The Kyosho R89C 1/10 scale circuit car is based on Nissan's Group 'C' sports car which competed in the 1989 World Sports Prototype championship. This latest model from Kyosho is highly detailed, incorporating fully independent wishbone suspension of Kyosho's "rotary" speed

all round utilising friction shock absorbers. The motor in this particular model is a 22 single turn, mounted inboard for increased realism and stability and is from Kyosho's new range of "Mega Motors". The car also contains one controllers. These are tried and tested, three speed forward and reverse items and have proved to be very reliable. Drive is transmitted through the rear wheels via a bevel geared differential.





## RRC takes a look at Kyosho's latest 1/10th circuit car.

## Construction

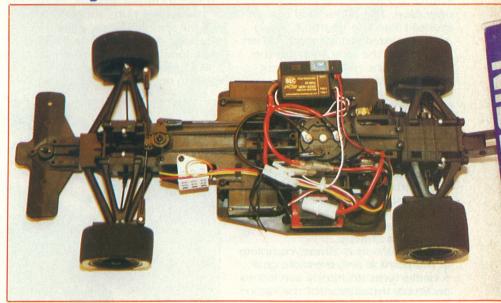
The review kit was one of the first into the country and contained Japanese instructions. However, it proved to be a simple task to build the kit with the aid of the excellent illustrations that Kyosho produce for their cars. (All commercially available kits will, of course, contain English instructions).

Construction commences with the small friction shock absorbers, which owe their origins to the 1/12th scale cars that Kyosho released some years ago. The shock absorbers use two foam rings to achieve their damping effect. Two sets of coil over springs, which give the units their springing effect, are supplied, with the longer of the two sets going on the front shock absorbers. Once complete, the bottom of the shock absorbers are attached to a push rod, which is in turn attached to the top front wishbone. This set up allows a smooth movement of the shock absorbers, whilst maintaining a realistic appearance. The next step is to insert the knuckle joints into the front upper and lower suspension arms. Each knuckle joint is then held in place by a metal clamp which is secured by a screw



OCharged up and ready to go!

**OF**rom this shot you can see the front and rear wishbone suspension, rotary speed controller and "stick pack" nicad configuration.



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and nut. It is important to remember not to tighten the screw up too much as it will cause binding which wil adversely effect the performance of the suspension. The steering arms are then screwed onto the wishbones and to obtain maximu performance, a 1mm clearance gap between the steering arm and the wishbone must be left. When the wishbones were being assembled to the front blocks, it was found that the washers were a tight fit. A small needle file was used to enlarge the holes in the washers and once completed they fitted perfectly. After this the front left and right hand suspension units were attached to the chassis and secured by two "O" rings. The "O" rings are used because the car has a "crash back" facility which enables the front suspension to fold back in the event of a collision.

The gearbox was the next item to be assembled. It begins with the construction of a geared differential unit, which is very similar to the type found on some of Kyosho's off road buggies, such as the Ultima and Mid. It is important to put sufficient grease into the diff unit to ensure a smooth and efficient operation. The differential is then inserted into the gearbox, along with the intermediate gear. When assembling the idler gear on the outside of the gearbox, the nut tension must be correctly set, otherwise it will cause drag and hamper the cars performance. The "Outlaw stock" motor sits just in front of the rear wheels, along the centre line of the chassis, giving a low centre of gravity. The rear wishbones are next to be attached the gearbox, along with the rear wheel carriers and ball and pin (dogbone) driveshafts. This assembly is then attached to the

Construction is almost complete at this point as only the radio gear, wheels, tyres and body are left to be fitted. Installation of the radio gear is no problem as the Nissan is designed to accept most popular types of equipment. The steering and speed controller servos are both attached to a top plate that runs along the length of the car, which helps to incease the strength of the chassis. The "rotary" speed controller, resistor and receiver also

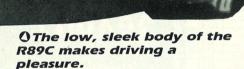
sit on the top of the upper plate, which leaves room for the nicads to be positioned on the chassis in "stick" form.

The wheel hubs supplied with the kit are one piece, injection moulded nylon items and apart from looking good they are of the "slick" rubber type. They do require glueing however to stop them from

slipping on the wheels under acceleration.

Total construction time for the kit was about six hours, with no major problems encountered despite not having English instructions. The body shell is moulded from clear polycarbonate and is highly detailed. For realism it was decided to reproduce the full size car's paint





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scheme. The overall effect was enhanced by the excellent sticker sheet that is supplied in the kit. You are also given the choice of numbers from 23, 24 or 25 so you can have the Yokogawa Hewlett Packard, Calsonic or Nissan car. There are even Dunlop Sport stickers for the tyre walls! If you wish to make your car into a concourse winning machine you can fix wing mirrors and a windscreen wiper to the body shell. Once complete the car really looks the part, indeed it seems almost a shame to race it.

## Track Test

Acceleration through the rotary speed controller was smooth and very fast!! The "outlaw stock" motor provided lots of bottom end punch and good top speed. It seems that the choice of a 15 tooth pinion

© The outer part of the gearbox can clearly be seen here. The wide rear wing should provide plenty of downforce.

gear (provided in the kit) was ideal. Low speed steering was sharp and responsive, but there was progressively more understeer at high speeds. The slick rubber tyres worked well, but sponge tyres may be the way to go if you are considering racing the car (Kyosho can supply direct replacement sponge tyres). One of the most impressive features of the car was the suspension. The Nissan soaked up any unwanted bumps with ease,

giving a very smooth ride.

In conclusion this is another excellent kit from Kyosho which is enjoyable both to build and drive. The car is not aimed at the competitive end of the market and should not be classed as an out and out racer. It is a highly detailed radio control model car that will provide its owner with a lot of enjoyment and value for money.

**OFront end detail showing** 

"crashback" front suspension

sprung servo saver and

system.

Available from your nearest Ripmax stockist.

rear of the chassis.