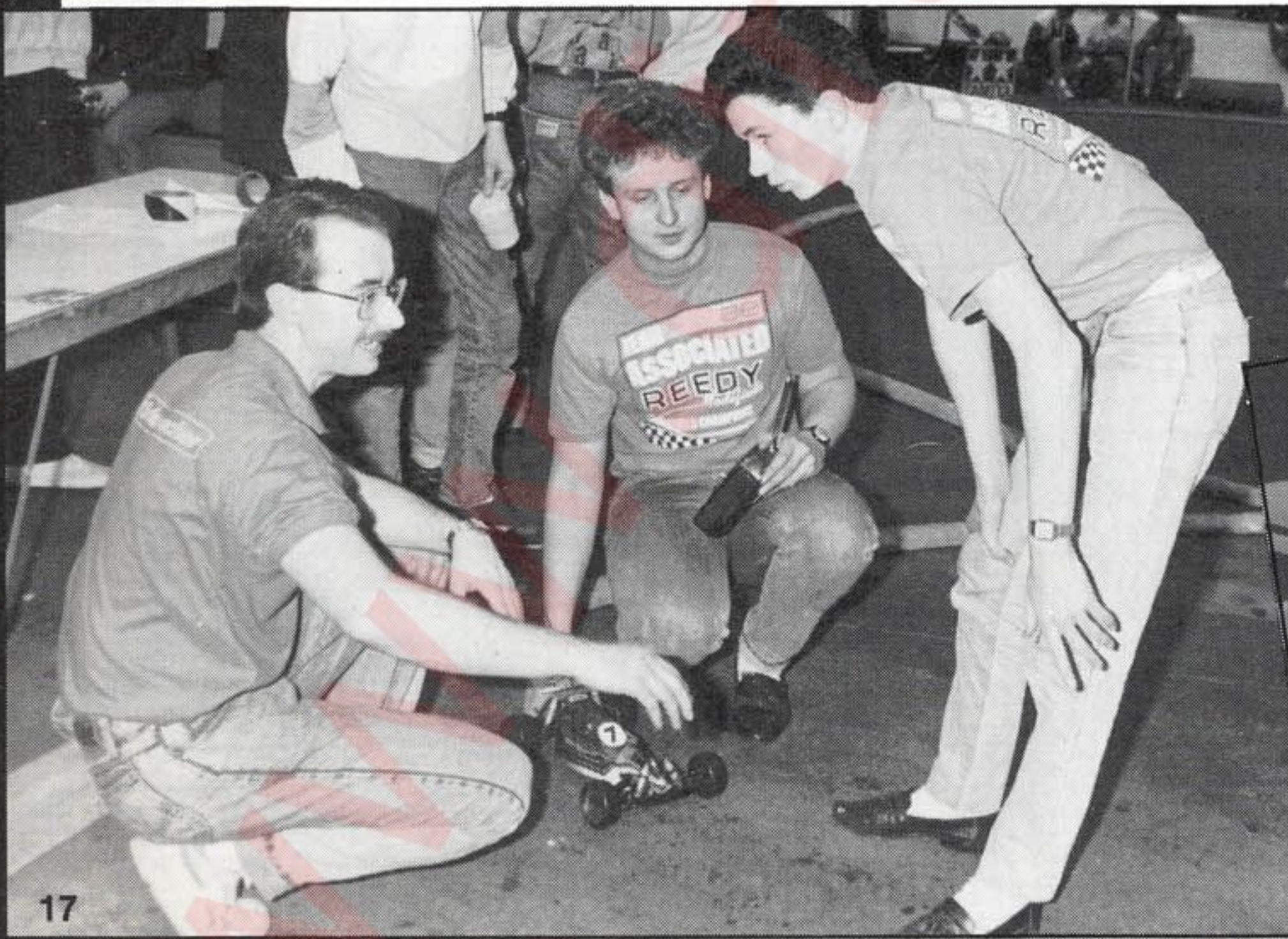
1. Gordon Brice
2. Adrian Brunt
3. Stewart Leckie
4. Mick Childs
5. Richard Stitson
6. Ken Ledger
7. Terry Elleston
8. George Hansor

E FINAL

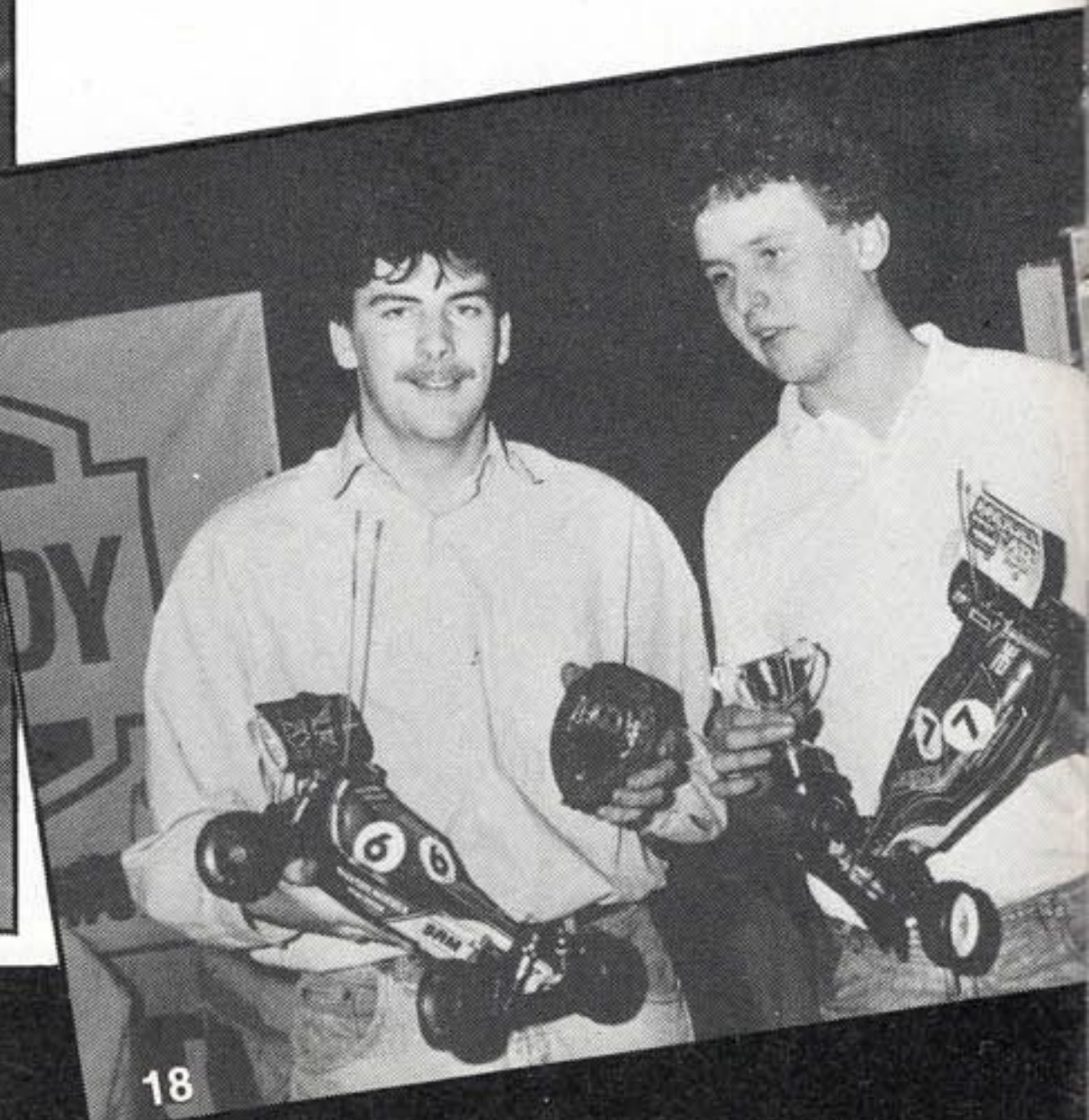
1. Paul Hill
2. Danny Payne
3. John Wilson
4. Spencer Marquis
5. Mark Ellston
6. John Glazebrook
7. Keith Piggott

F FINAL

1. Ian Smith
2. Steve Clarke
3. Edward Roberts
4. Ian Smith
5. Aldo Maretta
6. Spencer Goodson



16. Interesting Pro 10 car raced at Ally Pally built by "Mr Superscratch". 17. Phil Davies, Jamie Booth and right Rory Cull chat about the A Final. 18. Steve Haynes (left) and Jamie Booth 1st and 2nd places - and FTD.



19. Superstar line-up! Rory Cull, Steve Haynes, Lawrence Harris, Jamie Booth and Keith Chaplin share a joke. 20. Pro 10 A final line-up L to R Phil Davies, Jim Davies, Jamie Booth, Mark Barford, Dave Gale, Pete Smith, Glyn Pegler and Mr Rallycross John Chamberlain. 21. LWB Optima Mid in action. 22. Phil Davies talks motors with Jamie Booth.



Name	Q	F	Car	Motor	Cells	Speed Control	Servo	Tyres Front	Tyres Rear
J. Booth	1	6	CAT	Reedy Pink Dot	Schumacher SCE	Nosram International Pro	KO FET	CAT 3 Row Spike Soft	CAT 4 Row Spike Soft
P. Davies	2	1	CAT	Reedy Pink Dot	Schumacher SCE	Nosram International Pro	KO FET	CAT 3 Row Spike Soft	CAT 4 Row Spike Soft
W. Mitcham	3	4	CAT	Technigold Plus	SCE	Nosram Exterminator Pro	Multiplex Nano B/P	CAT 3 Row Spike Hard	CAT 4 Row Spike Hard
R. Cull	4	2	CAT	Reedy Pink Dot	Schumacher SCE	Nosram International Pro	KO FET	CAT 3 Row Spike Soft	CAT 4 Row Spike Soft
L. Harris	5	5	CAT	MG 13 Double Ultra	Parma SCE	Nosram Enhanced	KO FET	CAT 3 Row Spike Soft	CAT 4 Row Spike Soft
S. West	6	7	CAT	MG 15 Double Ultra	Keil SCE	Nosram Exterminator Pro	KO FET	CAT Block Hard	CAT Block Hard
A. Carter	7	3	CAT	Parma 16 Double	Parma SCE	Radio Active Photon	Futaba 131SH	CAT Block Hard	CAT Block Hard
C. Drecher	8	8	CAT	Reedy Pink Dot	Laser SCE	Vortex	KO FET	CAT 3 Row Spike Soft	CAT 4 Row Spike Soft

On TEST

Nosram Exterminator

If there is any regional dominance in the electronic speed controller market then it would be fairly simple to say that in the West of England the *Nosram* name is king.

Racers around the Malvern, Worcester and Herefordshire area would not countenance using anything else such is their loyalty to the man who has been producing some of the best state-of-the-art controllers money can buy.

Fortunately for Nick Marson, regional fame has translated into National awareness by virtue of the fact that numbered amongst the users of his products are a few of the top drivers. Jamie Booth, Rory Cull, Stevie Haynes and so forth have given their seal of approval to *Nosram* making the range of speed controllers one of the most popular in the

country.

In the past couple of years speed controller technology has progressed in leaps and bounds. Keeping up with the innovations is costly and involves a lot of research and development time. If you want the best invariably you have to pay for it and one thing you can say about *Nosram* speed controllers - cheap they ain't!

The controller on review here is the International Pro which will set you back approx £95.00. It's worth it however if you are looking for a controller to really do the business. There are cheaper *Nosram* controllers available like the Enhanced speedo at a mere £70. The

beauty of this is that you can uprate the unit to a higher specification as your bank balance gets over the shock.

The features list of the 'Pro' however is mouth-watering and includes: eight high-spec FETs; fully proportional forward and brake; FET brake; voltage multiplying circuit for increased FET efficiency; independent rate adjustment for both forward and brake; Fet protection circuitry during fault conditions.

Also (there's more) the 'Pro' incorporates an extra wire to facilitate the fitting of an on/off switch or separate receiver pack.

The technical specification

reads thus:

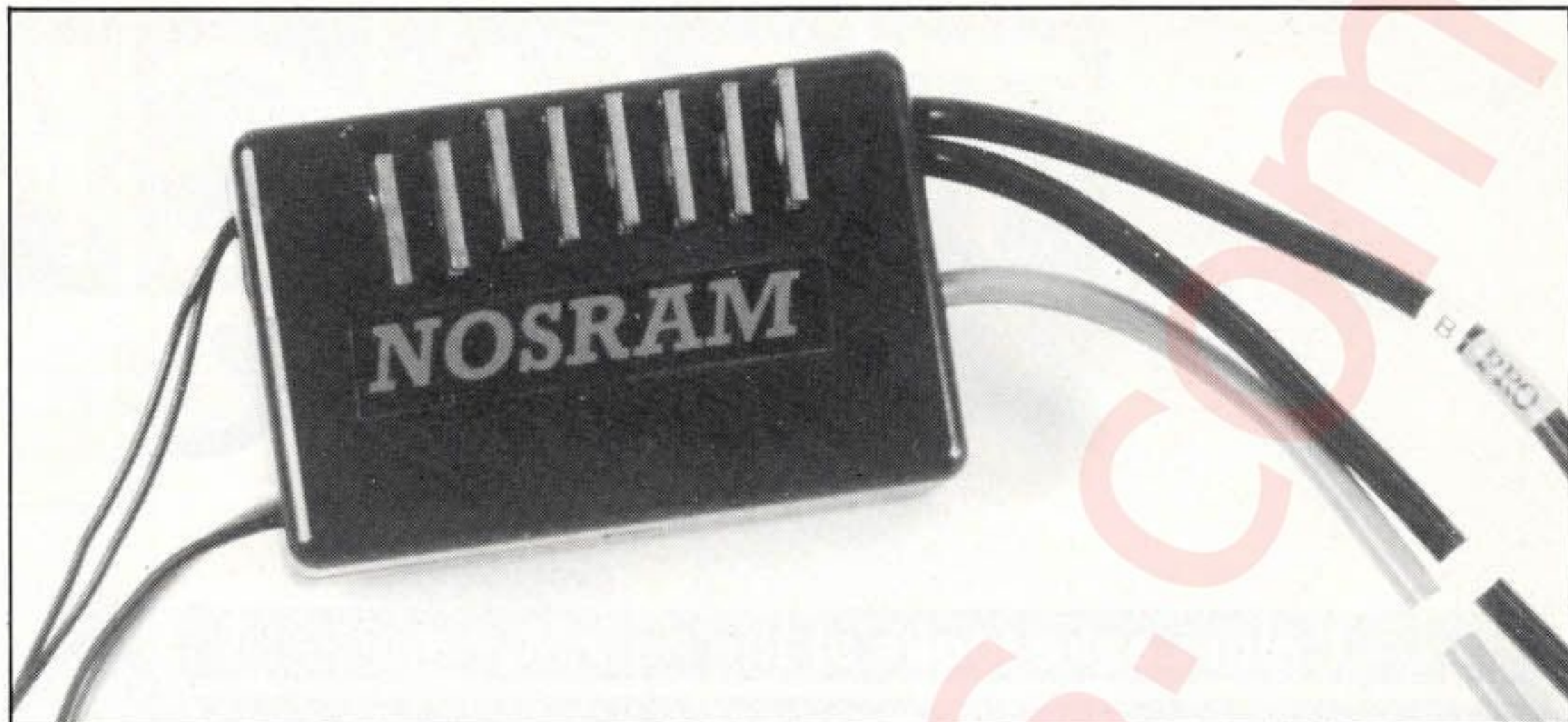
Max. continuous current:
300Amps.

Max. instantaneous current:
960 Amps.

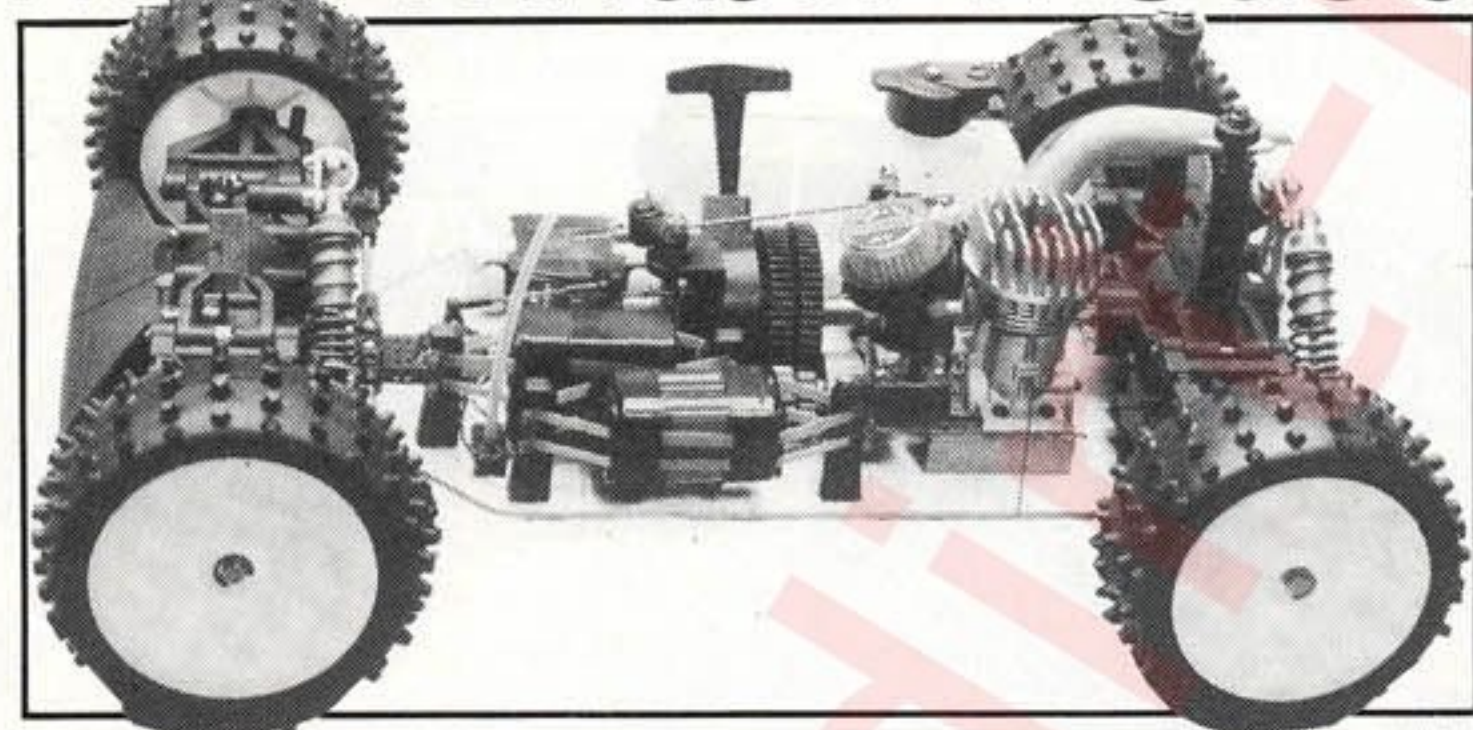
Voltage drop with 12 Amp load:
0.021 volts.

Max. number of cells: 10.

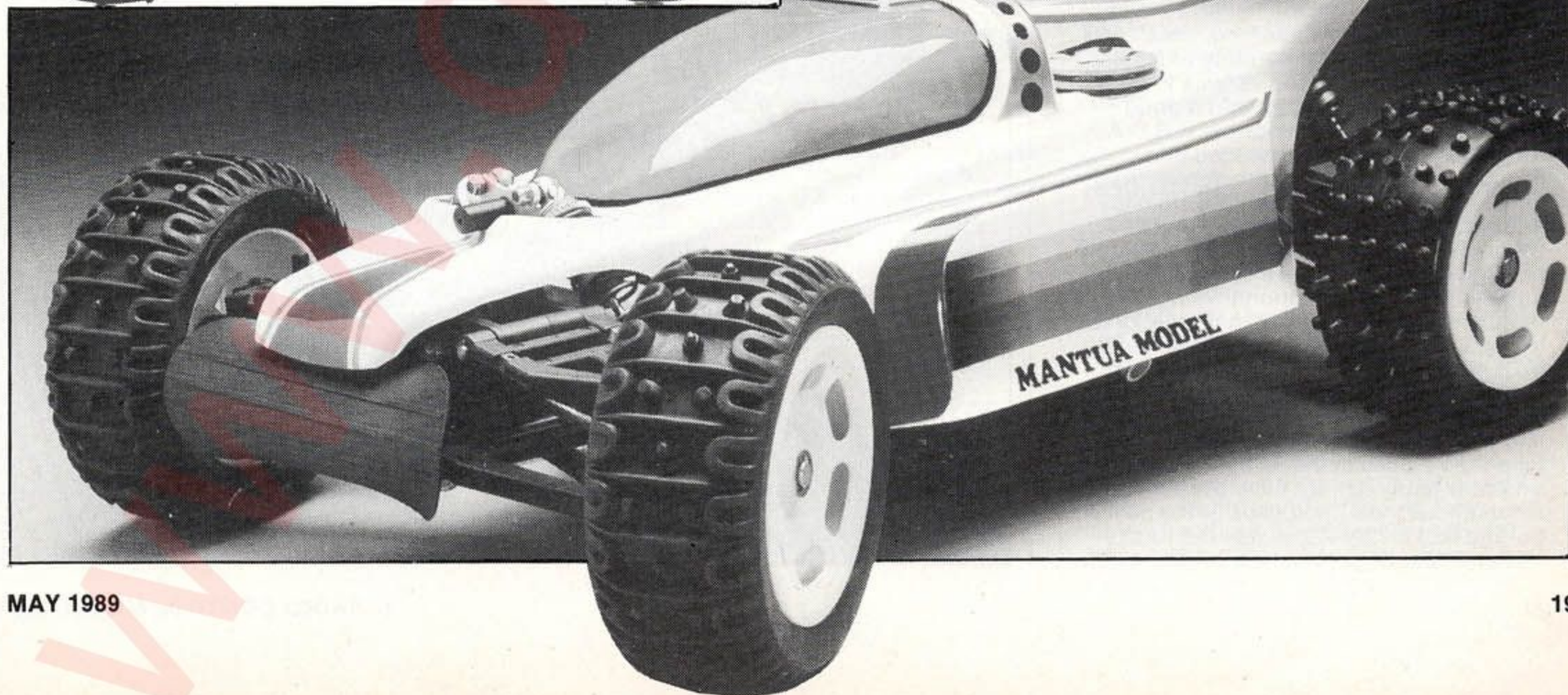
The 'Pro' is also very compact and extremely well made. Unlike the normal tradition of sealing the electronics in shrink wrap the 'Pro' has a tough protective box around it. The FETs poke through the lid to allow air to keep them cool. Because of the small size the 'Pro' will just about fit into any car quite easily, even a short wheelbase 'CAT!'



New Rallycross Cars From Windsor Models



A new range of economically priced Rallycross cars is soon to be available from the Windsor Model Shop. The range of 'Mantua' cars and engines include a unique 2WD car featuring a pull start system for around £125.00 to a full 4WD car from around £200.00. Mantua are certainly not newcomers to the Rallycross scene being present World Champions. Windsor will be importing a full range of cars, engines and accessories for the range. For more details call Windsor Models on 0753 856321.



TRACK

Torque

Colin Leake looks at the new Mendip circuit and some PRO 10 developments

Talk over the winter has been of an increased level of support for eighth scale circuit racing. *Elite Models* in particular claiming to have sold a considerable number of cars either to new drivers or to drivers returning to the fold. I gather that a considerable number have also been tempted by the low prices at which *Serpent* cars, brought in by *Ripmax*, have been sold in the model shops.

The attendance at this first meeting of the season tended to bear this out. We turned up at about ten expecting to see the normal sort of numbers that one would expect at an open club meeting. As we drove through the gate at the perimeter of the circuit I could hardly believe my eyes. The pits were packed, and with the few hours of daylight available at this time of year, we were only just in time to have our entry accepted. A turn out of some 70 or so drivers, mainly from the south, gives some indication as to the numbers we may expect at National meetings this year. Drivers will be well advised to get their entries for the B.R.C.A. National Series meetings in early. For the first time that I can remember we could well have meetings that are over subscribed.

What's even more interesting is that over and above the impressive number of drivers who had actually entered I talked to many more who have bought cars but not built them yet and had only come to watch. Add to that those drivers who have not yet got their 1989 cars and the Northern drivers who, with the exception of Steve White, did not travel down to what was after all a one-day club meeting, and you have some idea of what 1989 should be like.

I must say that this meeting, which was run to the normal club formula of fastest drivers qualifying for the various finals, brought home to me just what a good system we have for the normal B.R.C.A. rounds, with the drivers seeded into groups, and the skill factors applied to the qualifying times. The Mendip Club had arranged for four finals to take place, which under normal circumstances would have given most drivers a chance to qualify. With the exceptionally large numbers entered it meant that most of the less skilled or experienced drivers were frozen out with no chance of making a final. Drivers who would normally have had to qualify for the A Final and had a bad practice simply found themselves filling the places in the lesser finals.

I know many drivers have been heard to moan about their handicaps in the past, but the fact is that if this was the form at National Meetings then new or less-skillful

drivers would soon get fed up with travelling hundreds of miles to the meetings. We would then have dwindling attendance and few new drivers coming through.

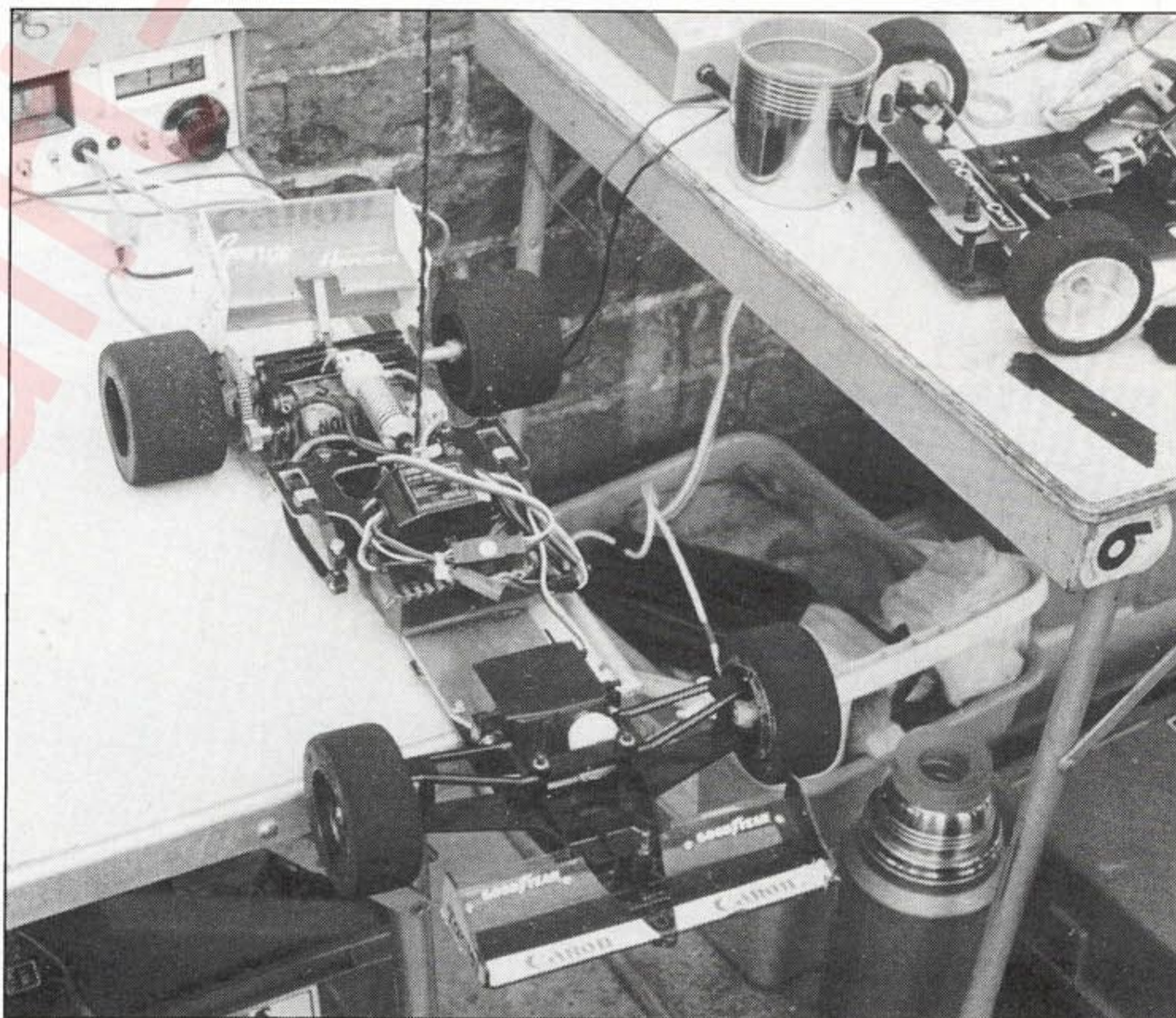
No doubt one of the reasons for exceptional attendance was the fact that Mendip have relaid their track, making substantial changes in the process. With the E.F.R.A. Grand Prix taking place there this year I know many drivers want to get as much driving in on the new track as possible.

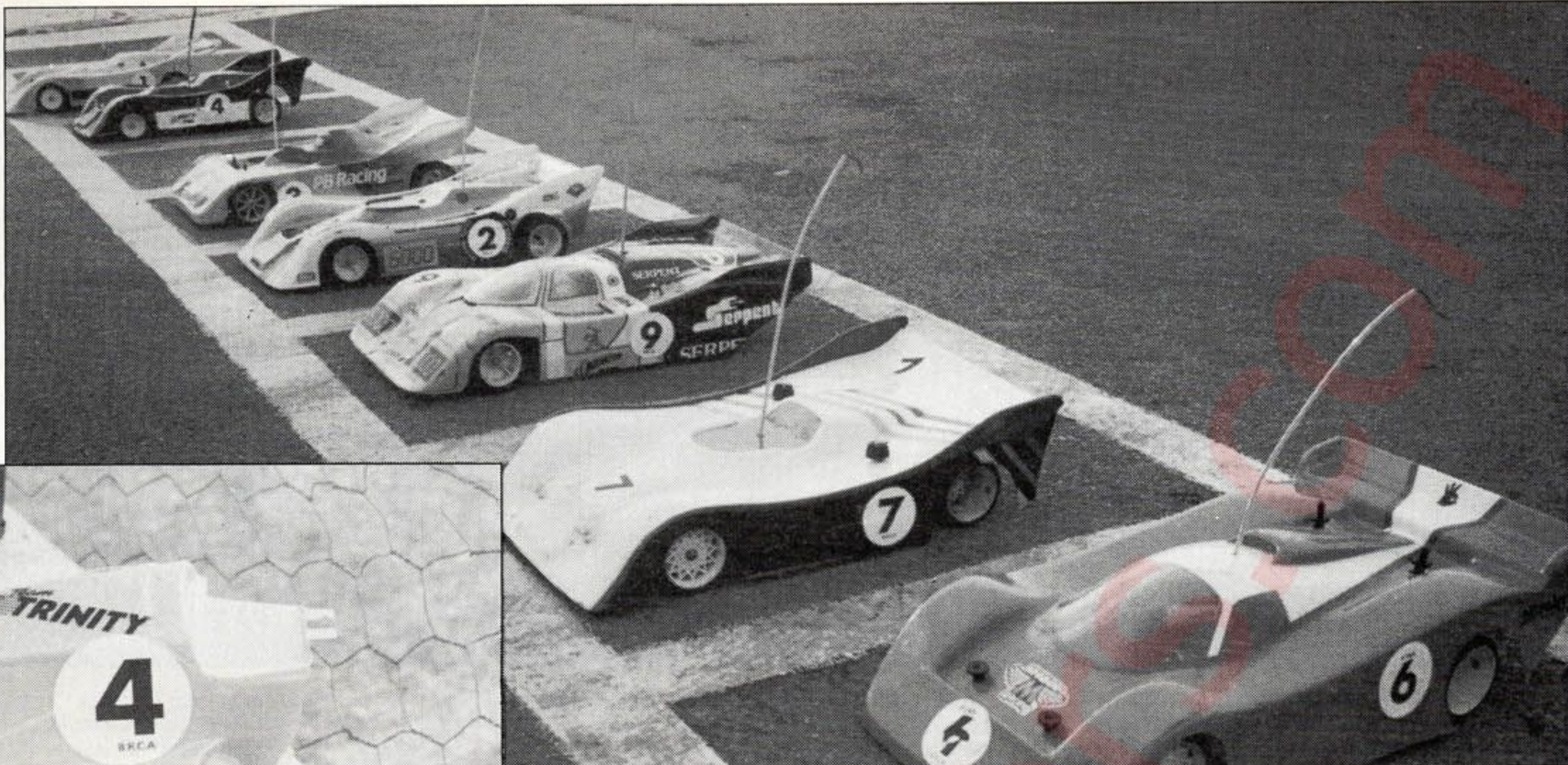
Main changes

Mendip have basically made three changes to the circuit layout. Perhaps the most important of these, and certainly the most noticeable, has been to move the pits from their old position to a new one under the drivers' rostrum. It obviously helps the drivers in that they can now look down and get a clear view of what is going on in the pit lane. However there is even more to it than that. The Mendip Club have obviously put a lot of thought into the



planning of the new pit area, particularly with regard to the entry and exit points. The entry lane has been positioned just





Bottom left: George Hansons "Road Wizard". Left: 'Optima Mid' converted for circuit use. Top: Purpose built PRO 10 cars on the start line.

at the entry of the hairpin bend in front of race control. Most drivers take this bend with a very tight line, which means that those intending to enter the pits can slow down and run wide to line themselves up with the entrance without interfering with the race. The entry point itself and the lane running down to the pit area is fairly narrow so that drivers are forced to slow down and hence enter the pit area at a sensible speed. I must say as a mechanic I much appreciate this.

Equally sensible the exit is on the outside of a bend well off the normal racing line. The drivers have to make a 90° turn to line up with the exit so once more they are slowed down, thus giving them time to check the traffic before exiting out onto the track.

The second change is to the latter part of the infield. It's difficult to describe just what they have done. Effectively the bends leading into the long sweeper, that itself leads on to the main straight, have been changed to slow the cars down. This means that drivers have to take the sweeper slower and hence have more time to line themselves up correctly for the straight. I get the impression that the exit of the sweeper has been slightly changed as well to make it easier. It all certainly worked. The tendency for some drivers to get their entry onto the straight wrong and drive their cars flat out into the circuit fencing, with disastrous results, seems to have gone.

The third major change has been to the very fast bend at the end of the straight. This has now been quite steeply banked. As chief financier, manager and mechanic of Team Leake I'm not all that happy with this one. Both my lads, along with most other drivers, seem to have decided that the fastest way around is to brake impossibly late, take the first part of the bend high on the banking within an inch or so of the edge of the track, and then dive down for the second part of the bend. True the drivers seemed to enjoy it but I've got enough grey hairs already without watching them do that for lap after lap. Seriously, although it looked hazardous, it seemed to work very well. I saw fewer cars slamming into the boarding at the end of the straight with that sickening dull thud, that used to be an all-too-common sound on the old circuit.

All in all the changes seem to have been well worthwhile. Needless to say with their experience the club have chosen the best material for the top surface and ensured that the track has been laid flat and true with no hidden hazards to throw the cars unexpectedly off line and spoil the racing.

The new track has a mixture of fast and slow sections, which makes the racing interesting. It provides a true test of the drivers' skill without placing an undue premium on engine power. Yet at the same time it produced races that are fast and entertaining to watch. I'm not sure whether it was due to the new track design, or the conditions, but certainly a feature of the day was the closeness of the racing.

Conditions started wet and remained damp throughout the day. MRC Tyres were the thing to have in the first round of qualifying with Arrows Whites taking over as the grip built up on the track. The gradual improvement of the grip meant that times improved throughout the day, and qualifying positions were very much decided on the last round results. This produced a number of anomalies with drivers who would normally be found in the A Final competing down in finals as low as the C.

Steve White set F.T.D. with his *Serpent* closely followed by the *Belsport Serpent* of Steve Leake. Super qualifying star, Dave Dixon, just could not get a good enough run in the final round and, despite obviously being the fastest car on the circuit had to be content with third place.

Every time I suggest that eighth scale circuit racing is the ultimate form of model car racing I get taken to task, usually by the rally cross fraternity. Still, judging by the number of the top Rally cross drivers who are turning up for circuit meetings I must be right and the message must be getting through. Super rally cross star and three times National winner James Weedon is the latest driver to have a go. Considering that this was his first attempt in this upper echelon of model car racing his narrow win in the D Final was very creditable. (That should stir up a few indignant rally cross drivers again). Seriously, considering how close the racing and qualifying times were, it was a fine effort with a car that he has no experience of setting up. I understand that his available time for racing is going to be limited in 1989 and I'm not sure what his plans are, but clearly if he does a few more meetings he will be up there with the rest of the rally cross drivers who seem to have taken to doing the odd bit of circuit racing. Proving that in the end it's the skill of the driver both in terms of car preparation and driving that count.

The computer failed as the D Final finished, so it's only fair to say that there is room for doubt as to the accuracy of the results. Officially Andy Hill was adjudged to have been a close second with Mo Cox and Chris Deakin fourth.

It seems that when I look back over last year's results every time Shaun Leake and Tony Gilson have met in a final they have been so evenly matched it has produced a battle royale. At the Ever Ready Nationals last year only one tenth of a second separated them, producing the closest result of the season.

Into the C

This year they seem determined to renew the rivalry. Both drivers found themselves relegated to the C Final, by dint of poor runs in the final qualifying round. They promptly set about producing the closest and most hard fought race of the day.

At the start Shaun took advantage of his pole position to move off into the lead. Tony made short work of slicing his way through the field from fourth place to move into second spot behind Shaun. The gap was just two seconds. It remained almost exactly that for the first five minutes as both drivers sped around the circuit taking fast but careful lines. Neither



were prepared to risk making a mistake that might hand the other an advantage by pushing on to break the deadlock. Ray Killgallon had no such inhibitions. He was, as usual, just out to enjoy himself, and was happily pushing his car to the very limits of adhesion. He managed to hang on to the two leaders, making up a three car procession that sliced its way with clinical precision through the rest of the field.

At the first and only pitstop of the ten-minute race the leading positions were changed but the deadlock remained unbroken. Shaun was the first to come in for fuel and was slightly baulked by another car. Tony, sensing that this had given him an opening, really went for it with a very fast stop which saw him emerge from the pits two seconds ahead of Shaun.

Just as in the first half of the race the two drivers were so evenly matched that the cars might as well have been tied together with string. The gap remained precisely two seconds for lap after lap.

With one minute to go, Shaun obviously decided he had nothing to lose and visibly began to press on. He was skating perilously close to the edge of disaster, with the tail of his car gently sliding wide on most of the bends. It was just enough

to allow him to start closing the gap. Tony attempted to respond and in so doing made the smallest of mistakes which allowed Shaun to close right up and sit on his tail.

With less than a lap to run it looked as if Shaun would have to settle for second place. However the pressure he was exerting took its toll. Tony left the smallest of gaps when he went a little too wide on a bend, and Shaun was through. There is no doubt that had he wanted to Tony could have slammed the door shut on Shaun and taken a chance on who would have come out of it best. However, in a gesture typical of the sporting manner which has become the norm in eighth scale circuit racing, having left the gap in the first place he moved over and left it open. It meant he was off line for the corner that followed and that allowed Shaun to gain a safe two second lead which Tony had no hope of pulling back in the half lap that remained.

Ray Killgallon's spirited drive earned him a well-deserved third place just over a lap behind the leaders with Adrian Hill fourth a further lap behind.

The B final looked like a London benefit with only one driver competing who was not a member of the London Club. Roland Leonard was another driver to find himself languishing in a much lower final than he

West Burton circuit is perfect for PRO 10 use. Below: PB racing's 'Sizzler' now a popular choice seen here in standard form.

would normally compete in. On paper it looked as if he would run away with the event. However the rapidly improving Pete Margetts had other ideas. Pete seems to like the Mendip track, and kept up the pressure on Roland for the whole of the final.

Roland managed to stay ahead but there was only half a lap between the cars at the end of what was a splendid race for both drivers.

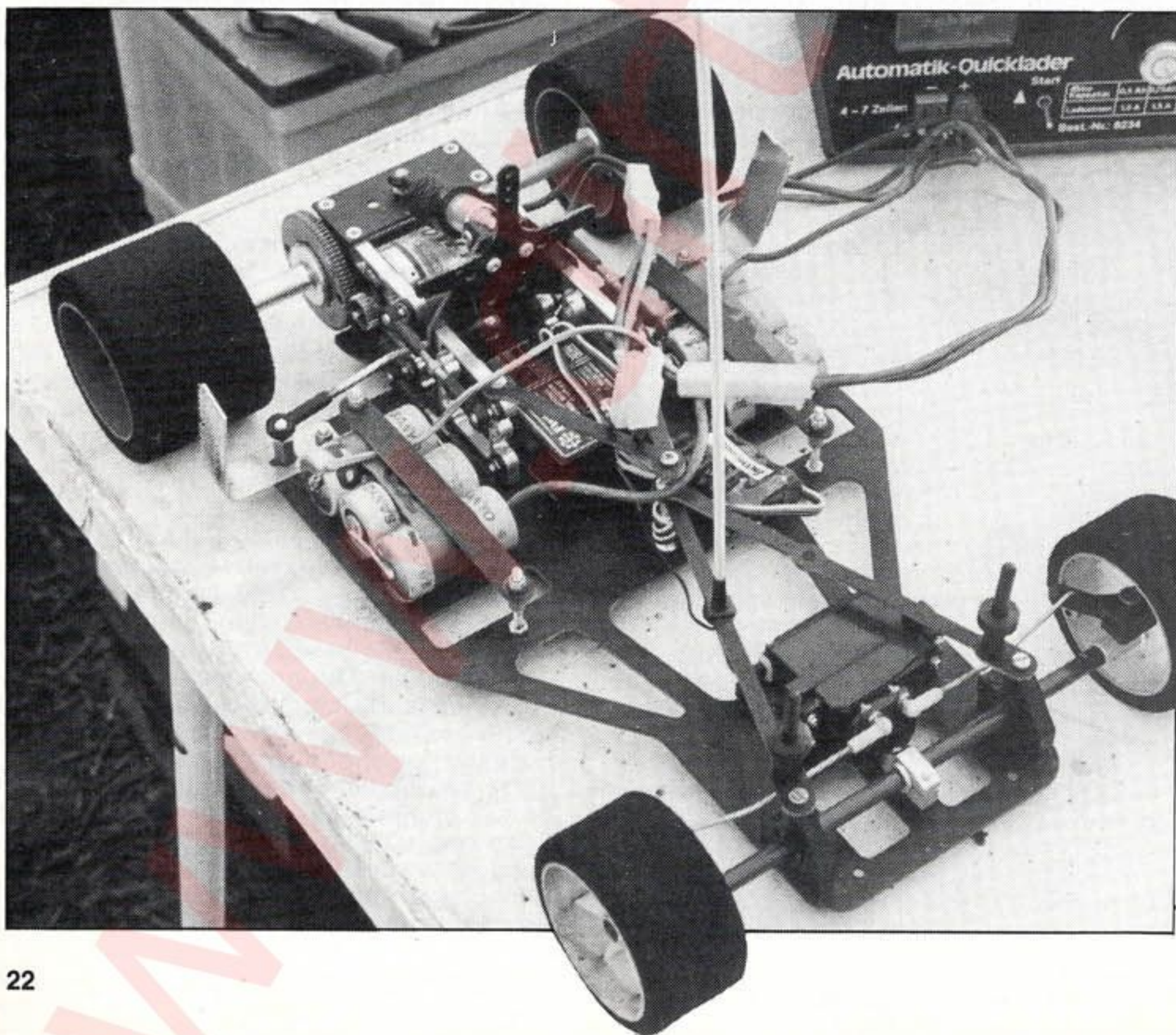
The real fireworks in the B Final was taking place behind the two leaders. The drivers involved were changing places so frequently that it was almost impossible to follow what was going on. In the end it was John (Mr Pitstop Models) Diver third, Alex Jordan fourth, Jason Varley fifth, Mick Kruschell sixth, and Ian Anderson seventh. Less than 12 seconds separated those five drivers.

