

Rarely in the UK do we witness the start of something new in R/C cars which attracts at the outset experienced drivers looking for enjoyment rather than results. 1/10th scale Circuit Rally Racing will mark 1988 as one such occasion. July's issue of RCMC contained a superb article on this new branch of the sport, and created a great deal of interest. Within days of that magazine appearing I was asked to review not one, but two cars eligible for the formula. The first of these is one of the favourite dozen of the American Oval and track racers - the TRC 'PRO-10'.

TRC are an American company known primarily in the UK for their 1/12th scale tyres. They are Schumacher's agent in America for the 1/12th 'C Car', and now the 1/10th Off-Road Schumacher 'CAT'. The tie-up between TRC and Schumacher is one of long standing, so it comes as no surprise to learn that Schumacher are the UK agents for TRC and kindly loaned the TRC 'PRO-10' for review.

Most RCMC readers will be familiar with 1/10th Off-Road cars - or buggies - which we feature every month. Thanks to Colin Leake's excellent column, those same readers will be aware of 1/8th circuit racing. 1/10th circuit cars are a cross between the two. Retaining the scale size and electric power from 1/10th Off-Road, and using the body styles (sports GT/saloon) and tracks from 1/8th circuit, this new formula is designed to appeal to racers from both established classes. Those familiar with 1/12th circuit cars will immediately recognise the chassis layout of a 1/10th circuit car. A solid rear axle mounted in a pod which houses the motor, drives the rear wheels through a ball and thrust race differential. This pod is screwed to a 'T' piece which is connected to the chassis such as to allow a side to side, and up and down, motion - the rear suspension. The chassis is a single plate extending forward and has cut-outs for the saddle pack cells. Front suspension is bolted directly to the chassis plate and consists of a beam with two king pins - one on each end. The king pins carry axle blocks which are allowed to slide up and down against the action of a spring. All the standard 1/10th electrics are used: motors, speed controllers, cells, normal R/C car two-channel radio gear is employed.

As and R/C car racer brought up on 1/12th circuit cars, the first thing to strike one about 1/10th circuit chassis is the size - they look

enormous! Reaer wheels are 2 1/2 ins. wide, fronts 1 1/2 ins. Tyre diameters vary, but the most popular TRC wheels are 65mm and all round. Far and away the best selection of shells come from Parma, whose 'PA9 Osella' and 'Olds/Chevy' (sports and saloon respectively) bodies look superb in every way. Because these are 2WD cars with all enveloping bodies, they look much bigger than their 4WD open wheel Off-Road cousins. On the track the cars look spectacular with realistic driving characteristics (more power than grip) and stable, controlled handling.

TRC PRO-10

The TRC 'PRO-10' is currently the car to beat in America. The kit comes as a rolling chassis, that is complete less electrics and bodyshell, but SLAG Schumacher kindly provided a 'BMW TOJ' shell and a spare set of wheels. Opening the box

next to the chassis. The instructions are not clear on this point - don't worry if yours is the wrong way round - mine works OK!!

It is vital that the axle blocks ride smoothly up and down the king pins, time spent here will be rewarded on the track. Fit the springs, washers, and top nuts to complete the front end. The rear of the car is easy to assemble, with one note. When screwing the rear blocks to the 'T' piece make sure that the blocks sit flat and snug on the 'T' piece. Two problems afflicted RCMC's review car. There were small burns on the blocks (easily removed with a file) and the countersinks in the threads were too shallow. These need to be enlarged with a countersink tool, or a 5/16 in. hand drill.

Everything else fitted as described without problems. The damper at the rear was a fiddly job requiring a couple of attempts to get right, but that

As 1/10th on road takes off -

Model Cars looks at TRC's

answer to the perfect chassis

reveals a number of sealed plastic bags containing some very familiar (to me) parts. The chassis, 'T' piece and top plate are made from composite resin sheet in black, all other parts are metal or glass filled nylon.

The instructions are somewhat rudimentary, but careful reading and some dummy runs assembling the parts soon familiarises the owner with how it goes together. The collection of photos on the last page helps a lot. Assembly starts with the front axle. One king pin is driven into the aluminium beam with a hammer. Make sure the axle beam is well supported to avoid damage, although this bruising method looks crude it works well. Slide the two support blocks onto the beam and make certain you have them the right way round. One block is split to allow castor adjustment, the threaded position of this block should be

was brain fade not component problems. A Laser 'Comfet' forward only was placed in the middle of the chassis, a JR 'Beat 2 PRO' receiver taped to the damper brace.

