Radio Race Car International review megamix
JUNE 2001

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Get serious!

Tamiya TA04 Pro

Tamiya cars have long been renowned for superb build quality, excellent instruction manuals, and beautiful bodies, but sadly in recent times not for their competitiveness against other more sophisticated racers on the track. Now, with the introduction of the TB01 EVO and this, the TA04 PRO, all that has changed! You still get the superb build quality and excellent instruction manuals, but now you also get a Tamiya car that can hold its own against the very best. Great news indeed! As you can imagine, I couldn't wait to get my hands on one of these!

Seriously

You can tell immediately that this is a serious racer, it comes without a body or motor, and there is not a 3-step forward and reverse mechanical speed controller in sight!

The TA04 has a rear-mounted motor and uses a two belt driven full time 4WD system. Tamiya touring car or GT bodies all fit and the car can be raced in both 4WD touring car and GT classes. If you want to race against other TA04s, look no further than the Tamiya Eurocup 4WD class, where this year this car will almost certainly dominate. The chassis accepts stick-pack cells and is of the traditional upper and lower deck design.

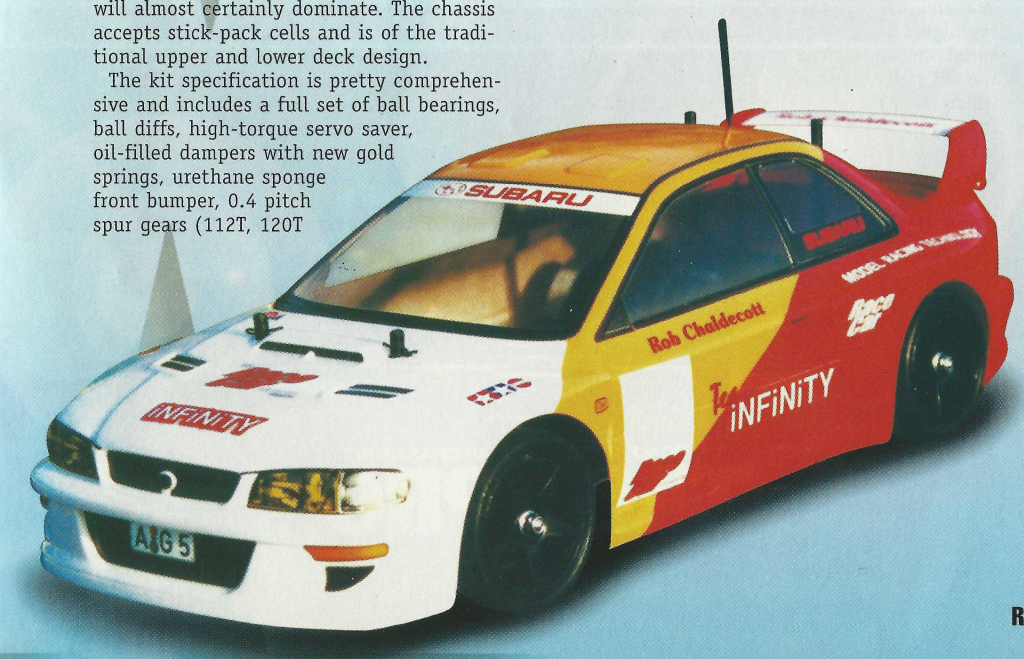
The kit specification is pretty comprehensive and includes a full set of ball bearings, ball diffs, high-torque servo saver, oil-filled dampers with new gold springs, urethane sponge front bumper, 0.4 pitch spur gears (112T, 120T and 128T are provided), 40T pinion gear, front and rear stabilisers, aramid fibre reinforced drive belts, transponder bracket, and new 24 mm wide wheels and tyres.

Kit Box or Carrying Case?

Unlike most Tamiyas this one doesn't come in a box that is a work of art in itself. Instead, it comes in a plain blue box that simply proclaims that this is a TA04-PRO.

The box is actually cleverly designed and handily doubles as a substantial carrying case complete with handle. With the removal of some of the inner compartments, there is even room to store and carry the complete car. Great if mum or your other half objects to tripping over your 'toy' car every five minutes - now you've got a box to protect it and to get some brownie points for being tidy!

No body is provided, but it looks great clothed in a Tamiya Subaru



Quick Spec

1:10th scale two belt driven 4WD car. Fully equipped with ball bearings, oil-filled shock absorbers, ball diffs, front and rear anti-roll bars, high-torque servo saver, front sponge bumper, and transponder bracket. Requires bodyshell, motor, electronic speed controller, 2-channel radio, 1 servo, cells, and charger to complete and operate.