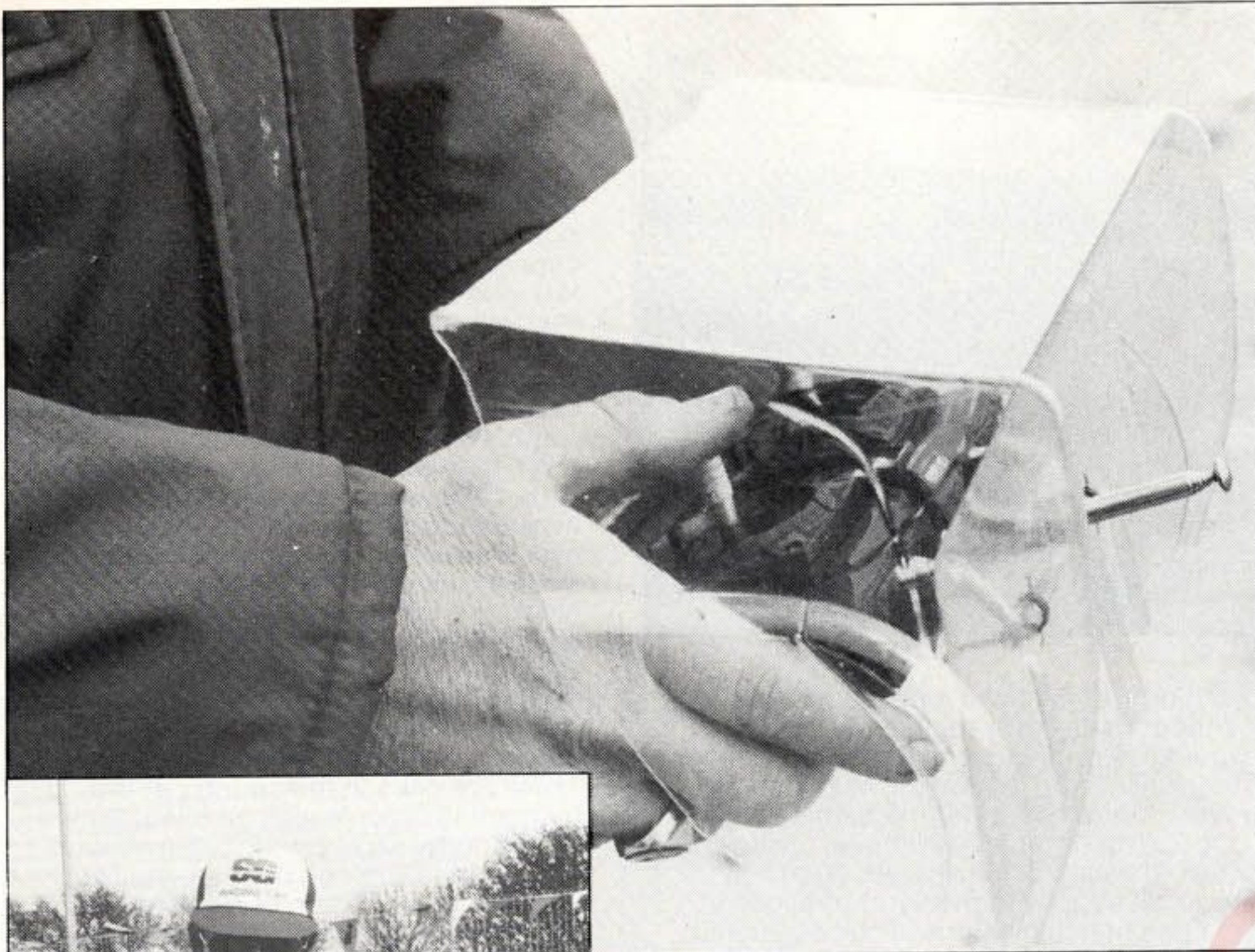
With the light rapidly fading the A Final was shortened to 15 minutes. At the start the two fastest qualifiers, Steve White and Steve Leake, streaked away into the lead in line astern formation apparently pulling away from the rest of the field. I turned to walk back to the pits so I never saw what happened but when I next turned around as the cars came screaming past the pits the pair of them were trailing the rest of the field and PB driver Dave Dixon was holding a lead he was not to relinquish for the remainder of the race. According to my Steve afterwards the problem was just one of those things that occur when three drivers try to occupy a given spot on the track simultaneously!

The running order was now Dave Dixon, High Rimron second and Garath Bell. Steve White began to make up lost ground and by the 11 minute mark had worked his way up to third place when he was forced to retire with a broken steering servo. Drivers of Steve's calibre don't need to make excuses. I missed it but Steve told me later that he simply drove into a wall. That means I've missed two events of major significance lately. Halley's Comet and Steve White making a mistake!

For the remainder of the race Dave continued majestically on his way to a well-deserved win, followed by Hugh Rimron, who drove a magnificent race to finish second, only seven seconds behind Dave. Dave Preston drive his usual unflappable race to take third place. Steve Leake was steadily closing on Dave Preston but had to settle for fourth place as time ran out on him.

As usual at Mendip it was a very enjoyable well-run meeting. With drizzle falling for most of the day the covered pits were most appreciated by all of us.





In the gathering gloom (sorry about the photographs Mr. Editor. I remembered to take a flash gun but forgot the lead!) the trophies were presented by Mr Beman Blake the Principal Tourism Officer of Woodspring District Council. The Mendip Club had followed their usual procedure with regard to trophies so that those for the first three places were very nice-looking cups that were well worth winning with folding plaques for the remainder.

New bits and pieces

Not much new on the equipment side yet but it was nice to see the *Picco* "F1" engine, that is so popular in France, challenging the established might of the *Serpent*, *Nova Rossi* and *OPS* engines. The second and third fastest qualifiers and the winner of the A Final were all using this engine. The acceleration it seems to have off the line is impressive. The distance to the first bend from the starting line is not very great, yet Steve Leake's *Picco*-powered car seemed able to rocket away to give him a safe two or three feet on the rest of the pack everytime. Impressive when said pack contains drivers such as Steve White. It certainly gave him an advantage by ensuring that he had three clear qualifying runs.

Bob Errington was present but without a car. He amused himself instead by helping to run the meeting. This gave rise to two questions, both of which remain unanswered. At the start of the meeting the question on every driver's lips was "What car will Bob be driving this year?"

As the meeting progressed and Bob's comments over the PA system became progressively more zany the question changed to "What's he got in his coffee?". No one knows what, if anything, it was, but he was certainly becoming more and more uninhibited as the meeting progressed.

D Final

- 1 James Weedon
- 2 Andy Hill
- 3 Morris Cox
- 4 Chris Dealin
- 5 Ray Mitchell
- 6 Adrian Malin
- 7 Roger Doran
- 8 Denis Jones

No laps recorded due to the computer failure.

C Final

- 1 Shaun Leake, 26 laps
- 2 Tony Gilson, 26 laps
- 3 Ray Killgallon, 25 laps
- 4 Adrian Hill, 24 laps
- 5 D. Haskill, 23 laps
- 6 P. Davies, 23 laps
- 7 Simon Rimron, 23 laps
- 8 Dave Jones, 18 laps

B Final

- 1 Roland Leonard, 26 laps
- 2 Pete Margetts, 25 laps
- 3 John Diver, 24 laps
- 4 Alex Jordan, 24 laps
- 5 Jason Varley, 24 laps
- 6 Mich Kruschell, 24 laps
- 7 Ian Anderson, 24 laps
- 8 Rolly Hamblin, 22 laps

A Final

- 1 Dave Dixon, 40 laps
- 2 Hugh Rimron, 40 laps
- 3 Dave Preston, 39 laps
- 4 Steve Leake, 39 laps
- 5 Gareth Bell, 37 laps
- 6 Dave Swift, 35 laps
- 7 Steve White, 28 laps
- 8 Mark Stockford, 3 laps

B.R.C.A. Calender

For those of you who are not members of the B.R.C.A. the calender for 1989 is as follows:

- March 26th, Southampton*
- April 9th, British GP (Mendip)
- April 30th, Tibshelf*
- May 14th, Aldershot
- May 28th, Euro 'B' Saloon (Aberdeen)*
- June 11th, Halifax
- June 25th, Crystal Palace
- July 9th, World Championships (Holland)

Left: Interesting use of a bodyshell! - Keeping rain off the transmitter. Below left: Bob Errington - who this year will drive a Ripmax 'Blitz'.

- July 16th, Wombwell
- July 30th, Mendip
- August 6th, Euro F1 (Spain)
- August 13th, Crieff
- August 27th, British Nationals (Lilford)*
- September 10th, West Burton
- September 24th, Bournemouth

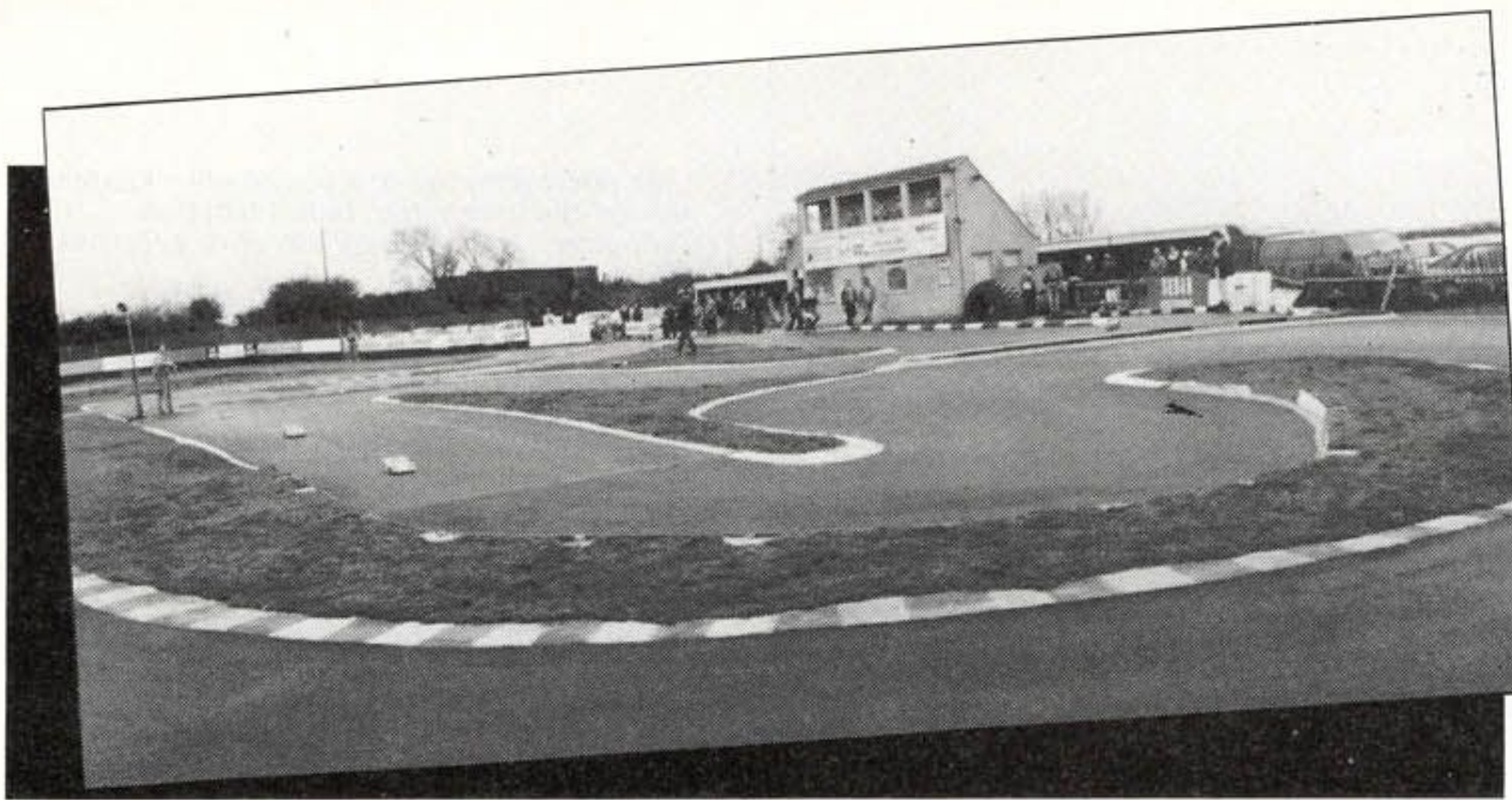
Meetings marked * three-day meetings. If you have never seen one eighth scale circuit cars in action before take note of the dates and venues and come along to watch. I know a few small model car clubs took my advice last year and organised a day out when the circus was near them. From what I hear their members thoroughly enjoyed it. If you're running a small club, especially if its members tend to be the younger generation make it a day out. I can guarantee you a day to remember. The sheer speed of the cars, combined with the smell and the scream of the racing two-strokes will stay with you for the rest of the season. You'll see the top drivers exhibiting levels of skill that are beyond comprehension.

That's it, my annual commercial over. Last month I gave details of a set of metal belt pulleys that were available for the *Serpent* car from *Elite Models*. I fitted most of them to the car at the time of writing but did not fit the large differential gear until a few nights ago as I planned to rebuild the differentials on both cars after the Mendip meeting. A word of caution is in order. The centre of the metal gear is thinner than the plastic one it replaces. I expected no trouble as this used to be the same with the earlier geared rear end. One was supposed to fit a Teflon spacer washer either side of the gear to stop it moving. In practice many drivers never bothered to do so and got away with it with no problem. I assumed therefore I would not need them with the new pulley. When I tried it I found that it was a false assumption. If you don't fit spacer washers the pulley can move to one side and the belt will at best run only half on the pulley and at worst come off. In my case I also found the differential was not as smooth so I solved the problem by simply fitting one of the old plastic pulleys. Since it was the small ones I was really after I was not unduly worried. The plastic pulley we used in the differential last year was hardly marked when I looked at it. Unfortunately the pulleys are only sold as a set so it is not possible to purchase only the smaller ones.

As rumoured it has now at last been confirmed that the car *Ripmax* will be selling next year is the 'Blitz'. Quite how this ties up with *Kyosho* is not clear but I gather it does in some way.

The actual full driver line-up has not yet been announced, probably because it has not been finalised, but I have just received confirmation that London superstar Dave Dixon will be driving one. Dave also tells me that he is so impressed with his new *Picco* engine that he will be using them all season. You can rest assured of the driver line-up will be a very strong one. It will be nice to see a third car that is competitive in terms of both price and performance taking on the *PB* and *Serpent* cars.

Perhaps now that *Ripmax* have such a car it will put a stop to the futile situation that developed between *Elite Models* and *Ripmax* over the *Serpent* towards the end of last season. Now it should come down to a good old fashioned sales war to be fought out on the race tracks around the country and over model shop counters. It can only do good by heightening interest in the sport and spreading it to a larger



The new look Mendip circuit on the opening meeting.

number of prospective new drivers. I look forward to reporting on it over the coming months.

As for the car itself, as most of you will know by now there is little doubt that it will be competitive. Two of the prototypes made the final at the Euro Champs and one also managed to win the Italian National Championships.

We are sticking to our *Serpents* for the time being but R.C.M.C. will be bringing you a detailed review of this significant new car in the near future written by one of the new team drivers who just happens to be a regular contributor.

Changing to tenth scale circuit cars for a moment as I mentioned before we are working on tyre development both with foam tyres for dry weather racing and pneumatic ones for wet racing. We still have some way to go before the ultimate solution is arrived at and the tyres brought to the market place. It is however beginning to look good. I'm now convinced that finding a rubber that can be used in the dry, without the need for additives, is a near certainty. In fact it's possible that the final tyres may even be better than last year's tyres were with additives! The time-consuming job we now have left is to arrive at foam formulations that will give the correct balance between the front and rear of the car. Equally I'm convinced that the new pneumatic tyres will make it possible to race two-wheel drive flat chassis cars in the wet, provided the electrics can be sufficiently well waterproofed. It's likely too, of course, that others are working on at least foam tyres for use in the dry as well and if we are beginning to find the answers it's not unreasonable to speculate that they must be as well.

Still on the subject of tenth scale circuit racing I'm beginning to hear rumblings about people with vested financial interests taking control of the sport for their own ends. Actually it is to some extent true. What is not correct is that there is something sinister and understandable in this. I find it entirely natural and, for the most part, see nothing wrong with it.

If one goes back to the very start of the whole sport of model car racing it was the same. I seem to remember that Wes Rayner of *Mardave* build the very first proper track in the country. Keith Plested and Ted Longshaw were certainly very active in those early days as well.

I can take some modest credit for helping to get tenth scale circuit racing off the ground. I gave it a plug in the column and initiated and ran the first four trial meetings at Crystal Palace. Apart from that those people at whom the finger is now being pointed took over and made the running. It was they who had the courage to import, or manufacture the cars we race. It was they who were to a large extent behind getting the clubs organised, and who bore the expense of

running teams to show the cars potential. Without them tenth scale circuit racing would never have got off the ground. Now they have taken the logical next step and banded together under the banner of the B.R.C.A. to organise a National Series in which the cars can be raced. What's more it was all done with plenty of publicity at an open meeting where all were welcome to attend and make their views known.

We should be thanking them and applauding their efforts rather than pointing accusing fingers. George Land of *Parma* in particular has been tireless in his efforts to establish the sport.

There are signs that both the two wheel and four wheel drive camps are beginning to abandon their positive attitudes towards their own products in favour of attacking the other camp. It's both a shame and unnecessary. Both forms of tenth scale racing have much to recommend them and there is certainly room for both to exist in harmony.

Four wheel drive electric circuit cars are on their way, there's no doubt of that. Most clubs tell me that they will cater for them so it's no use claiming they are illegal. They are not. They simply do not conform to the specification required for the present B.R.C.A. series.

Nor does the claim that they will be too expensive to buy initially hold water. I doubt if there will be much in it in the end. Certaining anyone whose company is currently successfully involved in selling fiendishly expensive carbon fibre chassis, and recently managed to spoil my breakfast, when I realised the tenth scale wheels I had ordered were priced a massive 76% higher than a set of *Serpent* eighth scale wheels, and no less than 102% more than *PB 'Sizzler'* wheels, is not in a position to start shouting about price. A definite case of the pot calling the kettle black.

As I see it the prognosis for the future health of outdoor flat circuit racing has never been better. Eighth scale is going

through a massive resurgence in popularity. Tenth scale flat chassis circuit cars established themselves at club level last year and now have a National Series, that will without doubt be enthusiastically supported. Tenth scale four wheel drive circuit cars with full independent suspension will no doubt follow the same route, establishing themselves first at club level, then at National level.

By 1990 we could see all the presently available circuits being raced on virtually every weekend and clubs' coffers being swollen not only by these frequent club meetings, but by hosting three, rather than one, lucrative National Series Meetings as well.

With that kind of money available we may even be moving into an era when new purpose built circuits will begin to appear. There are gaps in the country at the moment that could well be filled. To the West and North of London, the Midlands around the Birmingham area, the North of England in the region of Newcastle, and the South of Scotland around Glasgow and Edinburgh are all areas that could benefit.

Still on the subject of Tenth Scale it seems that information on where to race is hard to come by. If you're running a club that is involved in tenth scale flat circuit racing write to me at R.C.M.C. and let me have the details of where you race and who to contact etc. It doesn't matter whether you are a big existing club that has just started to cater for these cars, just a small band of a few drivers who have gathered together to race them on a local car park, or even a lone enthusiast who wants to start a club. If you send me the details I will be happy to pass them on in Track Torque and give your club a plug. It's amazing how effective this is. I did it last year for the London Club and I'm told the secretary's telephone never stopped ringing for days. The fact is that there are a lot of potential drivers out there who want to have a go, but simply don't know where to go to race.

Changing the subject once again to 40MHz this time. I recently told youngest son Shaun he could have an impressive new radio I was reviewing. I was surprised when he looked a little less than enthusiastic. When I asked him why it turned out that the problem was that the set was on the supposedly desirable 40MHz band. What was worrying him was that he knew there was beginning to be problems with interference. The problems come partly from the use of sets that have not been type-approved and from the

The Pit - same as usual with some familiar faces.



tendency for drivers to switch their sets on, assuming that no one else is on that particular frequency. Race organisers are the only ones who can help with the first problem. The only solution is to ask for 40MHz sets to be brought into race control for checking before the meeting starts and allow only those that have been type-approved to be used.

As regards the second problem the fact that no peg-boards exist makes it difficult. *Belsport* have offered to help. They are currently preparing a board that has clearly-marked plastic badges in place of the normal pegs. This will be used as a normal peg-board but with the added bonus that the driver will be expected to

wear the badge so that if it is not on the board it can quickly be found. The use of such a board should go a long way to solving the problem. I will be taking the board to all the National Meetings we go to and it will be made available to any organising club that wishes to avail itself of it free of charge.

Next month's Track Torque will be written in February, when very little is happening. I shall be looking at what new products I can lay my hands on and as usual bringing you the latest news. As there is likely to be space available I plan to amuse myself, and hopefully you as well, by taking a light-hearted look at some of the items that are on sale in

America. Some are incredible, some are ingenious, and some are both effective and useful yet are so simple you could easily make them yourself.

As I'm feeling generous I'll set the scene and have a little competition with a pair of *Belsport* 'Platinum Rear Tyres' to the first reader who can answer the following four questions.

- 1 What are Dans Dirt Dams?
- 2 What is Dans Banana Lube, and what is it used for?
- 3 What are Dans Dirt Dots?
- 4 Who is Dan?

I'll give you all a clue. The answer to question two is not the one that first came into many of your minds.

New PB Wheels

'Hot off the press' is how the saying goes, but in this case it was a case of hot off the moulding machine. On a recent visit to the *PB* works in Havant I was just in time to see the first *PB*'s new eighth scale wheels produced.

The new wheels have, in fact, been produced as an integrated package which incorporates a new quick release mechanism that *PB* themselves describe with refreshing honesty as *Serpent* like. Having seen one of the new wheels sectioned and lined up with the catch it looks bullet proof to me. Wheels falling off *PB* cars at inopportune moments should become a thing of the past.

The wheels themselves are of a strikingly new and innovative design. To ensure maximum rigidity they have very deep spokes that run nearly the whole width of the wheel. Externally they look strikingly different from any that we have seen in eighth scale racing before. The outer rim has in effect been joined directly into the centre by a solid disk that is part of the wheel moulding. The original intention of this feature was to produce a wheel that was enormously strong where it was most vulnerable, and aerodynamically efficient.

An added bonus, that was not originally planned, is that the stick-on type tyre wall-protectors we all use, can now be redesigned so that they stick to the tyre as usual, but with a reduced inner diameter, can be made to stick to the flat part of the wheel as well, thus preventing the tyre lifting off the wheel at the outer edge. Since, up until now, this has been one of the most common causes of tyre failure it will be a very welcome improvement.

The design makes the wheels look unduly heavy but this is very much an illusion. The fact is that *PB* tell me they weigh virtually the same as those of *PB*'s arch rivals, *Serpent*.

With this new design, *PB* have followed the lead set by others and have adopted the use of a hexagonal drive system front and rear. The drive cups moulded into the wheels are fashioned rather in the manner employed by socket set spanners so that the wheels may be easily and quickly located.

To further ensure rigidity the shaft that protrudes through the wheel is of a stepped design employing two different diameters.

The news, that I am sure will shock many *PB* drivers, is that *PB* are considering dropping their famous red colour in favour of what they describe as a more fashionable one. The final colour has not yet been selected so there's still time for *PB* drivers to band together and resist this change. More especially so if they opt for the horrendous green colour that my sample wheels have been provided in! Mind you, I am red/green colour blind so I suppose it may look as bad to normal people.

Tenth Scale Tyres

I've mentioned before that we would be spending part of the Winter helping to develop a range of tenth scale circuit tyres. Well we've just got back from a tyre testing session at Crystal Palace and the results are beginning to look encouraging. Now that I've thawed out I'll just have time to dash off a brief update to keep you informed as to what is happening.

The tyres we have been testing today are the first of the new *Belsport* tyres based on a similar formulation to their range of *Platinum* foam tyres, that are finding so much favour in eighth scale racing.

We used a *Composite Craft* 'Preditor' for the tests. The day was cold and very windy. It had been we earlier on so the grip available on the track was less than ideal. As we were out to test tyres we used a combination of motor and gear ratio that would let us push the various tyres to and beyond their limits. We subjected them to speeds and rates of acceleration that would not be encountered with a car geared to last a five minute race.

We started out with the kit tyres, as a basis with which to compare the *Belsport* tyres. On these the car was not bad. At least it was correctly balanced and if driven smoothly could circulate the track reasonably quickly. Next we tried using the *Belsport* tyres on the back with the original kit tyres on the front. The result of this was disastrous. The two rubber compounds seemed in some

way to be totally incompatible producing a car that could only be described as weird to drive.

Next Steve took the car out with a full set of the *Belsport* tyres on. The change was dramatic. Now the car became beautifully balanced again and began to circulate the track very rapidly indeed, drawing appreciative remarks from the kids that inevitably gather to watch at The Palace.

When we looked at the trim setting afterwards we realised Steve had been using very little steering lock indeed indicating that under these low grip conditions we could have used more rear end grip, without running into understeer problems.

Based on the encouraging results of these tests, and others that have preceded them, *Belsport* (P.O. Box 2, Great Whitley, Worcester WR2 6LA) have decided to produce a batch of the tyres as tested. They will be priced at £6.50 a pair for the fronts and £7.50 for the rears. It's not yet certain how they will be distributed but they will certainly be available direct from *Belsport* by the time this appears in print and it is thought likely that arrangements will be made to have them on sale trackside at the various venues around the country. An alternative softer rear tyre, made from the same successful rubber compound, will be blown and introduced later as soon as the necessary testing can be completed. This alternative tyre should provide the extra rear end grip that may

prove to be beneficial in low traction conditions.

The tools for the ultra low profile pneumatic tyres are nearly complete. Tyres suitable for dry as well as wet weather racing are planned. That's the good news. The bad news for some is that they have been designed to suit 50mm diameter wheels.

What it amounts to is that if you want to race competitively in the wet, then it's likely that you will need to make sure you can obtain 50mm diameter wheels that will fit your car and still keep it within the legal width. *Composite Craft* and *PB* wheels are the only ones I have come across that are 50mm diameter at the moment. They will bolt on to *Parma* cars, but it will be necessary for drivers to check the width, as the location of the centre hub within the wheel is different.

Weather permitting we hope to have started testing these tyres in time to bring you more information next month. We are confidently expecting the patterned ones to work well in the wet. What will be interesting is to see how the slicks will work in the dry. On four wheel drive cars the problem has always been that the rear tyres produce so much grip that massive understeer is the inevitable result. With these sensitive lightweight two-wheel drive cars that seem to have trouble finding enough grip on the rear it may very well be a different story. Only the forthcoming tests will provide the answer.



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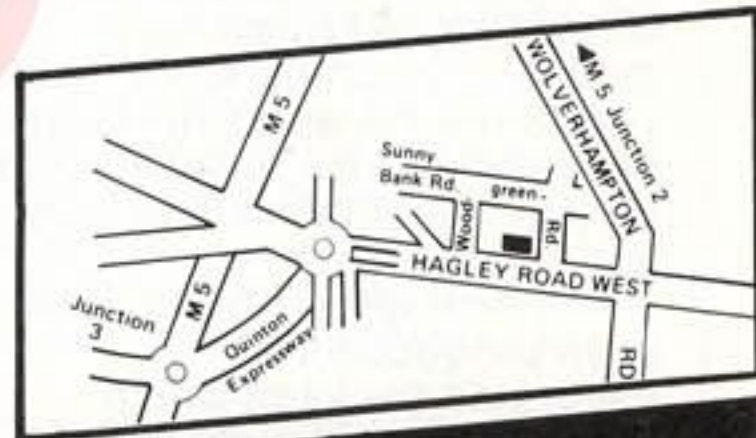
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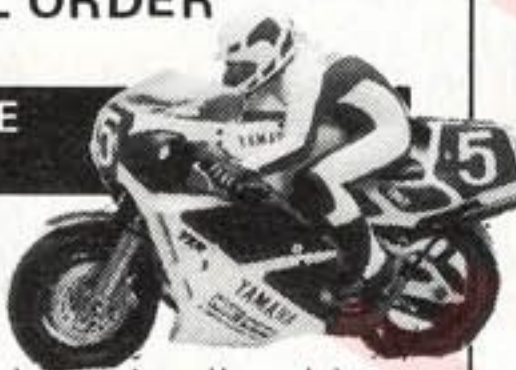
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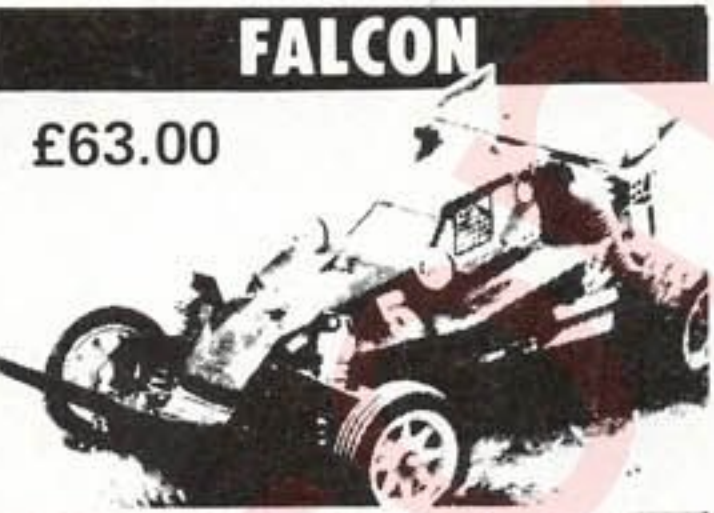
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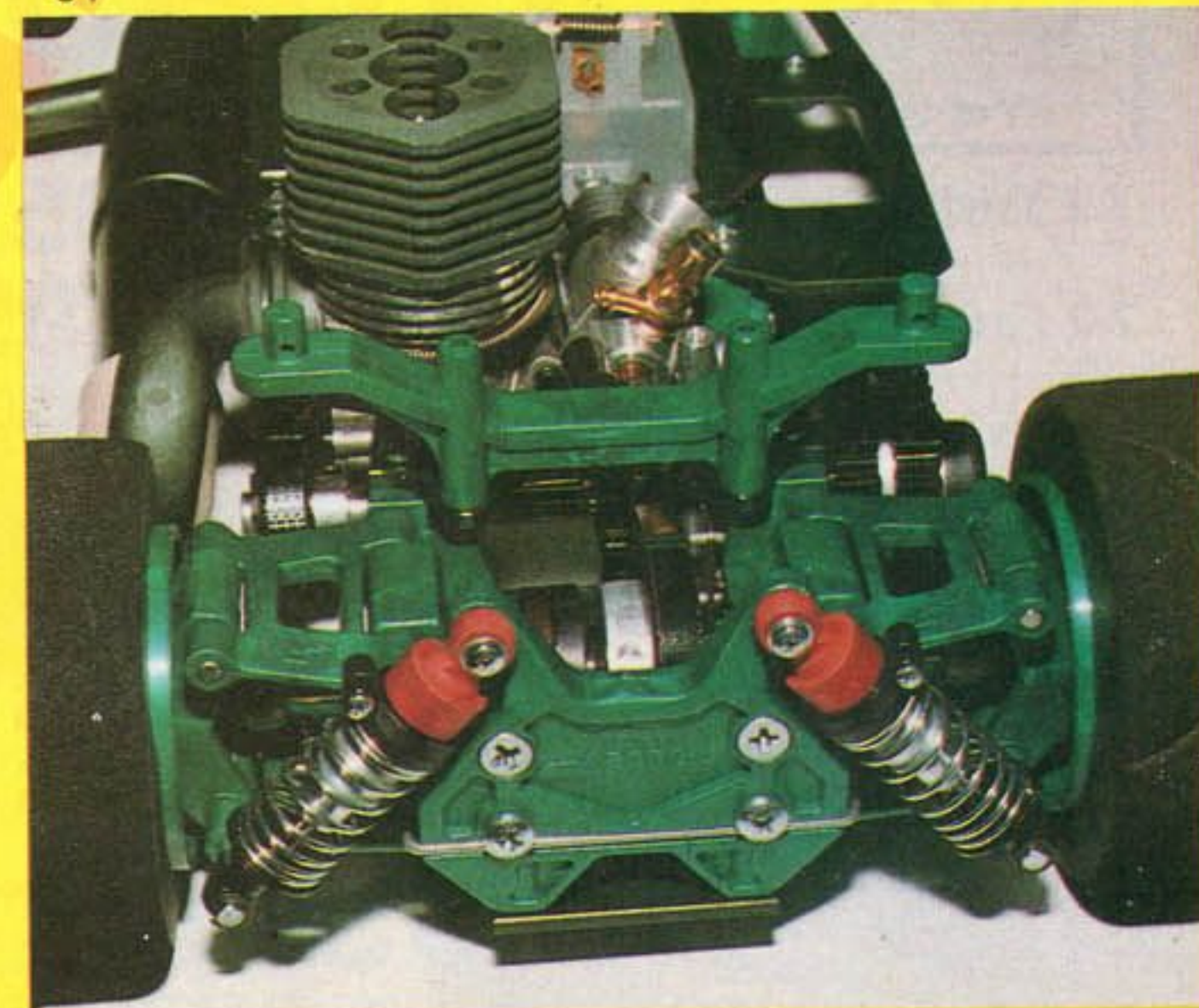
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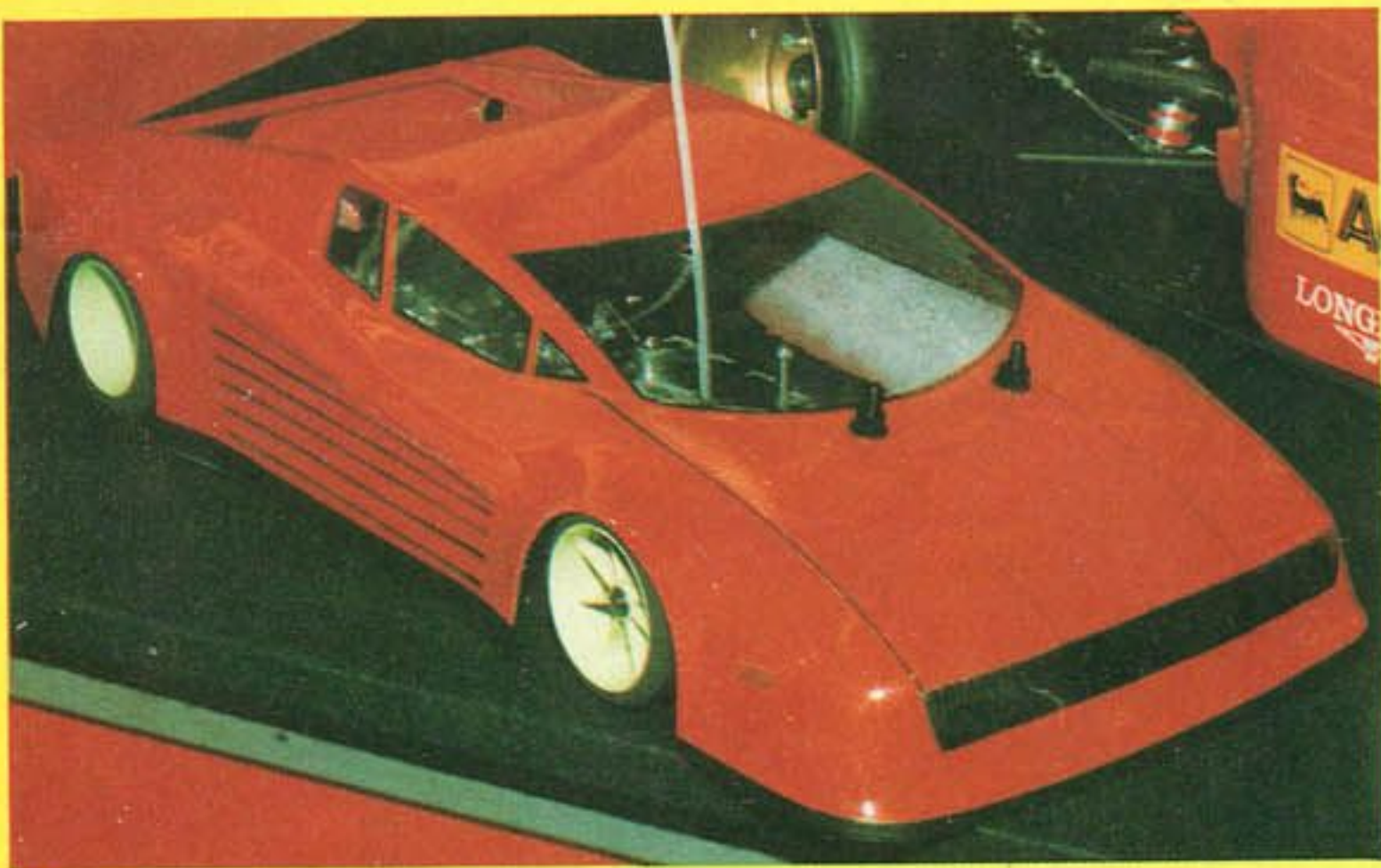
Another years goodies were released recently at the annual Nuremburg hobby fair. There actually were few new releases, but there were some important ones. *Kyosho* had their ready to run cars on show, the 'Sky Bomber' and 'Optima 14X' as well as the new 1/8 'Blitz' and a 2wd version of the 'RS200'. *Marui* also had the new 'FD' – fast drive cars on display as well as an impressive demonstration of their mini racing cars. *Tamiya* had an impressive stand at Nuremburg but had only one major RC release – a big wheeled 'Saburu brat' which is to be seen in the UK in April.

The UK was well represented by *Weston UK*, *Helger Racing* and *PB*. *Weston* had the usual range of chargers batteries and engines which included selected batteries which RCMC will review shortly. *Parma* had various new shells including a smart 'Testarossa' as well as their new range of boats and planes. *PB* showed their new look 'Phoenix' as well as the 'Sizzler' in latest form and the prototype of the new 1/10 off-roader. The show generally lacked in R/C new products but this was probably due to the pre-christmas batch of new releases.

