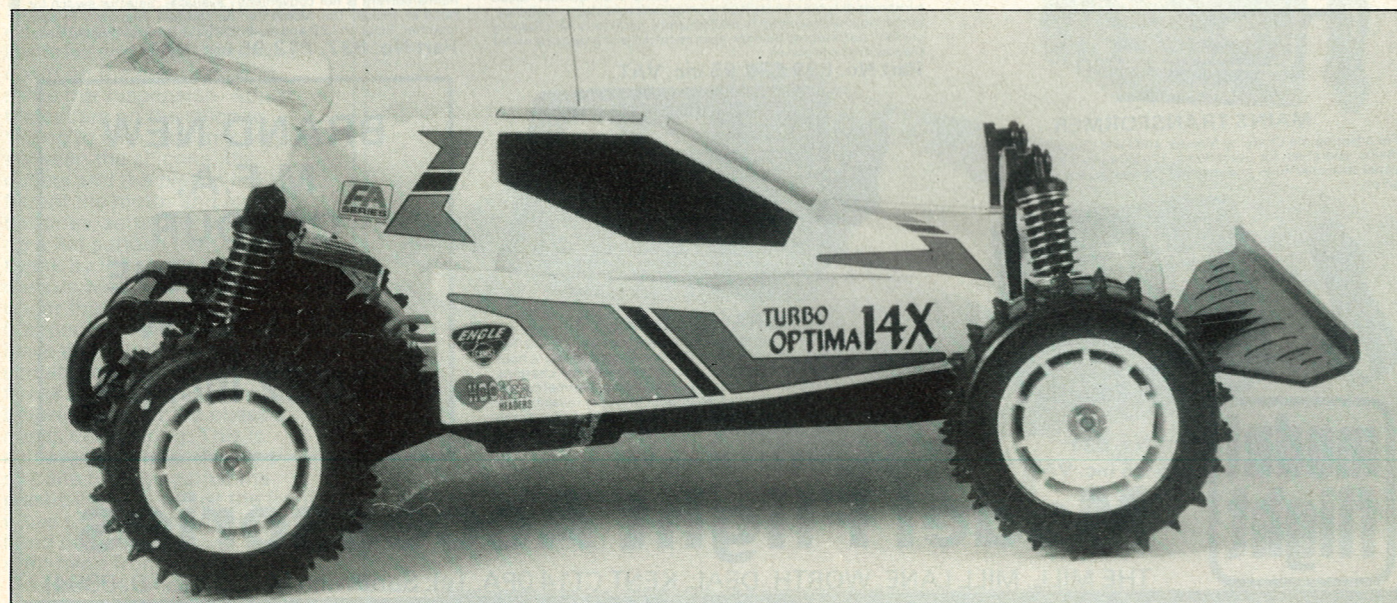


Two Ready to Run Cars from Kyosho

Lewis Eckett looks at them

READY FOR



World Champs prototype Kyosho buggy!

K yosho have unveiled their radical new prototype off-road car just weeks before the World Championships race in Australia. Team drivers have been whisked off to a top secret location where an exact replica of the track has been laid out. The plan is to get as much practice on the circuit with the new car as possible.

Initial reactions from Kyosho team driver, Pete Stevens were guarded. "Err... well - it's a bit smaller than I expected - but I guess those guys at the factory know what they are doing," he said.

Pete wasn't allowed to say any more but these exclusive photos show just how radical the new car is.

Basically the design concept centres around a...

Ha! Gotcha!

I don't seriously believe that you have been fooled by any of this but if you were then it is my sad task to tell you that this is not Kyosho's new car for the World Championships.

In fact this car is racing away in an entirely different direction, back down to the less complex end of the buggy market. The pressures of trying to build a new competition racer have not blinded Kyosho to the needs of people less interested in actual racing, but who are definitely interested in having a go with a minimum of fuss.



THE OFF

In this respect Kyosho's 'Turbo Optima 14X' is a firm step into the fast growing ready-to-run (RTR) sector.

However, having taken that step Kyosho may find themselves stepping on the toes of another Japanese manufacturer who have already identified the need for this type of car. As a reviewer I can't get away from the fact that the 14X is very similar to Tamiya's small scale RTR. Both cars are 1/14th scale and have virtually identical design concepts, so how this works out

as far as copyright is concerned is anybody's guess.

