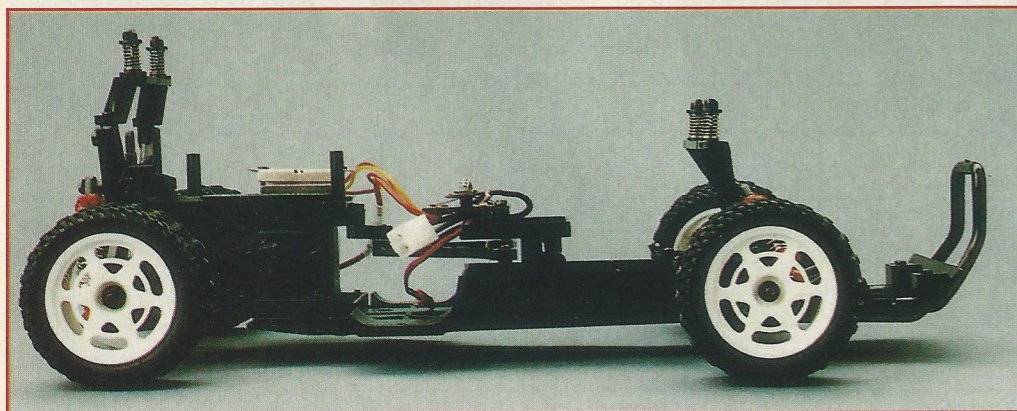




Kyosho have re-bodied the raider with the Paris Dakar version of the Citroen ZX, Andy Carter investigates...

DESERT RAIDER



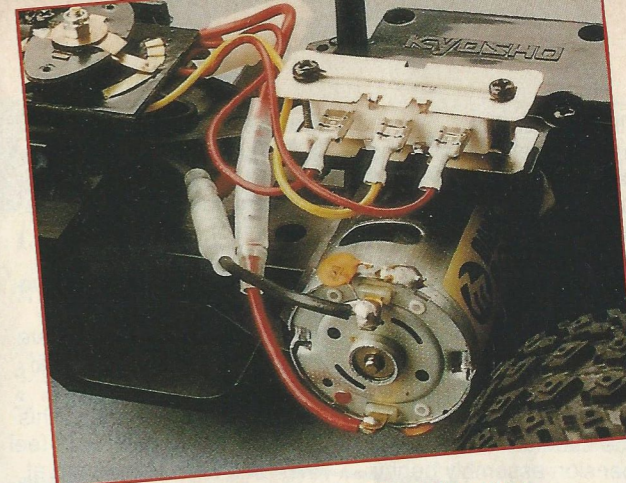
Simple chassis is well tested and reliable.

The subject of this review is the Kyosho Citroen ZX Rally Raid which is a 1/10th scale model based on Citroën's successful 1991 Paris-Dakar winning car. The Kyosho car has a fairly basic specification; two wheel drive, mid-engined plastic chassis with simple sprung suspension units. It is based around their successful entry level car – The Raider.

RADIO CONTROL MODEL CARS

Virtually 95 percent of the car's components are sourced from the Raider whose history dates back to 1987-88. The Raider has proved itself to be a very competent car at this level and it competes well against similarly priced cars from other manufacturers. The fact that the Raider has been around for such a long time in one guise or another means that the newest version (the Citroen ZX) has an extensive existing spares base and distribution and that the basic design is a well proven one.

If you are beginning to wonder whether this car is simply a re-bodied Raider then you can be partly forgiven, but only partly! At first glance, and maybe even second glance, the car looks exactly the same as its ancestor but look close enough, or better still put them both side by side and you'll spot the difference immediately. The Citroen is longer than the standard Raider. In order to produce a



Standard motor fits neatly to the gearbox and is controlled by a three speed resistor.

scale looking model of the Rally Raid, Kyosho have extended the chassis to make the car long wheelbase. This has been achieved very simply but effectively. Instead of producing a new chassis, thereby having to produce a new mould and foot the substantial tooling costs, Kyosho have produced a moulded plastic plate which bolts onto the chassis and extends the gearbox housing and rear wishbones backwards, thereby achieving the desired result of extending the wheelbase but at a much reduced cost. Also, this means that any existing Raider owners can upgrade their car's much more easily and cheaply. Incidentally in case you're wondering, this isn't a new innovation but has been used to great effect by Kyosho on the existing Raider based Sierra RS500 Cosworth – stablemate to the new Citroen ZX.