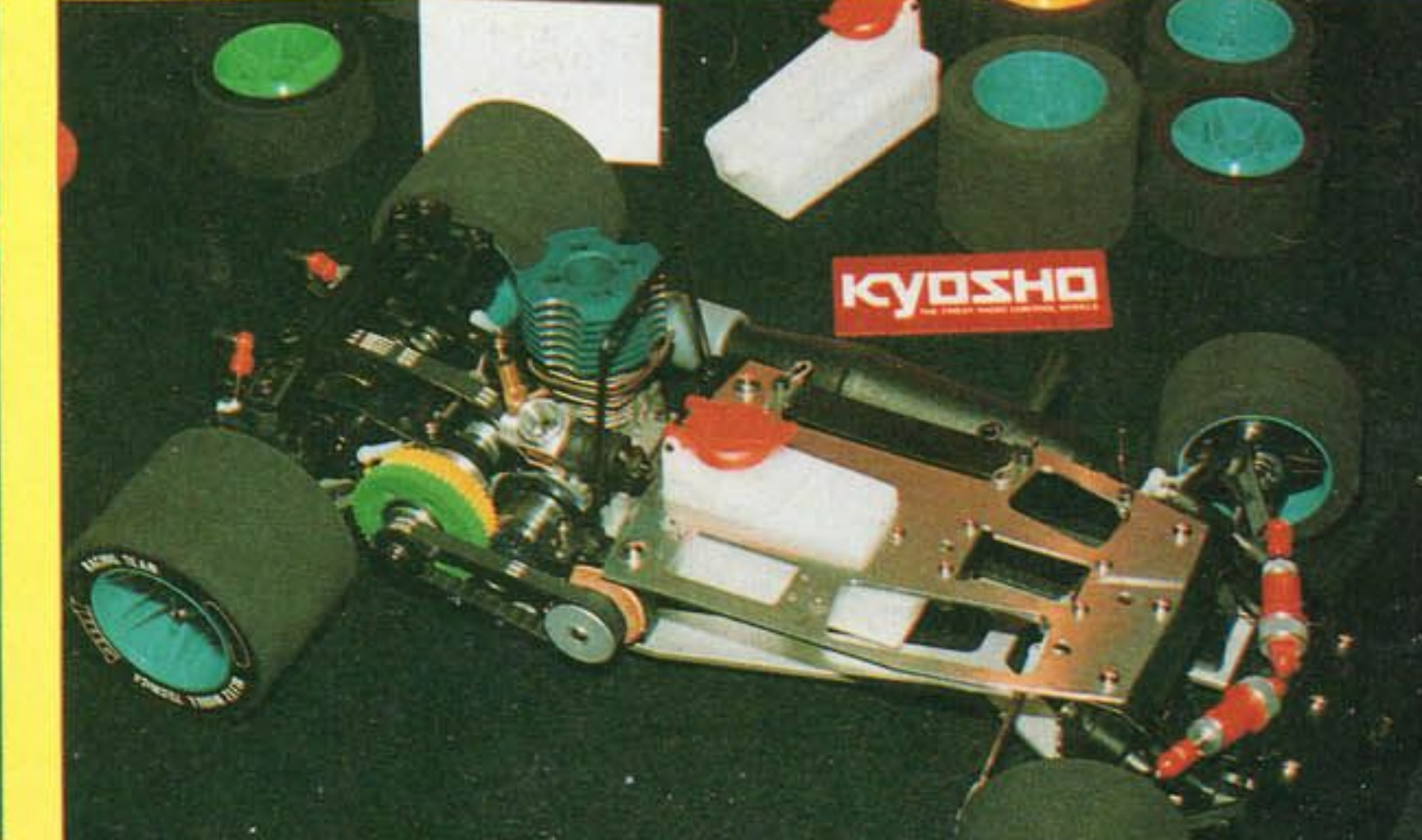


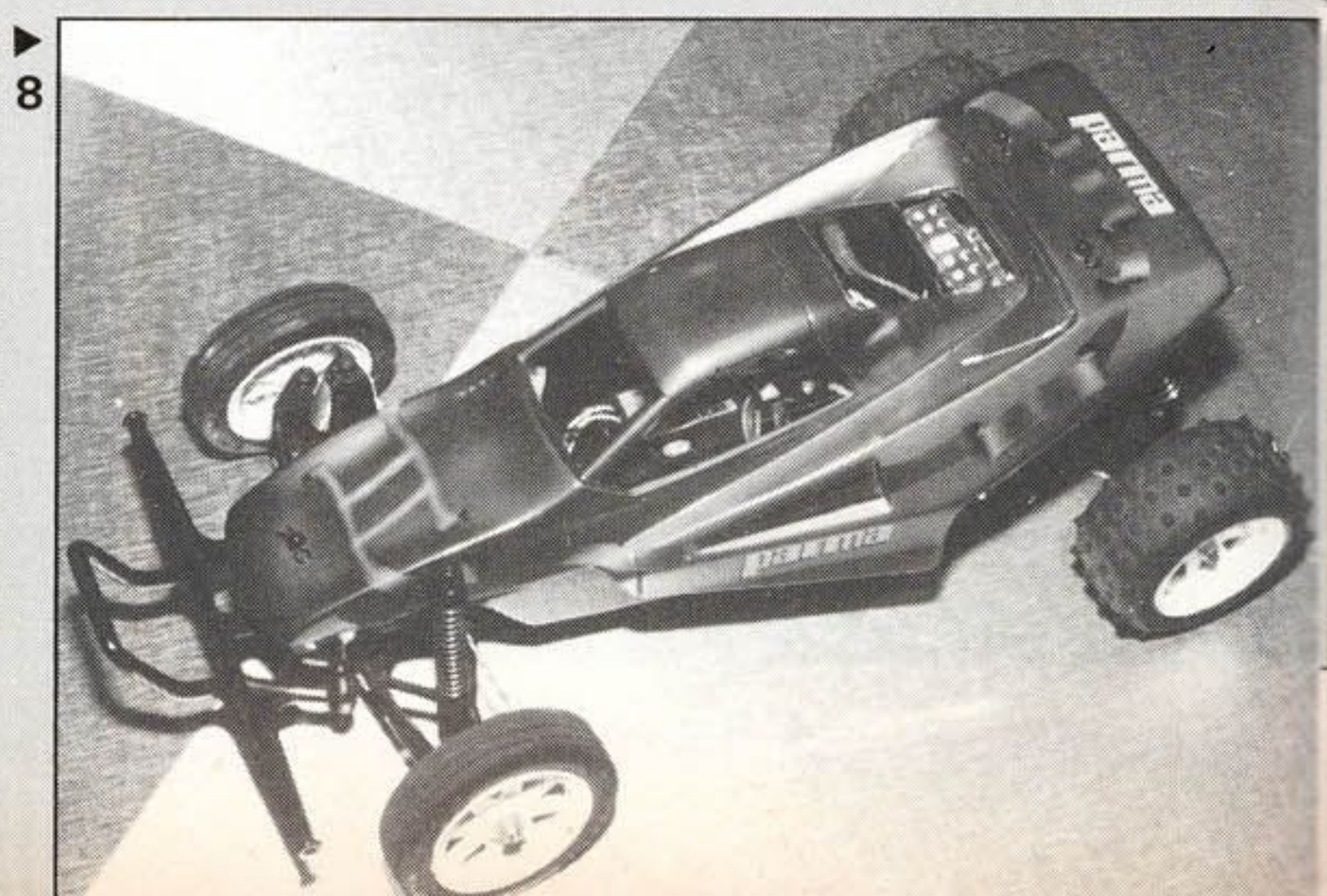
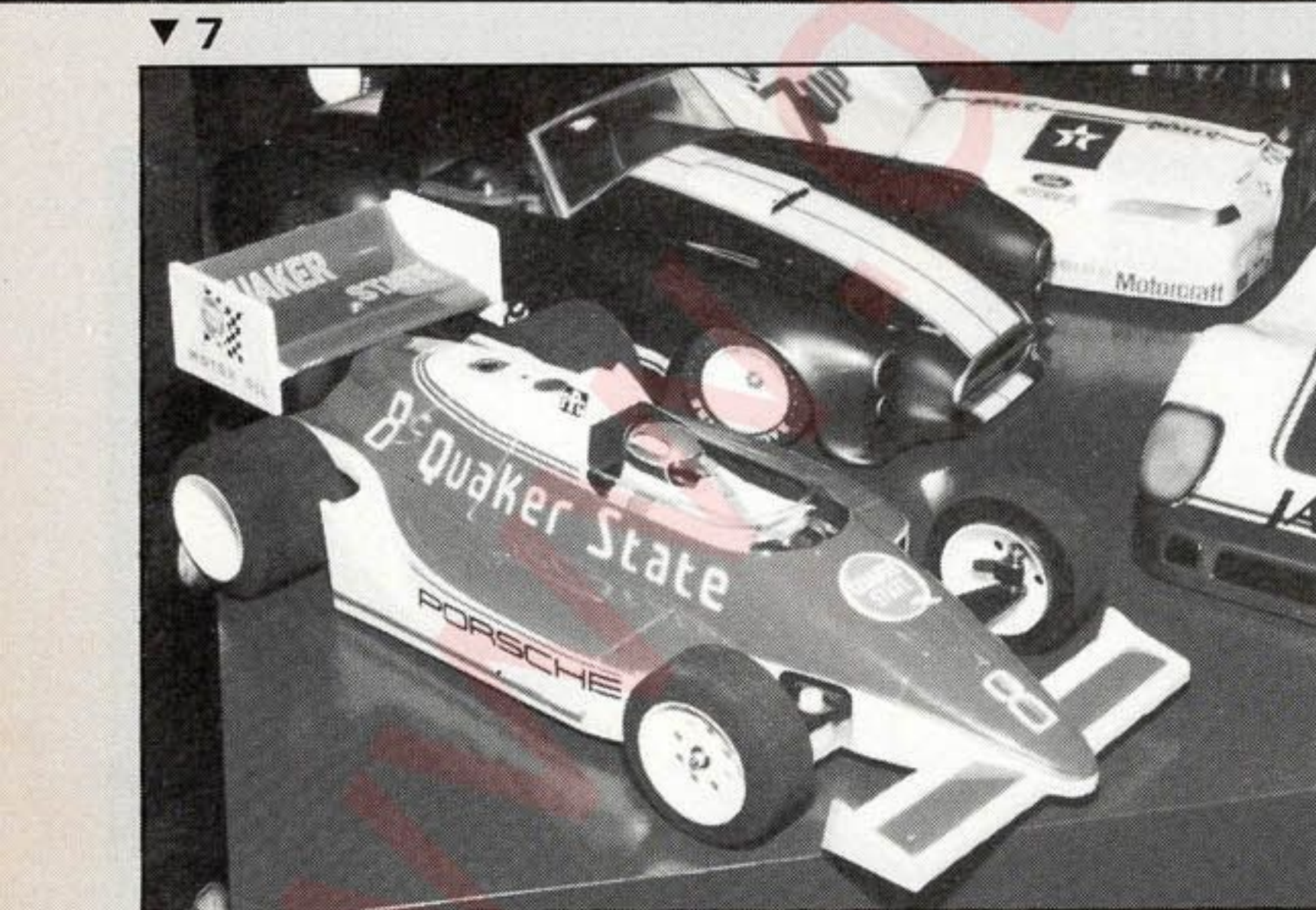
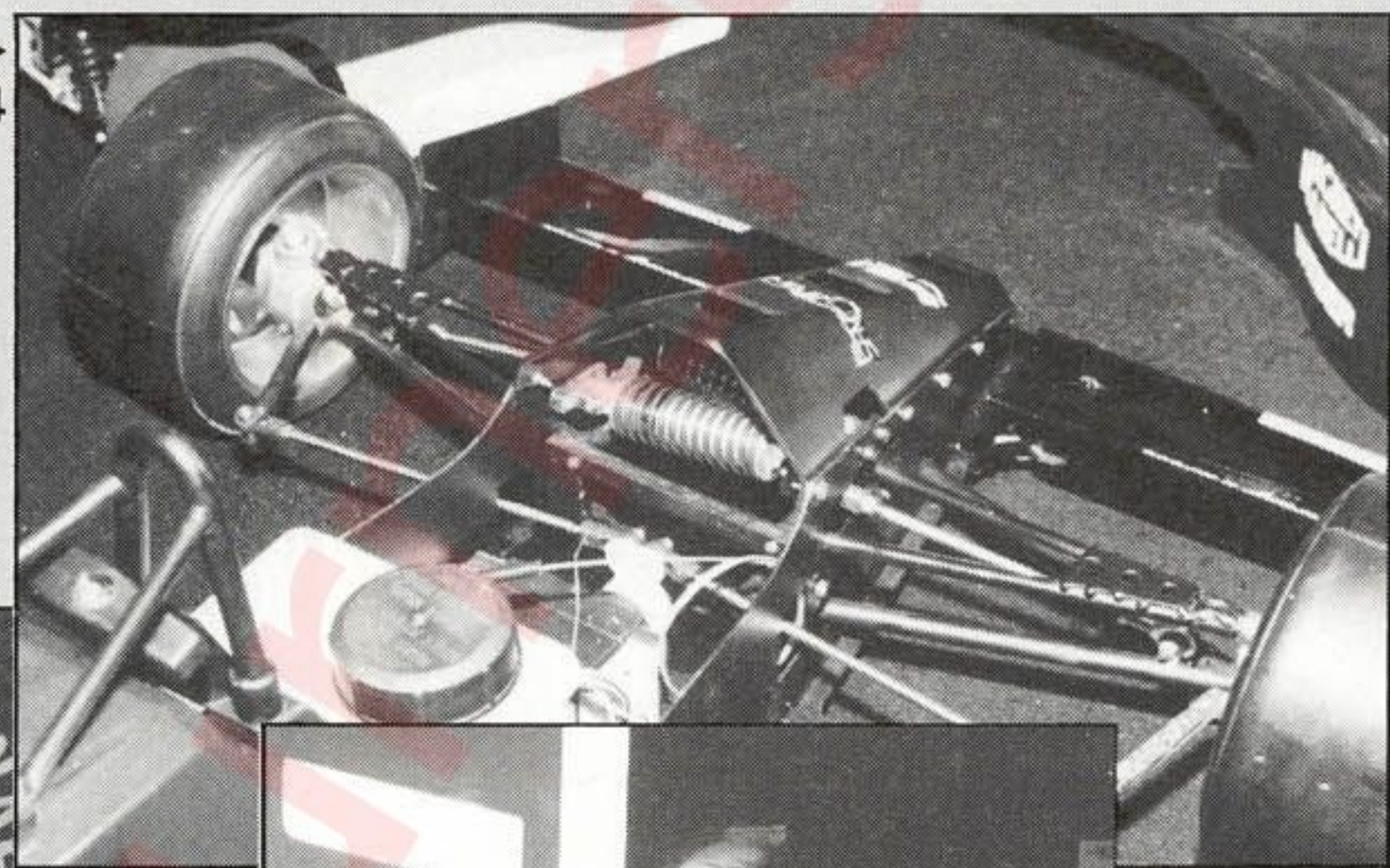
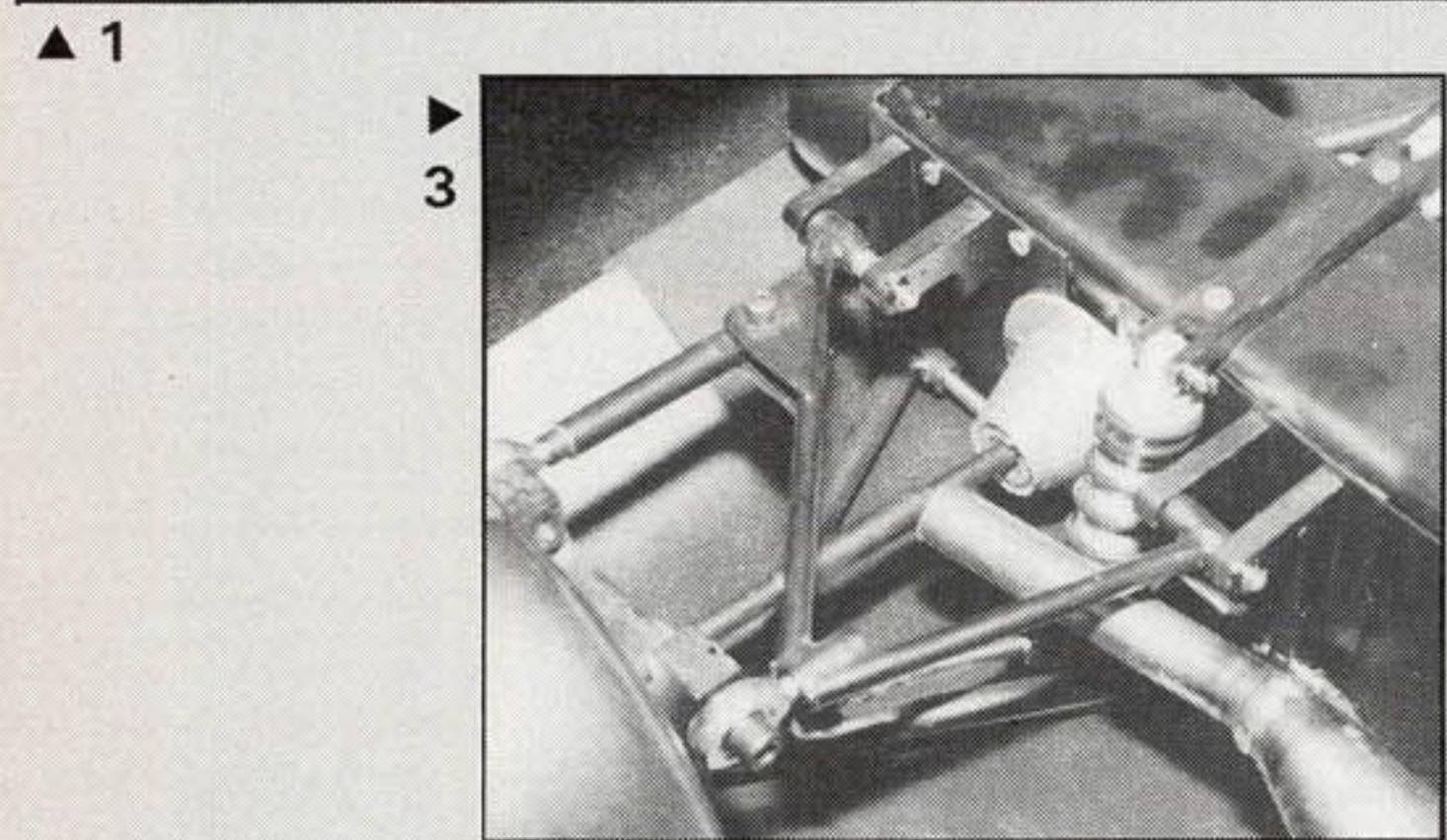
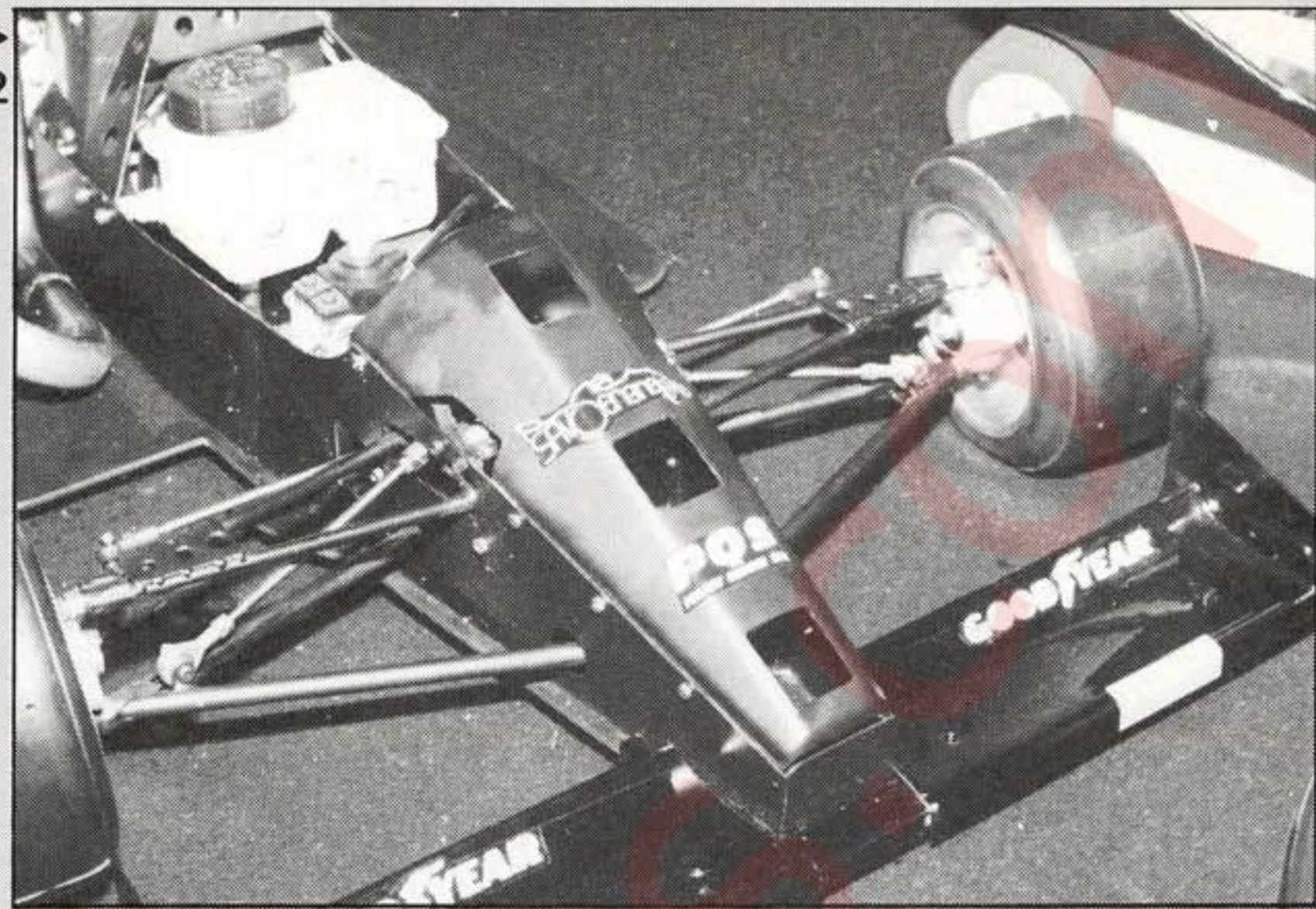
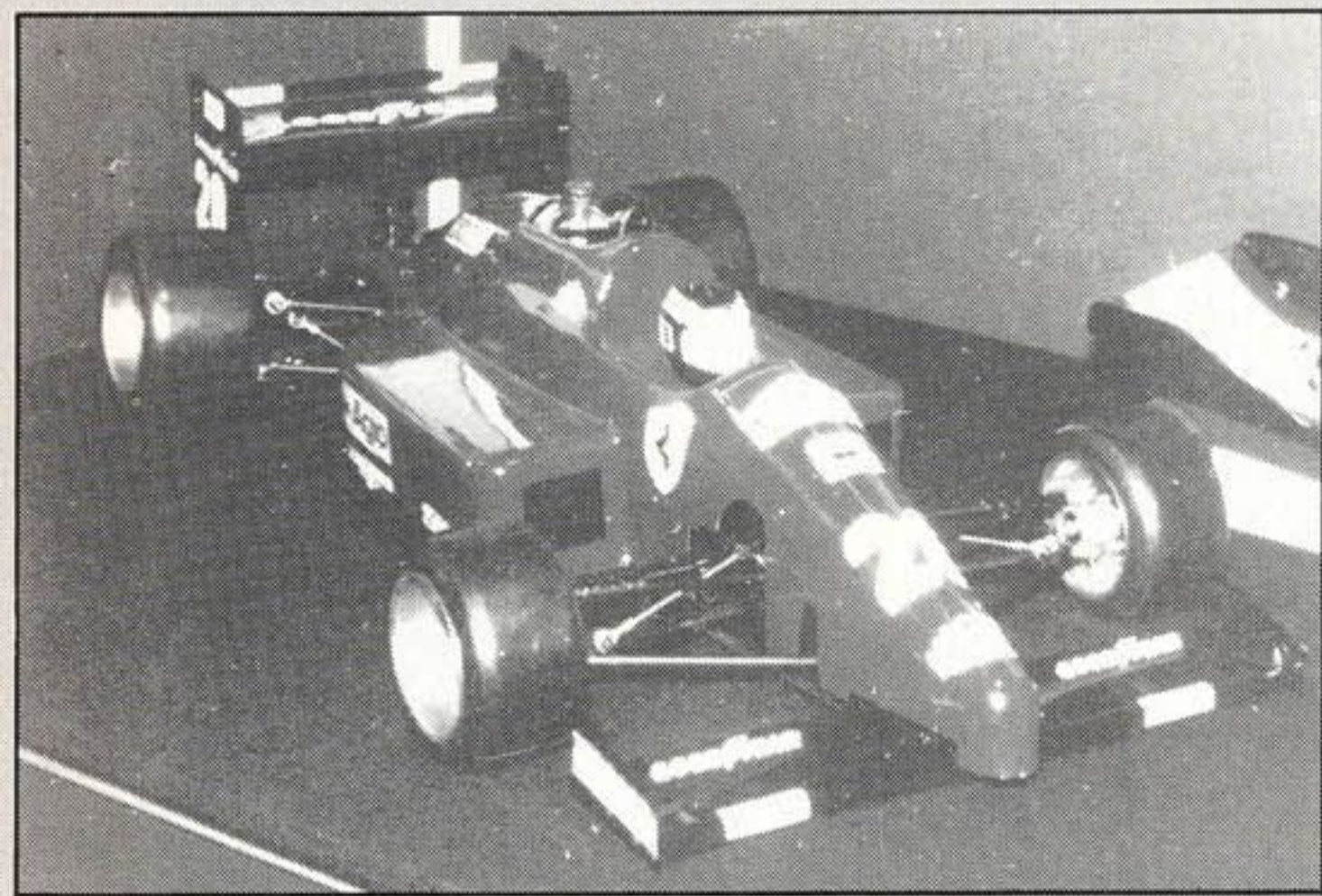
Nuremburg '89

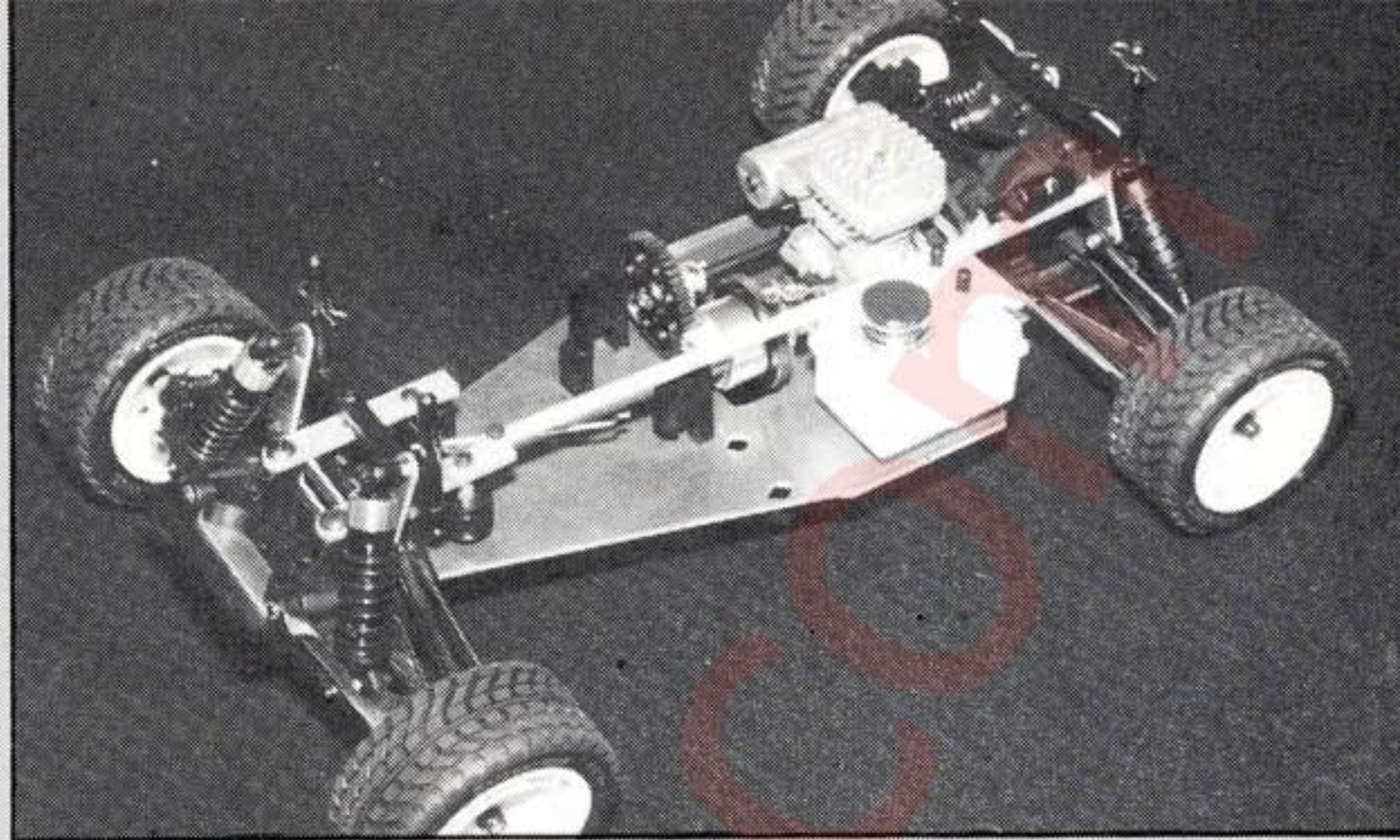
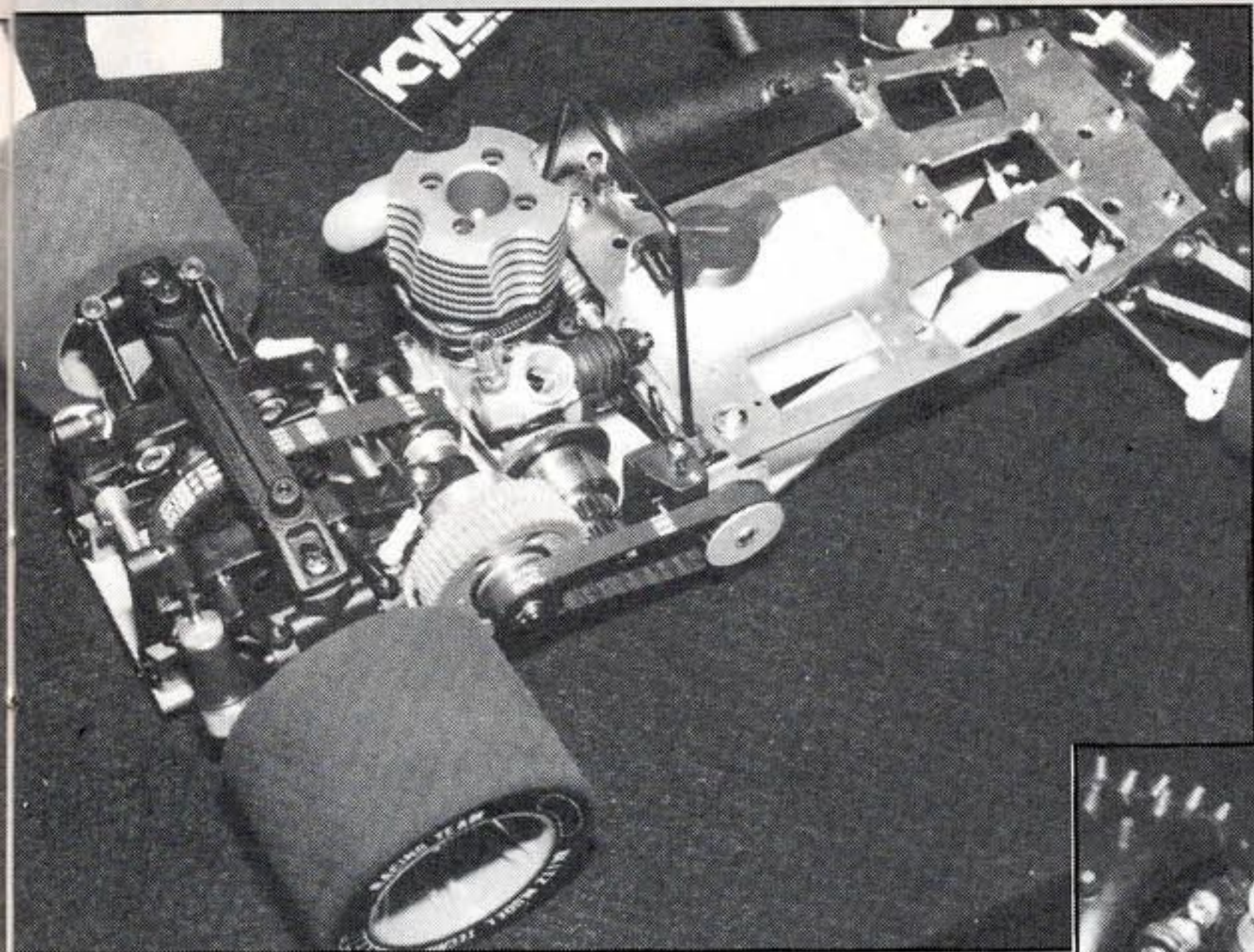
Model Cars reports the latest major releases from the hobby fair.



1) On the PB stand was this 1/4 scale Ferrari – with pull rod inboard suspension. 2) Kyosho's ready to run cars the 'Sky Bomber' and 'Optima 14X'. 3) The Marui 'Shogun' FD looks almost the same as its big brother. 4) Kyosho had this red and white NSR bike on show. 5) Serpent's limited edition coloured 'Sprint' turned a few heads. 6) PB's new Testarossa body for the 'Sizzler' in early design stage. 7) Marui's 'Ninja' uses same chassis as 'Shogun' and is supplied with steer-wheel radio. 8) Marui's neat mini-racers. 9) Honda Power! Kyosho's super little 'Lotus' F1 racer. 10) Tag Power – to go with the Lotus the Super McLaren. 11) 'Yokomo Dogfighter' and Hirobo 'Alien' two of Mauri's new mini racers. 12) New 'Cat' bodyshell from Parma. 13) The 'Blitz' – 1/8 scale circuit car designed in Italy and exported by Kyosho.







1, 2, 3, 4: The 1/4 Scale Ferrari on the PB stand attracted lots of interest with its' excellent design and size.

5: Mr. Parma - Ken Macdowel shows off their Lexan boat.

6: Gerry Goldberg of Helger Racing with the new 1/10th Testarossa.

7: Pro 10 car with Indy bodyshell in Quaker state colours.

8: Grasshopper II shell from Parma.

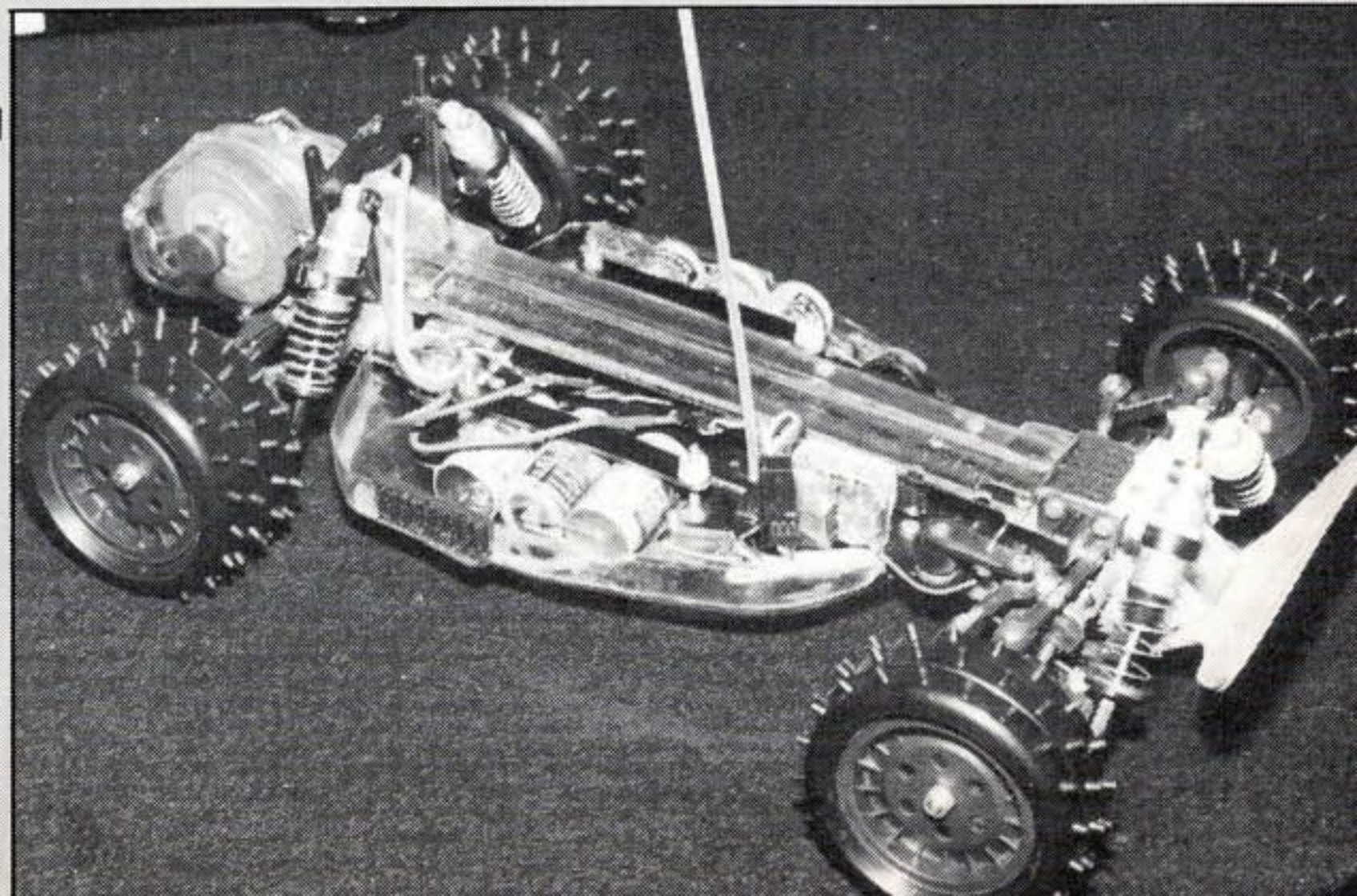
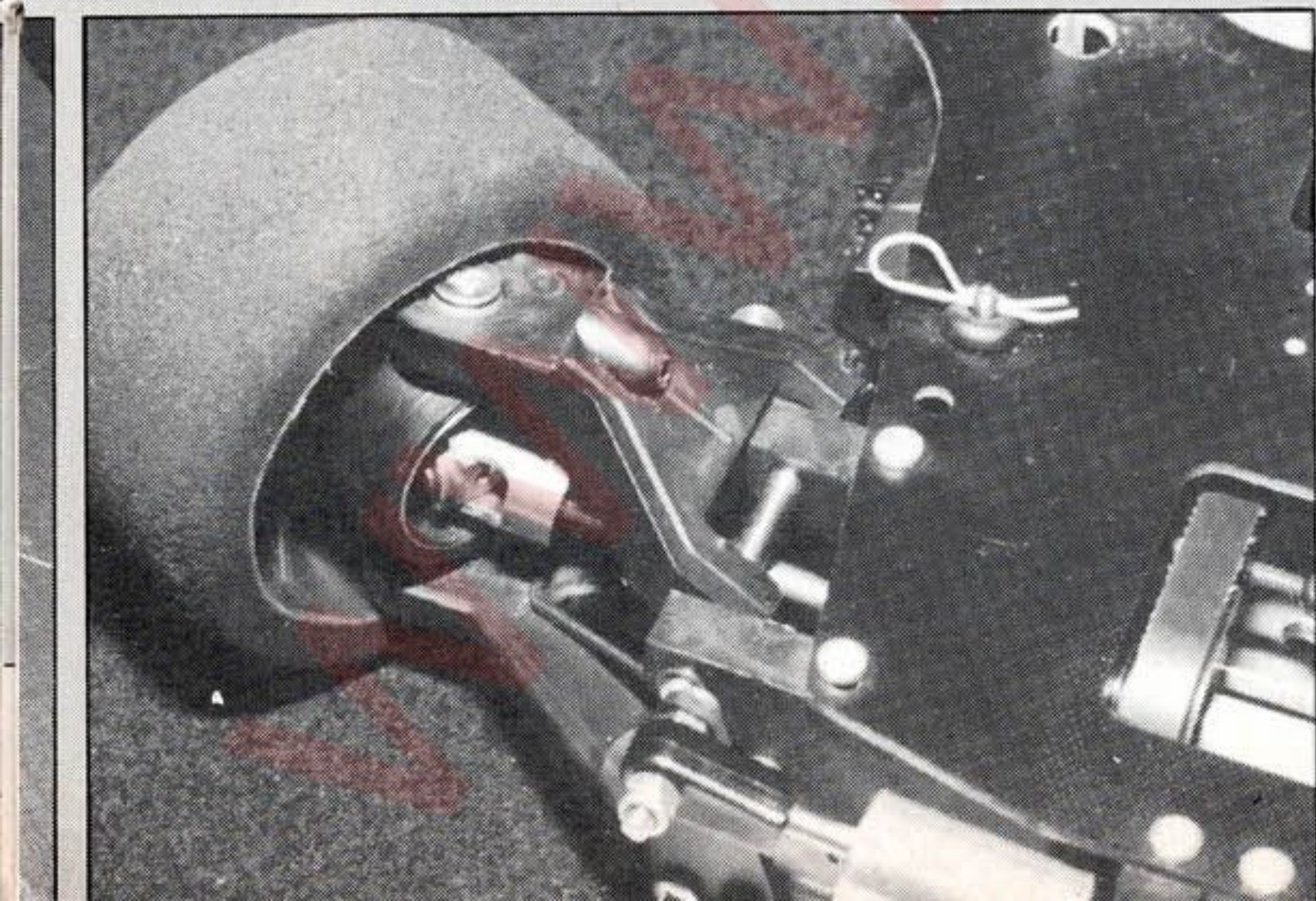
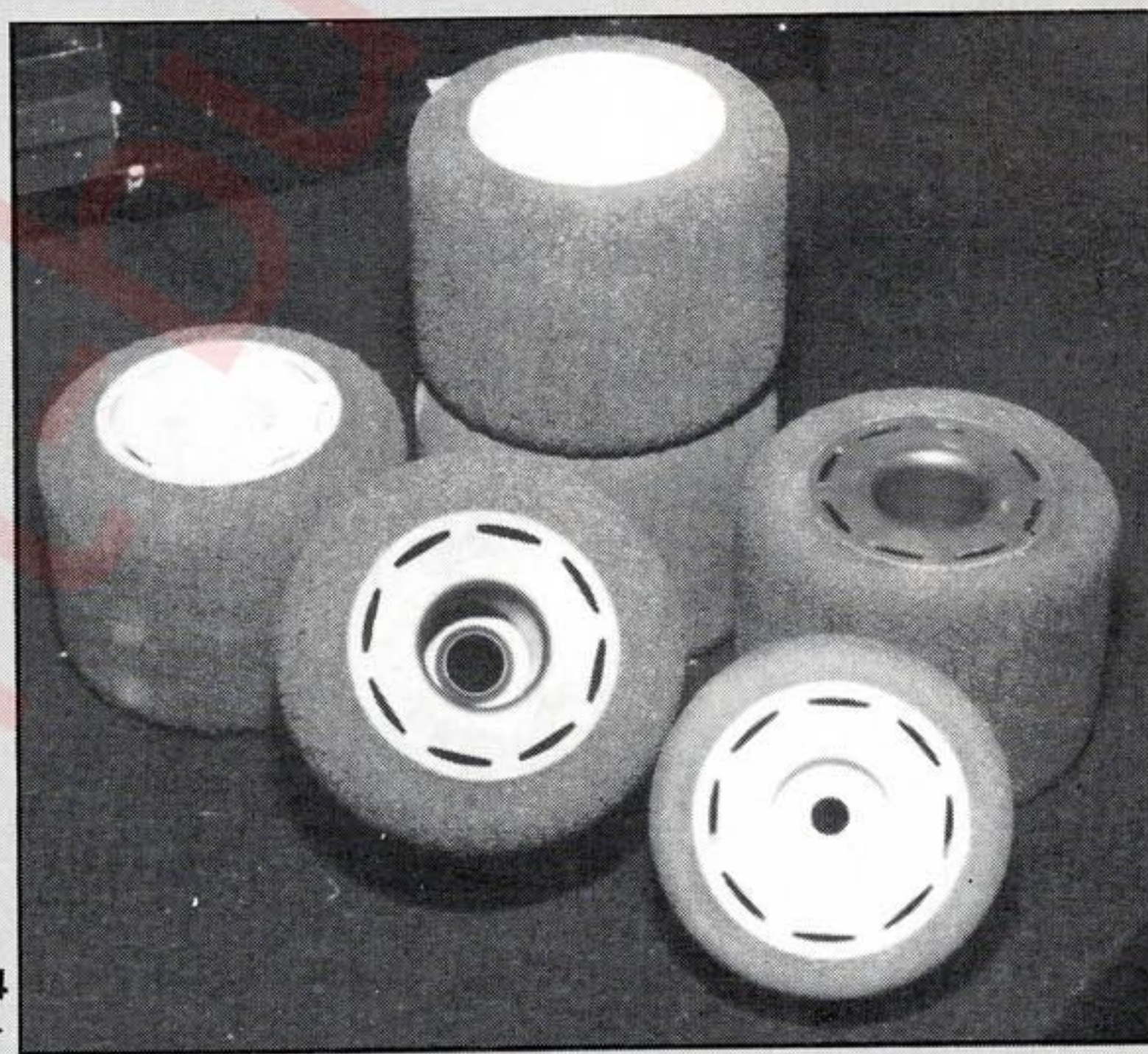
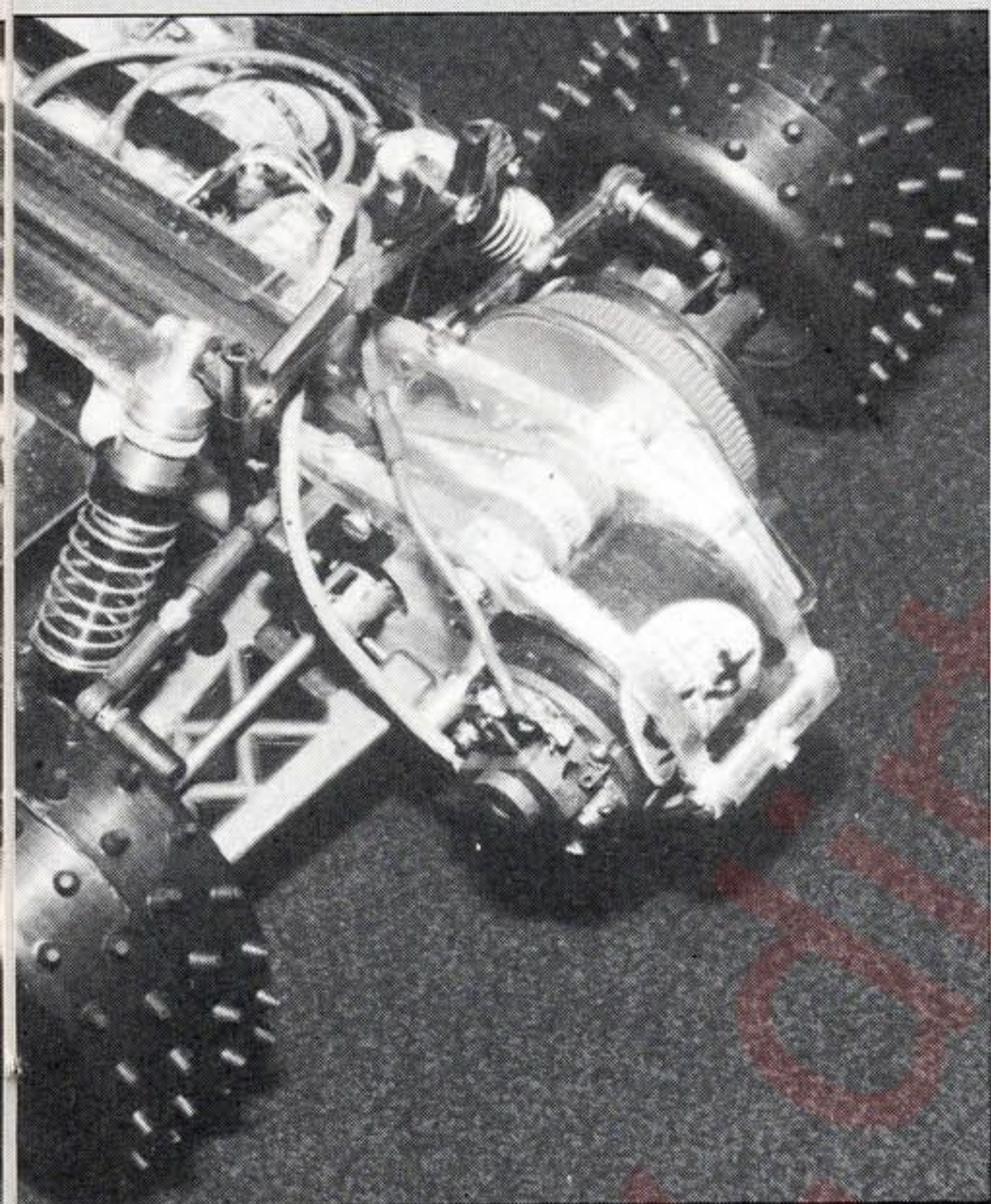
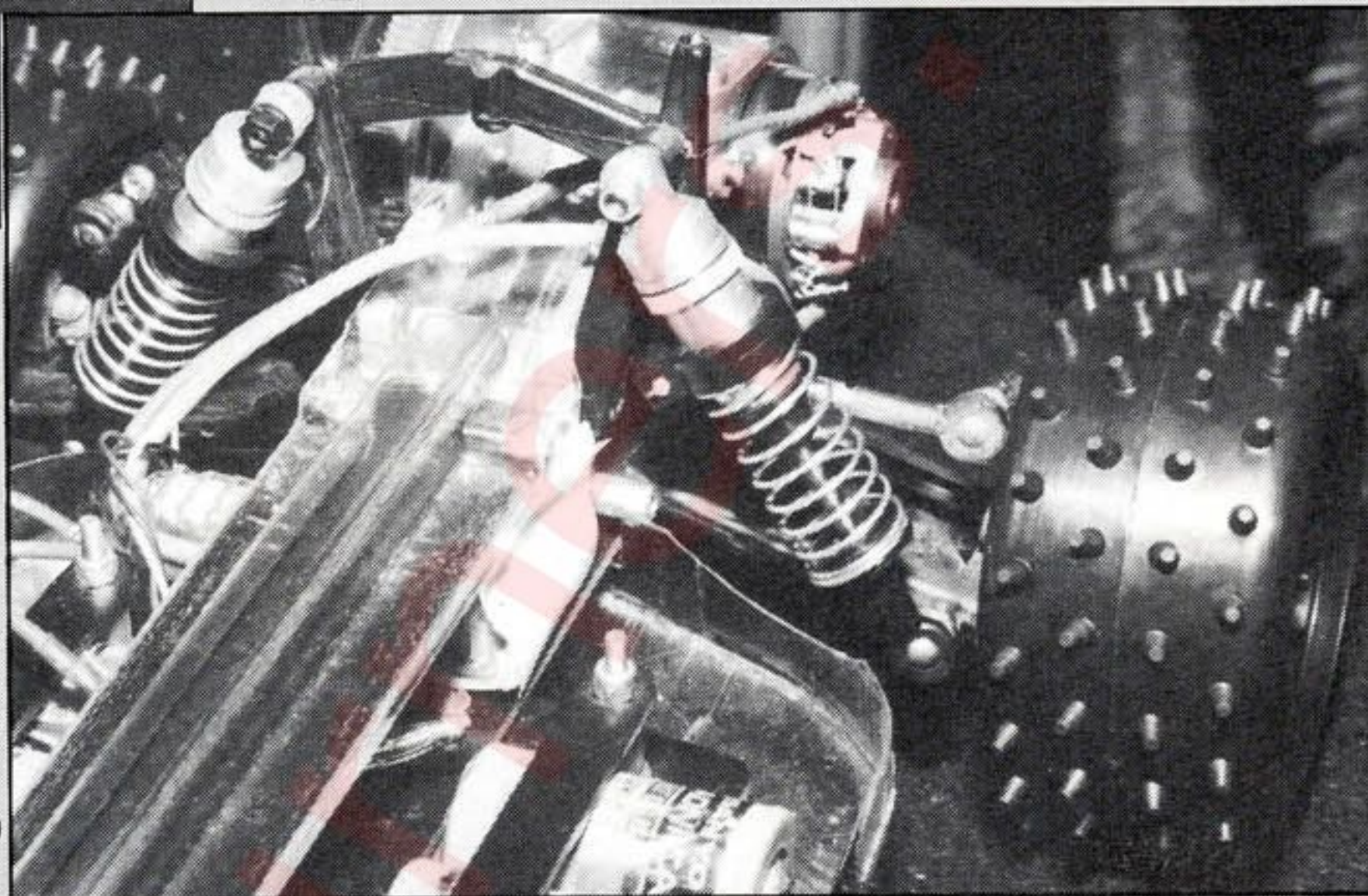
9: Blitz - a new contender on the 1/8th scene.