What set the Tamiya car apart from cheap and nasty end of the RTR market was the facility to change radio frequencies just like proper radio control cars. This revolution meant that the gap between RTR's and R/C cars had been bridged by the introduction of car that could be raced in the company of others.

Before you didn't have a choice about the radio frequency you could operate

on because it was factory set in the car. If you clashed with another car, then tough. By offering an RTR car with interchangeable frequency crystals Tamiya gave a leg up to the world of competition R/C cars racing.

This must have been successful because now Kyosho have waded in with their own RTR complete with interchangeable frequency crystals. No doubt others will follow but for the meantime the business is being held by Japan's "Big Two"

manufacturers.

As mentioned earlier the 14X is 1/14th scale which means the car is just slightly over a foot long. The choice of smaller scale is important because it means there is more choice in where the car can be run. It would have been possible to produce a 1/10th scale RTR but the scope for use would have been limited. Instead the 14X can be raced outdoors and inside if the weather gets tough.

Up and down the hallway and around a reasonable sized lounge, the 14X is much easier



to control than a conventional 1/10th scale buggy.

When you open the box the car is just sitting there ready to go once you have fitted the batteries (which are not included). There has always been a massive interest in RTR cars from the public simply because some people cannot be bothered to build something from a kit.

We may think that these poor unfortunate souls are a bit strange but the fact remains that when there is a choice between getting on the road immediately and spending a few evenings building (and getting it wrong) then many customers take the easy option.

Dad usually figures large in this equation. Heavy day at the office, bit of a headache - the last thing he needs is little Johnny begging him to finish the birthday present that has been sitting on the lounge table for the last three weeks. Slapping batteries into something already built is a lot better for the blood pressure.

For the 14X, batteries will need to be bought separate from the car (but preferably at the same time). The car takes eight AA (HP7) type pen cell batteries whilst the transmitter requires a single 9v PP3 transistor battery.

On the underside of the car is a hatch and inside is the placement for the eight pen cells. You will also notice the tab of the frequency crystal poking through from the inside of the car. Instead of taking the



bodyshell off to change frequency you have to remove the batteries.

Sensible solution

Anyone who is thinking about buying a 14X should consider spending a little bit extra on rechargeable Ni-Cad batteries and a charger. The cost saving in the long run will more than make up for the initial extra expense. Kyosho have a

suitable charger which will hopefully be available from model shops. It seems strange that manufacturers are now offering ready-built cars with interchangeable crystals but still leave out a charger and Ni-Cads. Surely it would be better to include these into a total package instead of the model shop owner trying to convince the customer that he really should spend the extra dosh. In design terms the 14x is

pretty basic, but it has all the bits necessary for the job. Anyone who thinks it will handle the same sort of conditions that 1/10th scale buggies get pitched into should reconsider. At the front of the car is a conventional, single wishbone suspension set up, controlled by simple coil-spring shock absorbers. There is not a lot of suspension movement but to be honest you don't need a great deal for the sort of



surfaces the car will be running on.

At the rear, things are slightly more complex because of the motor and gearbox. Instead of an independent suspension system the 14X uses a floating, solid rear axle which is (dare I say it) extremely similar to the set up found in the Tamiya Grasshopper and their RTR car.

The whole rear axle swings from side to side and pivots upwards for the suspension movement. In this car the system is plenty good enough and provides enough movement to absorb small bumps in the track.