Construction

As with virtually all of the entry level models like this one, the instruction booklets are written in such a manner that it is almost impossible to build the car wrongly. However, whilst assembling the car, I noticed a few areas which could be slightly troublesome if the instructions are not read carefully.

Upon opening the instruction booklet, you are faced with the obligatory mention of other items you require to finish the kit such as Radio Control equipment, Ni-cad battery and some recommended tools. If this is your first attempt at building this type of kit, Do not be tempted to skip this section or skim through it as it contains some very basic but worthwhile points which will increase your understanding of the car and its assembly.

The first items to be assembled are the shock absorbers. These are very simple units comprising of a

coil spring over a dummy damper barrel with a single rubber O-ring which provides a degree of resistance to the movement of the shock shaft. It is important to note that there are two different lengths of shock body; a shorter front one and a longer rear one, but the difference is fairly minimal so do be careful to install the appropriate ones in their rightful positions.

Next up is the assembly of the front suspension arm. This is a bit of a misname as it actually refers to the front knuckle arm/upright assembly. Two points to be careful of here; 1) The units are handed (i.e. there is a left hand and a right hand unit). 2) There are two types of Knuckle arm in the kit – one from the old Raider and a new type one for the Rally Raid so make sure the Knuckle arms you use look the same as in the diagrams. The front suspension is assembled onto the front bulkhead moulding which is then bolted onto the chassis plate. One area to watch here is the length of the upper suspension arms. These control the camber of the wheels but are not adjustable. Do be careful as two lengths are used in the kit; the longer ones on the front and the shorter ones on the rear. Once the wishbones and uprights are connected to the front bulkhead, this assembly can be attached to the chassis. The instructions recommend a set method to do the screws up in order to achieve this and it should be followed as it is the most



Suspension detail shows the familiar Raider mechanics.

logical method. The next large assembly is the gearbox. This has a total of three counter gears running between the motor pinion and the differential gear case. It is essential that these gears and shafts are greased as they will run a lot smoother and last longer if time and care is taken in assembly at this stage.

The car comes with sintered metal bushes which are more than adequate to start with but are nowhere near as good as proper ball bearing races which can be purchased separately. On our car, we found the factory assembled differential gear was notchy in action. This is due to small metal burrs on the bevel and planet gears within the differential which gradually wear in as they are

run. If however, the differential seems too notchy in operation, this can generally be relieved by loosening the three self tapping screws in the differential casing, thereby reducing the pressure between the planet and bevel gears. Once the gearbox is assembled, the rear wishbones and shock mount can be attached and the rear suspension assembly begins to take shape.

The rear drive cups need to be well greased to ensure smooth running on the sintered bushes in the rear uprights. Once this is all assembled, The rear gearbox assembly is then bolted onto the chassis plate extender and then onto the chassis. It's at this stage that the car begins to take shape.

Radio Equipment

Next up is the installation of the radio control equipment. This starts with the installation of the servo saver and the steering servo. One thing that could have been very useful would have been the inclusion of actual dimensioned track-rod lengths for the steering. This is only a minor point but I feel that for a kit that is aimed at the first time buyer rather than the hardened enthusiast, an omission such as this can lead to some confusion. All said and done though, it's only a minor point which won't cause too many furrowed brows.