10, 13, 15: New proto 1:10th PB car features rear mounted motor.

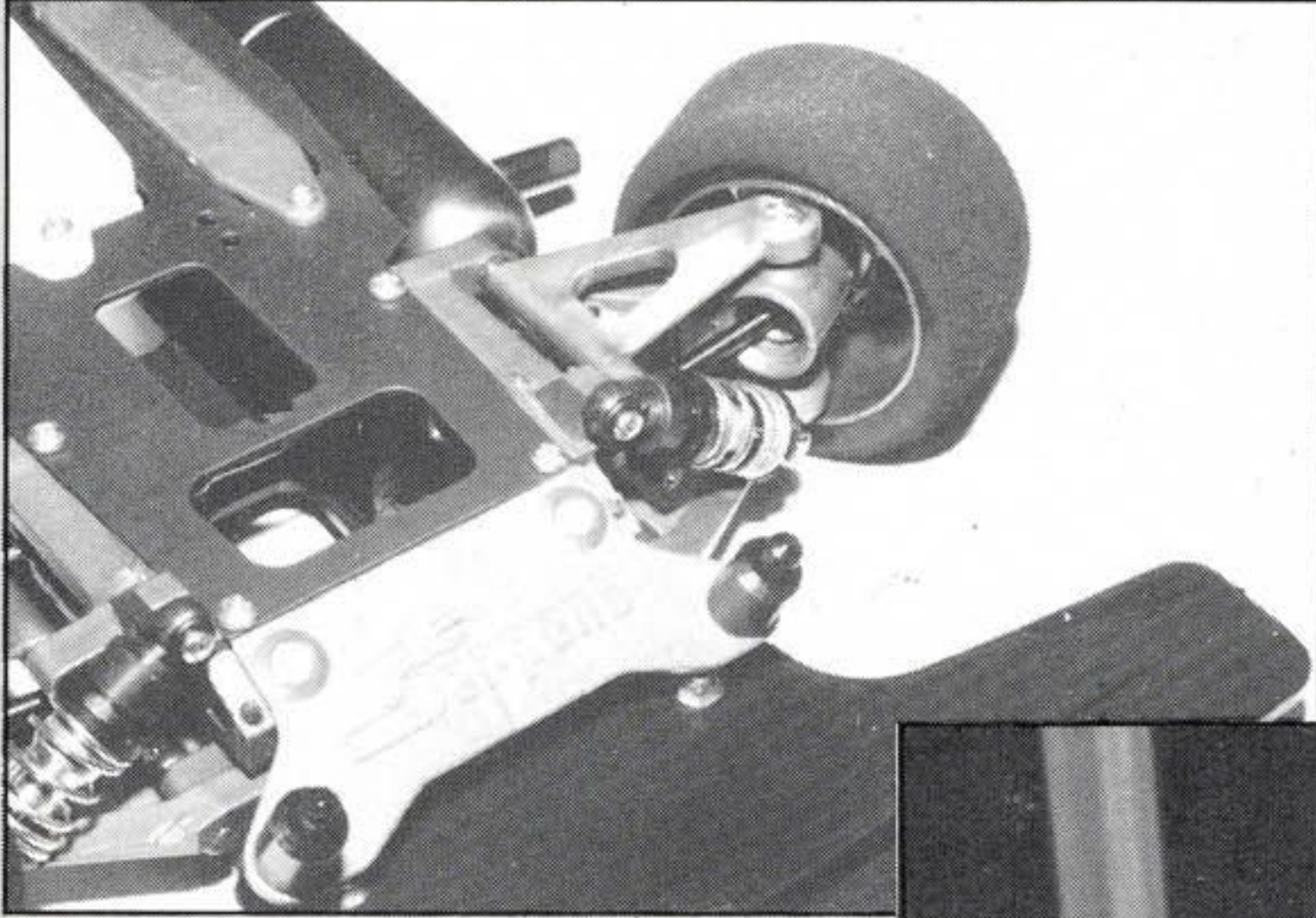
11: UJ's fitted on the latest Phoenix.

12: 2WD RS200 on its way from Kyosho - with 911 shell - nice.

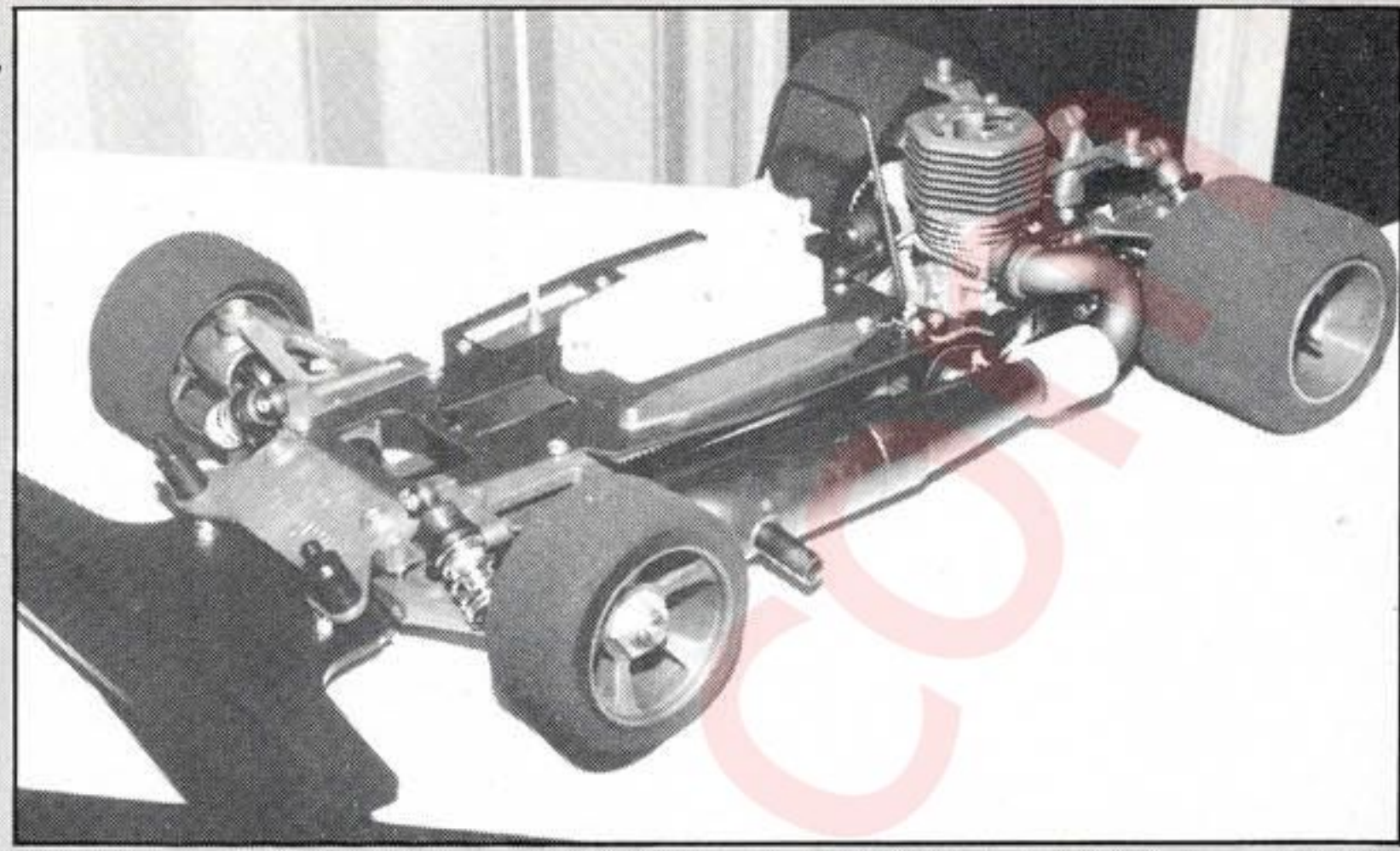
14: PB racing wheels for the Phoenix.



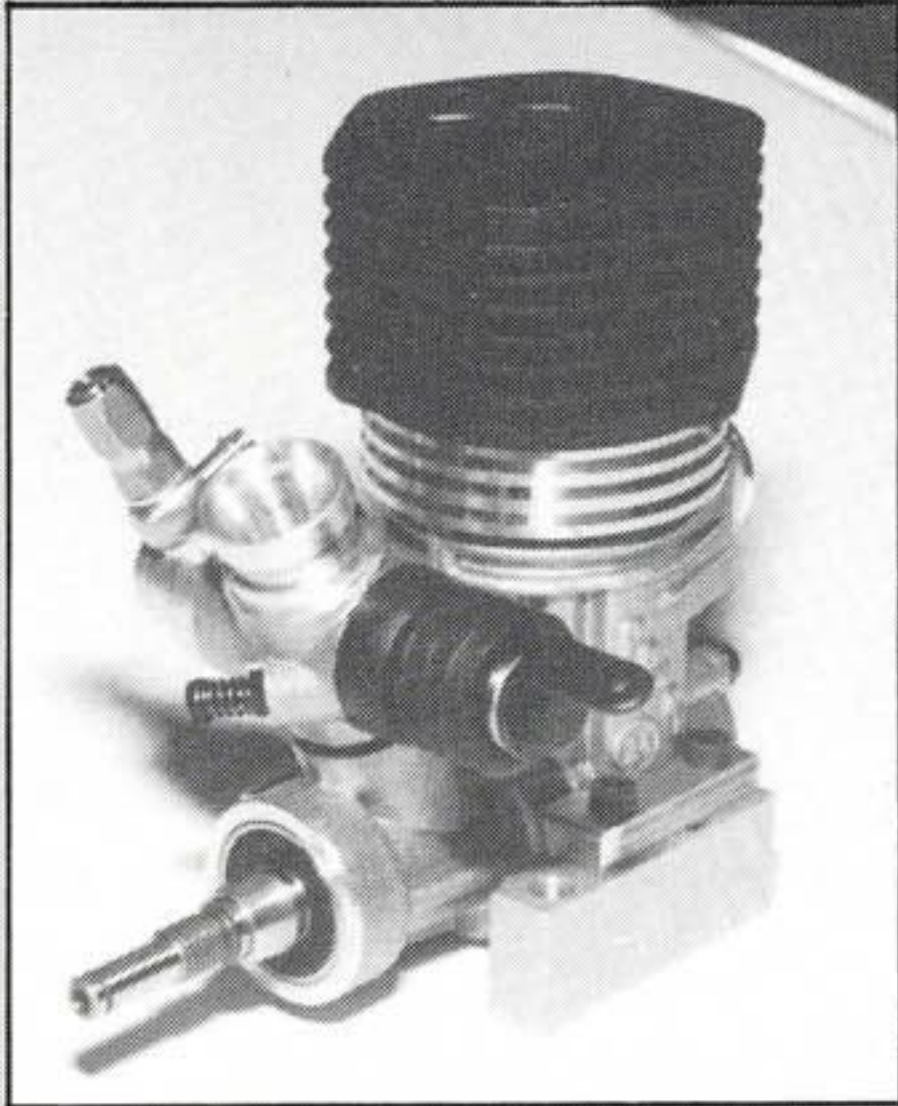
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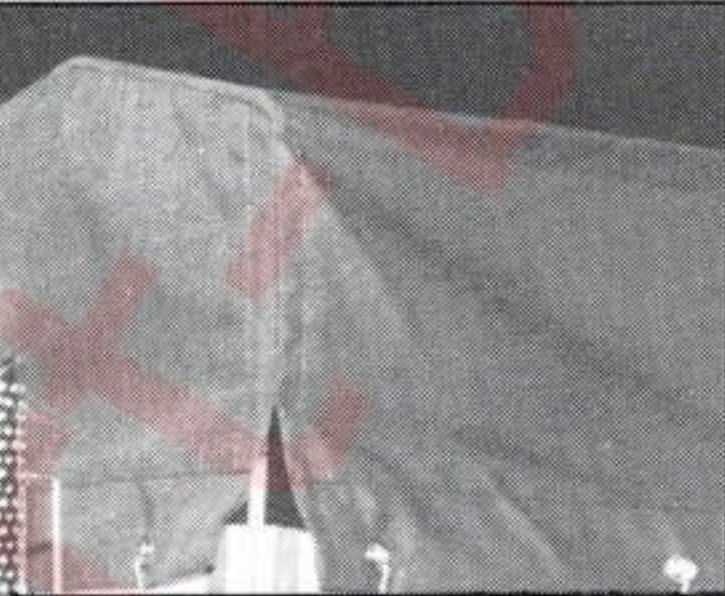
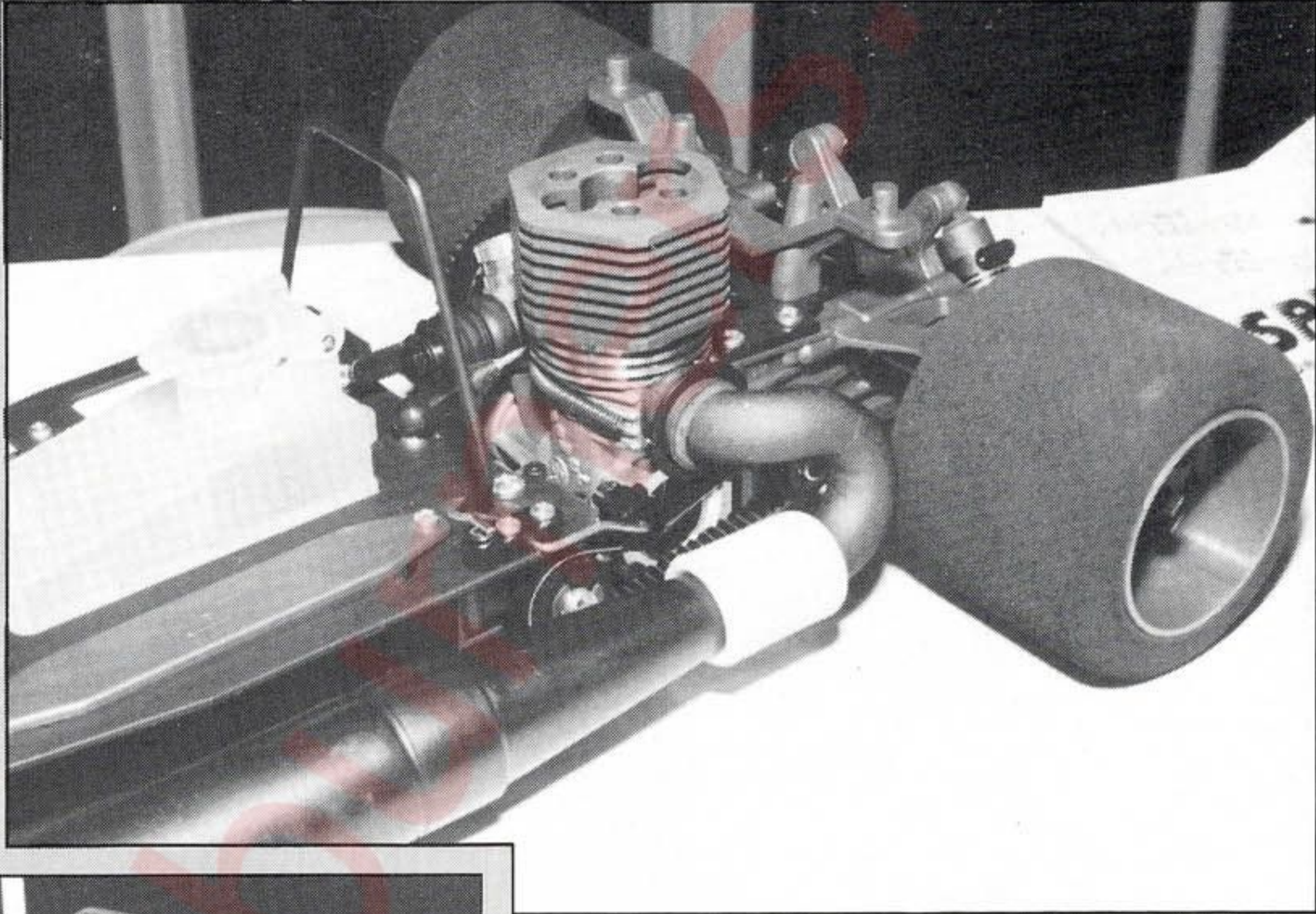
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Nuremburg '89

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21 ▼



16, 17, 19: Serpent are planning coloured special editions - this ones green but red, blue and yellow are on the way - yuck.
 18: Serpents new 8 port engine was on show.
 20, 21: These were certainly impressive - full working models of trucks with everything from working lights to sound making simulators.

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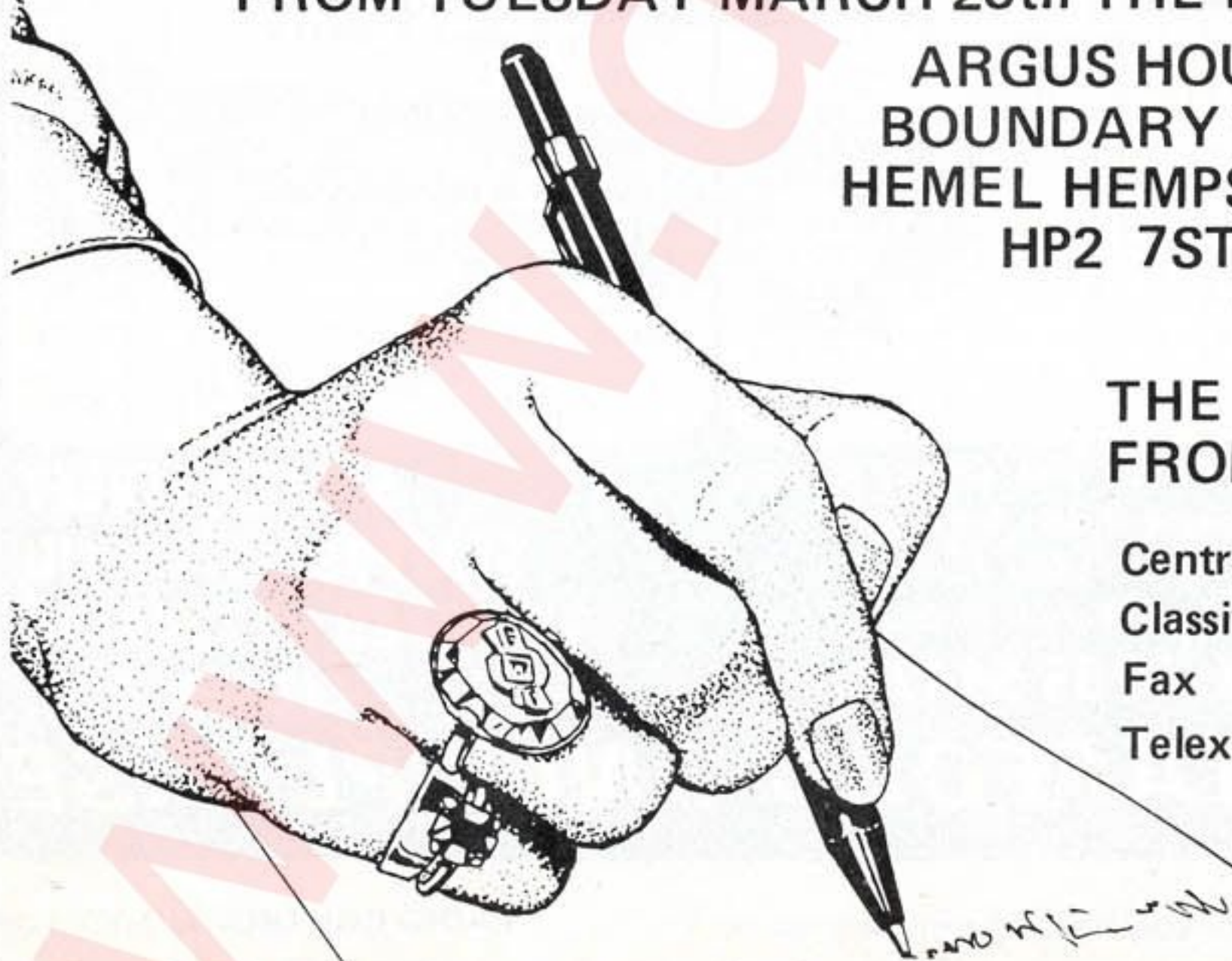
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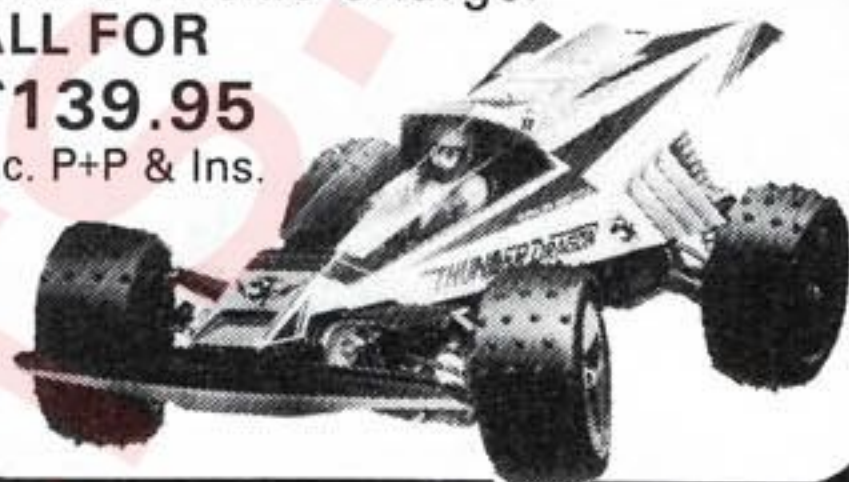
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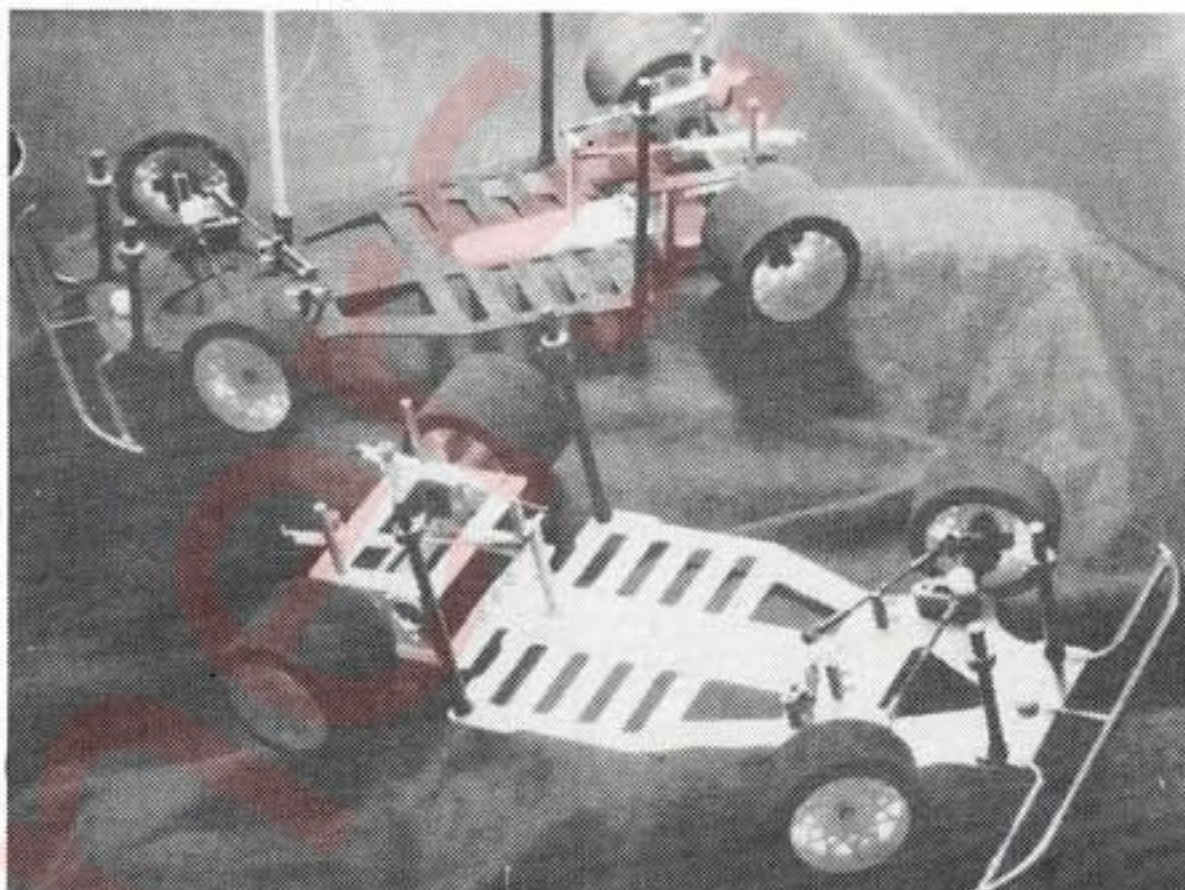
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Above all else Tamiya's latest 1/10th scale buggy is a welcome return to the part of the market they know best and are most renowned for. Tamiya's entry into the higher levels of the competition market was hardly successful. For the most part the 'Avante' was over-priced, over-weight and overlooked by most drivers in the UK bred on the race-winning potential of the Schumacher 'CAT' and the Kyosho 'Mid Optima' series.

However, when it comes to mass market, easy-to-build 4-wheel drive buggies, the Tamiya 'Boomerang' and others in the series sets a target that other manufacturers cannot even see, let alone aim at.

Despite the fact that a plastic 'Avante' is on the way the production of this competition 'Boomerang' will probably be just as important and maybe as competitive.

Since the 'Boomerang' was first introduced, racing technology has progressed apace. Bringing the original car up to scratch will no doubt be good news for anyone who has been trying to uprate their car in the workshop. Many imperfections of the old car have been ironed out to allow the 'Terra Scorcher' to provide the sort of performance most drivers expect of a competition car.

None of the changes, as far as I can make out, are cosmetic and all serve to make the car stronger in certain areas and hopefully quicker and more responsive.

Steering

On the old car the novel rack and pinion steering system always worked quite well but never as well as it could. Originally a plastic bar slid through a groove in the chassis from side to side to provide steering movement. The problem with this was that the bar flexed to much and the chassis groove usually got filled up with muck and rubbish off the track. Now, however, Tamiya have addressed the problem and come up with a simple and effective solution. Instead of a bar the 'Terra's' steering uses two pivot arms connected together to form the rack. The steering servo

connects with one side and movement is transmitted to the front wheels. The advantage of this set-up is that the whole thing is much stronger than the old type as well as being much more positive.

This new system transmits the servo's commands much more precisely and quickly simply because there is no longer any slop or weakness. Another area of welcome change is the use of adjustable, heavy duty track rods in the steering and throughout the car. Although the ball-joints are not captive they are a really tight fit and will need a lot of force to get them off. Furthermore the threaded rod end is a good quality hardened steel to lessen the possibility of it bending.

Gearboxes

Amazingly these are of a different design. The differential units in the 'Boomerang' series have for the most part been quite reliable so the change in design is interesting. They may have decided to change it simply because the original mould tool wore out - who knows!

Anyway the star and bevel gears of the differential are now fully enclosed because the gears are being held far more tightly inside the differential case whereas before they were in danger of flopping about.

The rest of the gearbox is fairly straightforward except that the drive couplings between the front and rear

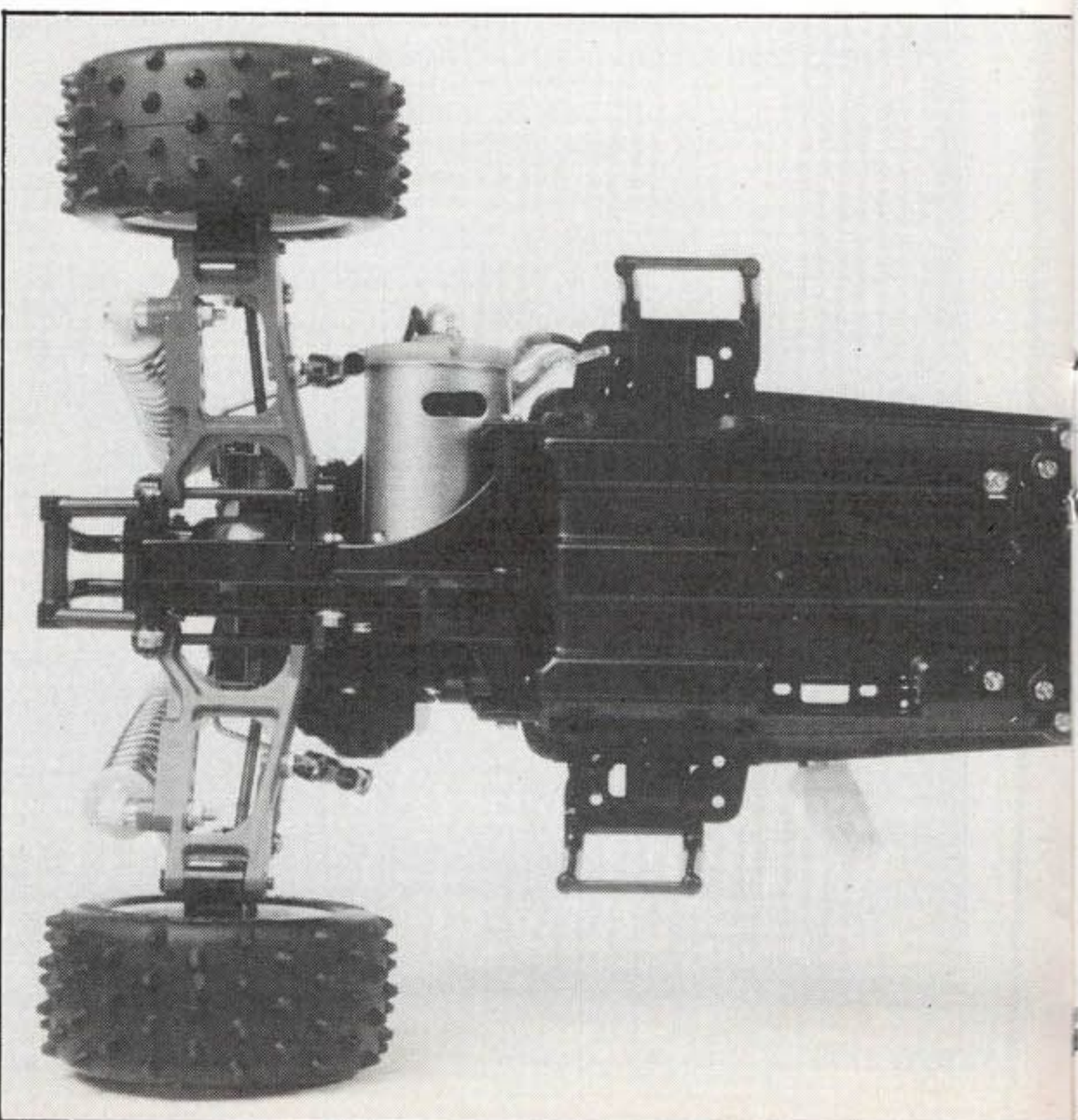
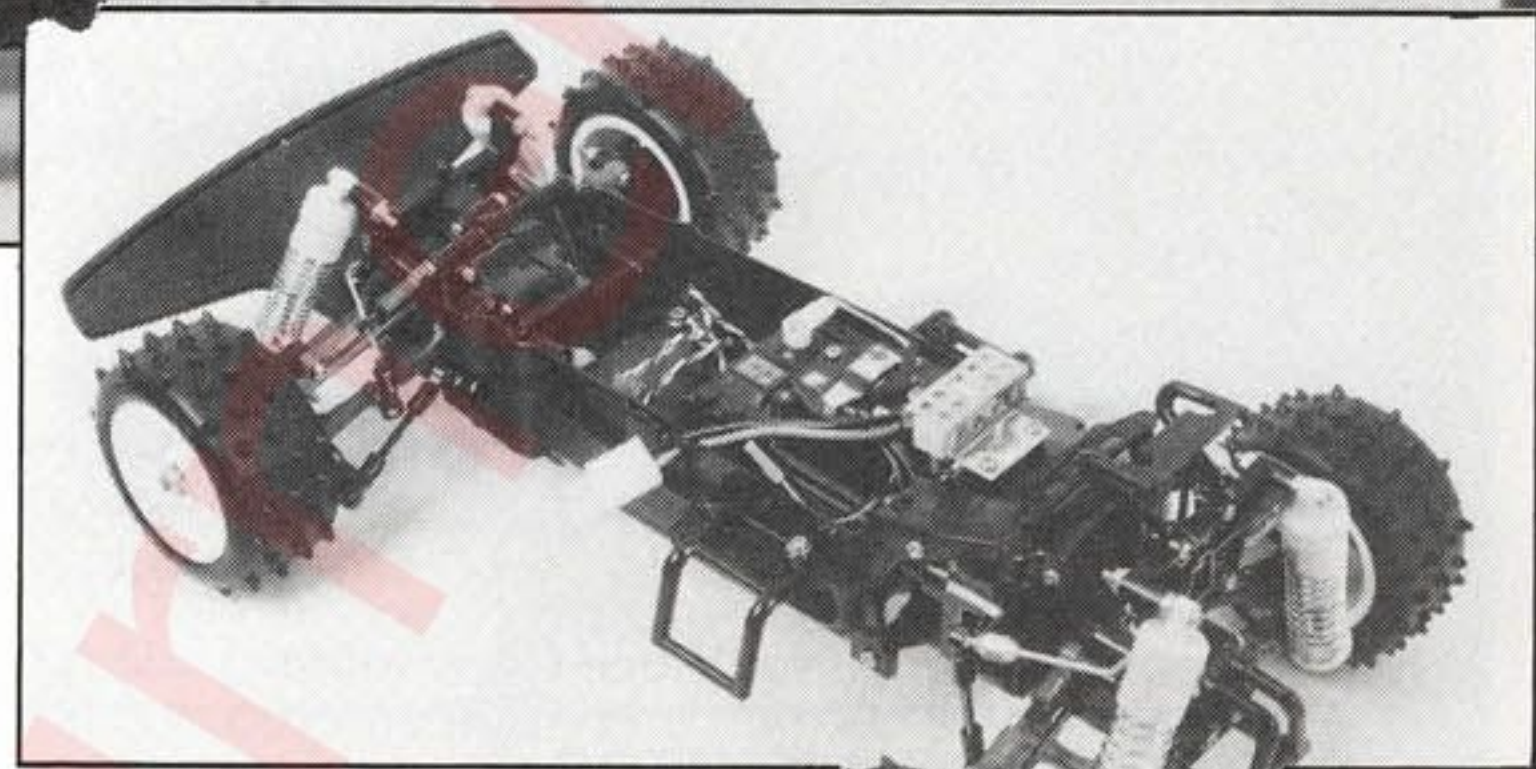
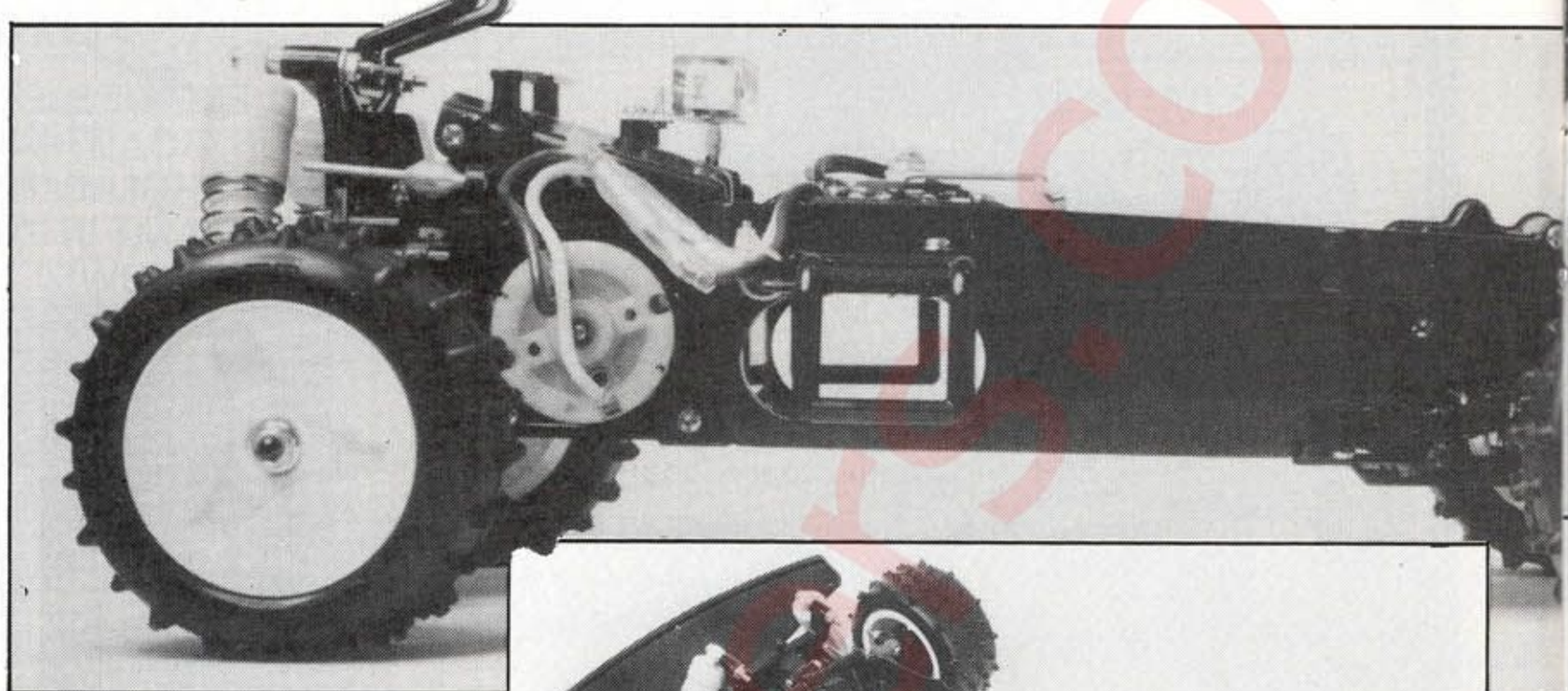
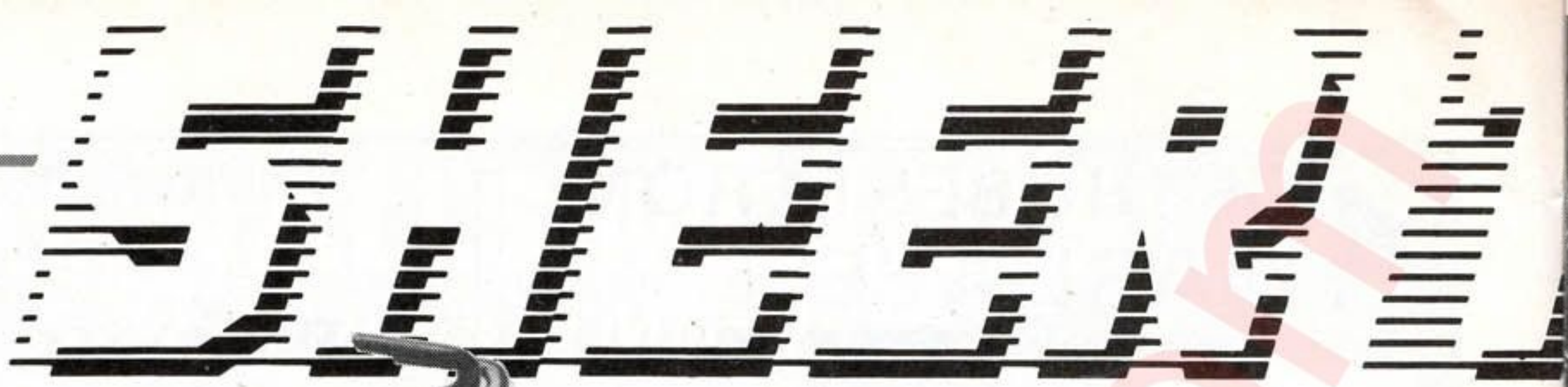
gearboxes can now be got at without dismantling the entire gearbox.