The TRC 'PRO 10' comes with two servo mounting posts positioned to accept the Futaba '132SH' 1/12th servo. Those using 1/10th (131SH) servos will need to reposition the mounts, an easy job. I had to supply the servo saver (Schumacher) and steering arms - a cheap skate omission which is not fatal, but annoying. There is a fatal problem on the 'PRO-10'. The chassis was designed to accept a wider axle beam. The narrow version applied is the result of testing to improve front end

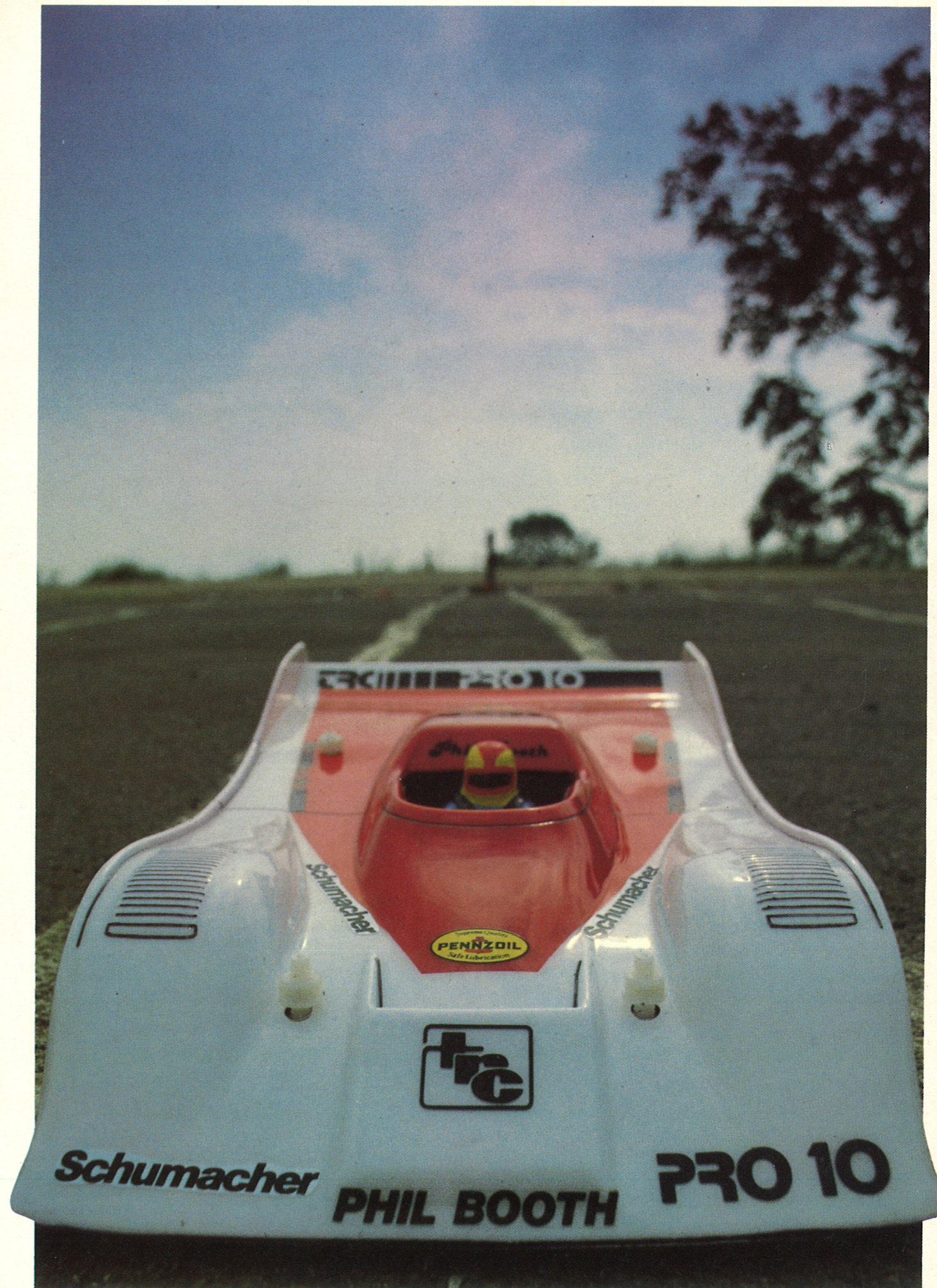
Steering response. However, the front wheels foul the chassis and it is necessary to machine the chassis edges away as shown in the photo. Schumacher are aware of the problem and will obtain a new chassis soon.