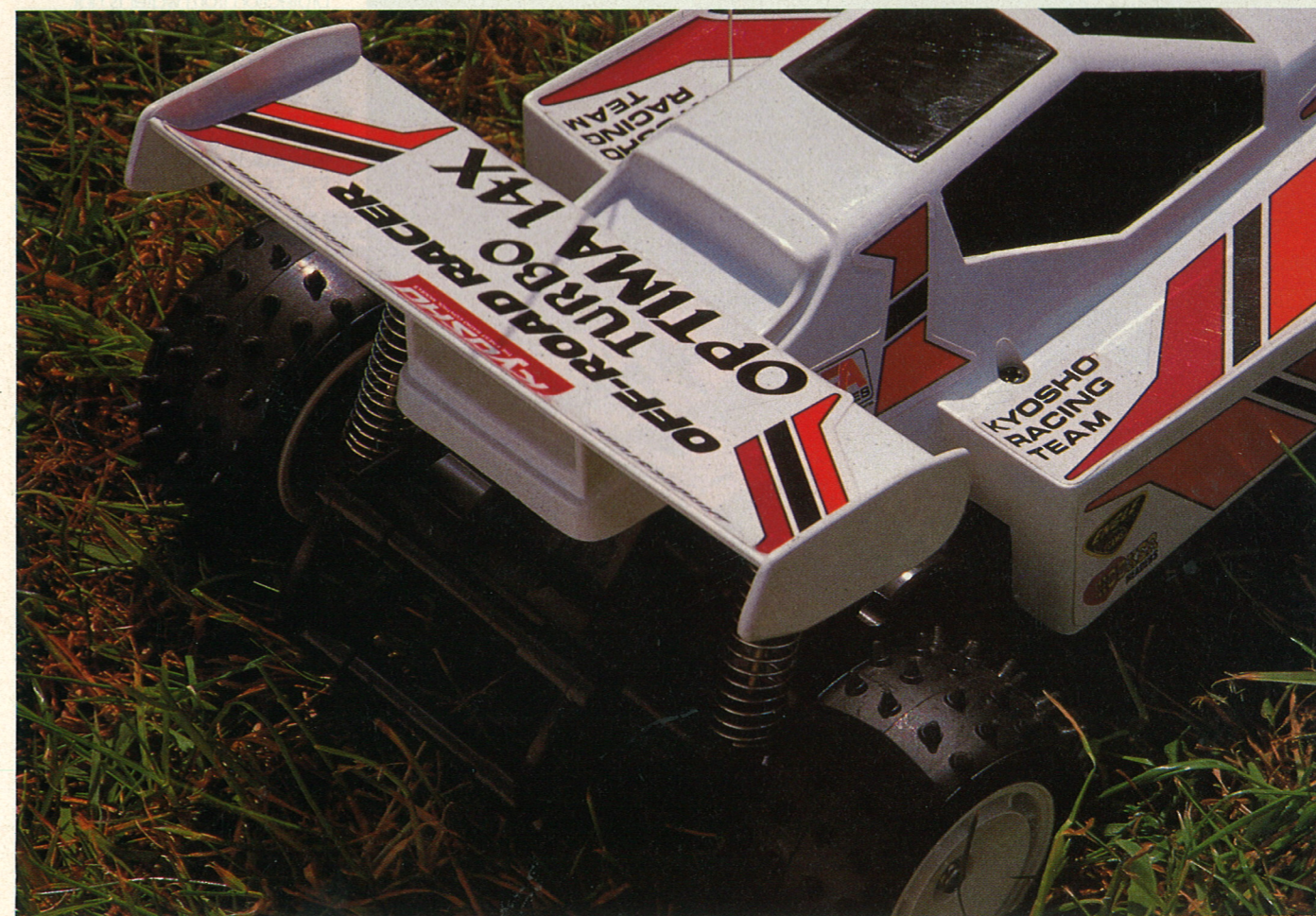
Inside the gearbox is differential and the motor supplied is a custom designed Le Mans X5 unit. On the back of