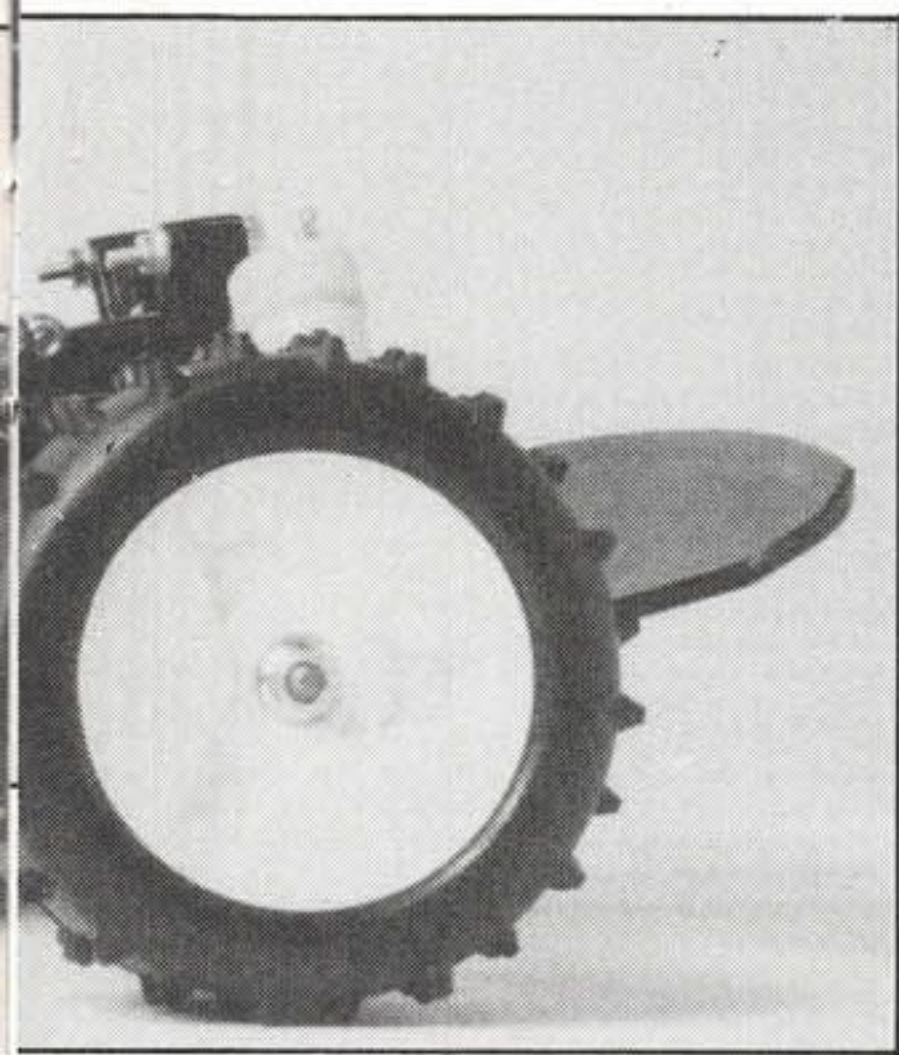
By removing the moulded box on the side of the rear gearbox and a plate on the side at the front, the central driveshaft can be got at along with the thrust washers and bevel gears that connect into the main drive. Obviously this is much better for maintenance and

oiling of the moving parts.

Motor mount

On the original 'Boomerang' getting the motor bolted into the car was a pain let alone getting the gear





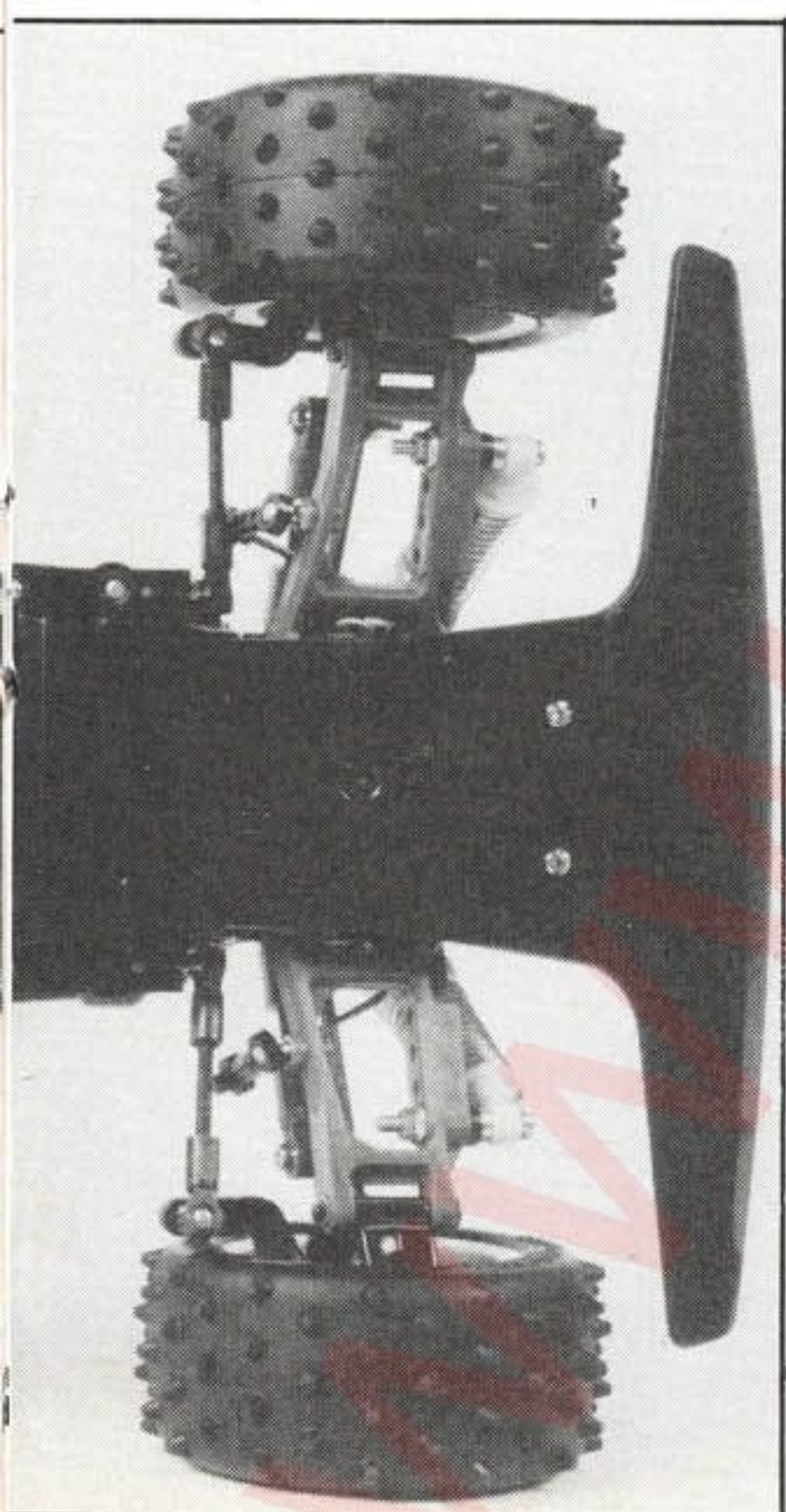
Above: The 'Terra' has good ground clearance and is reasonably long wheel based. Left: Independent suspension all round. Bottom: Reasonably smooth undercarriage and 540 Mabuchi motor.

Tamiya have gone back to what they know best. The Terra is a 4WD full blown racer – only for the clubman.

mesh right. All I can remember is fiddling with these annoying strips of metal which spaced the mounting screws in their slots correctly to achieve perfect mesh. Unfortunately, it was a job just to line the screws up with the threads in the motor which meant quick changes were right out of the question. Fortunately this is no

The 'Terra's' bodyshell is futuristic with an enormous rear wing & 'Ninja' style cab.

That enormous wing should keep the back on the ground – resistor sticks out of body for cooling. Note shell can be removed without removing wing.





**MODEL
CARS**



longer a problem.

A new motor mounting plate has been produced which fits directly onto the face of the motor and features a range of screw holes. Depending on which size pinion gear is being used the plate is bolted to the motor using the holes with the corresponding number written next to it (i.e. 14 tooth pinion = hole 14). This gives perfect gear mesh every time.

Getting the motor fitted into the gearbox is now much simpler because the bolts now screw into the motor mount rather than the motor itself.

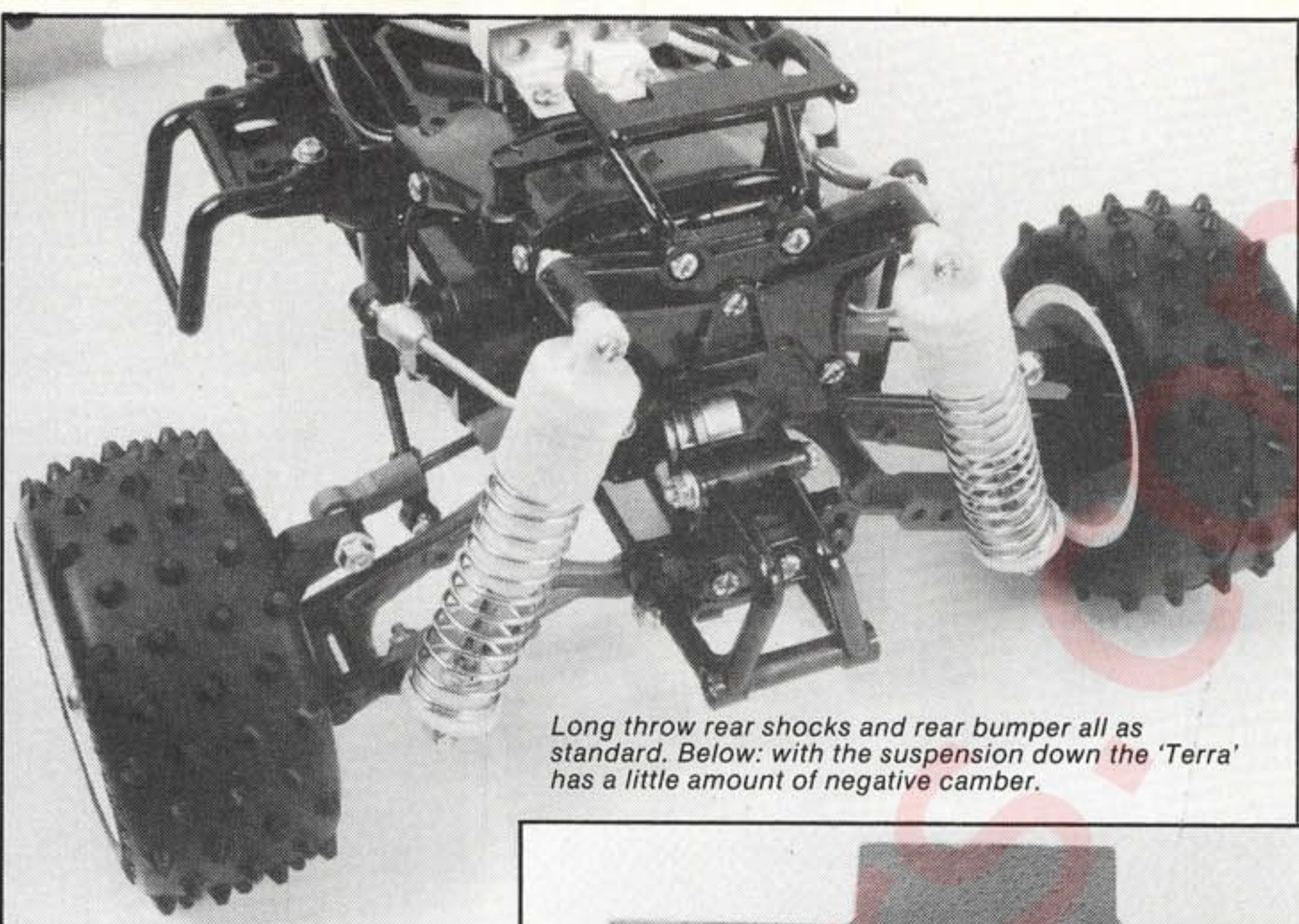
Suspension systems

This is virtually all brand new with different wishbones, adjustable upper arm links, anti-roll bars and at the front end, universal joint drive shafts.

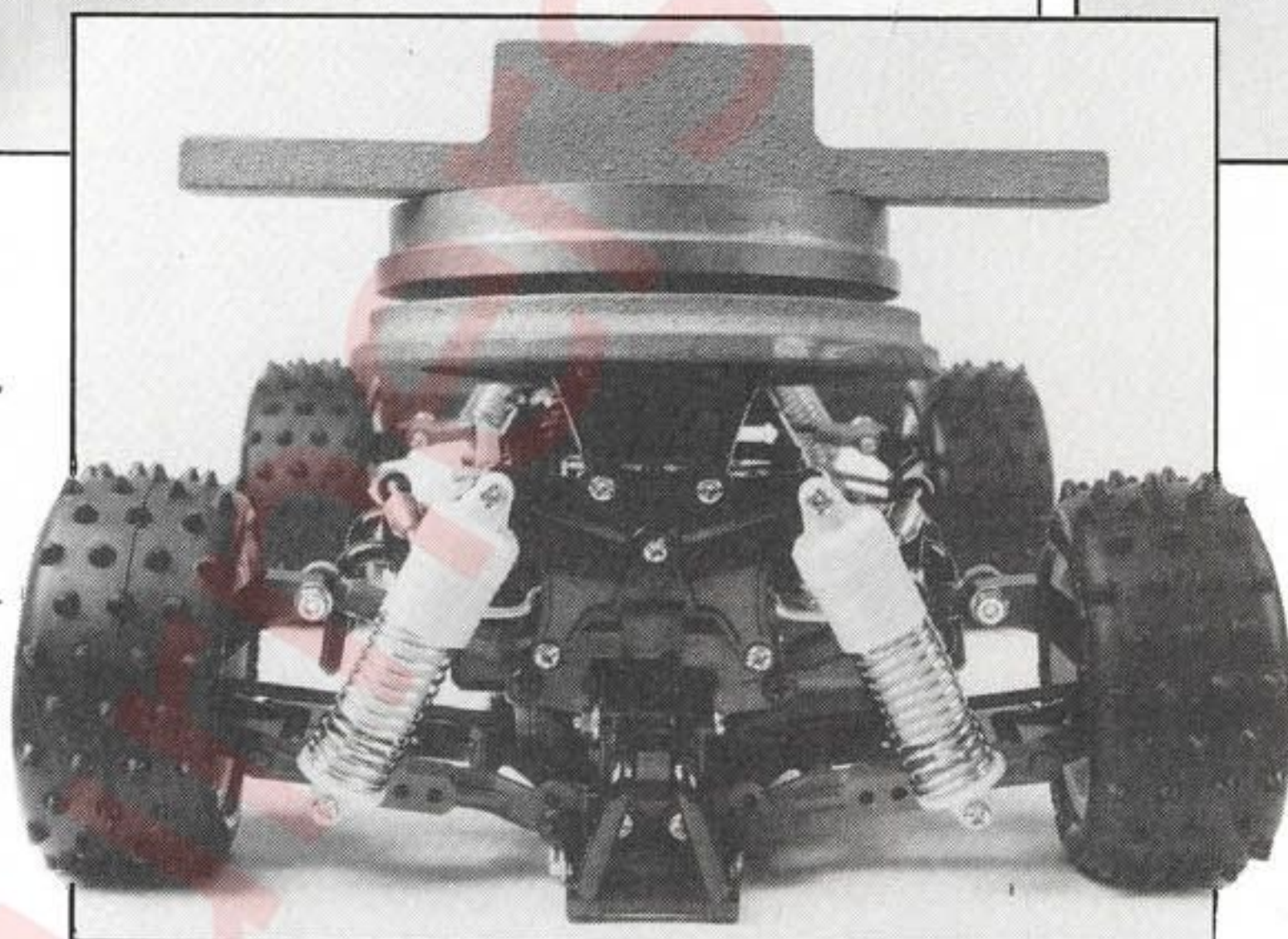
The wishbones are moulded in blue plastic which by all accounts allows you to see any stress marks in the plastic before the situation becomes too bad and the wishbone breaks. The 'Terra's' wishbones are a totally different design to those on

the original 'Boomerang'. Despite being less chunky, they still look very strong.

The wishbones pivot on hardened steel screw pins which have a thread at only one end to retain them in the plastic mounts. The top links are like the steering track rods - fully adjustable and heavy duty. Adjustment of the links means that camber angles of the front and rear wheels can be altered to give different handling characteristics. Once again they are a difficult thing to get on and



Long throw rear shocks and rear bumper all as standard. Below: with the suspension down the 'Terra' has a little amount of negative camber.



The Terra is fitted with the same wheels and tyres all round. Also the front has long throw CVA shocks.

logic says they will be just as hard to get off. The inboard pivots for the upper arm links also use screw pins for quick removal when inspecting or changing the drive-shafts.

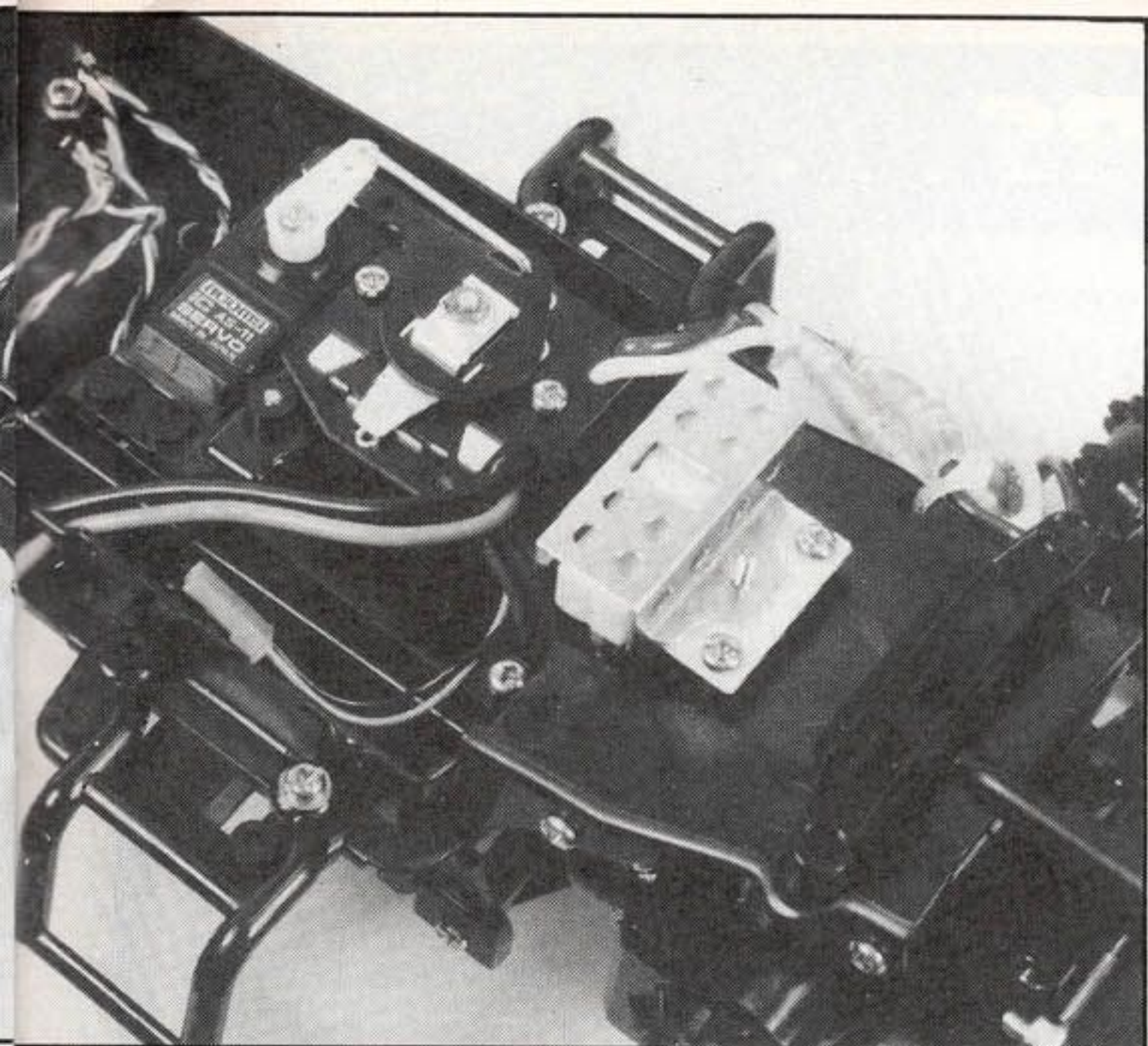
As mentioned above, the rear driveshafts are the solid steel type but the front feature universal joints to stop them flying out during hard cornering. The front UJs are of a fairly standard design used by most other manufacturers.

The anti-roll bars are, thankfully, (though not surprisingly) pre-formed because the shapes are quite complex. By most standards these ARB's are pretty good and do have some effect. Once again they are adjustable and 'Terra' drivers will have the choice between hard and soft settings.

Dampers

These are pretty much the standard Tamiya plastic CVA shocks which have been around for some time. In practice they have proven to work extremely

SHERRIN



Resistor 3 speed controller and cooling block. Below: Various views of the suspension showing camber changes and movement.

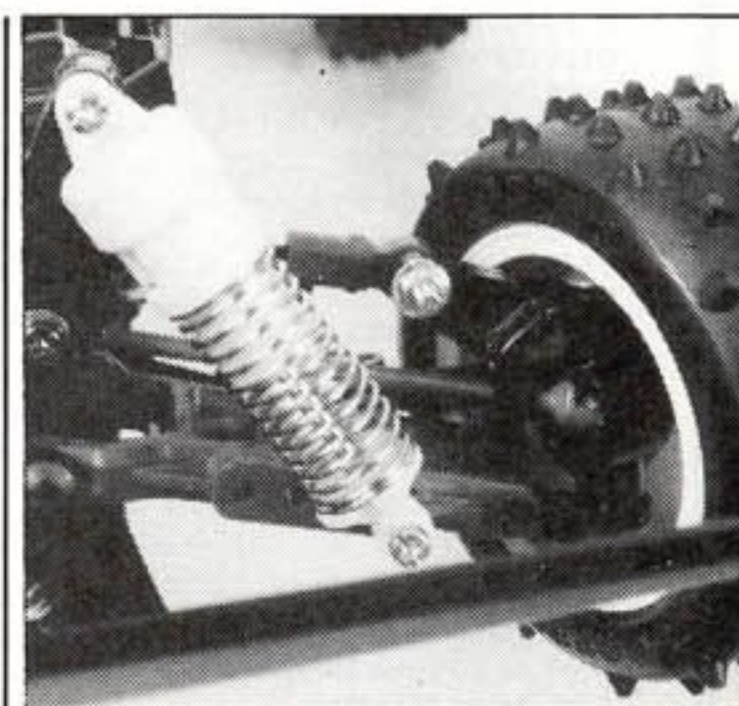
well, do not leak and are easy to set up.

The wishbones feature a range of mounting holes for the shocks to give a variety of ride height settings - again a change from previous models. The last major difference between this car and the one it was bred from is the inclusion of a full complement of ball races to really let the wheels spin.

The rest of the car is pretty much pure 'Boomerang', particularly the chassis which is the same basic plastic bathtub type. This gives plenty of room for the radio gear and makes it easy to work on any part of the system. One word of caution: Before you fit the rear gearbox to the chassis, make sure the centre drive shaft is in place - it will go a lot better with it in place. In an attempt to keep mud and rubbish out of the chassis tub, a top cover doubling as a driver mount encloses the chassis fairly well.

The one-piece plastic wheels are of a slightly different design but are exactly the same size and fitting of Tamiya's other styles of wheel. Needless to say wheels and tyres can be switched between the different cars.

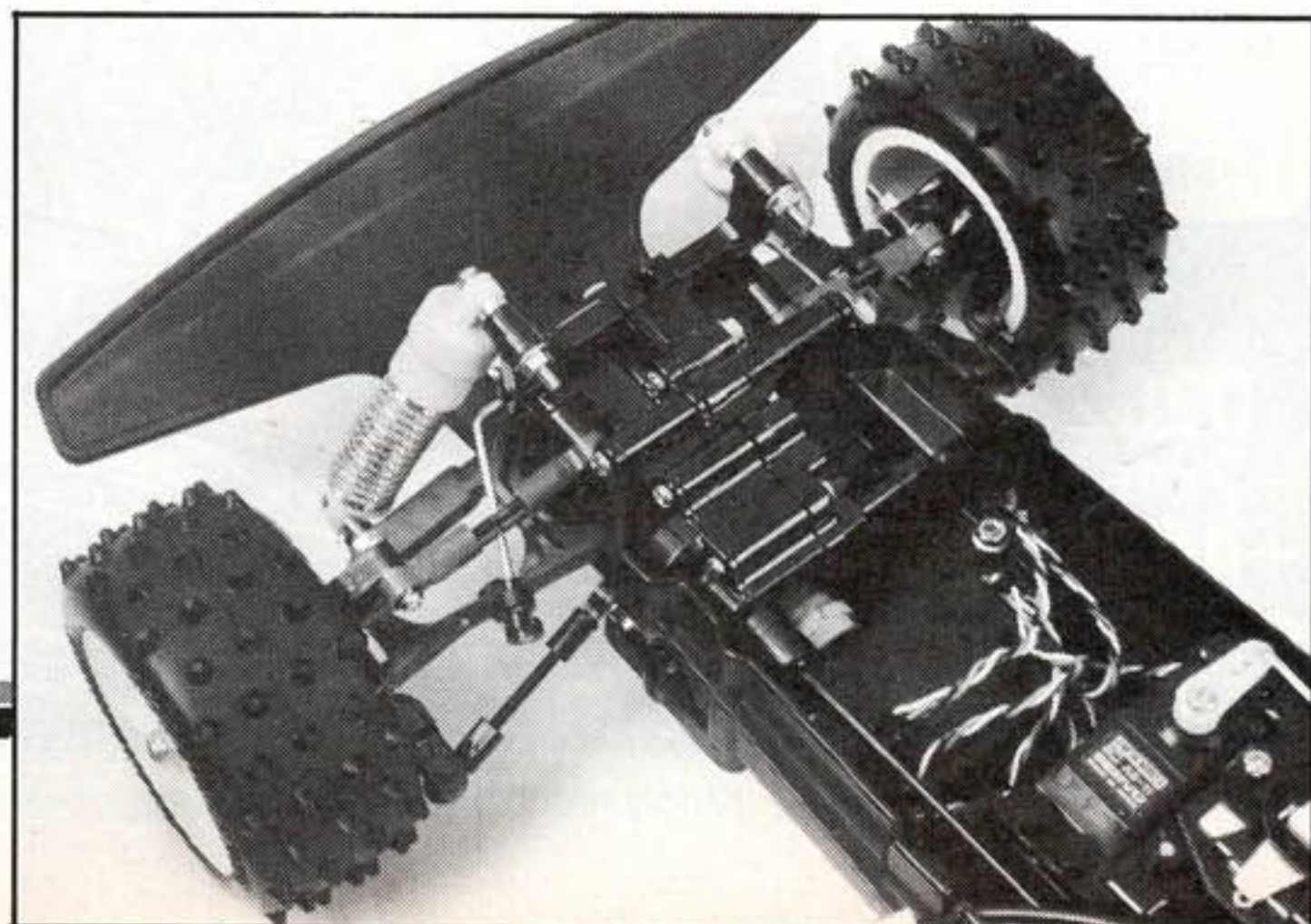
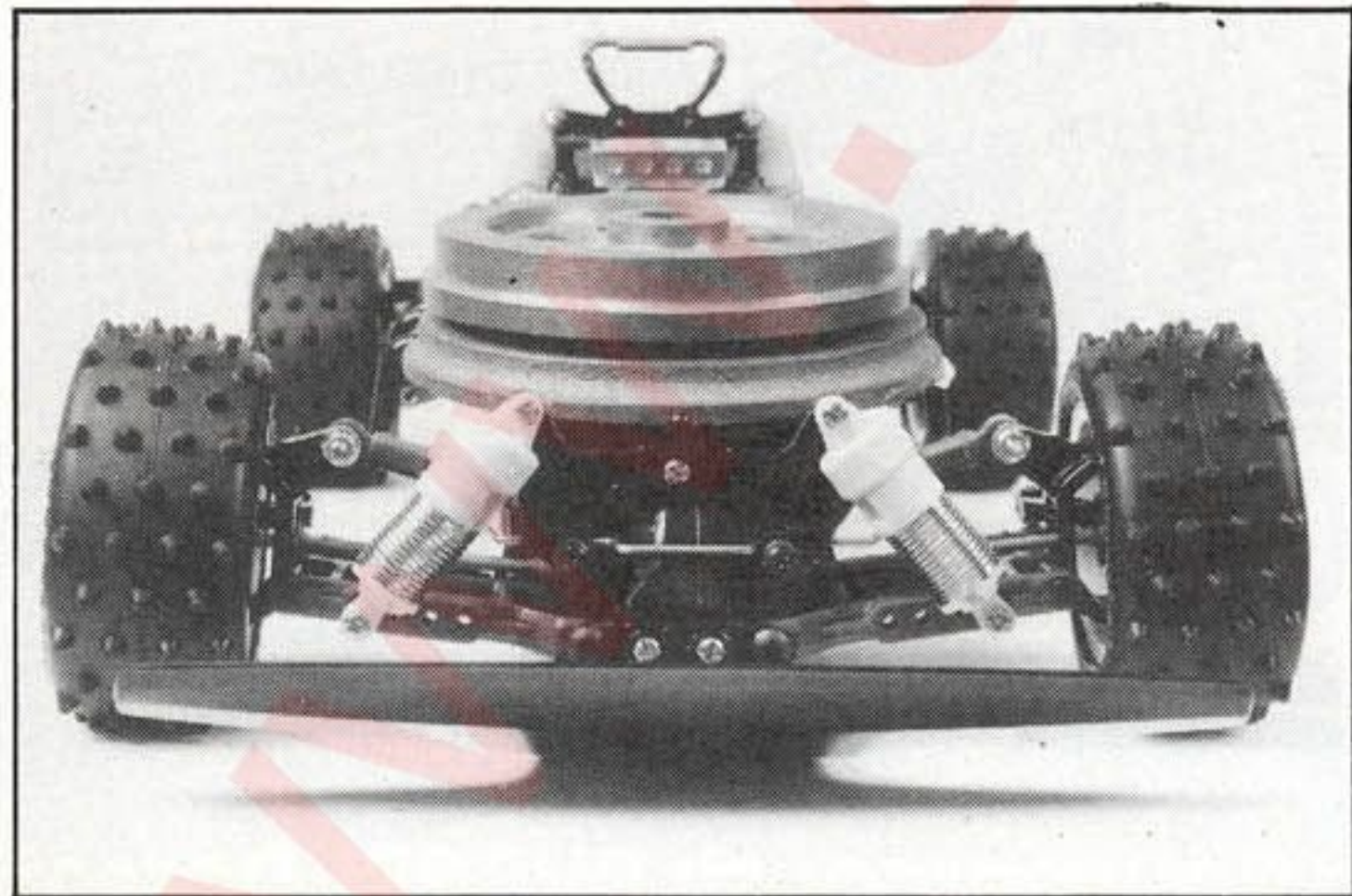
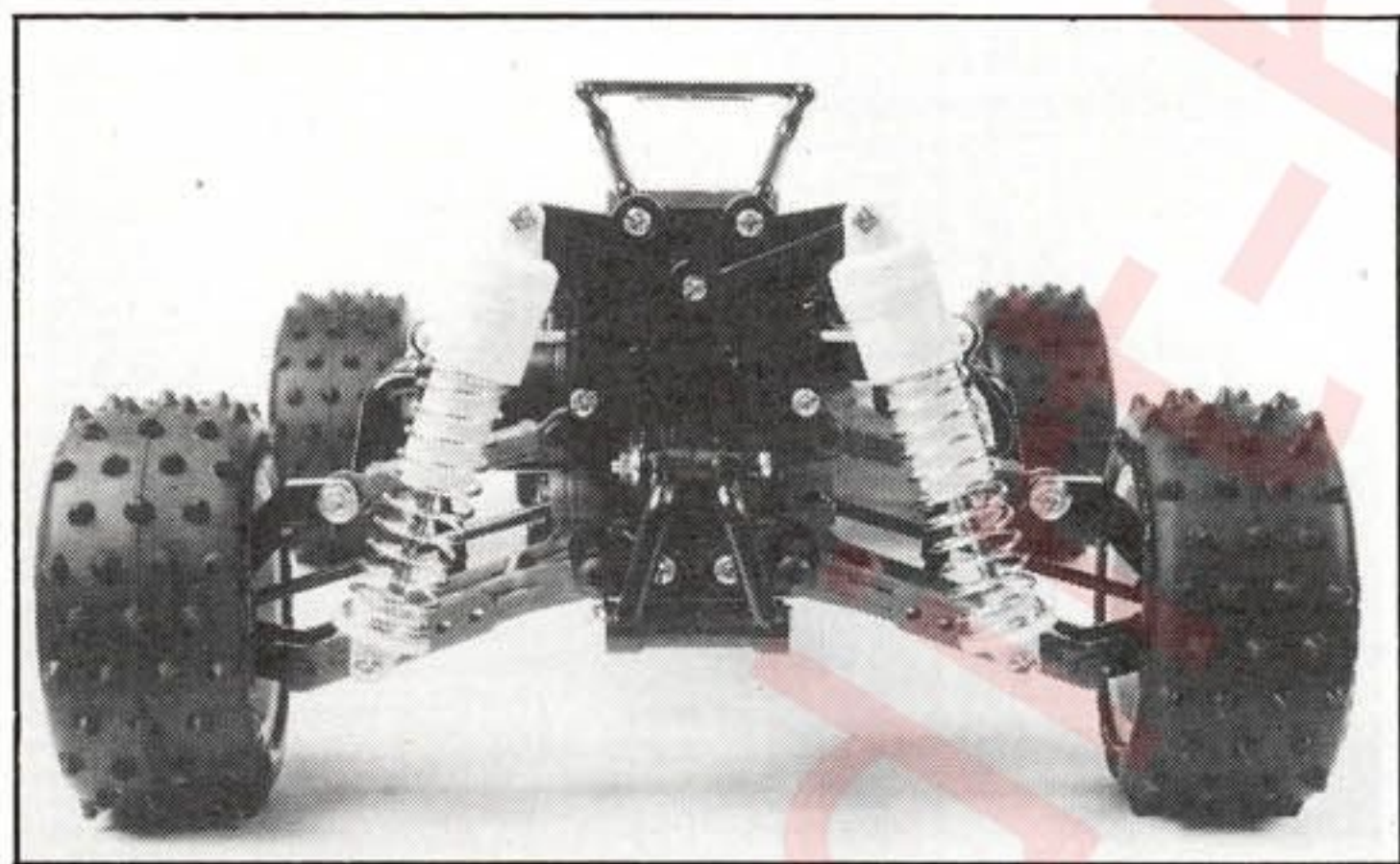
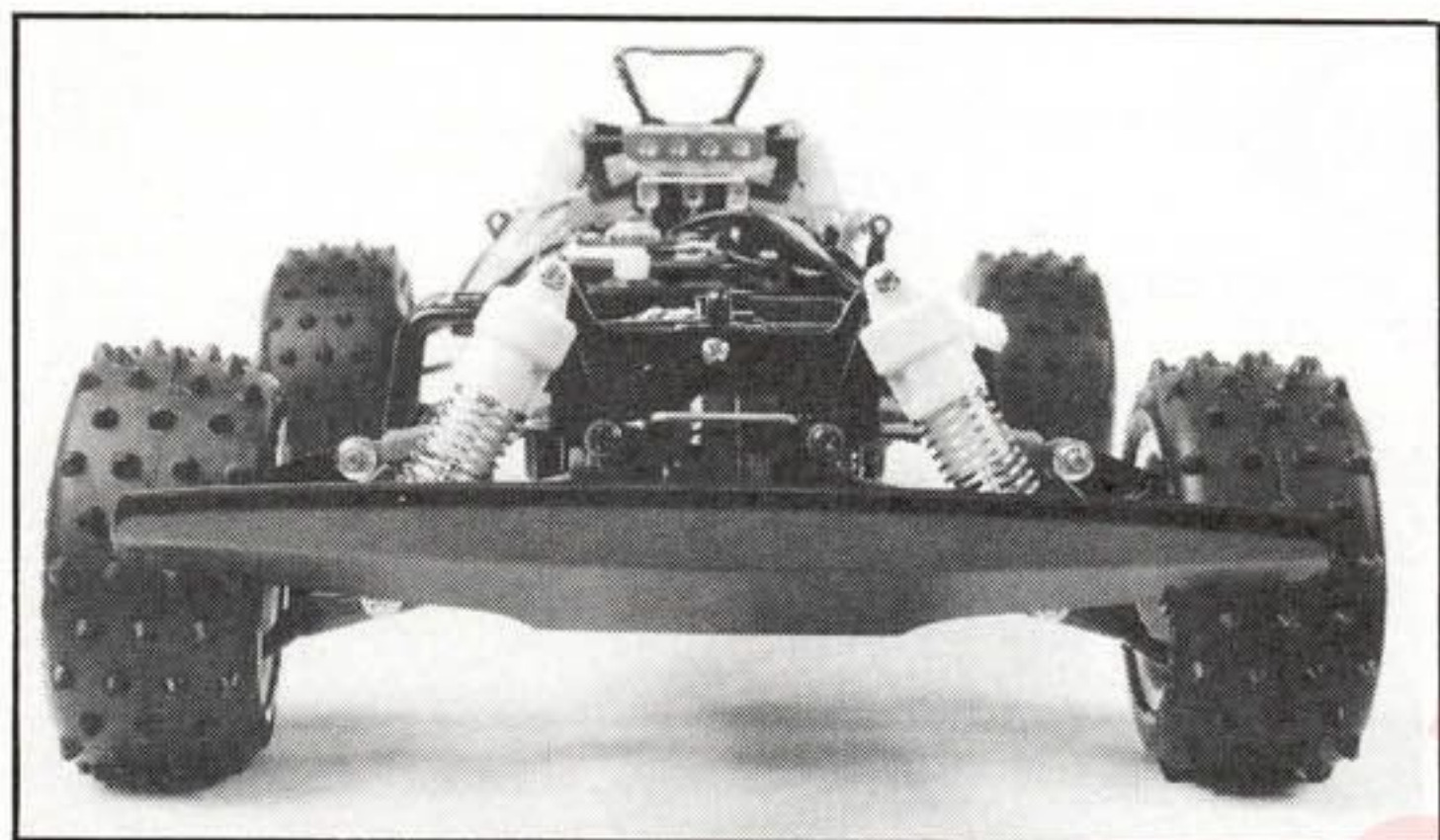
The bodyshell is one of



the most striking things about the 'Terra'. In many ways it reminds me of the Marui 'Ninja' body in style and shape. At the back, however, there is no comparison because a huge wing sits across the rear damper posts. I wonder if the Tamiya designers actually carried out any wind tunnel tests to see what the effects of the wing to the handling of the car. A wing of that size should have some effect.

How the 'Terra' matches up to the likes of the 'CAT' and 'Optima' or the new version of the 'Avante' remains to be seen but certainly in its class this car, on specification alone, has the beating of all the others.

Tough ball joints steer the 'Terra' and from our experience won't come off.



Eastbourne National January 28th, 29th

A new National on the 1/12th scene has to be greeted with much joy, especially when it introduces new racers to BRCA meetings. Eastbourne was given very little opportunity being geographically well away from the main strength of 1/12th club racing. Also the January schedule left a lot to be desired. However, around sixty drivers braved what turned out to be good travelling weather, to attend this new meeting.

With all new meetings, I feel a certain amount of trepidation about the quality of the organisation. At Eastbourne the local drivers with the help of Ian Spashett and John Ford

was a very private affair, between the members of the Chesterfield Club, who always race with intensity. It was interesting to watch Richard Isherwood's driving style, when compared with Kevin Creaser and Richard Pickering. Ishy lacked speed but drove some quality lines whereas Kevin relied on speed and smoothness. The eventual FTD was taken by Pete Goodyear, with his *Shumacher* 'SPC' car.

Formula 1 qualifying was not at all close. In the first round Rob Roy held TQ with a fast 39, closely followed by Dave Gale and Mark Barford, Matt Ford and Pete Riley. In the second round Pete Riley in heat eight cracked a huge grin when he cracked 40 laps to temporarily hold FTD. However, Pete's smile faded when Rob Roy, with a super quick *Demon* 30° standard drove with absolute precision, and awesome

handling to turn 42 laps 11 seconds. In fact such was the concentration involved he virtually fell off the rostrum, an exhausted, quivering wreck. Next fastest was Dave Gale with 40 laps, then Matt Ford and Mark Barford. In the third qualifying round nobody managed 42 laps although Dave and Matt both improved to 41 laps. I must say that this was my first and probably last FTD and I felt so pleased with myself I'm surprised that there was room for anyone else in the hall!

Standard Finals

All the finals suffered from scrappy driving and problems with the difficulty of overtaking on a small, tight circuit. The starts especially were very messy partly due to a rather rigorous grid, which gave absolutely no advantage for higher qualifiers.

The formula 3 A final was won by local driver Ryan Georgakis, a lap clear of Roy Aitkin, who was also a lap clear of Mike Tuson, another local driver. The formula two A final suffered a very messy start which spoilt team *Brampton Models*' chances of taking the team prize. Richard Isherwood benefited, both finding themselves half a lap clear of the opposition.

Eventually Pete Cusworth and Pete Goodyear managed to work their way into second and third positions, but they could do nothing about Richard Isherwood who at last had found some speed - *Reedy* in a can!

The formula one A final also started badly with only Matthew Ford getting a clear start, almost half a lap in the lead. Chris Hardisty came out of the pack second followed by Chris Evans and Dave Gale.

CIRCUIT Racing

did a magnificent job. A superbly, but difficult circuit was laid out on grey primafelt carpet. The circuit featured a nice variety of corners and two difficult chicanes, which caused all sorts of problems. Normally I would have said that the circuit was rather tight, but with the staggered start this was not a serious problem. The only minor criticism I can make was the pit space, which while more than adequate, was somewhat spread around the building, giving the impression of a lack of competitors.

Standard Qualifying

The most startling observation I can make about qualifying was the domination by team *SRM-Associated* drivers Dave Gale and Rob Roy. In every qualifying round of the day they pushed a long way clear of their fellow competitors. It was as though the absence of Phil Davies that spurred them on to a new standard of driving. Also, I suspect that the desire to impress Mick Langridge had a lot to do with it. The best part of it was that both Rob and Dave ran *Associated* 'Corvette GTP' enclosed bodies, proving that you don't need the almost obligatory 'TOJ' to achieve an excellent handling car.

In Formula 3 there was the normal close competition for FTD, with many drivers in contention, but the honours eventually went to Ryan Georgakis after a fine drive.

In Formula 2 the qualifying

Rob Roy reports from the Eastbourne National

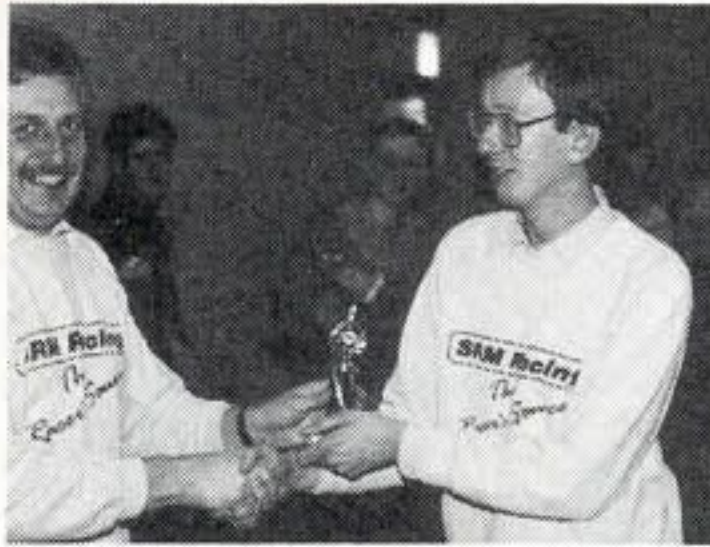


Rob Roy's RC12L complete with pink and white SRM bodyshell.

Dead last was Rob Roy who quickly caught Mark Barford, who was trying to pass Pete Riley. A misjudgement saw Rob off the track and almost lapped by Matt Ford. Dave Gale started to get desperate to pass Chris Hardisty, and a number of touches allowed Pete Riley and Mark Barford to close up, and they in turn were quickly being caught by Rob Roy. A mistake by Chris Hardisty caused a bad pile up, which allowed Rob into second place. For three minutes Rob drove hard and whittled away Matt Ford's commanding lead. With a minute to go Rob caught Matt and proceeded to try to convert his better lap times into an overtaking opportunity. Matt adjusted his lines, leaving no gaps. On the last but one lap Rob squeezed inside on the entrance to the chicane but couldn't clearly pass. On the last lap Rob attempted the same manoeuvre, but just clipped the hose, giving Matt a much deserved victory. Rob second and Mark Barford third. The team prize was won by *SRM Associated* with *Brampton Models* a very close second - one point only. For some reason Mark Barford's motor was stripped. I know which I would have chosen, as one, namely mine, stuck out like a sore thumb as an obvious flyer. Mark's *Demon* was absolutely legal.

