

“On opening the box, any enthusiast will immediately appreciate the excellent quality of the plastic mouldings”

*Crono has been designed to use less parts than any other rallycross racer.*

cars I have ever built. Its design is of a comfortable, modest nature, offering small innovations along the path of tradition, with the quality of manufacture running parallel to that of the Japanese market. This is a car made for the serious competitor.

The Crono car featured in this kit review is the E1001 version, this the 3 differential model with a fixed chassis. The other two versions that are available from Puma Racing are the E1000, the same as reviewed except includes a hinged chassis, and the E1002 the Crono 2WD with chain transmission.

The Crono range has been designed to accommodate any 3.5cc glow plug engine with adequate installation facilities for any 2 channel radio. On opening the box, any enthusiast will immediately appreciate the excellent quality of the plastic mouldings, which require very little, if any, deburring or shaping. Construction is made simple with an easy to follow step by step instruction manual. To aid the modeller all the nuts and bolts are packaged into bags that refer to the stages of assembly.

# EURO WINNER!

## Assembly

The gearboxes on this model adopt the design of many rallycross cars in the sense that they are unitised to the rest of the car. The diff housings form a tough sealed unit that protects the internal workings from dust and water. The differentials used in this car are all metal and have been configured of a planetary nature. The differential output cups are extremely hard and are mounted integrally via the diff pinion gears, hence there are no grub

screws that could fall loose. These sturdy gearbox housings form the fixing structure of the wishbone assembly.

The front and rear suspension assembly comprises of a fixed lower wishbone, with an adjustable top upper arm. This adjustable top upper arm has internally a threaded rod, at one end a clockwise thread and at the other end an anti-clockwise thread. This enables the enthusiast to adjust the upper arm whilst it is still on the car, to achieve the required amount of wheel camber.

The Crono car has a geometry design feature that is very close to my heart. That's the ability to adjust the castor angle of the front wheels and the ability to adjust the toe-in angle of the rear wheels. Both these adjustments are achieved via the rotation of circular pivots, which mount the lower arm. The pin that the wishbone rotates around is held in two aluminium cams. The holes that hold the pin in these cams is slightly off centre, so if the cam is turned it will fractionally move the angle of the lower arm in either the vertical or horizontal





plane. On the rear arms it is used to adjust the toe-in of the rear wheels. This idea is far better than having track rods on the rear, because track rods are often rather exposed at the rear of a car, eventually de-tuning a car in a collision. The cams on the front lower arms are used to adjust the king pin inclination or castor angle of the front wheels. Of all of the settings on the car I feel this is probably the most useful, enabling you to adjust straight line stability and cornering power.

The shocks in the kit are manufactured in aluminium and reach the consumer anodized in red. Internally the shock absorber's piston is threaded on to the shock shaft, giving a bullet proof construction. The ride height of the car is adjusted via coil over springs. This is adjusted by turning the brass spring location ferrules on the upper section of the absorber body. This makes tuning simple and easy. The fuel tank supplied in the kit has been manufactured for competition use, offering a quick fill flip top lid. In use the tank satisfies BRCA volume regulations and offers a good seal during pit stop operations.



15 deg for rapid air flow, 24 deg for medium air flow and 33 deg for slow air flow. Technical literature supplied by SVM.

**Wheels on the Crono are not just designed with looks in mind - they are very light and strong.**

The Crono kit have been manufactured in a hard plastic material, in comparison to GRP disks there is no noticeable difference in performance, however the longevity is greatly improved. This integrated double disk system gives the car awesome braking in use on the nations rallycross tracks. All brake and throttle linkage overrides have been included in the kit, which makes radio installation extremely simple.