Next is the installation of the three step mechanical speed controller and servo. These are assembled into a tray which is then screwed onto the chassis by means of moulded posts. The three pole resistor cover is a fiddly affair consisting of two pressed metal plates which sandwich the ceramic resistor. This assembly is held together by two long screws which locate into the chassis. Why this cover couldn't be one simple bent piece of metal such as the Tamiya variety is beyond me but I'm sure there must be a reason!

The instructions show the receiver being held in place by means of a rubber band. This does work well but, in my experience, the receiver would be safer if it were located more positively by the use of double sided servo tape. Once the radio equipment has been successfully installed, the only remaining things to do is the wheels and tyres, the bodyshell and the body mounts. The body mounts are sprung loaded clips which have the equivalent to a moulded body pin as part of the clip assembly. This is a neat idea as it means that there are no separate body clips that can get lost or mislaid.

The tyres are treaded in order to give an overall scale appearance to the car. These should work well on hard surfaces or in dust to a degree but may not give high levels of grip on a grassy surface. However, all is not lost as the wheel size is a

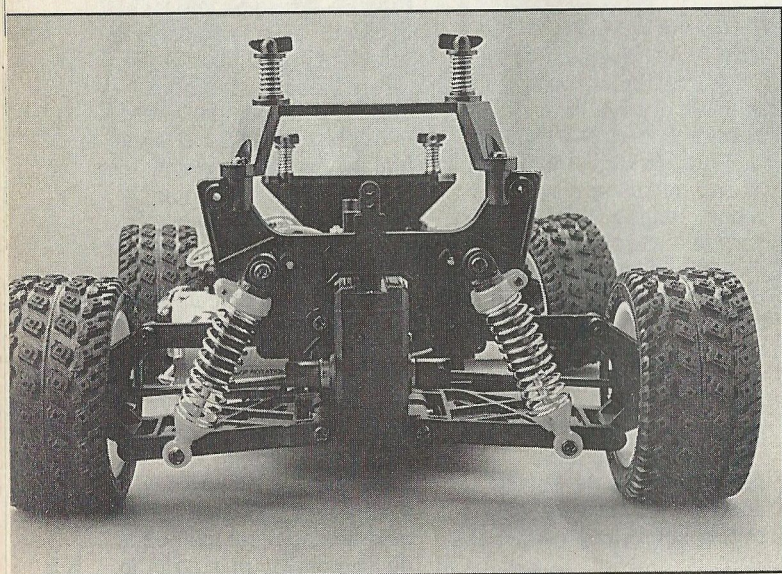
standard 2 inch diameter which should ensure a plentiful and varied tyre supply from many different manufacturers. Drive to the rear wheels is via a tapered hexagonal washer so do ensure that this is installed the correct way round as shown in the instruction booklet. On top of it all.

The final part of the assembly is the finishing of the bodyshell. With a body of this style, great masterpieces of customised paint jobs can be attempted. If however, like us, you decide to go for the box colour of yellow, there are many decals within the kit to ensure that even the most basic of paint jobs can look like a masterpiece. The bodyshell is a nice moulded polycarbonate which does require special paint but your local model shop will be able to advise you of what type of paint to use.

Conclusions

There is no doubt in my mind that this type of car kit will be very popular as it offers a more realistic model car than just the standard dune buggy style. Even with its basic mechanics, this car has a certain charm about it which it shares with the existing Kyosho RS500 Cosworth. Many local clubs are now catering for rallycross style cars within the frameworks of normal buggy racing and cars like this certainly add some much needed realism.

The car itself can actually be upgraded for more competition use but this is somewhat removed from the job it is intended to do. All in all, it's a good kit which, thanks to its existing proven abilities in other forms has very few faults and is certainly worth looking at if you're looking for an entry level radio controlled car with added realism thrown in for good measure. Many thanks must go to Radio Active Models in Chelmsford for the use of the materials for spraying and finishing the bodyshell. The Kyosho Citroen ZX Rally Raid is distributed by Ripmax and is available from all good model shops.



Although not over sophisticated the Citroen suspension is well designed.