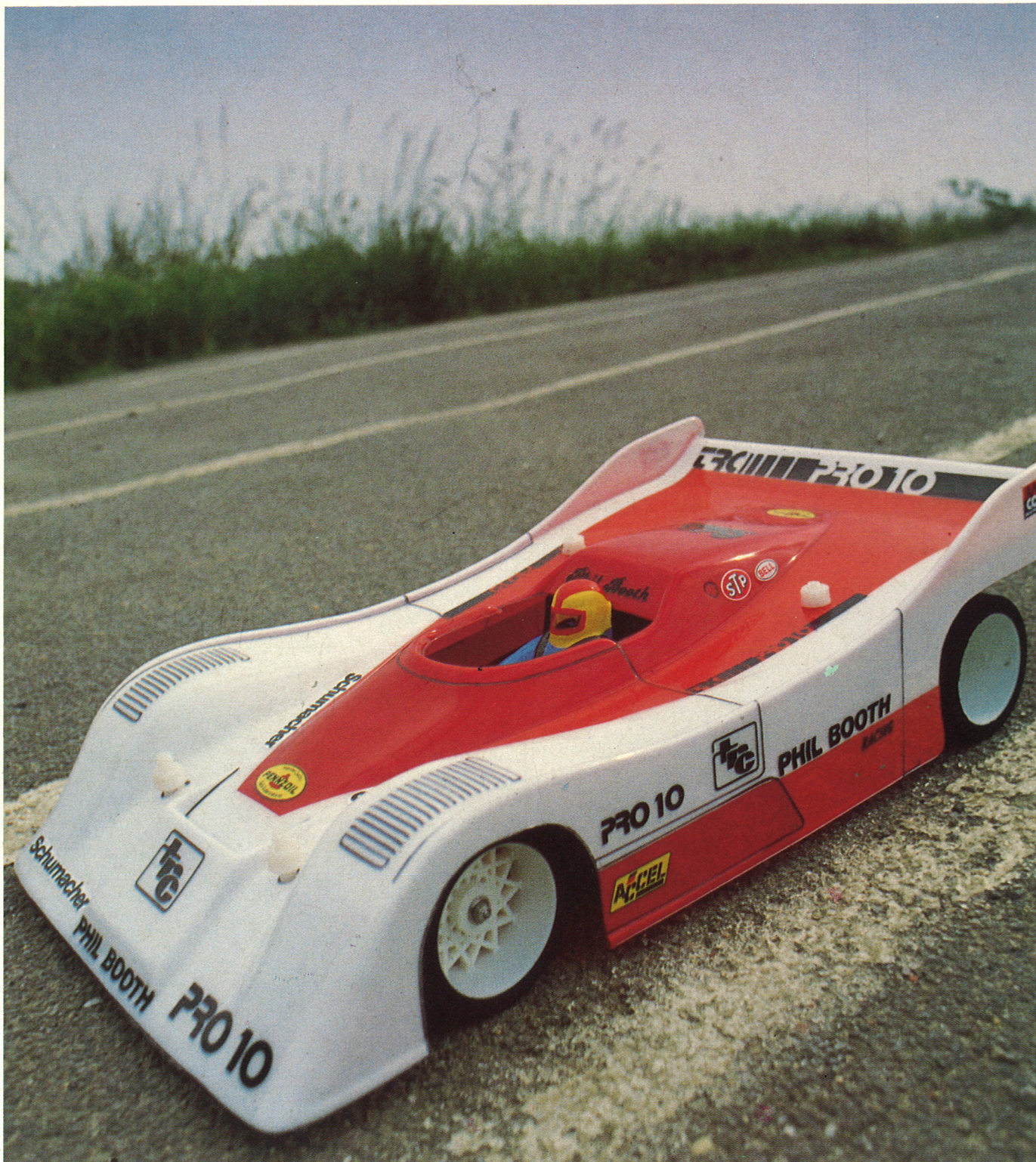
These should be available by the time you read this. Do check your kit before racing, filing the material away is not difficult. This is not Schumacher's fault and they did warn me about it. Rob Roy kindly sprayed the 'BMW-TOJ' shell in fetching colours - the one shown here is prepared by Phil Booth. Built on the Saturday, raced at Lilford Park on the Sunday - we don't hang about! Having raced 1/12th cars on the Crystal Palace circuit two years ago, I had some idea of what to expect. The Lilford Circuit is smaller, slightly more testing, and a little damp when we arrived on a blistery June morning.

