

Following our preview of the Kyosho 'Honda NSR 500' motorbike the UK importers, Ripmax Ltd, have finally allowed one of the first kits to find its way into our grubby editorial hands. The reason why we are so keen on two-wheeled racing all of a sudden is because the finished model looks so good and goes even better.

What we didn't know at the time of the first article is that this kit has been produced with the official authorisation of Honda, Rothmans and HRC. This would explain why the kit is so detailed and true to scale because with their permission Kyosho will have been able to look closely at the real bike and make sure the reproduction is accurate.

Their work has paid off because it is a pleasure to build something which for once resembles the real thing and allows you the chance to spend some time on the detail. At the end of the day we weren't sure if we could bring ourselves to even run it for fear of damaging the paintwork. Hopefully a body parts set will become available soon.

Nice and easy

fortunately the kit is not very difficult to build which means more time can be spent on the bodywork. The construction starts off with the gearbox and perhaps the greatest care must be taken here to ensure everything is free running. A

small tube of grease is included in the kit so use it on all the bearings and gears. The bearings are plastic and will bind on the shafts if they are not lubricated regularly. This in turn will affect the performance and running time of the bike.

The drive chain is a perfect example of Kyosho's attention to scale detail because it is a full metal roller link type just like the real thing. This part must also be kept in prime condition with regular applications of a light grade oil such as 3-in-1.

The motor is also installed at this stage to finish off the gearbox. The motor specification is referred to as DM20 whilst the type is 180 size which is a lot different to the size of motors we are used to in normal off-road cars. This one measures a mere 30mm long with a diameter of 20mm and weight only 31 grams. This is a plain bearing motor so again regular lubrication of the bearings is vital to keep it working properly for as long as possible. The motor pinion in this kit is of the push-on type and care must be taken here not to damage the motor when fitting it. A simple gauge is included to get the correct amount of space between the pinion and the motor for the ideal gear mesh. Gently squeeze the pinion onto the motor shaft either in a vice or by placing the gear onto a hard surface and pushing the motor firmly into it.

Coming together

The completed gearbox sub-assembly is next bolted into the left hand side of the chassis and laid aside whilst the steering system is built.

On the front of the instruction booklet the steering system is described as unique and even lists a patent number to prove the point. As we said in the November issue the front wheel is not steered in the conventional sense but is instead allowed to tilt from side to side. This forces the front wheel to follow the direction dictated by the angle of the front forks and the whole bike actually leans into the corner or curve just like a real bike.

Making sure the steering head operated smoothly is another area of prime concern otherwise the handling of the bike could be seriously affected. A servo saver fits onto the back of the steering head to soak up any shocks transmitted through the front wheel to the steering servo.

In control

The special 'RS-M' miniature radio system must be bought separately from the bike kit and consists of a steering servo and an all-in-one speed controller and radio receiver unit. The 'RS-N' system has been designed so as to be as small as possible to fit into the limited space within the box chassis. Unfortunately ordinary radio gear just won't fit although the similar system in the Tamiya 'Tamtech' range of cars will. Which is good news if you already own one of these cars but not much use if you don't.

The steering servo sits right in the top of the chassis secured with the double-sided tape provided in the kit. The position of the servo affects the amount of steering or swing as Kyosho describe it. To begin with you should start off with less "swing" until you get used to controlling the bike, therefore the steering servo must be positioned so that the output arm just touches the top of the servo saver. When positioning the servo make sure the plastic is clean and free from oil or grease as the tape will not stick to it properly. The handling of the bike will be affected if the servo is not secured properly.

The combined receiver and speed controller unit slots into a space underneath the servo

and does now need to be stuck in. The really fiddly part is making sure all the connections can be got at once the two halves of the chassis are bolted together.

Before this happens however the rear forks must be assembled because they pivot on two mounting points inside the frame. Once you have done that the really tricky part begins when the two halves of the chassis must be bolted together. This is more like juggling than anything else because all the screw holes and pivot points have to line up before the screws can be tightened up. The best way to do this is to place one or two screws through the right hand side of the chassis, bring the two halves together and just do up the threads of the screws a couple of turns to hold the lot in place. They you can make sure everything is lined up and insert the rest of the screws fully.

Almost ready

When you are finished, you should have a box chassis that is very strong and rigid and which should provide good protection for the radio gear and motor.

A single coil spring shock absorber acts on the rear forks to govern the suspension movement of the wheel. The final piece of the drive system needing assembly is of course the rear wheel along with the chain drive sprocket. The wheel itself is made up of three parts; the plastic centre hub and two halves of a metal ring which is fixed to the outside. The ring is intended to add some weight to the wheel in order to keep it in contact with the ground and improve the road-holding of the bike. The rubber tyre is pushed over the ring making sure it is seated properly all around the edge. Both wheels can be assembled at this point so that when the front forks are finished everything will be ready to get the bike up on to two wheels.

Once the chain sprocket is fitted into the rear wheel it only needs the chain to be looped around it for the wheel to be fitted and the whole rear end completed. Make sure the two Nyloc nuts either end of the axle have not been overtightened as this will cause the rear wheel to bind up.

The front forks are also spring loaded to provide suspension movement for the

front wheel. Here though the springs fit inside a pair of mock dampers which have no oil in them. Make sure you get the shocks around the right way as they are labelled left and right. Also make sure they are the same length otherwise the front wheel will be leaning over to one side and affecting the steering. Once the wheel and its dampers have been assembled the whole unit can be bolted to the steering head and secured to finish off the rolling chassis.

Finishing off

Now comes the really enjoyable part - adding the detail!

Parts like the handlebars, foot rests and exhaust pipes can all be added straight away. The rest of the bike - bodywork, fuel tank and driver must be considered more carefully to get the best results.