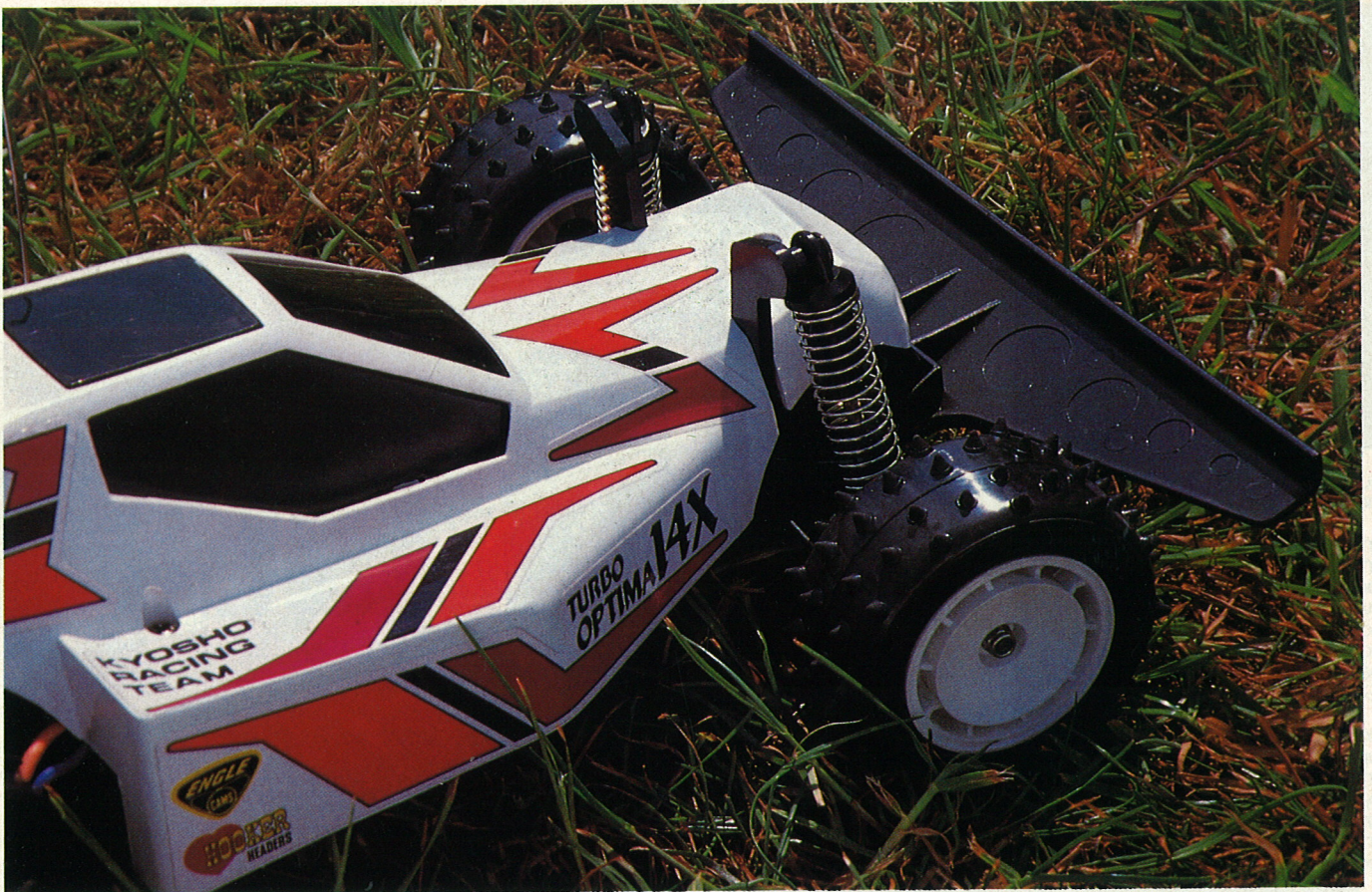
the gearbox is a selector level which changes the final drive ratio from High to Low, or the other way round.

On the low setting the running time will be longer but the speed will be down. Switching to the high setting will produce more speed but the running time will be reduced.

On high, the 14X is pretty nippy even outdoors where large spaces tend to make R/C cars appear slower. Inside, the speed is enhanced, particularly in small spaces where the car is fast enough to be exciting but not so fast as to be uncontrollable.

The insides of the car are best left alone unless you know what you are doing. Everything is protected from dust and dirt by





another tight-fitting cover underneath the bodyshell. Whether this is enough protection from water is not clear and it is probably not worth finding out since electronics are very averse to getting wet. It would be possible to seal the cover to the chassis using silicon rubber or bath sealant. By far the best thing to do is not go out with the car when it is raining.

To satisfy your curiosity the inside space is taken up by the combined radio receiver and speed control unit with the steering servo sitting at the front. Both components are pieces of complex electronic circuitry and should be left alone. If it goes wrong take the car back to the model shop for advice.

The transmitter contained within the same box as the car is a pistol-grip type using a trigger for the throttle and a wheel for the steering. Both functions have trim adjustments to make sure everything runs properly, but the instructions tell us that the car has been set up and checked in the factory.

If your ideal radio control car is one you can pick out of the box and race then I guess this is the ideal car. It doesn't do anything for me but if it gets people involved in R.C racing and then pushes them in the right direction of real radio control car kits then it has to be a good thing.

As an introduction this type of car provides a neat stepping stone away from the cheap and nasty types of RTR which abound in high street stores toy shops.