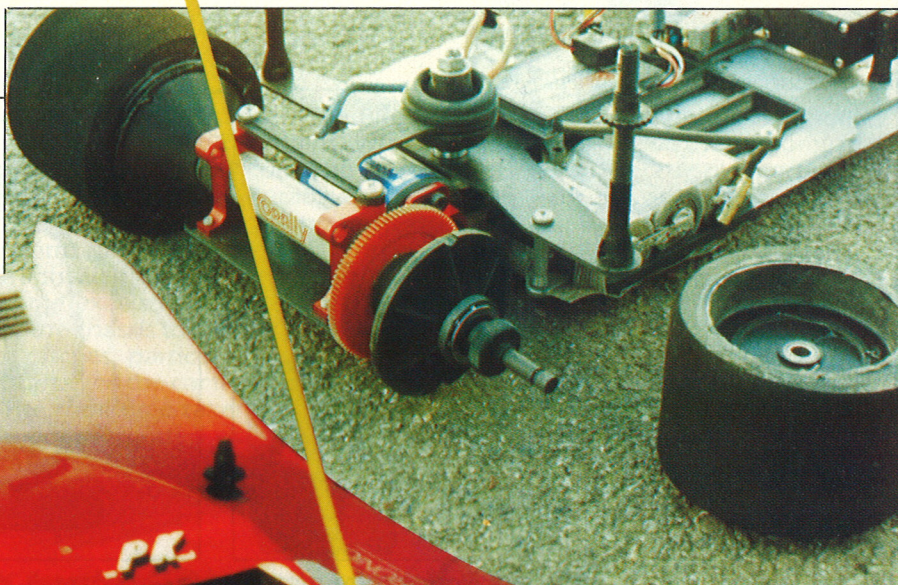


**The latest Pro 10 circuit car is reviewed by Mike Haswell.**



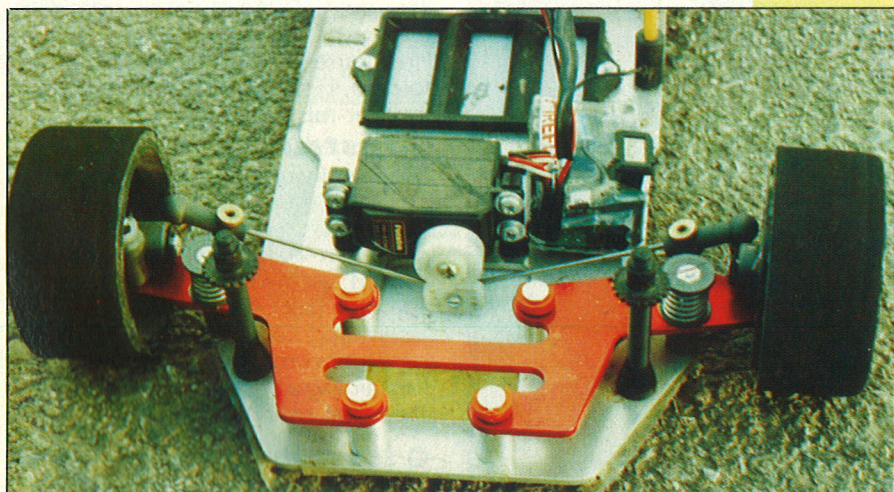
**▶ The beautiful diff unit.**



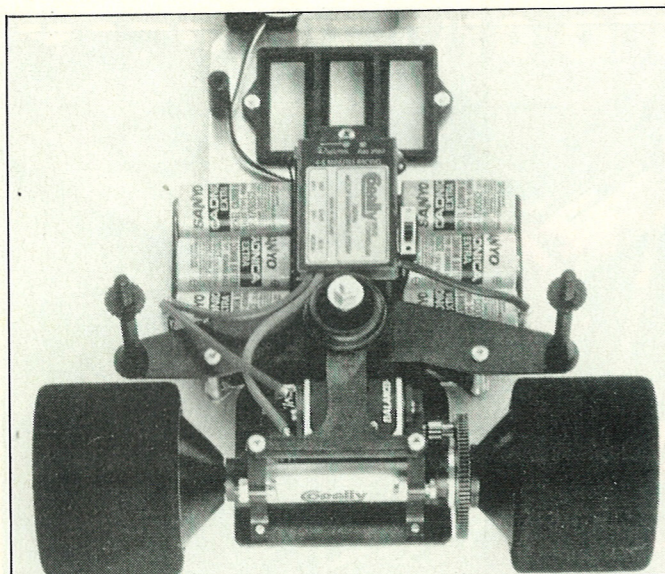
**◀ The Corally SP10 (with Parma Osella body).**