The instruction booklet includes a section on painting and it might be a good idea to look at this before assembling the various parts together. We found it easier to paint first and assemble later, particularly as we were using an airbrush to cover the bodywork. A spray finish will look much better than paint applied with a paint brush so either use an airbrush or spray gun for best results. If you don't have either of these then use paint supplied in a spray canister such as Pactra paint for a good alternative.

If you do it this way then make sure the paint has dried thoroughly, for as long as 24 hours perhaps, before you start to assemble the parts. Also make sure your hands are clean and avoid touching the paintwork if you can help it. Little scratches and such can be touched up later.

With the driver figure you could put him together first and then apply the paint. It will look better if you use matt paint as well. You have to glue the driver figure together with either plastic cement or superglue so take great care to get it right.

When you have finished him you can start applying the superb, full colour decals to the driver and bodywork. When you have finished that, stand back and admire your masterpiece - at this point any thought of actually driving it will scare you silly.

For the editorial test run the editor was chosen to take the controls first. The reason for this was that he is the best driver and also the smallest so we could give him a good whacking if he scratched it. All the controls were checked out and the steering rate set quite low so as not to make the bike oversteer into the corners.

Getting the bike to run straight was not too much of a problem from a gentle push start. However, when it came to the corners things got a little more complicated. Firstly the bike does not respond instantly to steering commands like a

car does. If you whack the steering from side to side to make it steer the bike will simply fall over. To get around the corners properly the steering must be fed in gently and the speed kept high enough so that the bike does not fall over half way round. You have to become accustomed to using the throttle more carefully with a bike because speed affects the balance. Too little speed and the bike will fall over - too much and it will fly out of control. When you get it right the bike looks brilliant when it leans into the curves and then gradually becomes upright as it accelerates out of the corners. Smoothness is the key to begin with until the skill factor increases to the point when the bike can be braked into the corners.

How did it go?

It had to happen of course. The editor crashed it and took a severe pounding as a result. However, it was just as well because we had to see now easy it would be to get the bike upright from stationary. The two metal hoops sticking out from either side of the fairing holds the bike away from the ground but still leaves the rear wheel in contact. By applying power to the wheel the bike will spin around and eventually stand up as the centrifugal force increases. That is the theory anyway, the practical side is not as simple. Everything works fine so long as the rear tyre can find some grip. If the track surface is dusty or covered in small stones the rear wheel will spin with little effect. On smooth,



grippy surfaces such as tarmac it works well but with all things requires practice. The really tricky part is steering the bike out of the spin so that it doesn't fall over again - take our word for it!

Despite the crashes, bumps and scrapes our beautifully painted 'NSR 500' still looked pretty good despite a lot of spinning around on the ground while we tried to get it back on its wheels.

Radio controlled motor bike kits have been marginally popular in the past only because they were slow and didn't handle very well. With the 'NSR 500' however these factors don't apply and in this case Kyosho could have a winner on their hands. Manufacturer: Kyosho, Japan UK importer: Ripmax Ltd Price: £59.99 (kit only) £59.99 (RS-M radio system) £16.95 (Ni-Cad pack).

KYOSHO HONDA NSR 500

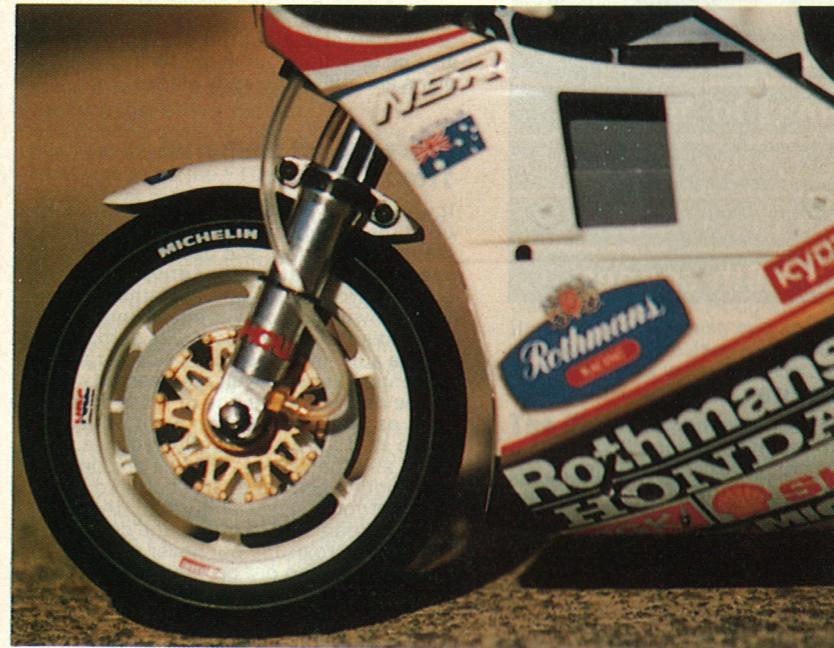
Model Cars
investigates the
2-wheeler from
Kyosho





Above: The NSR500 when complete looks great! RCMC painted the rider's boots in leather brown - although they should be in the overall blue colour. Below: The rider's figure requires painting in matt colours to give the illusion of leather.

Below: The original kit front forks are replaced with these 'Option House' accessories available from Kyosho. The new units (as described in "On Test") are oil filled and work very well. The front discs are plastic and look great if painted properly.



Bottom: Real chain drive! The Kyosho chain is really very neat and works extremely well. The exhausts are purely for show and set the rear end of the bike off nicely. Left: Ready for the off! The RCMC bike hasn't had the crash bars fitted for photographic reasons.