Modified Qualifying

The extra power of modified motors quickly created the



Dave Gale receives his 1st place trophy.

expected improvement in lap times. The grip was excellent, allowing power to be exploited to the full. Without doubt the most power was to be found in the hands of Rob Roy, Dave Gale and Chris Evans, all running Twister '21' Double Tornados. The absence of Phil Davies, Pete Farmer and Glyn Pegler caused something of a gap in qualifying. Certainly I've not seen the performance of Reedy and Parma motors look so tardy for quite a while. The absence of the best Reedy and Parma drivers obviously affected their team mates.

The qualifying in formula three was as ever very



Chris Evans came home 6th and receives his trophy from Mick Langdrige.

competitive. Eventually local lad Robin Streeter took FTD driving good steady lines, with a slightly slow car. Robin qualified with a time of 39 laps 9.33 seconds. Second qualifier was Ellis Stafford with 38/6.96.

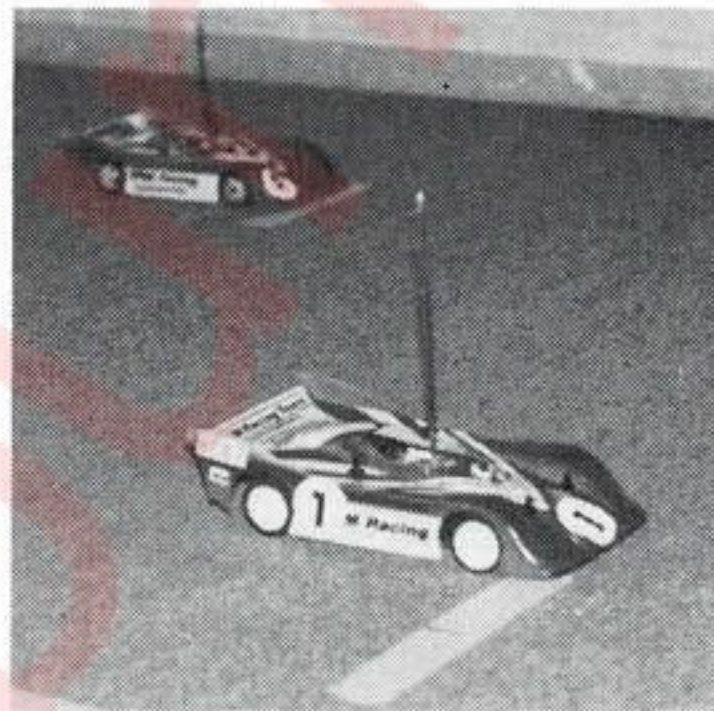
In formula 2 David Spashett appeared to have everything sown up. He was clear T.Q. after rounds one and two. Unfortunately, for young David, in round three Kevin Creaser with his new 12L sneaked FTD by half a second - 41/11.36. David was second qualifier with a time of 41/12.00 and was closely followed by Paul Ash and Nigel Piltz. Kevin ran a Reedy 'Blue' dot 25 double.

In formula one, round one Dave Gale set TQ with a fast 42 closely followed by team mates Rob Roy and Chris Evans. Round two saw David again take TQ with 43 laps closely followed by Rob also with 43 laps, next closest was Matt Ford and Mark Barford with fast 41s. The final round of qualifying and Dave Gale took FTD, 43/4.09 with Rob Roy snapping closely at his heels 43/6.96 and Matt Ford a distant

third with 43/16. David and Rob both used Twister '21' double Tornados whilst Matt ran an LRP green.

Modified Finals

The formula 3 A final closely followed the qualifying order. Robin Streeter winning with a



Dave Gale's and Rob Roys cars sit on the front row.

lap margin over Ellis Stafford who was two laps clear of Michael Tuson. If these drivers manage to race at more meetings they should have a successful future.

The formula two A final was won by David Spashett with an excellent start to finish race leading drive. From the start David had half a lap lead over the chasing group which included Kevin Creaser, Terry Evans, Paul Ash and Nigel Piltz. By six minutes into the race Kevin Creaser had positioned himself strongly in second with Paul Ash third. The now traditional Spashett dump spurred Kevin and Paul on, but the strain was too great on Kevin's batteries, and he dumped in a big way. Paul closed up on David but an accident dropped him back nearly into the clutches of third place Nigel Piltz.

The formula one A final produced a really messy start. David Gale from pole managed to get away, but second and third suffered badly. David drove very gently but slowly pulled away from second placed Chris Evans. Matt Ford from a disastrous start quickly worked his way into third, then proceeded to sneak past Chris to take on the chase for the lead. David had by now 3/4 of a lap lead and was driving a totally controlled race, driving conservatively in both his lines and use of power. A bizarre incident then occurred. Tim Briggs crashed in the chicane, Dave Towell moved to marshal the car, totally obscuring the chicane for Dave Gale, who drove to a stop hoping Mr. Towell would move. Unfortunately Dave Towell assumed Windy's car had broken and picked it up. Windy had one of those moments where your mouth moves but no words come out, however, Mick Langridge bellowed 'Put it down' which saw Windy restored to the track just feet ahead of Matt. Windy's response was a series of blistering laps with caution thrown to the wind, re-establishing his previous dominant lead. A fine and much deserved win for Dave Gale, let's hope many more will



Steve Brace with his trusty Parma - looks happy enough with his performance.

EASTBOURNE MODIFIED TECH CHART

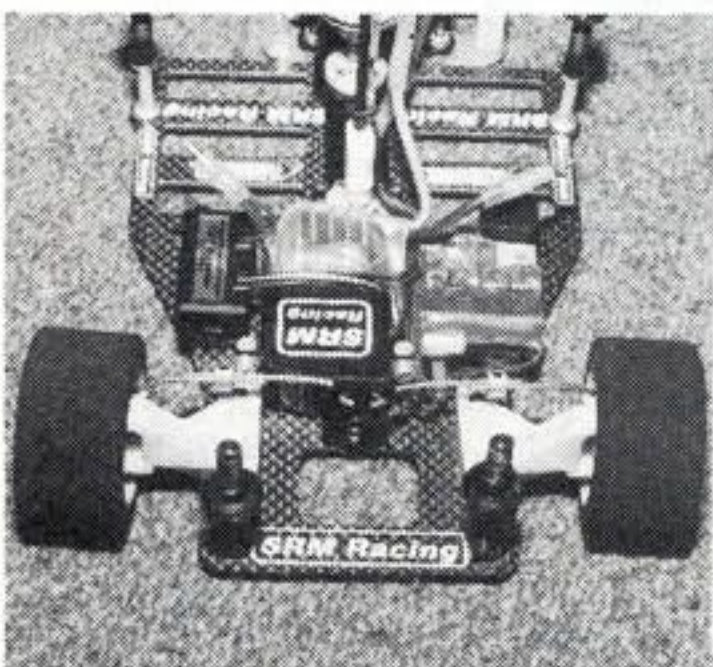
Driver	Car	Cells	Speedo	Motor	Tyres	Radio	Servo	Body	Ratio
D. Gale	Ass. 12L	PK SCE	Galeforce Tornado	Twister 'Tornado' 24 Double	Grand Prix C	JR Apex	KO FET	Ass. Toj	33.5 mpr
R. Roy	Ass. 12L	PK SCE	Galeforce Tornado	Twister 'Tornado' 21 Double	Grand Prix C	JR Apex	KO FET	Ass. Toj	33 mpr
M. Ford	Corally SP II	Intronics PK SCE	Intronics Int.	LRP Green	Grand Prix C	JR Apex	132 H	Frewer Toj	30.30 mpr
M. Barford	SCH SPC	SCH SCE	SCH FWO	Reedy Silver	TRC Green	JR Apex	132 H	SCH Toj	31.9 mpr
T. Biggs	SCH SPC	Laser/Parma SCE	Intronics Int.	Demon 20 Dbl	Tru-Tyres 07	Beat 2 Pro	132 H	Sarik Toj	25.2 mpr
C. Evans	Std graphite RC 12L	Laser/Parma SCE	Galeforce Tornado	Twister 21 Dbl	Grand Prix C	JR Apex	KO FET	Ass. Toj	32
P. Hodge	Parma Pro 12	Parma SCE	Int. Intl.	Parma 23 Dbl	Parma Grn.	KO St. wheel	132 H	Parma Osella	31.22
R. Isherwood	Ass. 12L	No. 1 SCE	G. Force Tornado	Twister 21 Dbl	TRC Green	Sanwa Exerd	KO FET	Ass. Toj	34 mpr

follow. Matt Ford finished seconds, with Chris Evans a fine third.

The team prize was again won by *SRM-Associated* with *Intronics* second. Trophies for the meeting were donated by *Intronics* and *SRM Racing* - a factor which I'm sure must have helped the viability of the meeting.

Grand Prix Model Products

A new year has dawned, and so far in the month of January there have been three dominating factors. *Grand Prix* 'C' tyres have won every meeting, along with the *Associated* '12L' car and *Twister* 'Tornado' 21 Double motors. The Model Engineer Exhibition was won by Dave Gale, the *Ever Ready* Watford League meeting was FTD by Dave Gale and won by Rob Roy, and finally Eastbourne National was FTD and won by Dave Gale.



Rob Roy's RC12L with KO servo.

Definitely an important factor in these results is the consistent quality of *Grand Prix* 'C' tyres. With doubt these tyres are of the highest quality available, and at a bargain price. The latest batch as used at Watford and Eastbourne is slightly firmer, retaining all the benefits of excellent grip but with a reduced wear rate.

Such is the quality of *Grand Prix* tyres *Schumacher* have chosen them to fit on their 'Cat' trued and glued wheels. Certainly I commend *Schumacher* on their choice as these two outstanding products, 'CAT' and *Grand Prix* 'C', certainly deserve each other and are the winning combination indoors on carpet. If you do not run a '12L' you can still benefit from *Grand Prix* 'C' quality. Matt Ford and Glyn Pegler both only use *Grand Prix* 'C' on the *Corally* and *Parma* cars.

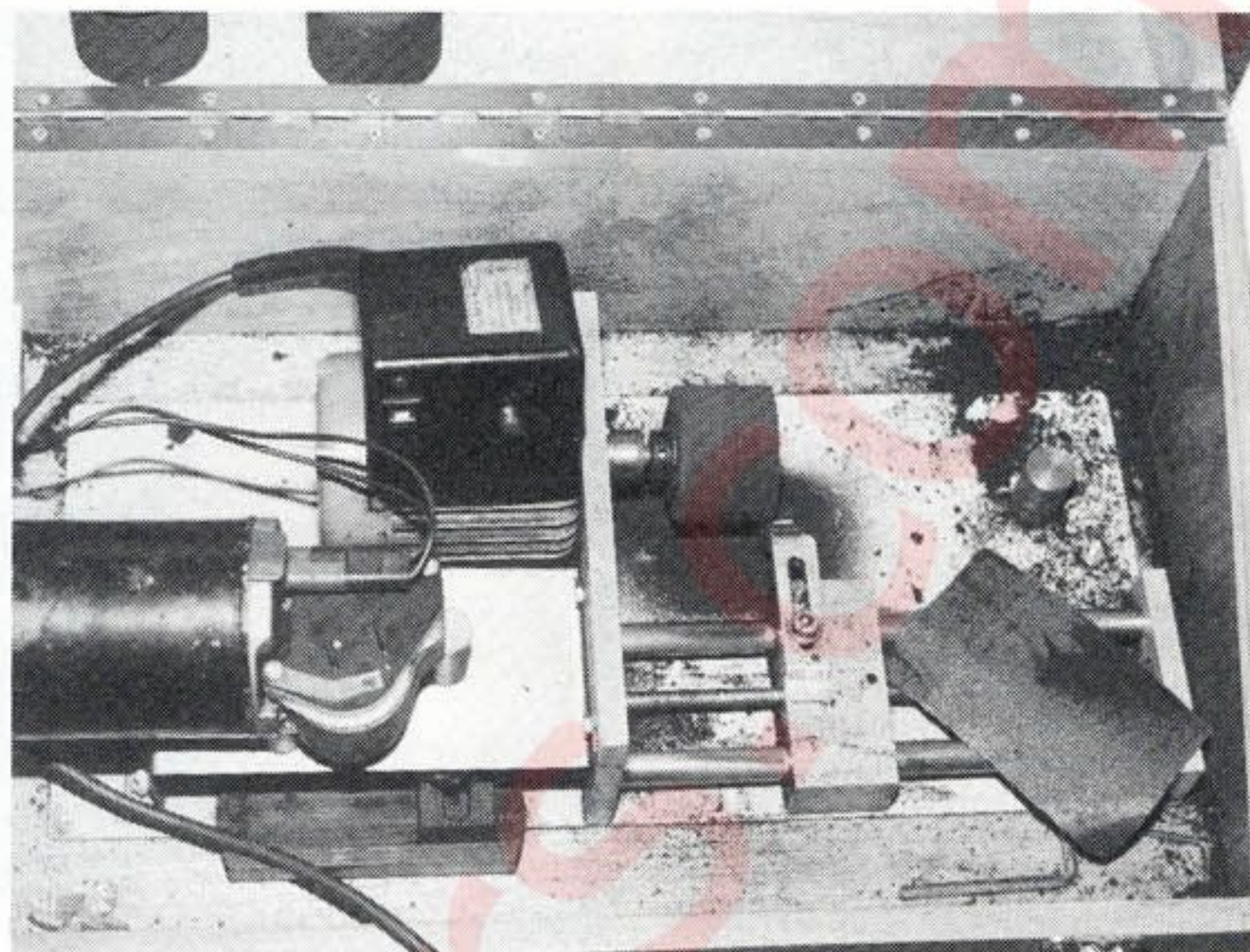
Demon Motors

In standard class, at the moment, there is only one motor worth buying. That is the 30° advance *Demon*, it blows the standard *Yokomo* into the weeds. However, no doubt the *Yokomo* importers will come up with something slightly better soon.

The *Demon* seems to

perform exceedingly well with both SCR and SCE cells. For SCR the appropriate gear ratio is 42-44 mpr depending on the nature of the track. For SCE cells it is better to look at 48-55 mpr but avoid overgearing as this will wreck the commutator. I found with my motor that it was advisable to replace the standard brushes, with full width *Reedy* 'Ultra' type. Be careful to run-in these new brushes fully before running the motor in the car. It is also a good idea to try to bed in the bushes, as these tend to be a little tight. One final comment; these motors are very highly advanced, and therefore do not take at all kindly to running in reverse. Another side effect of the advance is that adequate suppression must be used, or interference will occur.

Complementing the standard



Tyre Truing on sight - easy when you Know How.

PRO 10 News

The new year has dawned, with weather apparently much better than last summer - at least it's not cold and not raining. Suitably encouraged I arranged an expedition to Southampton on January 15th to try my first taste of 1/10th circuit without additives. As the new *Associated* car was some way off I spent Christmas armed with glassfibre, drills, files and a few ideas severely modifying my *MRP* car. So Southampton was my debut with an all new car, no additives and a new attitude - racing for fun.

On arrival at Southampton after a very enjoyable drive - for the driver if not the passenger - I was amazed at the number of people braving a cold damp morning. Around 20 'buggies,' 5 *Tamiya* 'Williams', and 40 'Pro 10' drivers were all eager to race. Sadly the weather was slow to oblige, the track staying damp for most of the morning. Hot favourites to win the meeting were Jimmy Davis and Glyn Pegler who were both busy practising. Also looking dangerous was Bill Jones with his *PB* 'Sizzler'.

An enjoyable day's racing later saw Jimmy put his *Composite Craft* 'Lynx' on pole, with a new track record - faster than had previously been seen with additives. Glyn Pegler won a messy A final, by virtue of

making no mistakes. Despite Jimmy's qualifying performance I would say that Glyn drove better, as his car was undoubtedly short of traction when compared with Jim's. This is by no means a condemnation of the *Parma* chassis which adequately controlled the available grip.

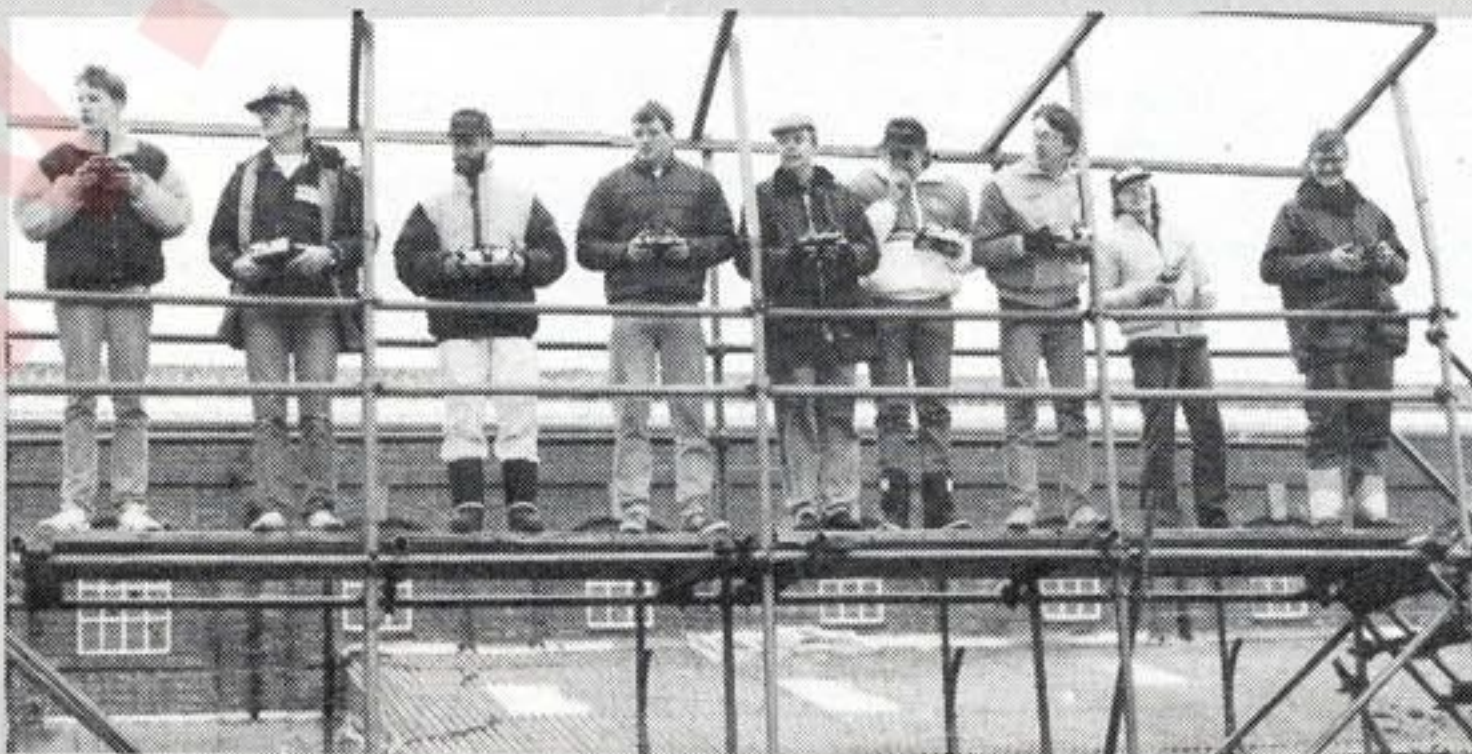
My virtually homemade car had an indifferent day while I learnt what tyres worked by trying all the ones which didn't! As ever by the B final I had discovered the relative merits of *TRC* tyres, and managed a

respectable if far too late time. Whilst on my way to achieving adequate grip I tried *MRP*, *PB* and *PB/TRC* tyre combinations, none of which I would advise in the prevailing conditions.

The tyres that worked best at Southampton were the so called *Pit Stop Models* tyres used by Jimmy Davis and Mick Langridge. These tyres were very soft, tacky to the touch, and had a very open grain. Both Mick and Jimmy had colossal grip and were able to use power at will. Jimmy was



Rob Roy's MRP Pro 10 with mono shock front end.



Pro 10 outdoors - Southampton rostrum gives excellent visibility.

running a *Reedy* 'Gold Star' 14 turn motor yet I never once saw his car lose traction. As for Mr. *SRM*, a man renowned for aggressive use of the throttle, he continually ran flat with a *Twister* '401' but again the rear of his car stayed glued. So if you've got money to spare contact *Pit Stop Models* to purchase traction.

Glyn Pegler tried *TRC*, *Parma* and *PB* 55ss tyres, but could not find enough grip to totally tame his *Parma* 18 turn single *Cyclone* and *Mega* joule SCE cells. In the final Glyn opted for the *PB* 55ss and

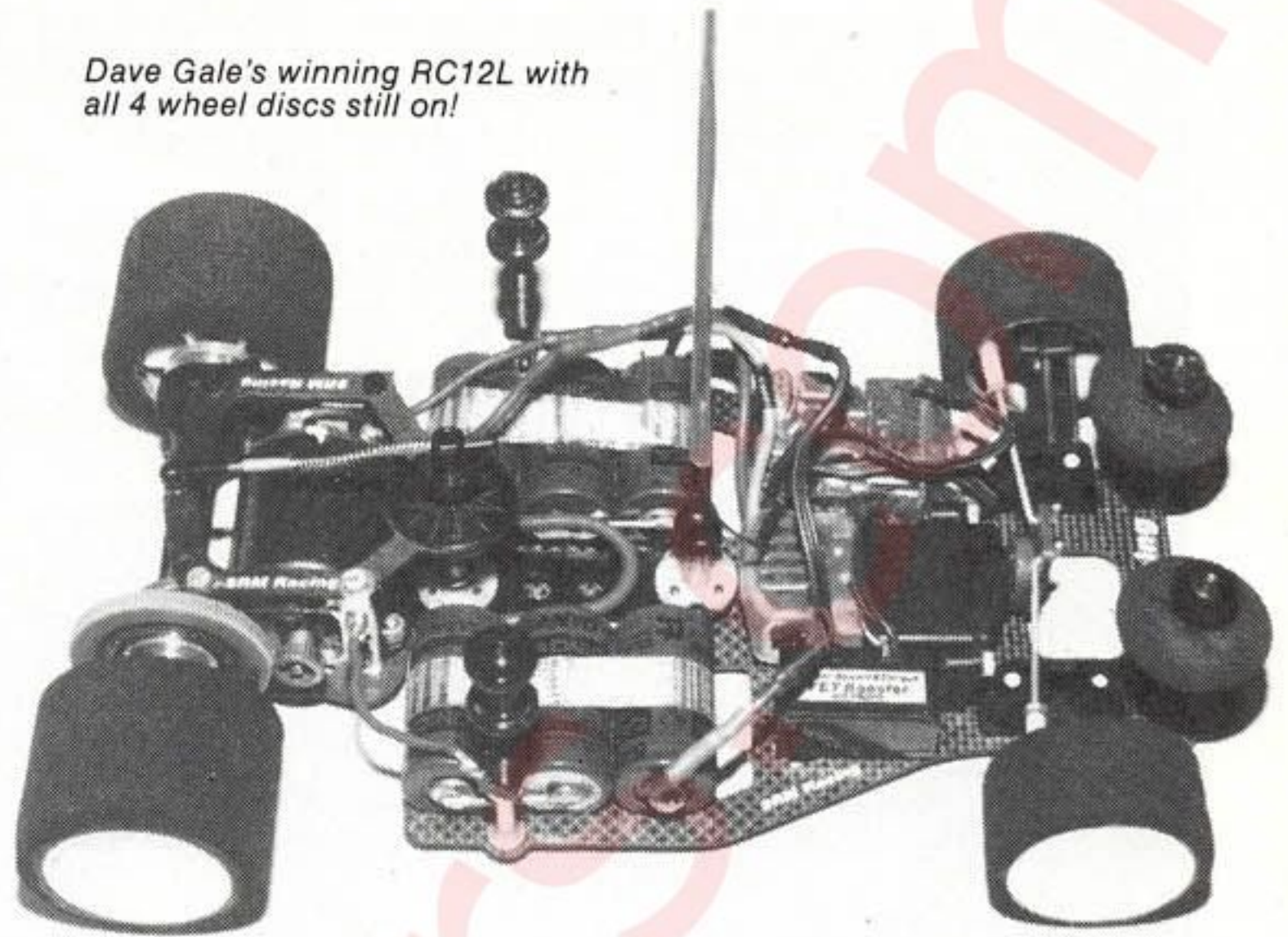
motor sales, is a range of modified motors. These are available in standard magnets, wet magnets, or as armatures only. As there are 25 winds available this gives a mind blowing selection of 75 options.

Fortunately for 1/12 racing we only need to consider 19-25 turns, and it is best to only use wet magnets. Of the armatures I have seen, the following have caught my eye: 20 triple and 21 triple for 1/12 and 18 quad for Pro 10 racing. Undoubtedly other winds in the range will be very good, but of the limited selection I have seen these three winds appear excellent. They are all high torque and therefore should be run with minimal advance, and geared high.

The good news about these motors is their price - £30 for a

complete unit. The armatures are available through *Intronics* at a price of around £16. Built up in a *Yokomo 'Ultra'* can they perform very well. Pro 10 drivers will need to look carefully through the range of 14 to 19 turn motors, selecting the wind they think best suits their requirements. One point to bear in mind is that as *Demon* motors are a budget range they are not silver soldered or epoxied; this means that the armatures will tend to lose their balance and increase in resistance if the weld breaks down. However, as the cost of a new armature is only the same as a standard, and will definitely last longer, this should not put off budget-conscious racers. To sum up, *Demon* motors supply very cost effective performance.

Dave Gale's winning RC12L with all 4 wheel discs still on!



drove carefully. I tried *PB* 215/M rears and 202 fronts, I found them too low on grip, especially at the front. Changing the fronts for *TRC* blues produced undriveable front end, adding *TRC* greens at the rear gave me the best compromise available - of course my car is hardly pedigree! *TRC* drivers also thrived on the blue/green tyre combination. Dave Gale tried greens all round on his very nervous *Bolink*, eventually he state he preferred blues at the front.

Watching the cars running around the track left one final impression. The *Composite Craft* and *PB* cars seem to have the edge. How much of this is due to the De-Dion style rear end I cannot say. Obviously in full size terms they are a known and trusted suspension system, much favoured by companies like *Alpha Romeo*. In theory the *PB* 'Sizzler' has a better set up because its weight is central on the rear axle. In practice I do not believe this makes a lot of difference and anyway it is offset by imprecise location of the rear axle, which rocks about alarmingly in the close set bearings, and could cause tramp in high traction conditions. At this moment in time, and despite some doubts about design strength, my feeling is that the 'Sizzler' has to be highly recommended. If you have any doubts ask Mick Langridge whose car performed impressively both on carpet at the Model Engineer Exhibition and on asphalt at Southampton.

To say that the De-Dion rear end is an advantage was certainly the truth on the Southampton circuit. The grip was low as the track barely dried all day, also some drivers could not adapt their 1/12 style driving to the wide, sweeping approach that Southampton encourages. I am sure that conventional 'T' piece style rear ends will be more than competitive, especially if they are used in conjunction with the very high traction tyres

used by Jimmy Davis and Mick Langridge on their *Composite Craft* and *PB* cars. Certainly Bill Jones with a 'Sizzler' and *PB* 55X tyres had no better handling than Glyn's *Parma*. Pete Winton's *TRC* on *TRC* blue fronts and green rears was also very competitive, but didn't look as on rails as a well shod *PB* or *Composite Craft*.

In the 1/12 scale the 'T' piece rear end set up is very well established. Originated by *Schumacher*, and refined by *Associated* and *Parma* the 'T' piece is the best rear suspension available. In 1/10th circuit given the right tyres I would expect the conventional rear end of *TRC*, *Parma*, *Bolink* and *Associated*'s cars to work very well indeed. Eventually only time will tell, but in America the *Associated* car, in prototype form, dominated the National Championships.

For the time being you pays your money and takes your choice; all the cars have good and bad points. For the club racer I would advise checking which cars work best on your local circuit, and take the advice of their drivers. Otherwise, find out spares

availability before you purchase - this should present no problem with the *PB*, *Parma* or *Associated* cars, and I suspect Ted Longshaw is well stocked with *Bolink* spares. For tyres *PB*, *TRC* and *Parma*, and *Grand Prix C* are readily available. As to *Arrows*, *Japs* etc. consult with your local 1/8th scale drivers on where to get them - Colin Leake obviously knows, but he's not telling!

Having spoken at length about the rear end of 'Pro 10' cars I have decided to give some mention to the front suspension. All of the available marques mentioned use essentially the same front end, namely the sprung king pin. This suspension system has been used competitively for six or seven years and was originated by *Delta* on the World Champion *Delta* 'Super Phaser' 1/12 car. Subsequently *Associated*, *Parma* and *Demon* 1/12 cars have used this suspension design. So 'Pro 10' cars all use a front suspension design which has won the last four 1/12 world championships. This has to be looked at as a real bonus for 'Pro 10' drivers.

Of course all the cars vary in the exact particulars of the suspension set up. There are variations in camber, castor and spring rates, all of which vastly affect the performance of the suspension. The *PB* and *TRC* cars have easily adjustable castor, achieved by rotating the beam. On the *Parma*, *Composite Craft* and *Associated* cars castor wedges are provided. On the *TRC* *Parma* and *PB* cars, camber is adjustable, but only by bending the king pins. To adjust the spring rate it is necessary to start buying springs, *Associated* make a range of springs, as do *Parma*, it is also worth acquiring *Bolink* and *PB* springs. The *PB* springs are highly recommended, as they are the wonderful items that used to be fitted to the *Demon* car, an absolute must for '12 L' drivers.

If you're in search of good racing, at high speed, get a 'Pro 10' car. The choice is yours, and they all work well. In a year or so we will know which is best, but at the moment any car is a winner, buy one and enjoy the racing.



Comp Craft Pro 10 with rear downforce wing.



Optima Custom

Another LWB
Optima from
Kyosho – but
more Affordable!

Just when you thought it was safe to go back into the model shop; just when you thought you knew where you stood; Just when you had made your mind up about what car to buy next. Then along comes Kyosho with another 'Mid'.

At least you can't say there isn't a choice. In fact most people have lost count of the number of different 'Mid' kits that have become available over the past 12 months. Pity the poor old model shop owner who has to figure out just what it is about the latest version that is so different. Imagine him running around the shop slapping the wrong prices on the boxes and selling 'Turbo' kits at 'Economy' prices (you wish).

Or think about the proud driver of a new 'Mid' - one week the talk of the club, the next on the receiving end of total apathy. Perhaps *Kyosho* could consider stamping a sell-by date on the kits so we know which ones to buy before they go off.

Whatever the solution the fact of the matter is that we have a new 'Mid', the 'Custom', to think about and compare with the major players in the ever-popular 4-wheel drive buggy scene. The 'Custom' is (thank God) an economy car offering a neat range of features but as a lower cost compared to the high-tech, mega buck machines currently destroying a race track near you.

What's included

Basically the 'Custom' is a cheaper version of the celebrated long wheelbase, saddle pack 'Mid' which arrived at the end of last



year. The basic design is common to all 'Mids' and stems from the original car which did not win the 1987 World Championships.

Wow! Here's a thought. Perhaps *Kyosho* are trying to milk the 'Mid' design for all

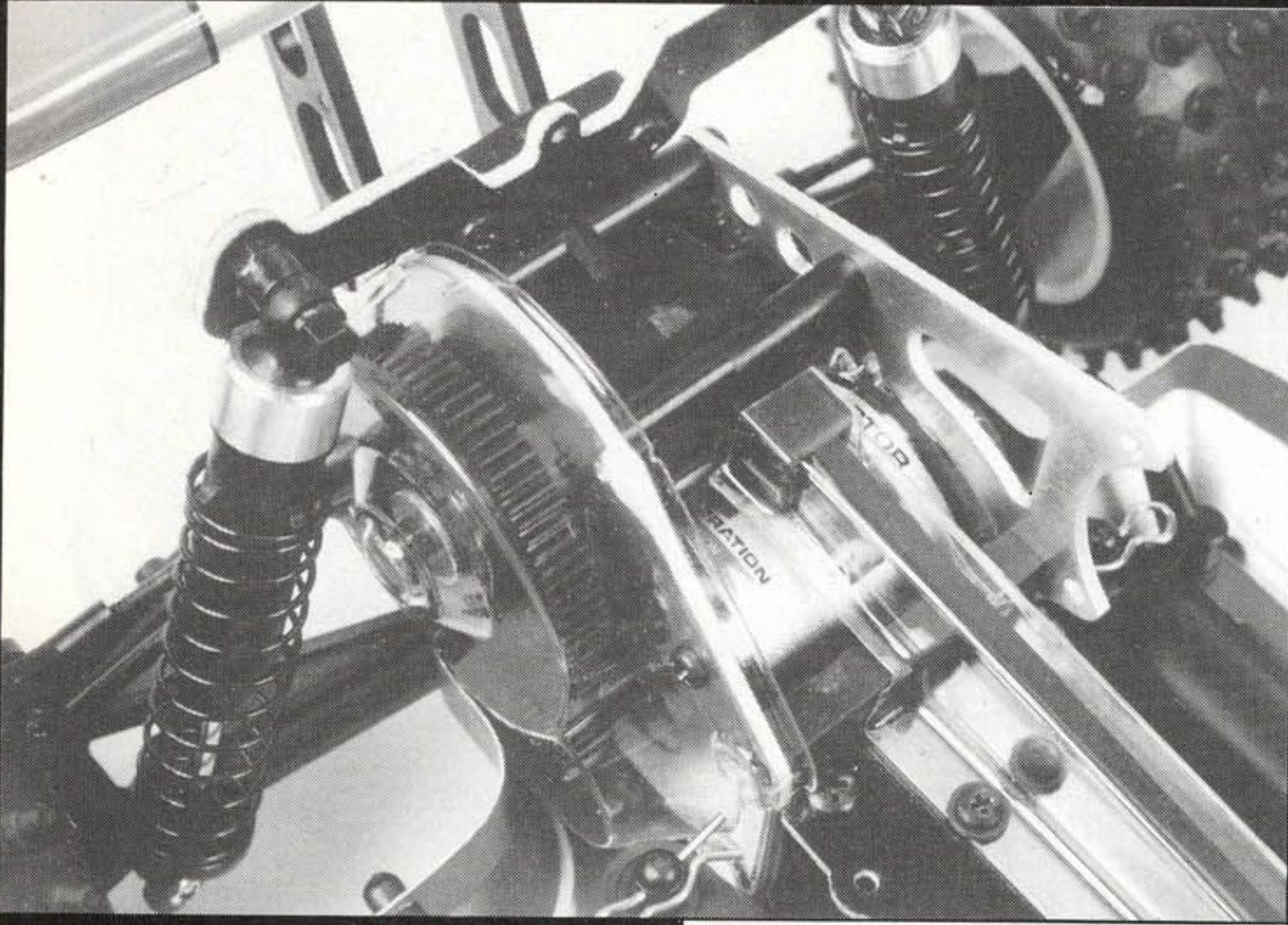
it's worth before they bring out a totally new car to compete at the Australian World Championships being held later on this year, but for now let's look at what we've got.

The 'Custom' has a lot

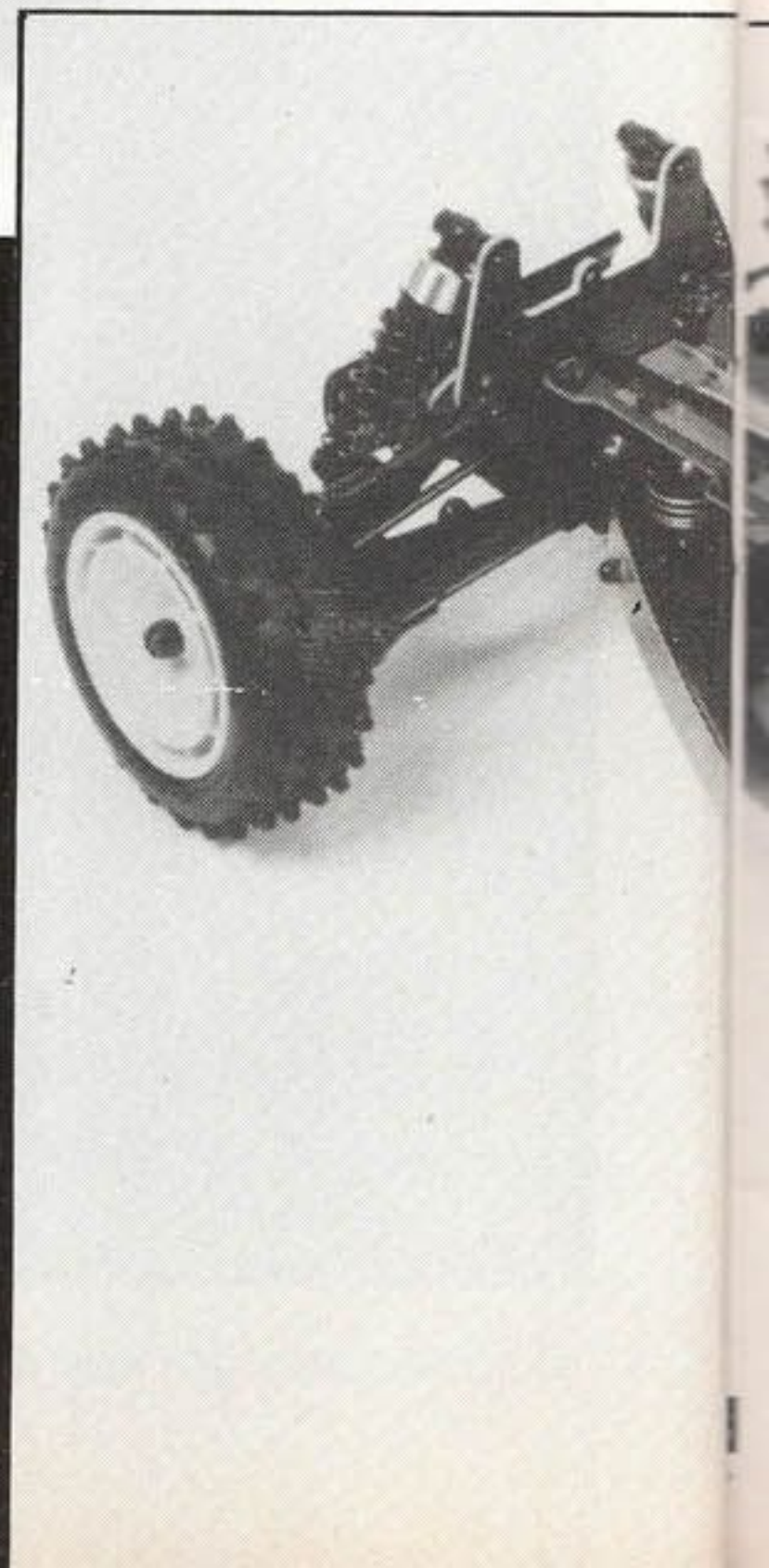
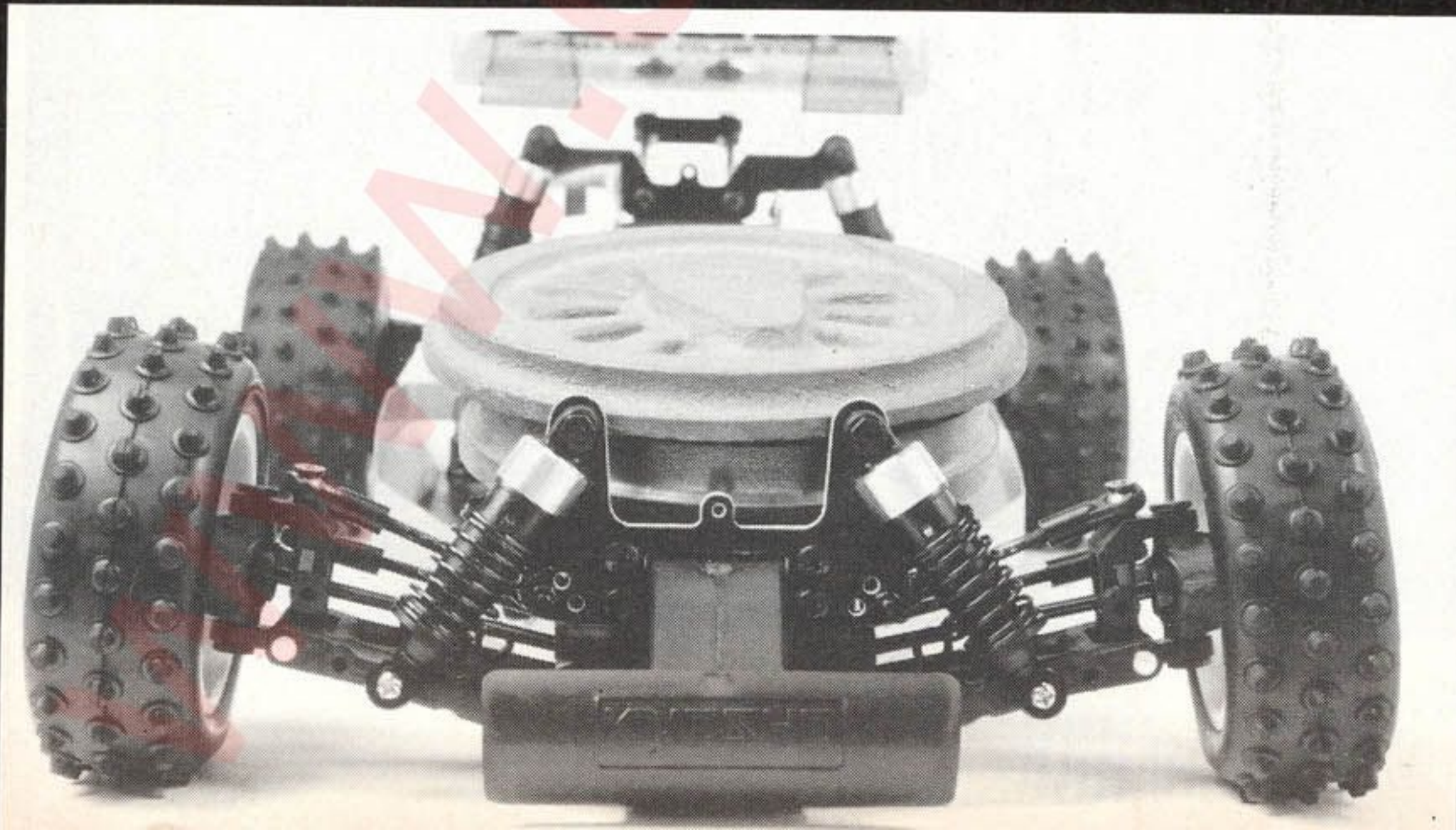
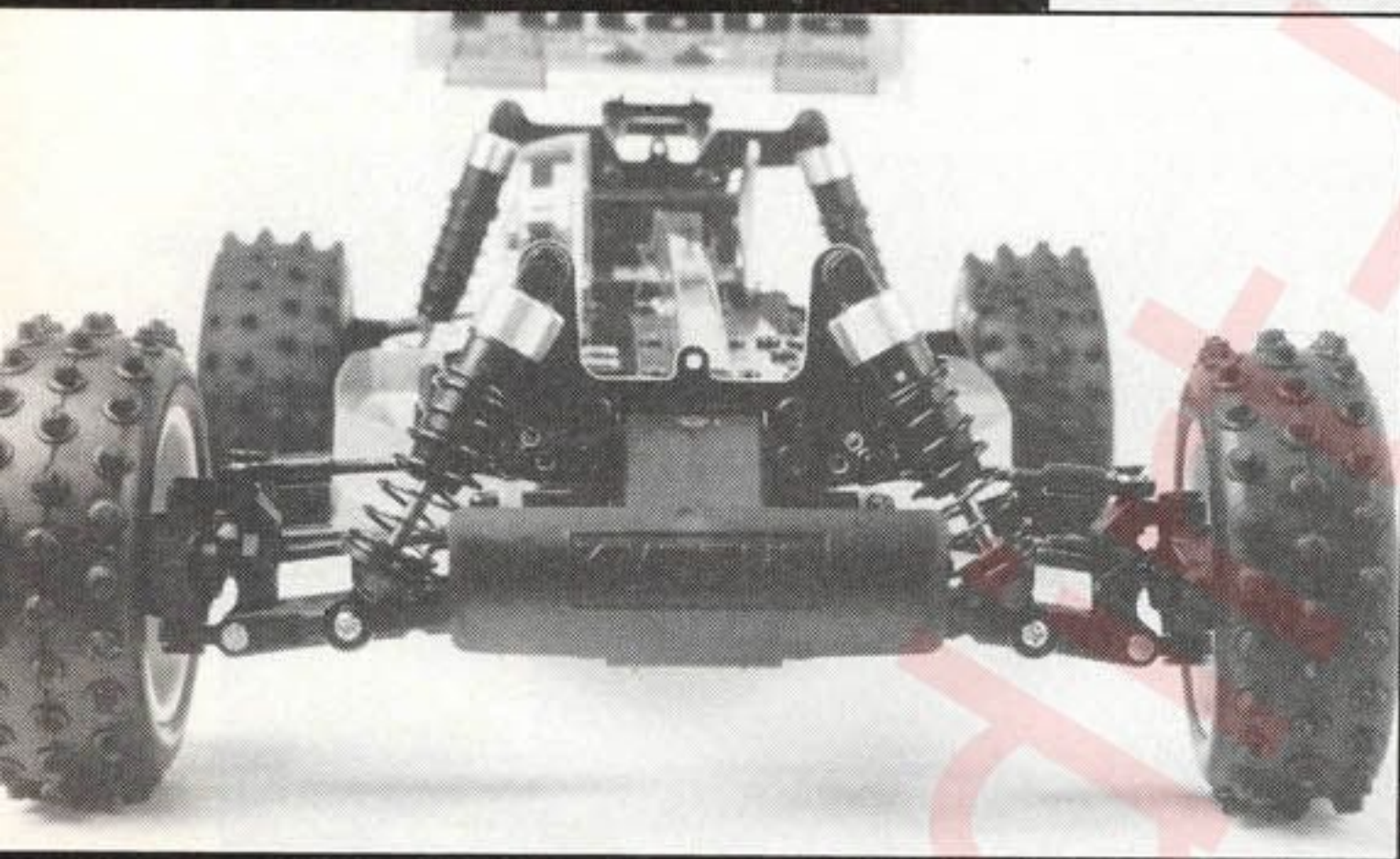
going for it. Just as we said earlier the 'Mid' has been around for some time but that at least means it is a proven design, race-tested and reliable in the extreme. *Kyosho* have been refining the basic car for some time