# CORALLY

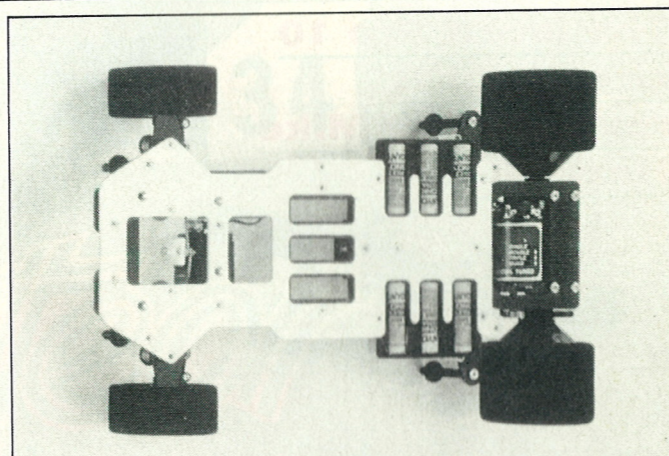
## SP10



**◀ Front end detail, beam/spring suspension and centre point steering.**



Ⓞ Rear view of the Corally SP10. Notice third nicad holder in the centre of the chassis.



Ⓞ Underneath. All of the components, including the Coral chassis, are beautifully made.

The name Corally has been around for a few years now, mainly with twelfth cars, and the SP10 represents Corally's venture into tenth circuit racing. The design of the SP10 is based largely on their twelfth car (SP12) so the design is more than proven. The Corally is made from Coral (hence the name), which is a hardened lightweight aircraft alloy. The reason that Coral was chosen, is that it has equal characteristics in all directions. This is not the case with fibreglass and carbonfibre (which are made up of layers), because the layers at the top contribute more to the strength of the chassis than the layers in the middle, which are of a sandwich construction. The Coral chassis also has the added advantage in that if you do have a big accident, you can, with a bit of patience,

straighten the chassis, whereas a carbonfibre chassis will de-laminate.

The Corally also features centre point steering, which has the advantage of giving the inside wheel a smaller angle in relation to the outer wheel, as opposed to normal track rod set-up. This gives the car less drag and results in a higher cornering speed, as well as reducing the change from under to over-steer when coming off the throttle.

The differential uses "O" rings to locate the diff rings. This, combined with the twelve ball spur gear, gives the smoothest diff action I have ever come across. It's almost worth getting the car for diff alone! The only thing to be careful of is to make sure that you do not get any grease or oil on the O rings or diff washers. Another neat design feature on the

car is that they have managed to enclose the thrust washer and diff adjusting nut inside the rear wheel. A tip here that they do on the twelfth cars is to glue the inner thrust washer to the plastic housing to prevent slippage. The gears are specially designed .5 module and the spur gears are machined from a Molybdeen filled nylon, which does not wobble sideways. The diff has also been designed not to use any set screws, which usually damage carbonfibre axles.