**‘The Crono body is very functional and gives the car a real racy look’**

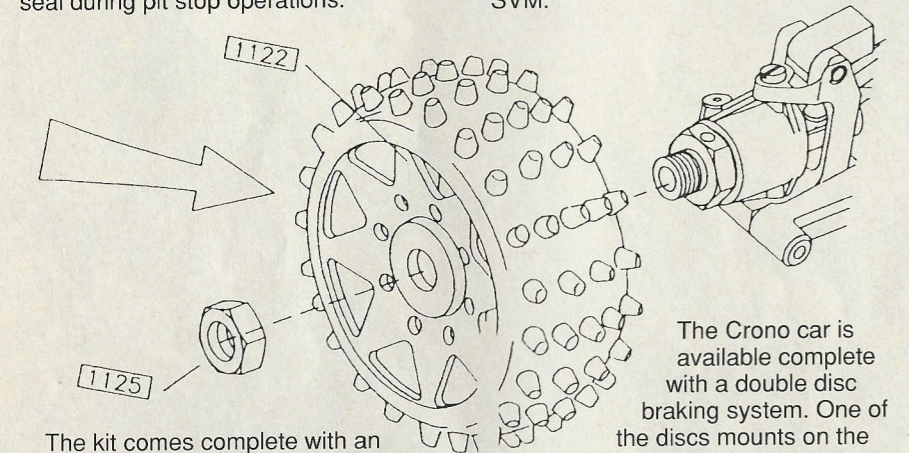
#### Bodywork

The Crono body is very functional and gives the car a real racy look. The bodyshell has obviously been manufactured in polycarbonate to resist the tough environment of rallycross. The rear wing included in the kit has been injection moulded in a composite of polypropylene, which requires no spraying. I have always found these wings to have lasted longer than polycarbonate ones.

To sum up, it has been without a doubt, one of the easiest cars I have ever built. The quality of manufacture is excellent, and the design is more than satisfactory for the needs of today's