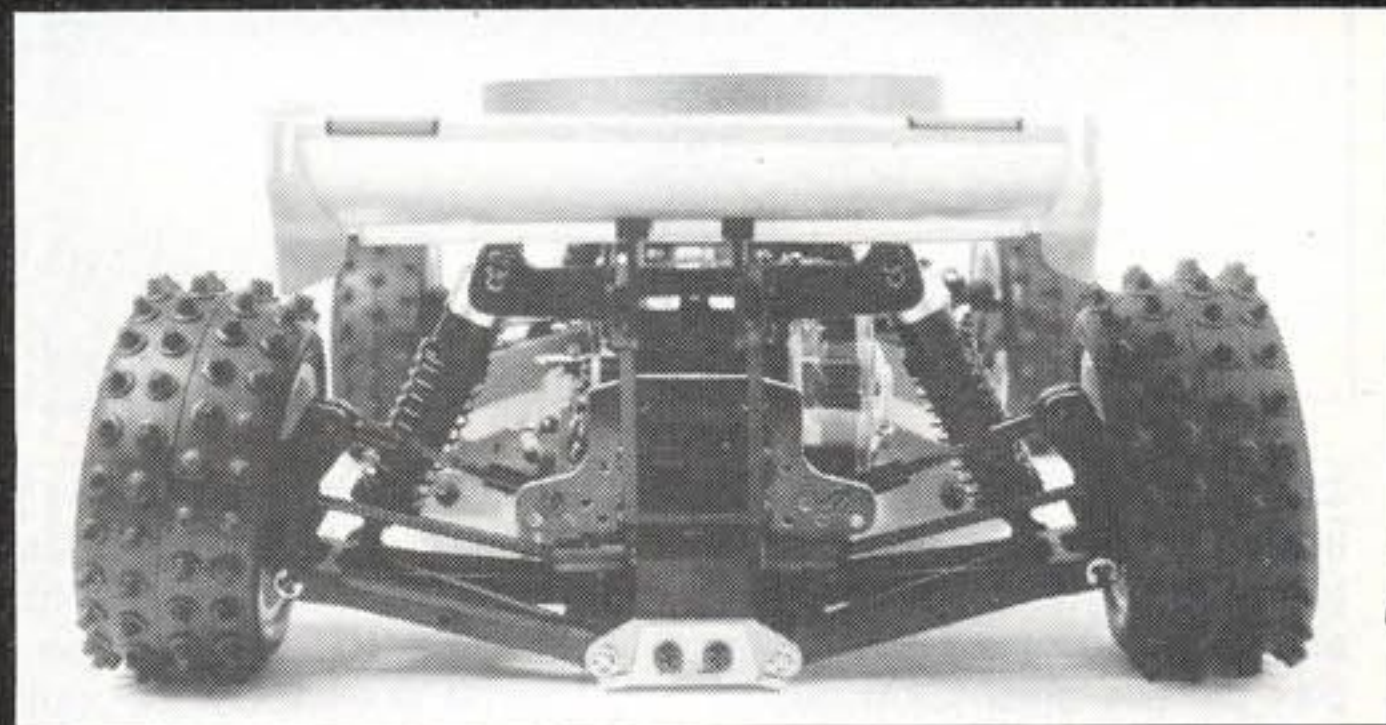
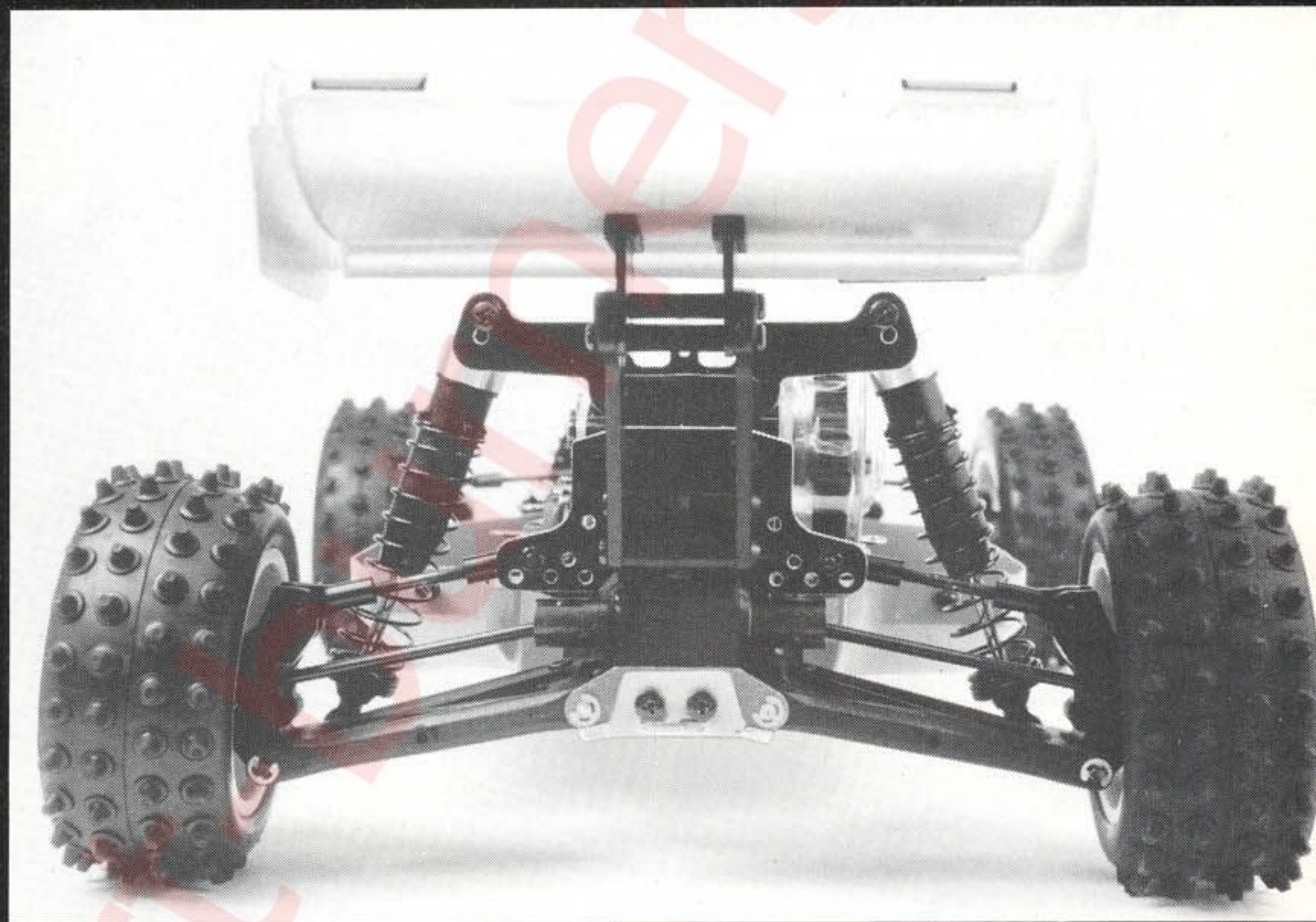
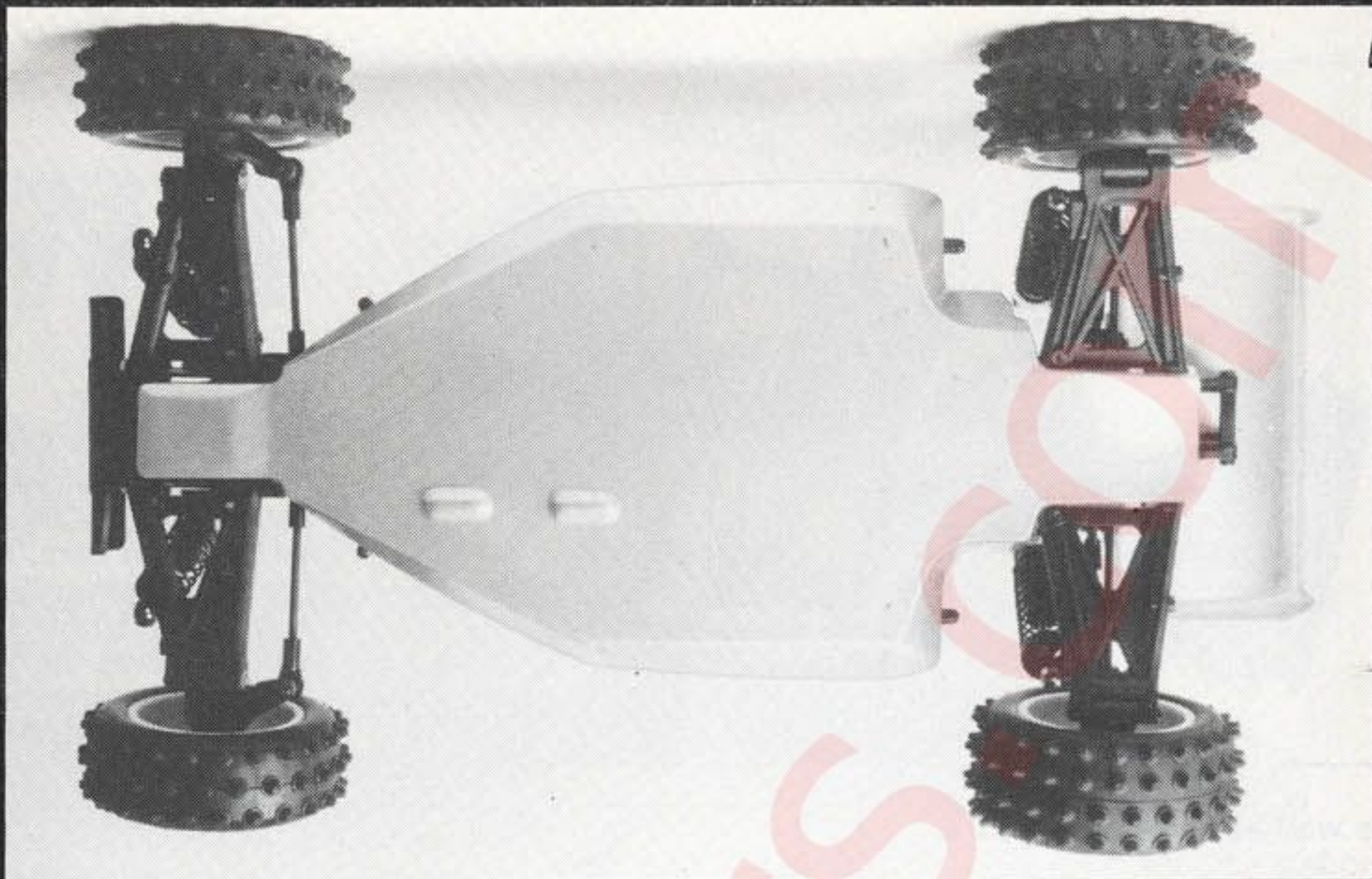
Optima



Top: 48 dp gears as standard. Below: The mini-bumper still included works OK but is a bit small. Bottom: Plastic shocks actually work very well but are fiddly to adjust ride height. Centre: Smart bodyshell/undertray combination.



Custom



Top: Smooth underneath of undertray - keeps internals mud free. Centre: Rear suspension has long travel. As can be seen from above. Left: Saddle pack or stick is catered for - note neat wing mount is also included.

Optima Custom

Up the front

Meanwhile, back at the front of the 'Custom' we find a welcome little improvement on the other cars. The front uprights on the 'Custom' are made from a new alloy which will help stop the pivot bolts from coming unscrewed and/or being ripped out.

of the day when after four minutes. 30 seconds have been spent in the lead. If it's better it must be good.

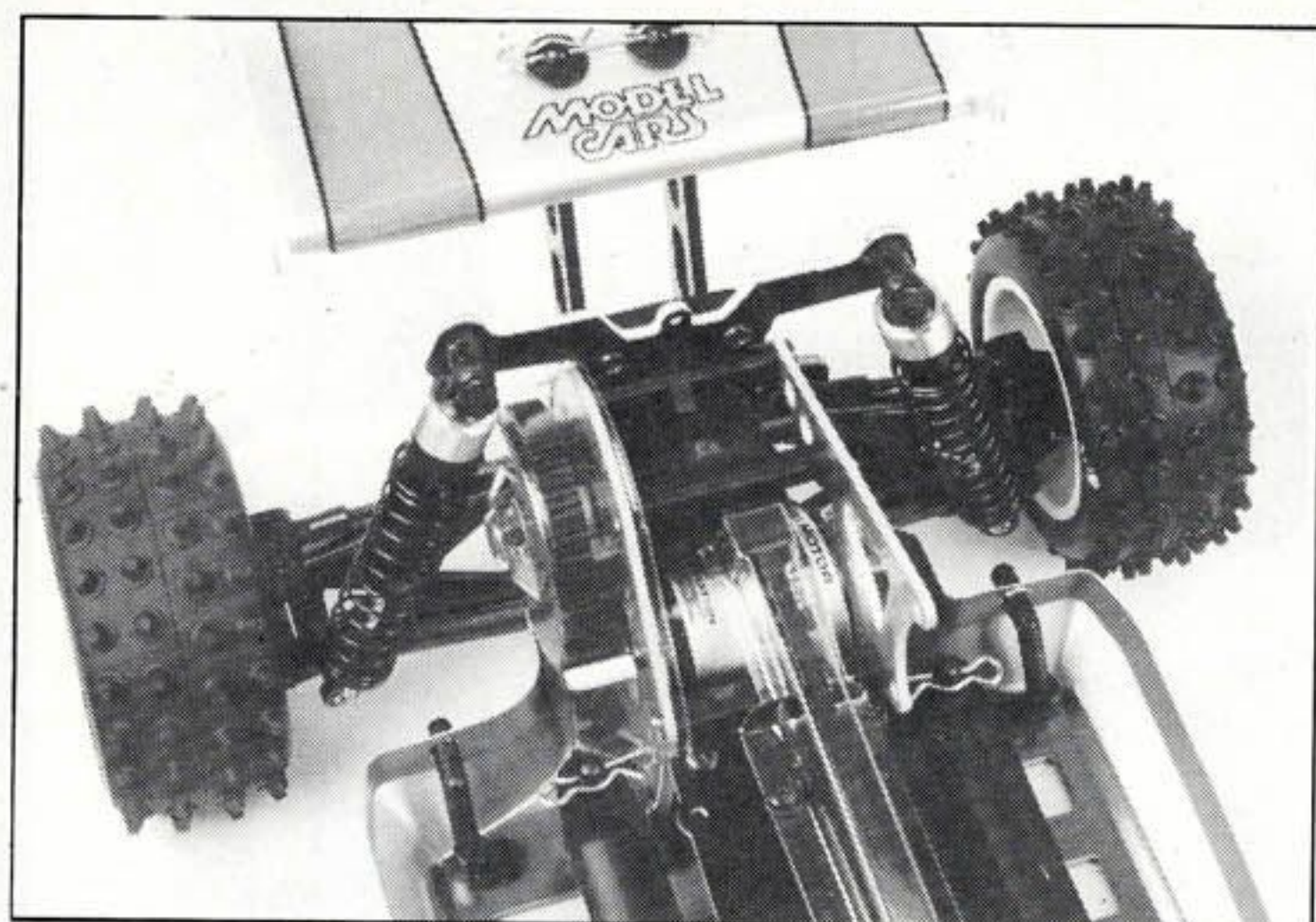
Also at the front we notice new GRP shock mounts (super - eh?) and more importantly new, slim green wheels of one-piece design.

However at both ends are found a change of shocks. Not 'Option House,' not 'Platinum' but plastic types with smart alloy caps.

Despite the fact that these are obviously a main economy feature the new shocks actually work well. The basic design is the same as the 'OH' sort and includes a volume compensating rubber diaphragm in the damper cap. Interestingly you can only adjust the spring tension by placing in plastic rings. These shocks may even be lighter as well as cheaper.

The rest of the 'Custom' package is fairly straightforward. *Le Mans* 540 motor and speed controller, 48DP gears in the gearbox, pre-assembled differentials and a fully enclosed undertray and bodyshell are included as standard. Unfortunately the undertray fixing used those stupid chassis mounts that end up ripping through the holes in the lexan. Take our advice and get some Velcro or servo tape to save yourself the hassle. And finally, *Kyosho* have kept faith with manufacturers of BRCA legal 'Mid' bumpers throughout the world by installing their dinky little number on the front of the car.

As a total racing package the 'Custom' will provide the best of both worlds for someone who wants the latest spec, but at the right price. It could be so easily updated to a full competition car providing you stick with the alloy chassis and forget about all the hype spoken about carbon fibre.

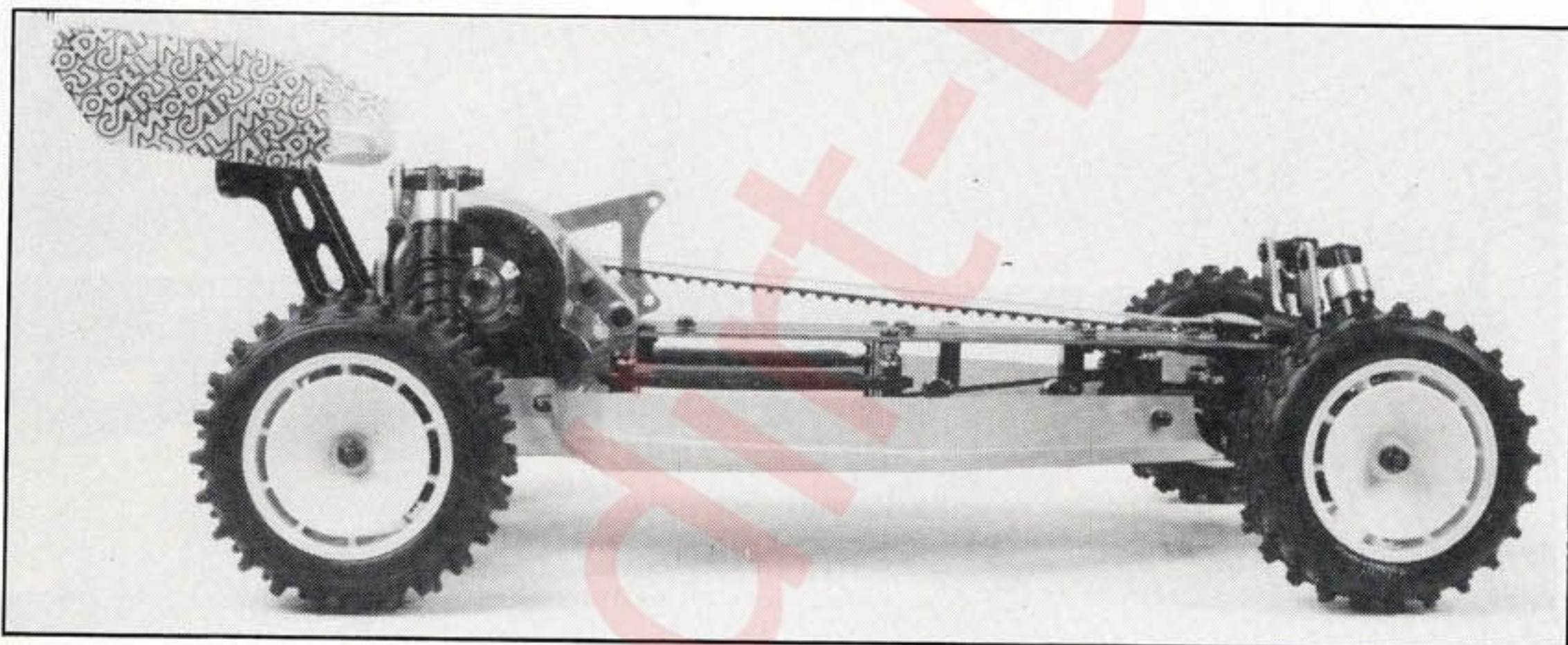


as well as coming up with a modest amount of race-winning.

The 'Custom' has most of those changes albeit in a less-expensive form.

To begin with the kit includes only four ball races, fitted to the differential outputs. Adding further ball races is up to the user and can be done at a later date.

The original long wheelbase chassis in both the 'XL Mid' and the conversion kit was produced from carbon fibre. This must have been fiendishly expensive to produce (you'd agree if you bought one) and was probably a pain to boot. Stamping out alloy chassis is a much simpler, cleaner and cheaper operation than drilling out carbon fibre



blanks. In any case the argument for carbon fibre is far outweighed by the amount of money you have to pay for the stuff. Compared against good quality alloy there is no discernible benefit in performance, all you get is a load of hype and

a sick bank balance. By the way, the 'Custom's' chassis is made from alloy and very nice it is too. The shape and format is exactly the same as the carbon fibre version with two sets of slots either side of the drive spine for the saddle pack batteries.

On one side an incomplete fourth slot is featured, presumably for the use of an 8.4v, seven-cell battery pack. If you decide to use it however the slot must be filed out because it forms part of the battery pack mount.

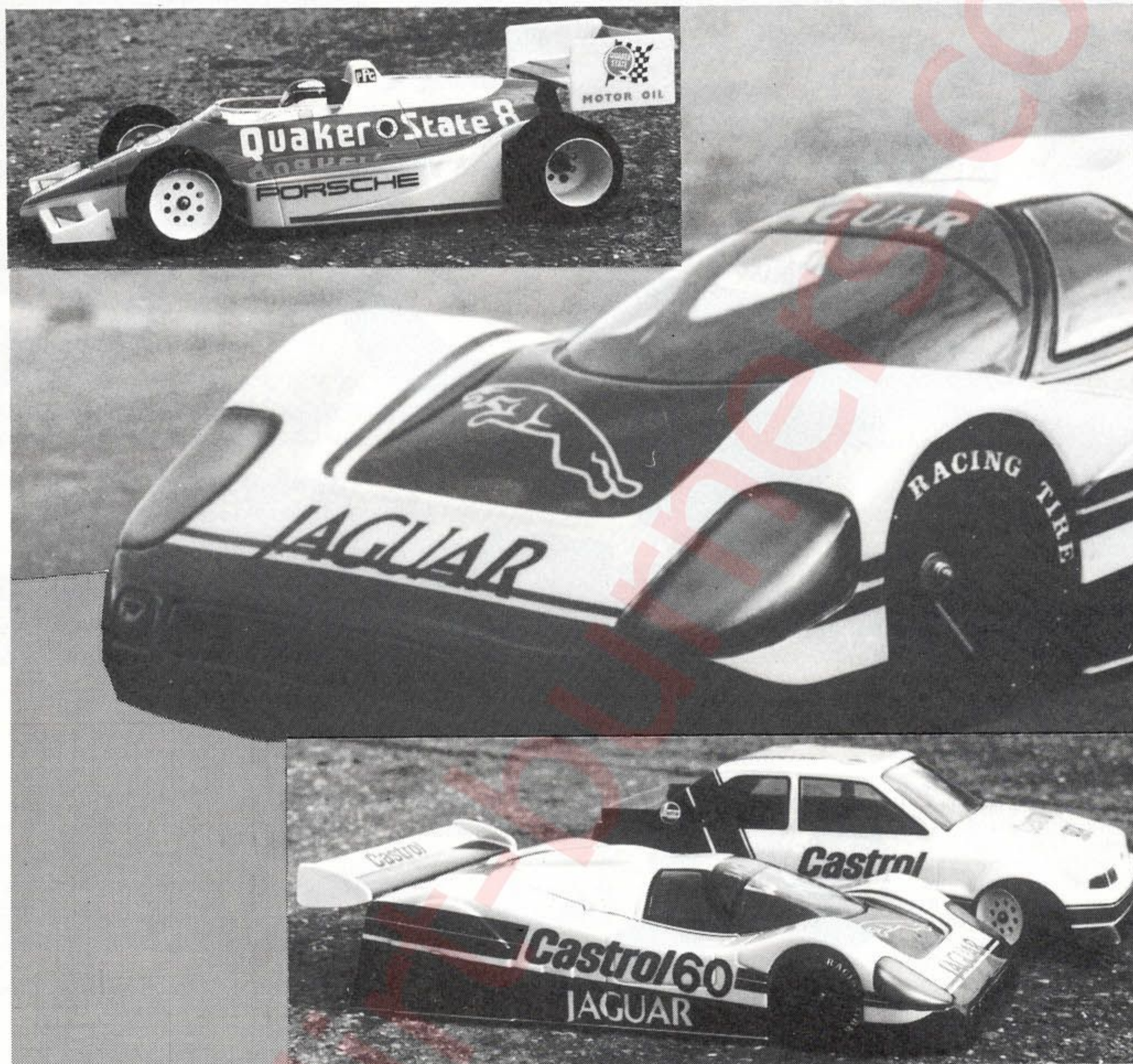
This is very good news because this part of the car has been a problem in the past, usually in the last heat



Top: *Le Mans* 540 motor and controller are also included. Above: 4WD belt can be clearly seen and is a coarse tooth type. Right: Ready for the off! An excellent club car from *Kyosho*.

parma

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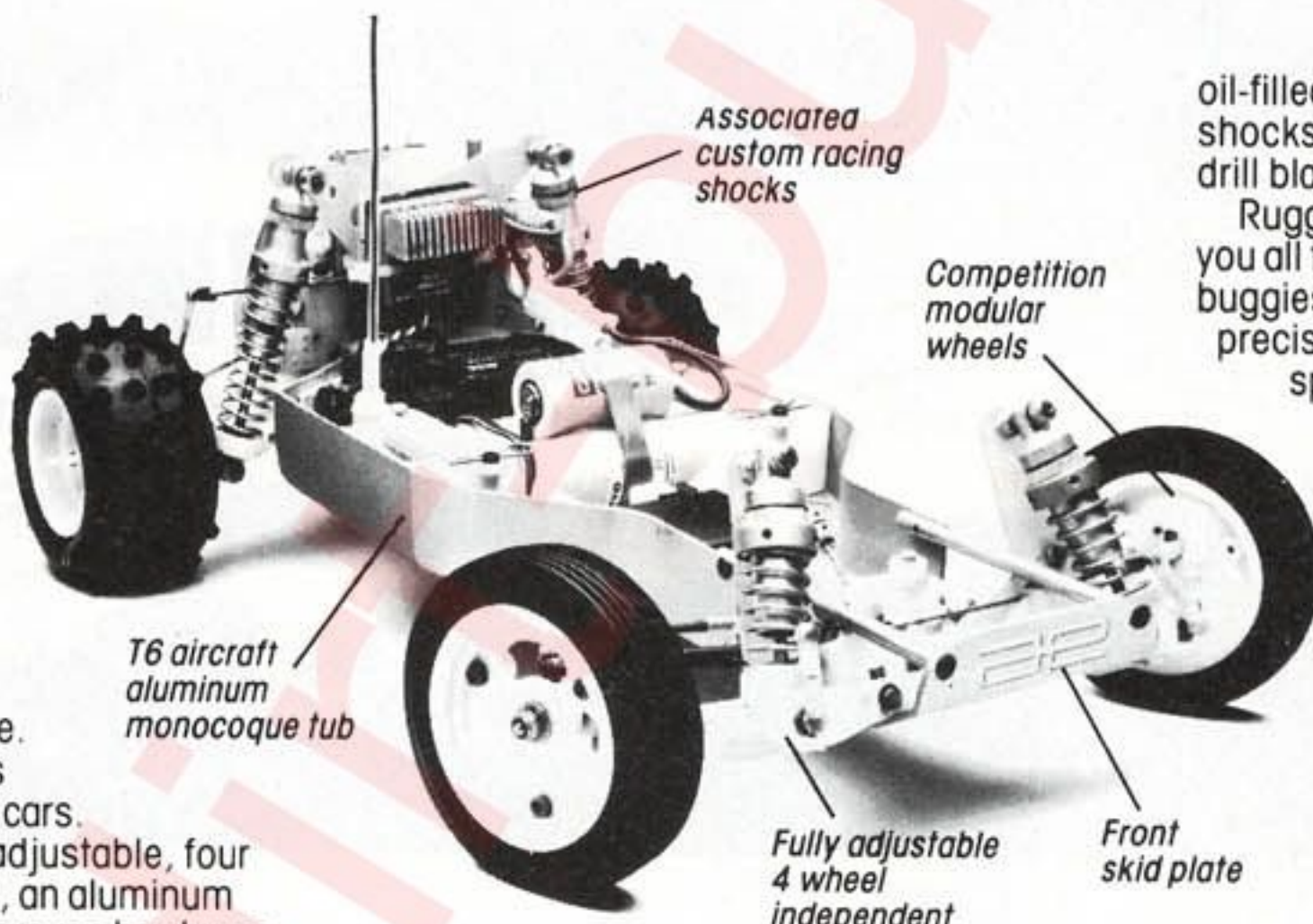
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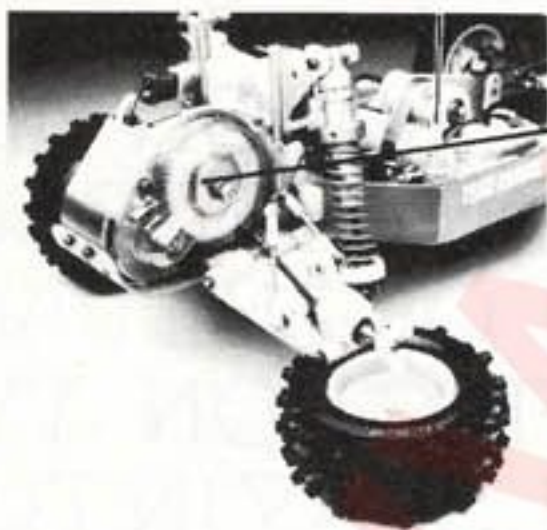
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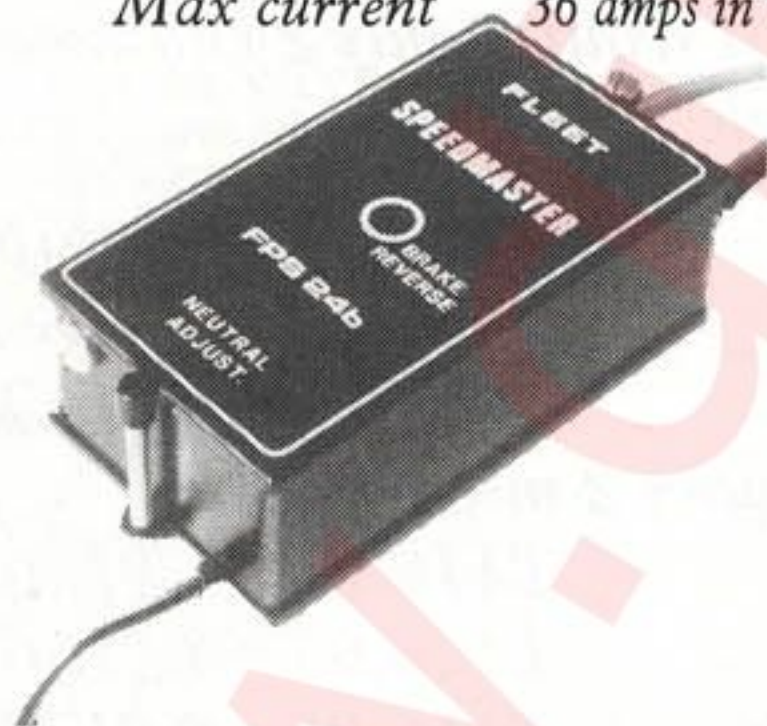
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Taking STOCK



**Mike Chilvers looks forward to the
oncoming 1989 season.**

Over the years that I have been racing around in circles on the ovals up and down this country, a number of different formulae have been mentioned both in this magazine, and others, for oval racing in a number of different scales. Some of these have become accepted, some not. Some are not raced in this country but enjoy popularity in others. As a well known TV personality might say, "It's a funny old World".

Everyone is aware that the racing of stockcars at both 1/8th and 1/12th scales appear to have become established over a number of years, the 1/8th with a following not only in this country but also in the rest of Europe.

The growing popularity of Ministox racing never ceases to amaze those who saw the cars as just

'cheap fun', but maybe it is because of this that they have become so popular, again in 1/12th scale.

However, there are some formulae that as yet do not seem to have met with the same popularity as the little minis, and so have not got off the ground. 1/8th Hot Rods look good, go well, and put to use those outdated circuit cars, and would introduce a non-contact formula onto the ovals, but despite there being some cars around, the racing has never really been accepted, though some clubs have tried to persevere with it. Maybe it has been upstaged somewhat by the saloon formula that has been introduced on the circuits, or maybe it has just lacked someone to promote it as a viable formula, or perhaps the drivers who had the cars found they had enough to do racing stockcars, and found two formulae one too many.

Sprint oval cars have begun to appear over the past couple of years, and these are in 1/10th scale. As yet no real meetings have been organised for these cars, though they do seem to go well as the demonstration at Alexandra Palace proved, and I understand that one racing at a buggy meeting on a tarmac track was flying to such an extent that people were heard to comment that the sooner meetings were organised for these cars the better! These cars are run in both America and Australia, and I believe South Africa, both as full sized and models, and look quite spectacular with their massive wings. Shale and tarmac ovals are used full sized, and where the models are raced the tracks too vary from tarmac to smooth dirt tracks. Again in this country no-one has yet set out to promote a series of meetings, and till they do this looks like another formula that will lay dormant.

The 1/10th circuit cars that first hit the headlines of the model car press in this country early last year have already become well established thanks largely to the promotional efforts of George Land, and these cars could really become a force on the ovals in more ways than one. Firstly they could become Hot Rods, used both on the 1/8th ovals outside, and also on the carpet ovals inside used by the 1/12th racers. True the inside ovals would have to be made a little larger, but the insertion of an extra length or two in the straights should not be too difficult, or indeed the use of hoses to mark out the track as at 1/12th or many 1/10th clubs could soon result in another use for these cars. Perhaps though the real oval use of these cars would be on a large tarmac oval recreating the Indianapolis or Daytona image. The cars complete with NASCA bodysells, of which Parma have a good selection, would look the part and be instantly recognisable. All that remains is for someone to come up with a suitable oval, and maybe another formula of oval activity will be established. Come to think of it sprint oval cars and 1/10th NASCA cars could look quite good at a combined meeting!

So far I have not mentioned 1/4 scale cars. These have not caught on in this country as yet, but do seem to be popular in the States, both on dirt ovals in Sprint car form, and also on the tarmac as Midget Racing cars. This latter class looks good, and of course is known in this country in full-sized form, so that there would be a certain amount of spectator recognition. One of the problems with this

Top: 1:10th Sprint oval car on show at Alexandra Palace - a Puma RC10 conversion.
Left: Sean North's Red Top Car.





Left: The stock cars that worked hard at the M.E. A finalists at the front, then B and C.

scale appears to be its size and price, quarter scale is a bit large to carry around being approximately three feet in length, not to mention the weight, and the speeds quoted for these cars does no compare with the speeds attained by the smaller scales, however, from what I have heard a field of 1/4 scale Midgets does look and sound good, and maybe one of these days I'll be able to get my hands on one to see what they are really like, though I doubt if they will ever catch on here.

If any readers have information on any of the scales and formulae of racing that I have referred to, especially those that do not appear to have caught on in this country, would like to drop me a line at 85 Elliott Road, March, Cambs. PE15 8BP, I should be pleased to hear from you, and a few photographs would be much appreciated, though I can not promise to return them to you.

1/12th Scene

This month I have received a few comments on the 1/12th scene from Roy Jones, the 1/12th Scrutineer, regarding racing on carpet or using silicone for the wood floors.

For some time now the 1/12th circuit racing has taken place on carpet for the Nationals, and for 90% of its club racing. Stockcar racing has been slow to follow this lead, but with 3 of the 5 Nationals this year being run on carpet are things changing?

What are the advantages of racing on carpet? Well the main advantage is a consistent floor surface to race on and no messing about silencing half a dozen sets of tyres every week to go racing.

Those against racing on carpet are generally those members of a club who have raced for years on silicone and have got their tyre preparation down to a fine art. They do not like the raw novice coming in and being able to go as fast as they do. When racing on polished floors with siliconed tyres, 50% of the car's performance is down to tyre preparation. On carpet this only accounts for 10% of the performance, much more driver skill is required. All drivers have access to suitable tyres which only need to be glued and trued on rims and need no other preparation.

The actual racing is faster and cleaner on carpet. This is mainly due to the fact that novice drivers can put their cars on the track and drive in a controlled manner without their cars sliding about all over the place. Damage for both novice and experienced driver is greatly reduced because there is less speed differential between cars, whilst crashes are more spectacular due to the increased speed. Car set up is less critical on carpet, the better set up a car is the better it will go, but there is more leeway than on silicone. When you get it wrong on a polished floor, it is very wrong. On carpet you get harder, faster, closer racing with less hassle. The driver, with limited time, can devote more time to car preparation rather than tyre preparation.

There is a drawback, however, the initial cost of buying a carpet can be between £200 and £300 for the average size circuit. However, any club considering going to carpet can go down one of two roads. If you do not want to use tyre additives, go for the darkest colour carpet possible, brown or dark green. These are coarse fibre carpets and give excellent grip to standard *Mardave* tyres. If you wish to use additives go for a grey colour carpet which is of finer composite.

So there you are, carpet or silicone, it's your club's choice.

I must admit that I am always pleased that on those rare occasions that I do race a 1/12th car, at the Model Engineer Exhibitions, the track is a carpet one. At least I know that I can find some tyres that will work well enough to do a reasonable job, not like those days, many years ago when I used to race a 1/12th circuit car on a polished floor, and never did manage to master the art of silencing tyres, not to mention the mess I made, and the time it took. In my book, long live carpet!

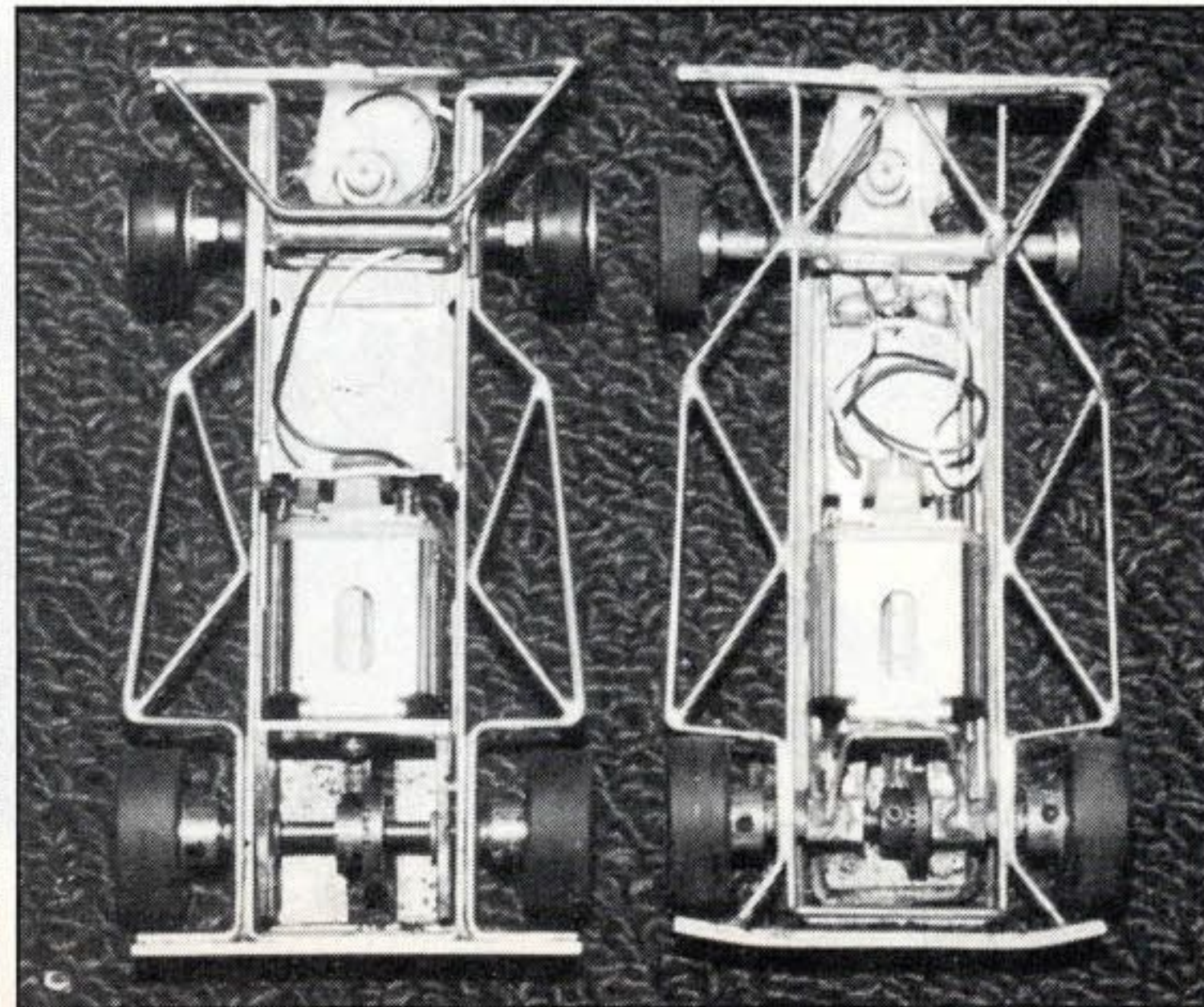
1/12th Clubs

Roy also gave me some information about a couple of 1/12th clubs. Firstly the Buntingford Club, very much a family club, running stockcars, ministox and buggies - all on a small carpeted oval. Racing is on Sunday afternoons, and help is always on hand for new and novice drivers. Give Matthew Pettitt a ring on Cotered 393.