With some trepidation, and an 18 double Twister motor, the car was eased out onto the track. Tyres were used as kit - no additives - and within a few laps we were sorting out lines and generally getting up to race speed. Once on the move the car is very stable, sweeping confidently through the banked 180 degree right hander off the straight. One soon learns that proper racing lines are a must. Come into a corner from a wide entry, find the apex, and accelerate smoothly out to a wide-ish exit depending on track position required for the next turn.

There are two problems to avoid. Excessive speed on entry to a corner results in an understeering slide (the car goes straight on instead of turning) way past the apex. It is essential to brake for corners to get the fastest lap times, but go too hard on the brakes and the car will spin. Easier by far is just to come off the throttle and gently steer the car into the turn. As soon as one passes the apex, accelerate gently, applying full power only when the car is in a straight line pointing down the track. Accelerate too early, or too hard, and the car will spin. By rolling the car round with gentle use of the throttle and steering it is very easy to drive well, and very rewarding.

The 18 double motor was, like all Twisters, a bullet. With just a momentary lift of the throttle on entry, it was possible to barrell through the 180 degree bend flat out and still come up smiling. Down the straight the car is doing about 35-40 mph, but without drama. This motor gave about four and a half minutes track time, so it was geared down (races are five minutes' long) for the next attempt. During the second run, the car was more of a handful due to the stunning acceleration. Every turn brought the hazard of a possible spin. I was beginning to doubt the chassis - until George Land and Phil Booth arrived. My first 'race', with George and friends saw ex-RCMC editor Lewis Eckett





lead the field! Lewis was driving superbly, and every time I caught him, a spin negated the effort. Discussion revealed that they were using 27 double 1/12th motors. A change to a *Twister 27* double had the TRC 'PRO-10' in scintillating form. Now it could be driven very easily, with no loss of time. Although slower down the straight, the car was so easy to drive in the infield that lap times were actually faster. Noticeably, the TRC 'PRO-10' was more stable across the bumps (and there are small bumps on every 1/8th circuit)

than Lewis's *Panther* 'PRO-10', it was felt that the carbon composite chassis helped.

Phil Booth was driving the *Composite Craft* car, and we will review that soon. Phil is an ex-1/8th World Champ who knows Lilford Park like the back of his hand. One cannot fail to be impressed when watching Phil - he makes it all look so easy. But above all, these people had turned up because 1/10th Circuit racing gives enormous pleasure. No additives, no mud, no complication - those are the virtues that make 1/10th Circuit

so appealing.

Of the TRC 'PRO-10', despite the build niggles, I have nothing but praise. The car is well designed, easy to build, and works straight out of the box. It has the best wheels/tyres (both Phil and George were using TRC wheels/tyres) the simplest rear suspension adjustment, and the simplest castor adjustment. Although this review makes mention of the *Parma* and *Composite Craft* cars, one should not take that as detracting from the TRC. *Schumacher* are importing the

The 'TRC PRO 10' sits on the tarmac complete with TOJ shell - car care of Phil Booth Models.

car, have a spares back-up, and the car is reckoned to be the better of many available in America. For anyone who has longed to drive an R/C car on a proper circuit, but shies away from 1/8th cars, this formula has it all. Buying the TRC 'PRO-10' to start gives you an excellent chance to learn with a properly sorted, easy to drive, strong car. More reports will follow - I love it!!!