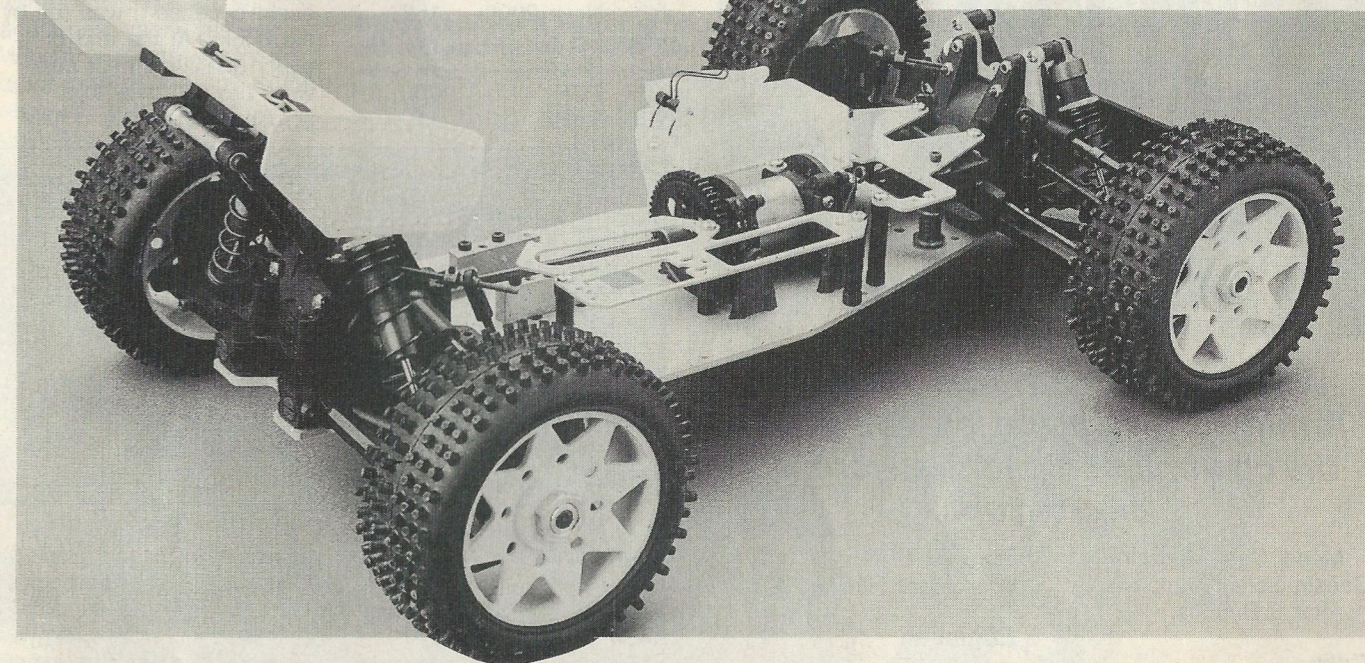
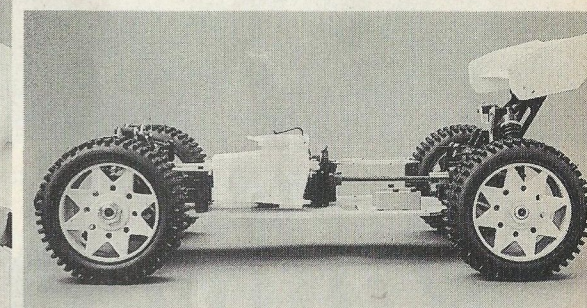
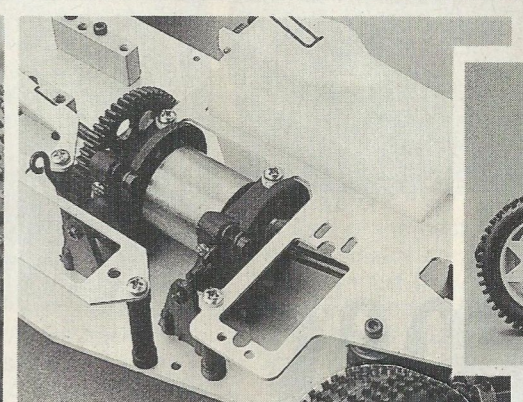
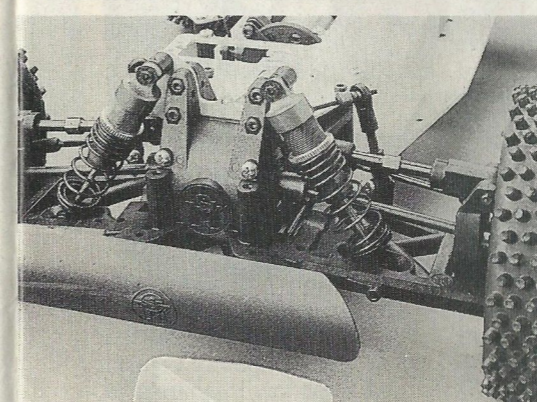
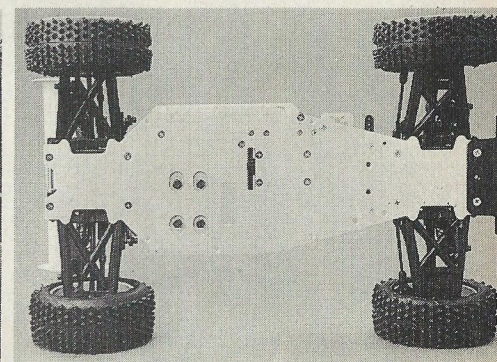
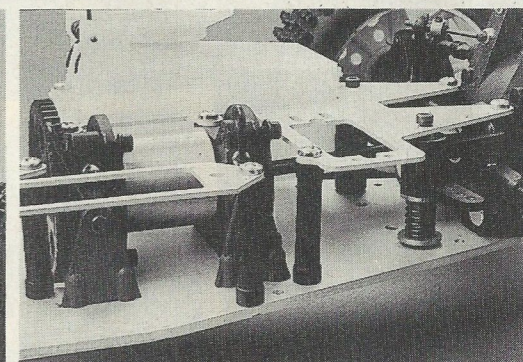
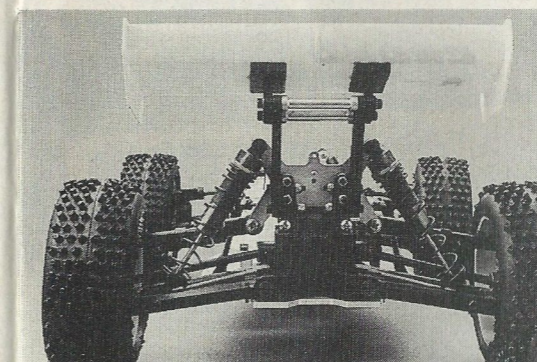
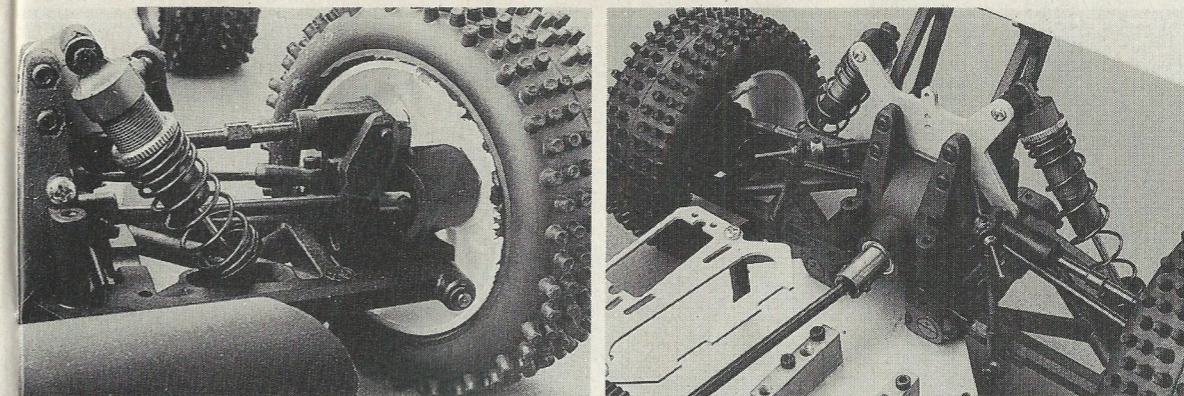
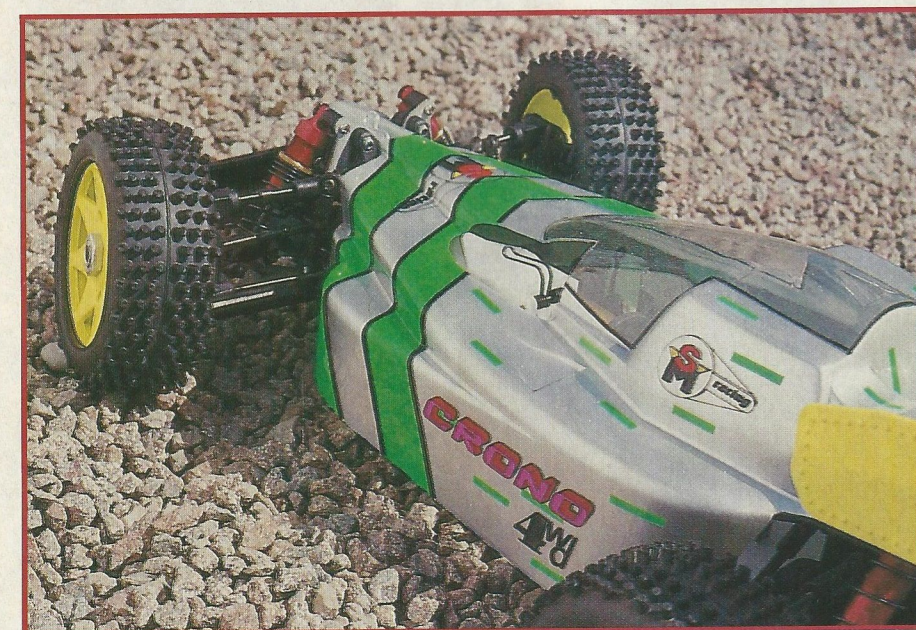
**Body shape on the car will appeal to most eyes - including ours..**

RADIO CONTROL MODEL CARS



The kit comes complete with an adjustable rear wing mount that fits securely to the rear gearbox. Three Wing settings are available for the enthusiast to experiment with, these are

The Crono car is available complete with a double disc braking system. One of the discs mounts on the main body of the centre differential, and the other is located on the front output of the centre diff. Unlike most other cars, the disks supplied with



racer. I feel this year will be a successful year for the SVM Crono team, and next year, well unless the opposition buck their ideas up, the Crono could well be

in the hands of the British Champion. The car is distributed by Paul Dudley of Puma Racing Models. For more information Trade or Retail contact

Puma Racing, The Barn, Moat House Works, Kings Coughton, Alcester, Warwickshire, B49 5QF. Tel: 0789 765496. Fax: 0789 763573

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**Under the skin the Crono follows pre set rallycross styles but does so in a simple and uncluttered fashion.**