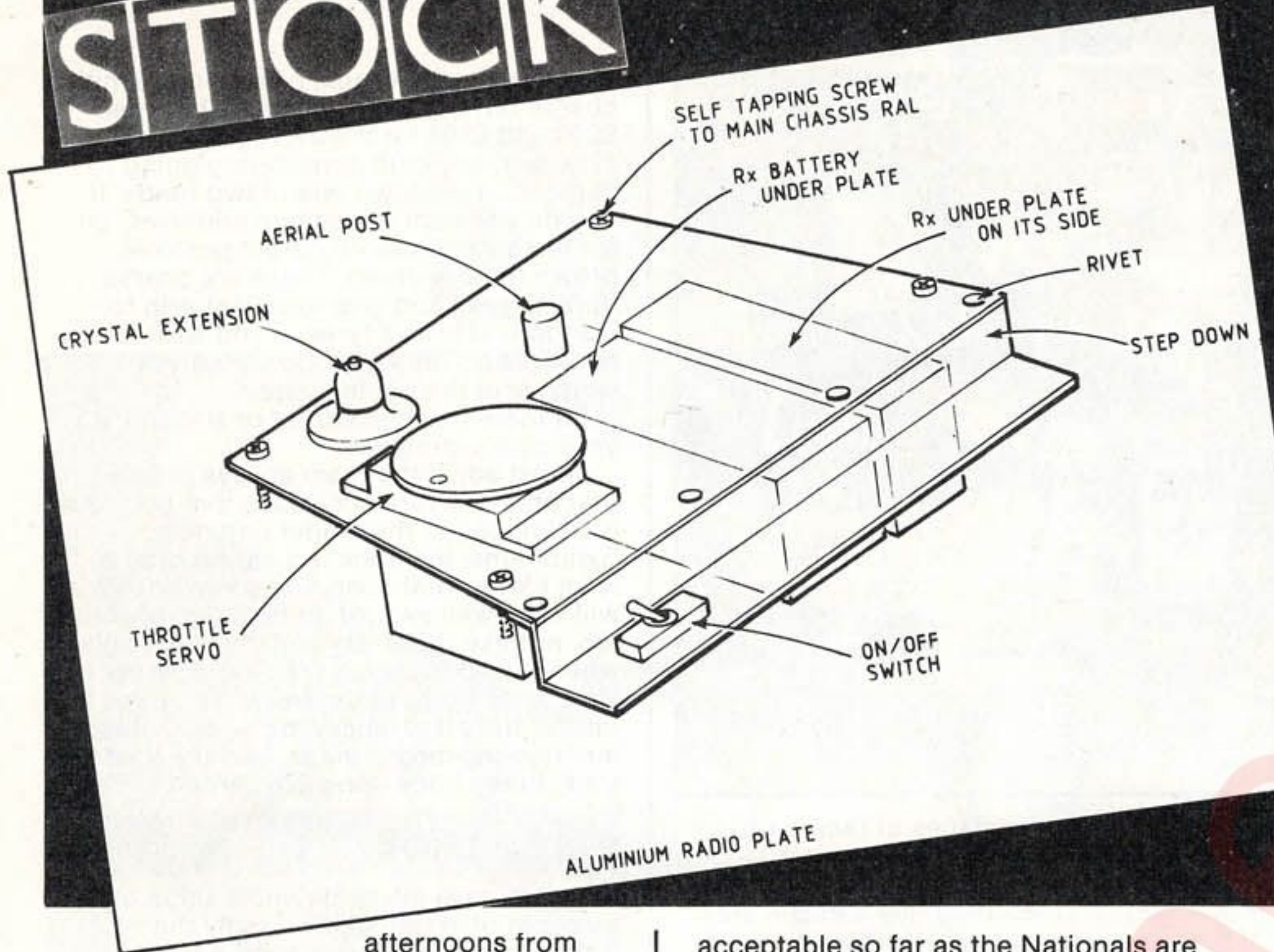
Then there is the Thames View Club, situated near Barking in Essex, which runs on Wednesday nights from 7-10pm. This is a long carpeted track but still has a track record of 72 laps in 5 minutes set up by Ian Skinner. Apart from the normal racing this club get up to some weird things, not just caravan races and car football, but also Blindfold Best Pairs! No surprise to discover that the man behind this lot is Roy Jones himself, and he can be contacted on Hertford 582732.

I also had a letter from F. Price of the Oxclose Radio Control Car Club, who run at the Oxclose School, Washington up there near Sunderland. They are running a club at the above-mentioned school on Tuesdays, Thursdays and Saturdays which caters for all varieties of electric powered cars, stockcars, ministox, 1/10th both off road and circuit. At the moment the stockcars and minis run on Thursday evenings 6.30-10.00, and Saturday

Left and below: The Heseltine top and right and the keeling bottom and left showing the design differences.



Taking STOCK



afternoons from 12.30-5.00, the 1/10th scales running Tuesdays 6.30-9.30 and Saturday morning 9.00-12.00. The Club is keen to attract new members in all branches, so if you are that way, ring either Pete Riley on 091-3 845695 or get in touch with F. Price, 8 Orchard Street, Pallion, Sunderland, Tyne & Wear SR4 6QL.

Slot Stox

In the March issue I mentioned the fact that there were two variations of slot stox cars that could be obtained either as rolling chassis or complete cars, and that at some future date it might be possible to look at the two cars in question. Well this looks as good a time as any, as the Nationals take place later this month (February is the time of writing).

Before any one starts to get on the phone to tell me that there are more than two outlets for the slotstox, can I say that firstly I apologise to anyone I have overlooked, and maybe you would like to let me have the relevant information so I can pass it on, and secondly that I am only interested at this time in the cars that are

acceptable so far as the Nationals are concerned.

Having said that I had better explain to those with even less knowledge of slot stox than myself that not all clubs race cars that conform to National Rules, why this is is one of those mysteries that we cannot go into here, but for the Nationals there is an agreed set of rules regarding car construction, dimensions etc., to which most clubs will adhere for all their racing, as it saves drivers from having to have two cars, one club-legal, the other just for the Nationals. Both cars that I shall be looking at are National cars.

Many drivers do in fact build their own, but for the lazy and incapable, such as myself, it is good to know that someone else is prepared to spend their time building cars to sell to those who want them.

The car is around 12cm long, and 6cm wide, construction is from a mixture of piano or brass wire, brass plate, and lead strip to give weight in the right places. Power comes from a *Parma 16D* which picks up its current from the copper tape either side of the track 'slot' via a slot guide at the front of the car equipped with braids. Both axles are fixed to the underside of the main chassis,

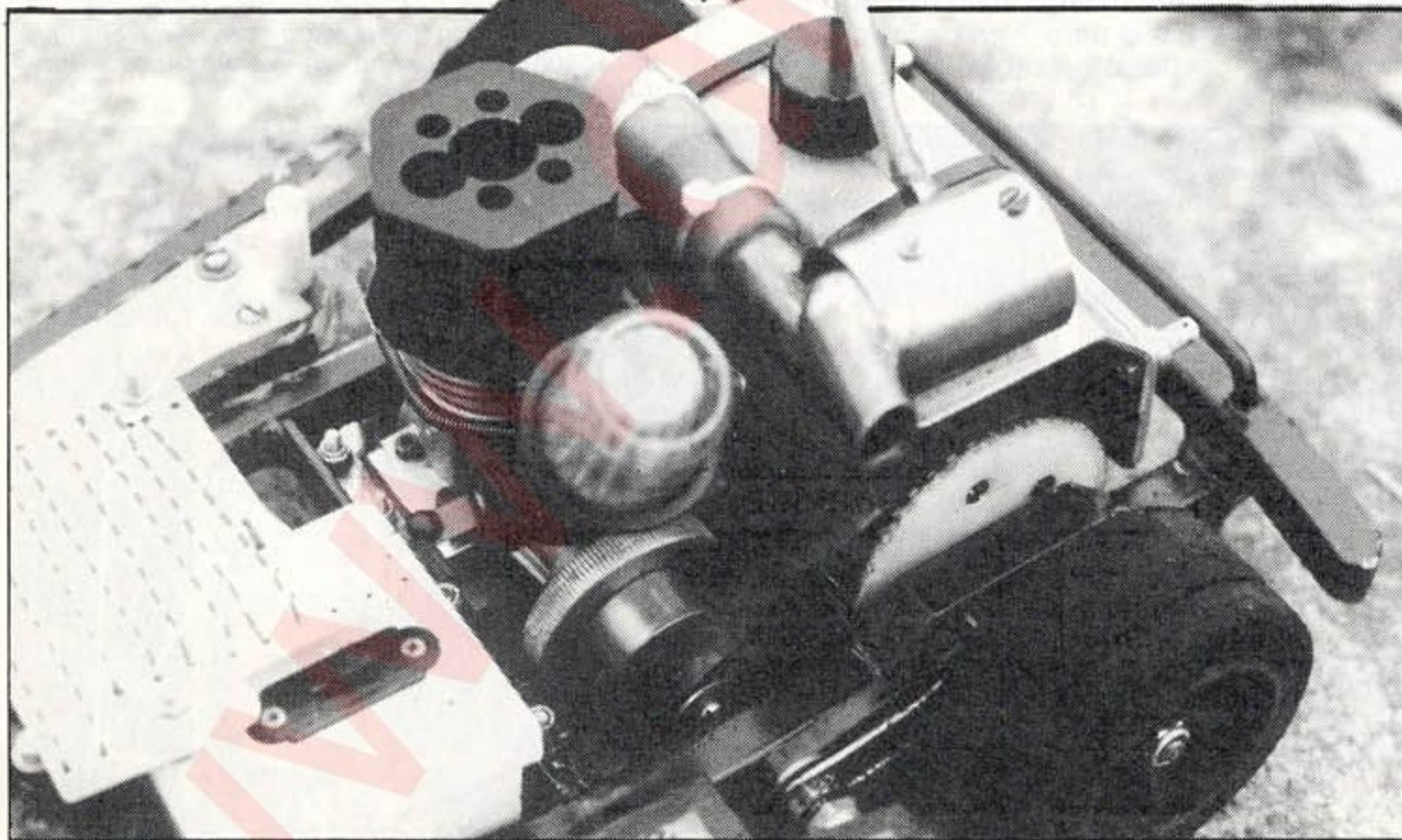
axle passing through an axle tube which runs the width of the car, and the car is so constructed that when in its 'slot' the front wheels just touch the track or are very slightly above it - remember all steering is done via the slot guide. The rear axle passes through split tubes which are fixed to the underside of the chassis as mentioned above, with the drive gear held in place by a grub screw so that it can be adjusted easily to mesh with the pinion on the motor. Front wheels can be fixed to the axle in a number of ways, grub screws, wheel nuts or sometimes screwed onto the threaded ends of the axle. At the rear grub screws hold the wheels in place. The main upper chassis is constructed of piano or brass wire, with several lengths being used to form the traditional stockcar chassis shape, and give it its strength, strength that the car will certainly require when it enters the rigours of the oval, even if only that of the slotstox. At the front and rear an 0.5cm wide strip of brass makes up the bumper, the centre of which will be 1cm above the height of the track. The motor is located in the bottom chassis, which also forms a drop arm, pivoting from the rear axle, the degree of drop being regulated by a stop, though some drivers allow this drop plate to swing through ninety degrees. This bottom chassis or drop plate is made of a wire frame around brass, or brass and lead plate. The motor is either soldered or held in place with small screws.

Build-up

The description I have given above is a basic description of what a slotstox looks like, and how it is made up, though of course is not meant to be a 'How to Build a Slotstox', in fact, far from it. But this is the sort of car you would be looking to acquire if you were going into National Slotstox racing. Such a car can be obtained from either Rob Heseltine or Chas Keeling, and will cost somewhere in the region of £20 to £30, depending upon exactly what you require.

I have one *Heseltine*, and three *Keeling* cars that make up the 'Chilvers & Son' team, and these have been acquired over the past two years or so, all were bought new with motors except one of the *Keeling* cars which I bought second hand from a fellow club member who was retiring. The *Heseltine* and *Keeling* cars are identical in many respects, as one would expect from cars complying to strict construction dimensions, with almost identical top chassis layouts, though the *Heseltine* does use a smaller diameter wire for the main rails and outer nerf bars, and the nerf rails are angled in to the front axle rather than coming into the main rails as on the *Keeling* car. Also the *Heseltine* has triangular bracing at the front centre. At the rear the bumper is angled inwards at the ends slightly so that the opposition slides off, rather than being straight as on the other car, and is backed up by rod at an angle to the main rail as an additional brace, there is also a rear override bar on the *Heseltine*.

The most noticeable difference between the two cars is with the construction of the drop plate, or bottom chassis. The *Keeling* car has the bottom chassis the full width of 2.75cm for the entire length, constructed of a wire framework with brass plate at the front, the motor in the middle and a brass motor and rear axle carrier at the rear, the bottom being lead, and a strip of lead 2.5cm long is placed on the top of the bottom chassis just in front



Left; *Serpent 'S' Power engine* fitted into a stock chassis - note home manufactured exhaust system.

of the rear axle either side. The *Heseltine* has the bottom chassis in two, or perhaps I should say three, sections. The drop plate or bottom chassis retaining the motor again runs the full length of the car, but is only 2.10cm wide as it runs between two fixed side plates fixed to the front and rear axle tubes. These side plates carry lead strip the full length on either side. The bottom plate itself is again framed of wire, but has brass plate front and rear, with the motor nestling in between. The accompanying photographs help to show the difference in the motor mounting area, the *Heseltine* on the right with the bracing from the rear axle blocks. Both cars are fitted with the *Parma '16D'* motor, and both cars use a fixing screw to hold the motor in place, so it is quite easy to remove them, though I have not yet done so. Both cars are topped off with polystyrene body shells that are available from *Slot Car Distributors*, and these can be supplied pre-painted as mini replicas of the full-sized BRISCA cars, or in plain white for you to cut out windows and paint for yourself.

The *Heseltine* is available from Rob Heseltine of 21 Westroyd Gardens, Pudsey, West Yorks. LS28 8JG (0532-568132), and the *Keeling* from Chas Keeling, Slot Car Distributors, Grange Nurseries, Westgate Hill, Nr. Bradford, (0274-682120) from between £20 and £30.

Which, you may ask is the better of the two, and my answer is that I do not really know. I have only had the *Heseltine* for two meetings, and as the East Anglian Club runs at two very different venues, i.e. with two different tracks, one short and the other longer, I have not worked out a preference, though there are those at the Club who say that the *Heseltine* handles better, but the *Keeling* can take the knocks better, that is will not de-slot so easily, so it seems like the old story of "you pay your money and take your choice".

Next issue we will see how the various teams, and cars, got on at the Nationals at Bradford.

Variations on a Theme

"OK then, Mike, what are you racing next season?" was the opening comment from most of the 1/8th drivers who visited the stand at the Model Engineer Exhibition whilst I was there, as they picked up my car from the stand "The usual *Mardave* I suppose?", was the inevitable answer to their own question!

The fact is that I am not an engineer, cannot weld up anything to save my life, though at times I have been known to braze bits up, and so rely on commercially available bits and pieces for my racing. At the moment that means for most people *Mardave*, its where I started, and its *Mardave* bits and pieces that make up the spares in my spares box, so yes, it will be a *Mardave* again to start '89, and more or less a standard one at that. In fact it will be more or less the same car that I built and did the review on in the last issue.

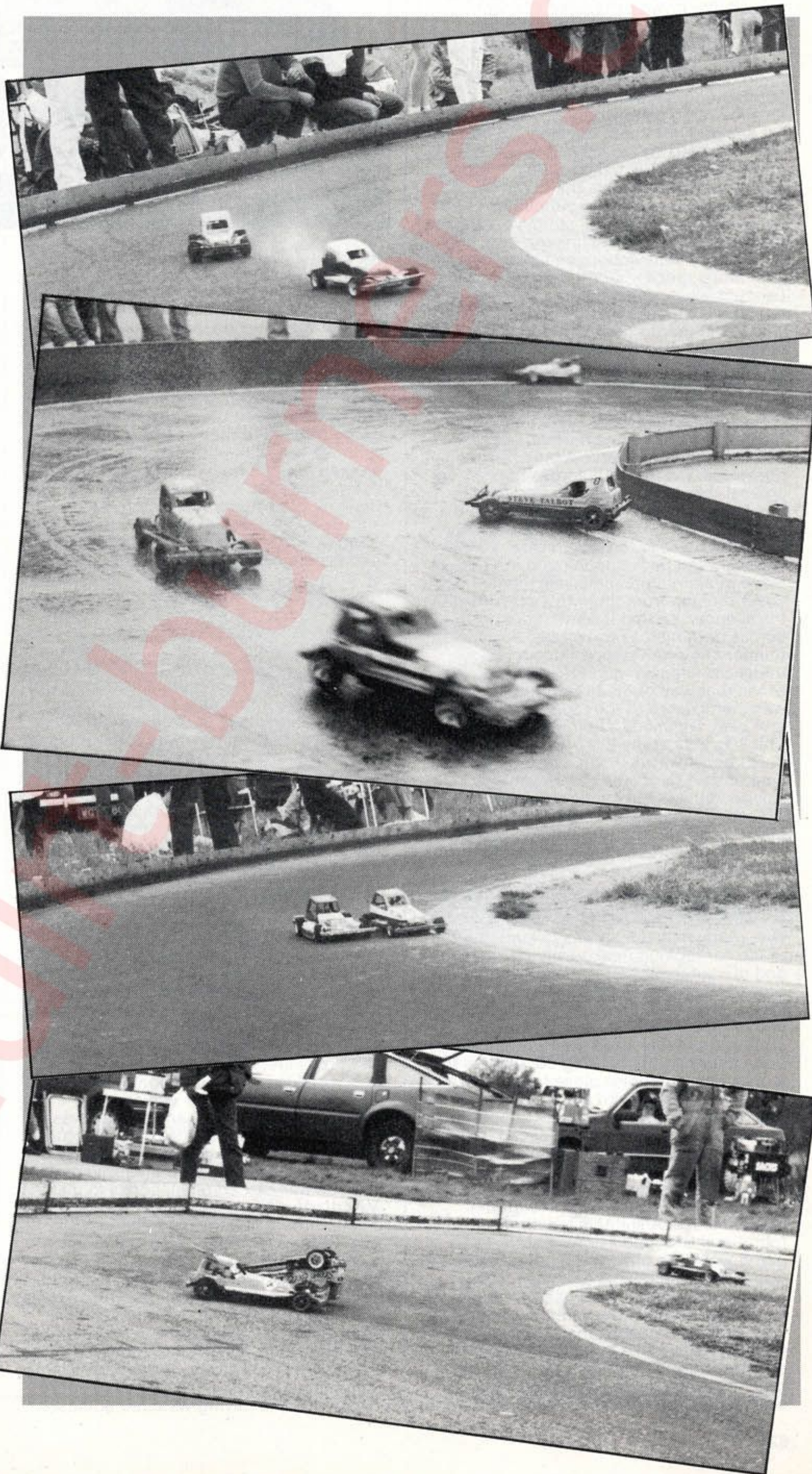
The chassis is the new width standard *Mardave* chassis with no modifications to it at all, using the same rear trailing arms and springs from last year's car, again standard *Mardave*, though I have had to invest in a new 'wide' rear axle with positive drive hubs, again standard *Mardave*. The 40 tooth rear pulley is also from last year's car, but is a nylon *Kingsway* unit. At the front end an alloy front beam axle from *Paul Dexter Racing* with 2 degrees of camber on the outside wheel replaces the standard unit, and this has been fitted with standard *Mardave* axle blocks, king pins, springs, track rods and servo saver all of which are new! Well the others have done at least three

seasons' racing, and are still there as spares. The fuel tank of course came from last year's car, though the mount is new, well it was a spare one I had kicking around, as I broke the body fixing post of the old one towards the end of the season, and the self-tapping screw holding it in place did not look as though it would last a season. The engine, etc., is the same as last year, an OS sitting with a *Kingsway* clutch unit using PTFE shoes.

Just to get away from being too standard looking for the first time I have

done away with the radio crate, and am using a home made alloy plate. (In fact I did use this idea on the 'alternative' *Mardave* I built prior to last season, but this car was never raced, being the 'spare' car in '88, and looks destined to fill this role in '89).

The reasons behind the move from the radio crate were (1) that I was considering putting a tuned pipe on the engine, which I could not do because of the height of the radio crate lid, (2) using the side exhaust silencer meant that there was no need for



Taking STOCK

Four of the countries top drivers with their cars. L. to R. Ivan Congreve, Steve Talbot, Roy Crowson and Kevin Langley.

the space between the box and the back of the undertray where the pipes used to go with the down exhausted silencer, which was now collecting residue etc., and proving difficult to clean, and (3) I wanted to be able to lift out most of my radio gear in one go, and install it into another chassis with minimum fuss. I felt an alloy radio plate would be the answer.

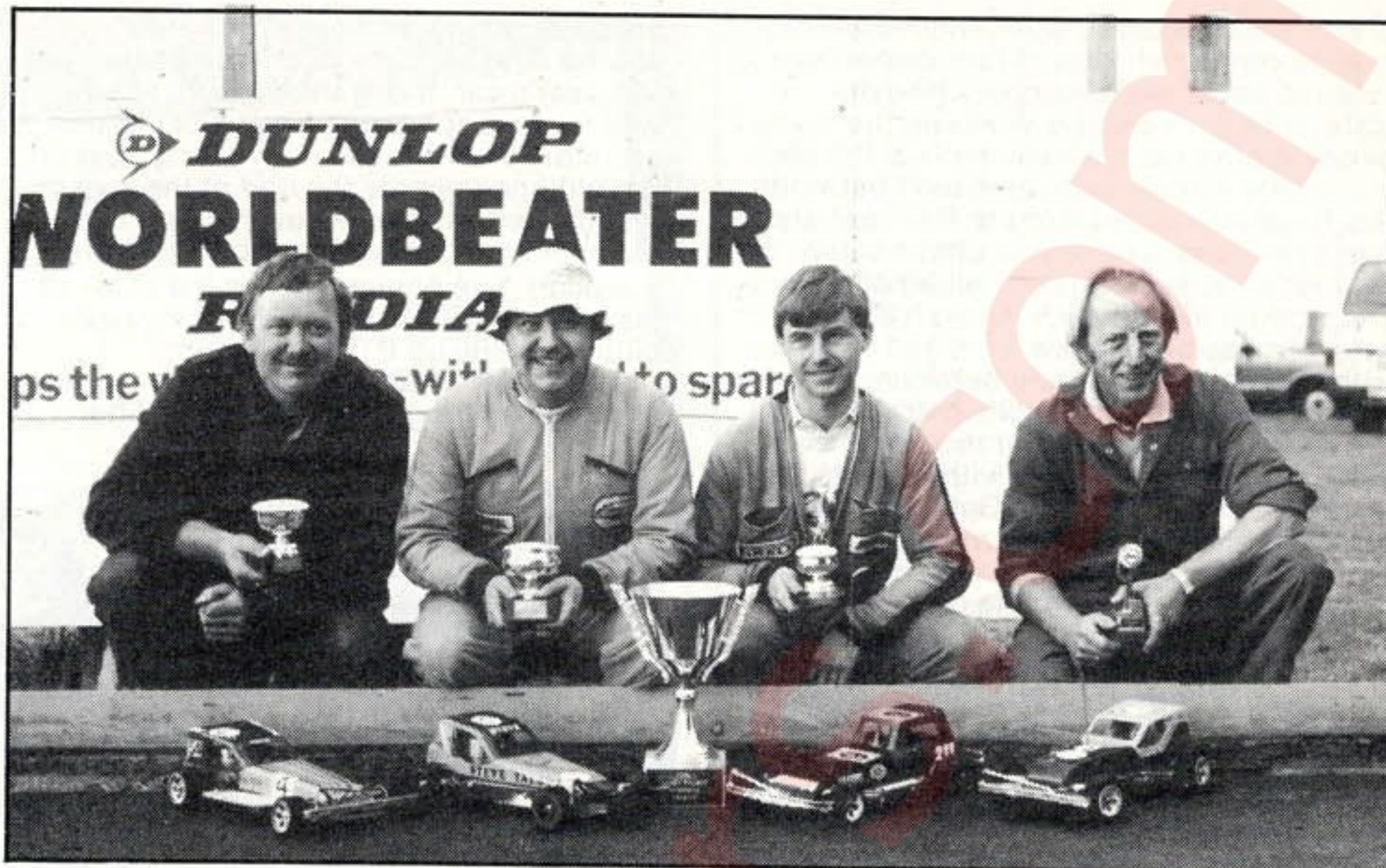
I decided not to put the steering servo into this plate, but to leave it where it was in the standard kit, fixed to the underpan of the car, with a direct link to the servo. This was because of the difficulties I had had with the 'alternative' *Mardave*, referred to above, in getting the linkage from servo saver to my satisfaction, and also to create a bit more space under the plate. Perhaps I should issue readers with a warning at this point, which is that if you dispense with the standard radio crate and opt for a plate fixed to the main rails as I was doing, you sacrifice some height, and this can cause problems when trying to install the radio battery pack and radio itself.

Having decided what I was going to do the car was built up as normal, but after fitting the steering servo a bulk head of fibreglass was inserted across the car, up against the forward bracing bar, held in place with silicone to make it both rigid and water tight, having first made a hole for the servo lead to pass through to the receiver, and then siliconing in the gap. A piece of aluminium plate was then cut to cover the gap from there to just in front of the silencer, so that it went about half way across both main chassis rails. A piece of thinner alloy was stepped down to go under the silencer, and to rest on the top of the rear wall of the undertray, and this was then riveted to the top plate, having first been trimmed to fit inside the chassis. This has taken only a few moments to describe and write down, but took a great deal of time to do and to get right, so I can assure you it is not a quick or easy task.

At this stage the radio plate was fixed in place using self-tapping screws, and the car body was fitted, just to make sure that all was working, at least so far.

Looking Good

One of the main ideas was to keep the top of the car looking neat, easily cleanable, and of course, water tight, so I wanted to drill as few holes as possible in the plate. Having said that, the servo for the throttle had to go somewhere, and that meant cutting a suitable sized aperture; this was done after careful marking out using a drill to make several holes close together, and then joining them with a file. The servo could now be bolted in place, but before this was done, other holes needed to be drilled. The switch had to be placed somewhere across the body of the car in the plate, but where it could be easily reached from outside the car with the body in place. A suitable location was found in the stepped-down part. All was going well! The other main hole I wanted was to take the crystal extension socket. Now I know people have had problems with these, including myself, but I find that they are very valuable, inasmuch as they enable you to make quick frequency changes during practice periods so that a free frequency can be made use of, and also reduce the hassle of having to change



frequency during the meeting, so I wanted to fit mine to the car. This needed to be kept out of the way of the tuned pipe – should I ever fit one, and also away from the throttle override. Also consideration had to be given as to where the receiver was going to be placed inside the plate once I got round to it. So more time was spent fiddling with ideas as to how and where the radio battery and receiver were going to go, and then seeing if the theories worked out in practice. All was worked out, the hole drilled, crystal extension fitted, so it seemed like a good time to fit the servo and switch. All that was now left was the aforementioned radio battery and receiver. Some time had been spent playing around with different layouts at earlier stages in the task, so by this time I knew what would and would not work, all I had to do was fit them in, but not forgetting what I was going to do with the aerial. With the plastic crate this was always threaded through the lid, but I did not want to do that on the alloy plate, and so I toyed with the idea of a plastic card fixed to the plate with the aerial threaded through that. That idea was discounted on the grounds of neatness, and difficulty to keep clean. A whip aerial was the next idea, but I did not want that outside the car, and was not happy with its location withing the body shell. At this moment a rod of nylon bought at the Model Engineer Exhibition for some reason rolled out of the open cupboard next to me and landed at my feet – Ah! I thought, a little stub post of this with the wire coiled round should do nicely, so suitable fixing holes, and hole for the wire to pass through were drilled, and that task was completed. The battery pack was servo taped to the underside of the plate, the receiver was placed on its side, also taped to the plate and battery – I had checked that it would all fit (beware, some receivers will *not* fit on their sides in this location), all wires hooked up, and the job was almost complete. The radio charging lead was run to a place on the side of the throttle servo so that the battery can be charged without having to remove the radio plate, silicone was placed on all edges to make it watertight, and then it was screwed in place, throttle linkage made between servo and carburettor and job done. A quick test of the radio gear showed all to be in order, so with a bit of luck I should be ready for the first meeting on March 19.

Just to finish the car off there is the body shell; last year's looks a bit tatty but may do to start the season, or there is the spare shell that I always carry. Sometimes I think I might do a new one (what, more expense!), and having watched bodies

being sprayed at Alexandra Palace, who knows what I might produce!

Chassis – Northern Style

One of the scratch built chassis that impressed a number of people during '88 was the one built by Tony Middleton. So impressed were some of the northern drivers that it was not long before enquiries were made of Tony asking if he would build more. Soon Kevin Straw was piloting one around the ovals in fine style along with Tony. These drivers were to take the Middleton chassis to high places in the European and World Championships, Kevin taking second spot in the European, as well as domestic competitions.

With increased pressure to produce yet more chassis Tony has decided to put his chassis on the market for anyone who would like to contact him. These chassis are replicas of the ones raced by Kevin and Tony during '88, but in Tony's words tidied up a bit. The actual price of the chassis is £30 and it will accept *Mardave* or *Puma* parts. Tony will supply a list of the parts required, plus prices, so that the car can be built up within the current price limit. The engine mounting is undrilled, as Tony has discovered in his limited time as a builder that drivers have a variety of engine preferences, and also preferences for different gear ratios, all of which tend to alter the engine mounting position within the bay.

I have not seen the chassis apart from those on the cars mentioned above, but hope to have a closer look at one once the '89 season gets underway, though I did do a feature on Tony's car in the September '88 issue. The chassis is known to be strong, within the weight limit, and has been proved in competition at the highest level, so if you want to be a little different, don't mind doing a little work, but want a ready made chassis why not contact Tony Middleton at 99 Park Road, Glasshoughton, Castleford, West Yorks. or give him a ring on 0977-512980.

Club News

The other day I had an unexpected call from Alan Gratton of NORA. Now it's always good to hear from Alan, but the news he had came somewhat as a surprise. He phoned to tell me of someone who wanted to start a 1/8th Club, not up in the North, but over in the West! To be exact in Wales!

It seems that a certain Jeff Stone, of 2 Monmouth View, Llanbradach, Caerphilly, Mid Glamorgan CF8 3LX had been in

contact with Alan, and asked how do I start a Club. So if you live anywhere near Jeff and are interested get in touch with him, either at the address above, or on 0222 861635 and let him know. Seems that we might be oving in Wales in the future.

The Chessington Club is one of the few that send me a copy of their Newsletter on a regular basis, and I am pleased to see that it looks as if their search for a permanent location may at last be over, and hopefully they can look forward to a more settled future. The resting place appears to be at the Surbiton Town Sports Club, though at the moment I have not got the exact location of the said Club. In early January, members of the Chessington Club went down to Surbiton for the Sports Club people to check out the noise level and general feasibility of the Club running there, and all appears to have worked out favourably. Since then there have been other contacts between the two bodies, and agreement appears to have been reached for the Club to race there as from the start of this season, though there is further work to do to make the track site as the Club would want, though they appear to have been given the go-ahead to do so. Anyone contemplating racing with the Club should contact Ian Spiller at 50 Holly Road, Aldershot on 0252 20657 just to check the venue, and I will try to keep you informed.

What's in a Name?

Have had a fair bit of fun in the past two or three months with my computer. I have bought a new one you see, one of these with a spelling check device. The trouble is it does not know proper nouns, e.g. people's names, so when I run the spell check and it hits names it comes up with some good alternatives. For example for Steve Talbot I get 'Stave Tablet', for myself instead of Chilvers I get 'Chiggers', Tony Bicknell comes out as 'Bicker', Roy Crowson becomes 'Crimson' and Fred Emson becomes 'Free Ems'. So if any Club wants to use code names for its members I can supply you with a few! Wouldn't mind quite as much if I knew what 'Chiggers' or 'Ems' were! Ah well, I suppose I'll have to teach it the names of the stockcar drivers, that is once I have discovered how you 'update the user dictionary' which is what it tells me to do after each check.

Racing Round and About

This month there is plenty of racing. On the 1/12th scale we have the second round of the Ministox Nationals at Yeovil on the 16th April, and on the 30th April the second round of the Stockcar Nationals is on the carpet track of the Loughborough CESCO Club.

On the 1/8th front there are Open Meetings on April 2nd at Lilford Park and NORA, and Club Meetings at Adur, Chessington, Coventry, Hastings and Leicester. The following week, April 9th the National Ever-Ready Series gets underway with Round 1 at Yorkshire, this of course is an Open Meeting, and there is also an Open Meeting at the Nottingham and Derby Club, and one at the Borders Club in Scotland. Haywards Heath have a Club meeting. On April 16th Coventry host the first round of the Midlands Regional Championship, NORA have an Open Meeting, and Adur, Bournemouth, Chessington and Hastings all have Club Meetings. The 23rd April sees the now annual Pairs Meeting at Lilford Park, which is of course Open, and there are also Open Meetings at the Borders, Nottingham and Derby, and Yorkshire Clubs, with Club Meetings at Bournemouth and Haywards Heath. April comes to an end on the 30th with the Borders hosting the North Regional round 2, and Open Meeting at Leicester, and

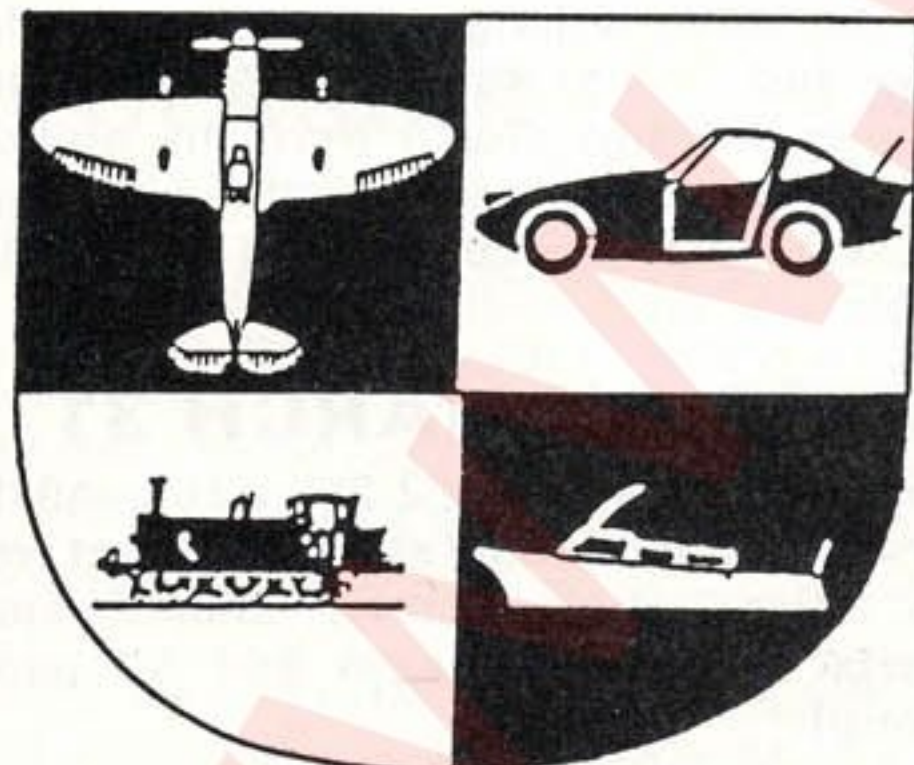
Club Meetings at Chessington and Hastings. Looking into the first weekend of May the Chessington Club has two days of Open Meetings at Sandown Park on the 6th and 7th, and there are also Open Meetings on the 7th at the Borders, Nottingham and Derby, and Yorkshire, with Club Meetings at Bournemouth, Coventry, Haywards Heath, Leicester and NORA.

I hope to be racing at the Ever-Ready Series Round at Yorkshire on April 9th, the Midlands Round at Coventry on the 16th, the Pairs at Lilford on the 23rd (no idea with whom at the moment) and will take a weekend off at the beginning and end of the month. So reports of those meeting will come in due course.

Well, that is all for this month. Please do drop me a line at 85 Elliott Road, March, Cambs PE15 8BP if you have any contribution to make, comment to air, tip to pass on or observation on life on the oval, as I look forward to hearing from you.



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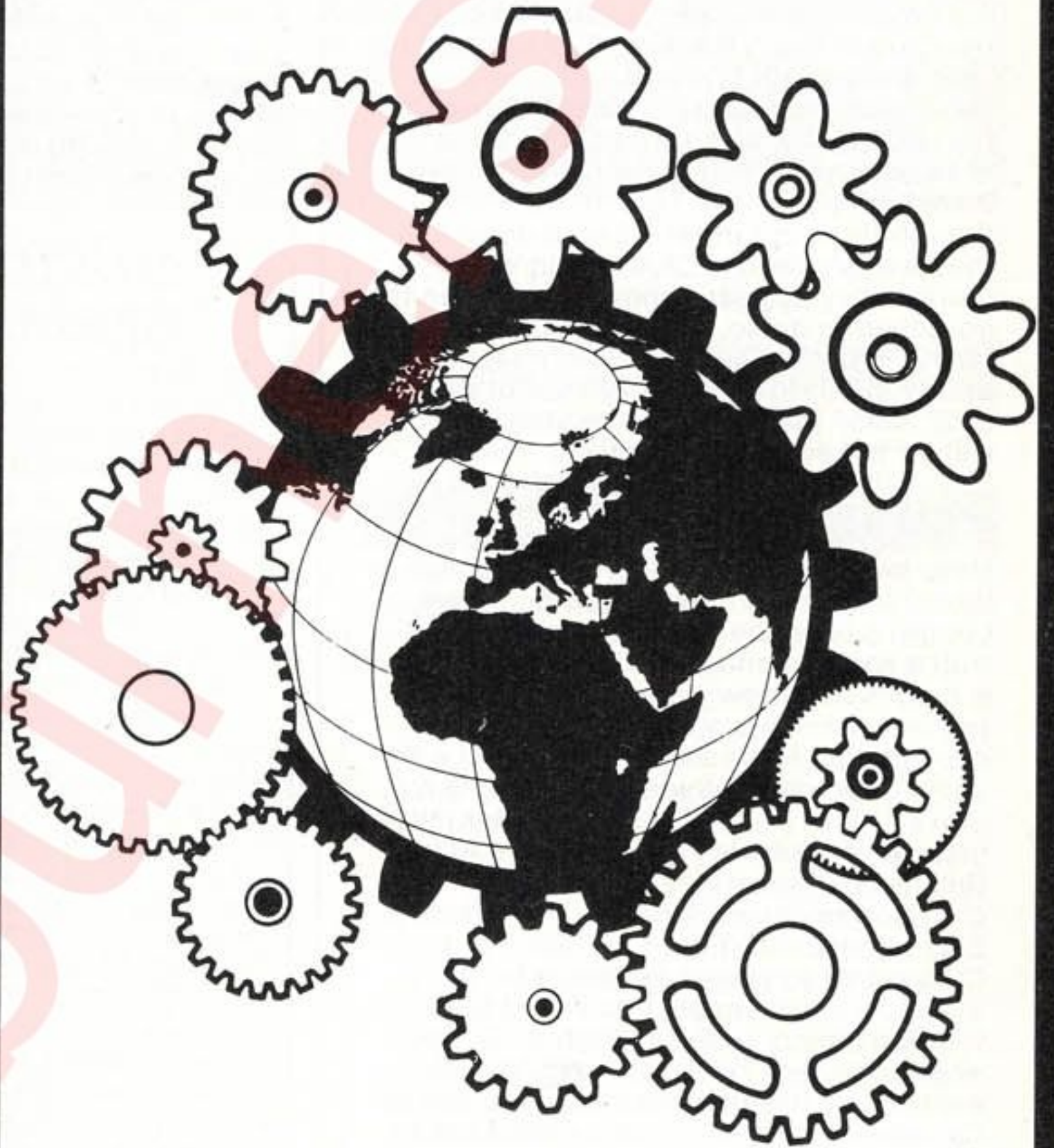


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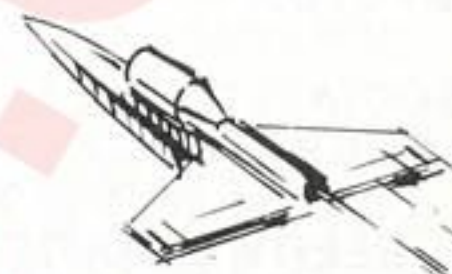


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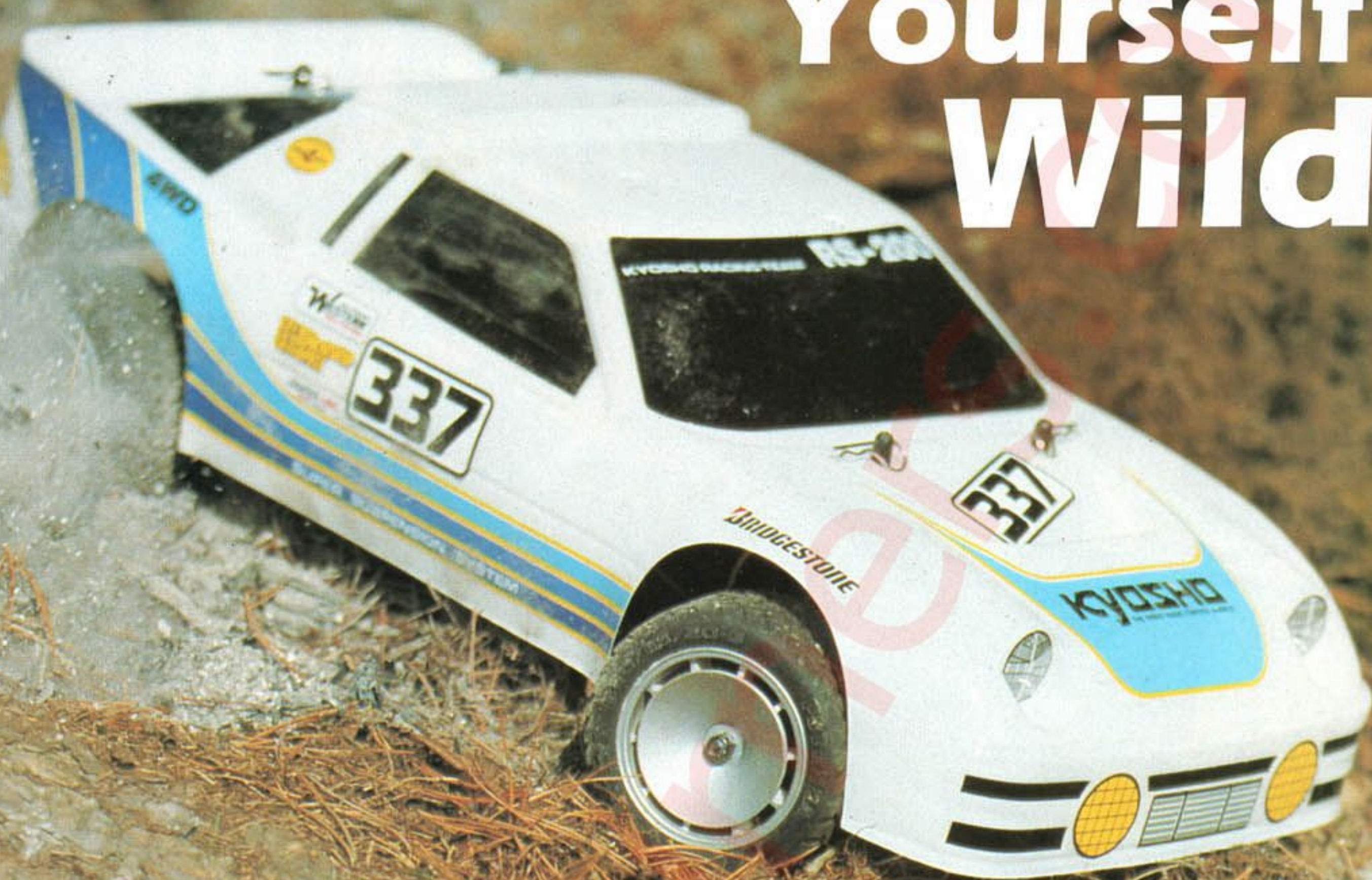
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