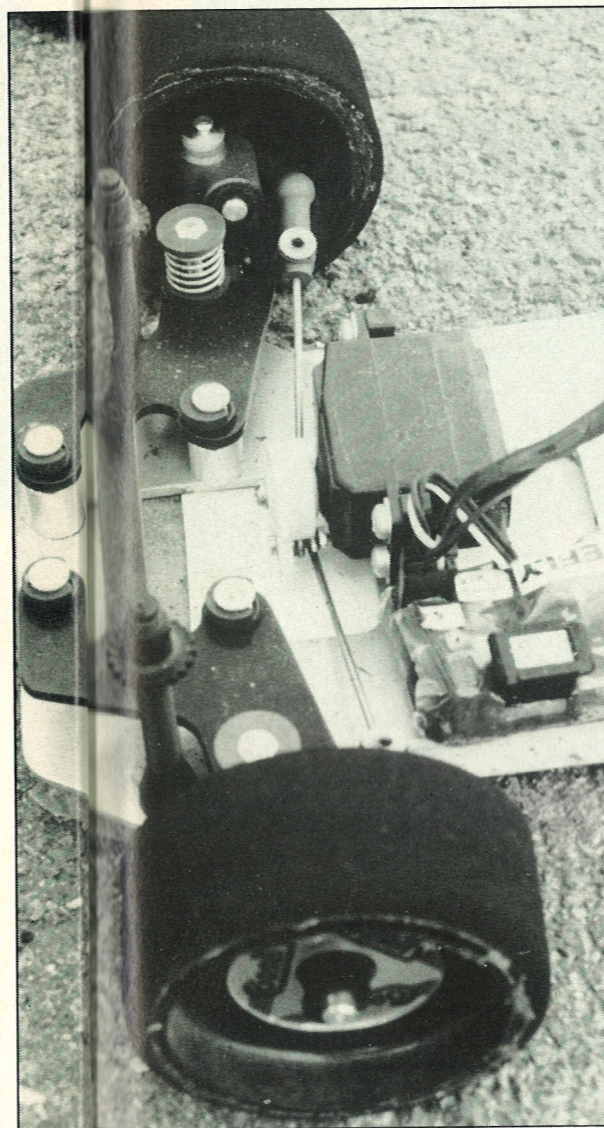
The Corally uses its own design of battery holders for easy changing of the nicads. There are three 3 cell battery holders on the car, with the one in the centre being for the seventh cell. Alternatively it can be used with two or three cells in to offset the weight balance to the inside of the car for oval racing. The rear wheels have been designed to prevent flexing, by using the inside hub carrier as a support. The bearings for the live axles (at the front) are uniquely fitted into the steering blocks, which are mounted with three washers. By changing the position of the washers you alter the ride height. The rear ride height is adjusted by using the three different sets of bearing holders, which are numbered to prevent mistakes.

### Construction

The Corally comes ready assembled (so I won't be able to bore you too much) in a tastefully artworked box with a cut-away picture of a Jaguar bodied SP10 on the front. On opening the box you find the assembled car together with an instruction manual and plastic bag containing a sticker sheet, a pinion, the aerial, rear ride height adjusters

Ⓞ Southampton circuit. (Can you spot the Corally?)

and plastic spruce with some spacers on it, as well as some spare plastic E clips, which hold the wheels on. The instruction manual is very informative with a number of very helpful exploded diagrams. I fitted a Futaba 132H servo, a Corally MMS speed controller and used a JR Max 202 transmitter and receiver. The total race ready weight with a Parma Osella body was 1250 grams, on the office



scales. This is just above the BRCA weight limit of 1200 grams, which is pretty good, and could be reduced further by a Futaba 40Mhz receiver (FP-R103F), taking out the centre battery holder and running a lightweight bodyshell. I also stuck some lexan sheet to the underneath of the chassis to protect it from any scratches, particularly as I had borrowed the car from Ian Spashett. The total time taken to get everything fitted was about 20 minutes and you will need to get a Kimbro servo saver as this is not supplied.

### On the Track

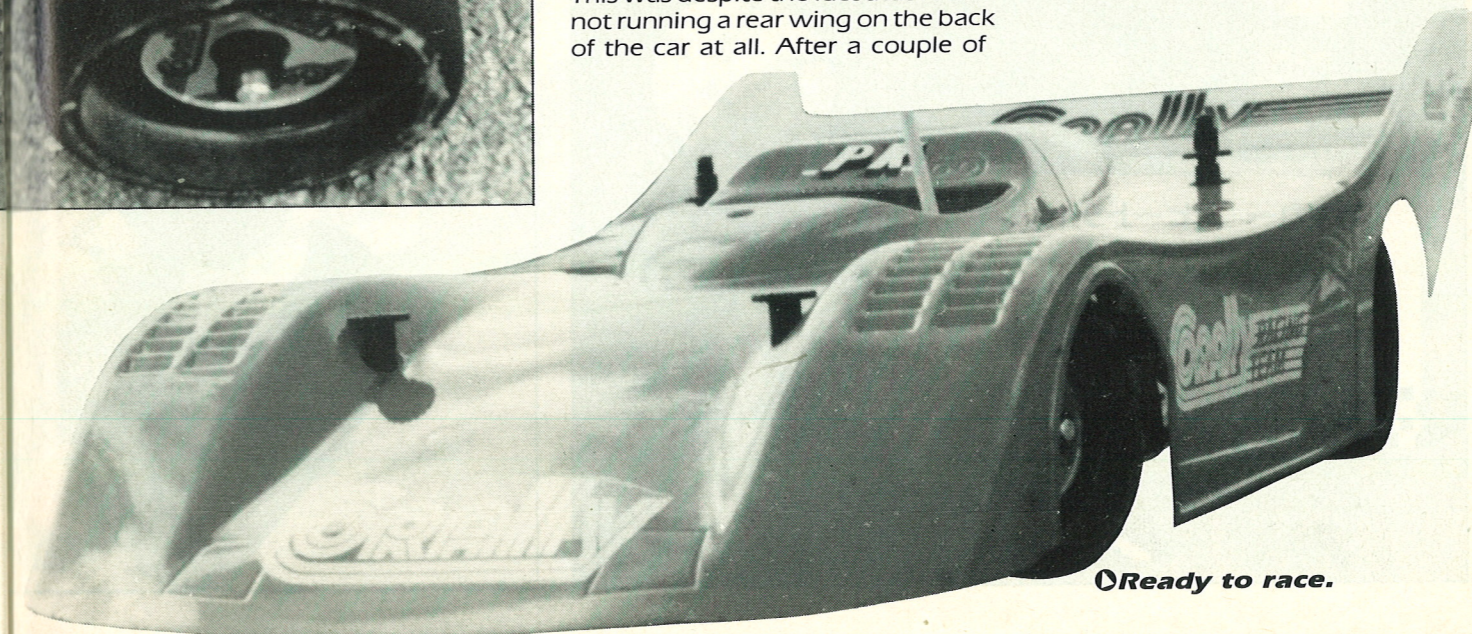
I took the car down to the Southampton track, which is just over an hour away for me, as I wanted to get in plenty of running. When I arrived the track was damp, so I took off the kit greens and fitted some PK Silvers (Yokomos). The reason I chose Yokomos is that they work well at the Southampton track and that they work well in the damp, which Southampton usually is in a morning, whereas greens do not.

I adjusted the ride height to give maximum ground clearance all round, as Yokomos aren't exactly what one could call large tyres, although they are hard wearing and require minimum truing. I started off by running an undergeared 19 double to get the Corally nicely trimmed in and to get the general feeling of the car. Despite the damp conditions, the car handled extremely well and the back end only let go when I was being a bit abusive with the power coming out of the slow hairpins. This was despite the fact that I was not running a rear wing on the back of the car at all. After a couple of

runs with the 19 double, I decided it was time to give the car some real horsepower to handle, particularly as the track was by now dry. So a 17 double was fitted and geared on 46.7 mm per rev. The car went down the straight like a ballistic missile and round the top corner without any problems at all. It was during this run the car got a strength test, when I cut the top corner too fine and caught the kerb. This lifted the front end allowing the wind to get underneath and the car sailed into the fence, from which it emerged unscathed. For the last run of the day I decided to put some slightly better cells in and really go for it with someone recording lap times for me. I went out and clocked up 25 seconds laps, with a few 24 second laps thrown in for good measure (which is pretty good for this time of year) in between avoiding some Buggies, one of whom I punted up the rear when he decided to move over as I was passing him through the flat out chicane opposite the drivers' rostrum. Fortunately neither car suffered any damage. He got his own back later when he rode over the Corally accidentally whilst I was taking pictures of it.

### Conclusion

Although it is not advisable to make judgements on one test session, I am certain that the Corally will be a winner, about that there is no doubt. It is also interesting to note that David Gale, who has been signed up to drive the Corally, has been very impressed with it. The Corally SP10 is available from Intronics, price £180. ●



Ⓞ Ready to race.