Testers Kit

Futaba FF3 radio
Futaba R123FA micro receiver
Futaba FP-S148 steering servo
Tekin 412P electronic speed controller
Infinity 12 x 2 motor
Infinity 2000 cells

Hop-Ups

The TA04 is already very good in standard form, but to make it even better you might consider the following hop-up parts:

53437	Aluminium Motor Heat Sink
53438	Universal Shaft Set
53452	Aluminium Hub Set for Spur Gear
53458	Racing Hub Carrier Set
53456	Turnbuckle Upper Arm Set
53457	Turnbuckle Tie-Rod Set
53427	Hard Suspension Arms
53428	Hard Rear Upright
53440	On-Road Tuned Hard Spring Set
53441	Colour Stabiliser Set (Front)
53442	Colour Stabiliser Set (Rear)
50894	Medium Narrow 5 Spoke Wheels
53434	Medium Narrow Soft Inner Foam

Likes

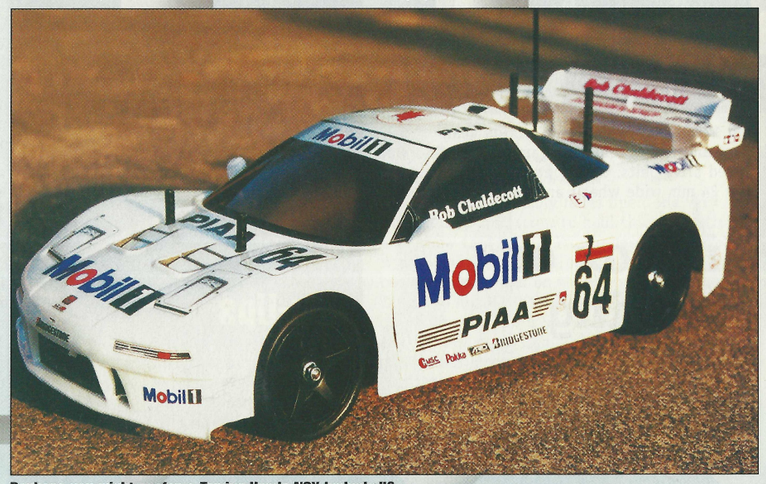
Competitive performance
Build quality
Excellent instructions

Dislikes

Dog-bone type driveshafts
No dust covers to prevent ingress of dirt to ball diffs.
High wear in diff output joints.

'a Tamiya that can mix it with the best!'

The new Tamiya Ferrari Modena. This is Lee Woodhams example, which handles as well as it looks!



Perhaps you might prefer a Tamiya Honda NSX bodyshell?

The Build Up

The box may be interesting, but I couldn't wait to get it open and get started. The superbly fitting parts and well-illustrated instructions make this car both simple and quick to build. I am not a particularly quick builder, but our car was finished in just two short evenings. Mind you, I was somewhat impatient to get it to the track!

The two ball diffs are built first and present no problems providing you carefully follow the instructions. The only thing to watch for here is to ensure that the diff is sufficiently tightened so that it doesn't slip yet is not overtightened. The diffs are nice units, but I was disappointed that there are no dust covers on each side of the pulley wheel to prevent the ingress of dirt and debris to the balls. One other area of concern is that the driveshaft slots in the diff output joints seem to wear very rapidly. To be fair, anti-wear grease for the driveshaft ends is provided in the kit, but I'm always a bit wary of using grease in such areas because it has a tendency to attract the dirt and debris.

The ball diffs, supported on ball bearings, simply drop into the front and rear gearbox housings and are driven directly by the drive belts. This is pretty typical for cars of this pedigree and keeps transmission losses to a minimum. It also means that this is one Tamiya that doesn't announce its arrival by the noisy whirring of the gear trains!

Motivation

The motor (not included) is bolted to a metal motor plate and drives the centre shaft via the pinion and spur gear. The shaft rotates on ball bearings and carries the drive pulleys for the front and rear drive belts. The motor is very accessible and both the pinion and spur gear can be changed quickly and easily. The instruction manual includes a useful chart giving the gear ratios for different combinations of spur gear and pinion. Note the lower the number, the higher the gearing, the higher the top speed, and the shorter the run time. We used the 40T pinion supplied with the 120T spur, which was probably a bit high geared for the Infinity 12 x 2 motor we were using, but ideal for a Tamiya DynaRun racing stock motor. It was quick, though!

The drive is transmitted to the wheels by dog-bone type driveshafts. Again we were a little disappointed here that such a high spec. kit does not include universal type driveshafts as standard.

Suspension

Front and rear suspension comprises substantial lower wishbones, adjustable top links, oil-filled plastic shock absorbers, and anti-roll bars (or stabilisers as Tamiya prefer to call them). The lower wishbones are fitted with grub screws, which bear against the top of the chassis plate and limit the suspension droop. These are used to control the ride height - screwed in, the ride height reduces; screwed out, and the ride height increases. When set as per the instructions, the resulting ride height is 7 mm front and rear. The adjustable top links allow the camber to be changed, but one of the rod ends has to be popped off the ball connector to permit adjustment, which makes the job a little tedious. To overcome this, a hop-up turnbuckle upper arm set (53456) can be substituted at relatively little cost. We set our car with 1° negative camber on the front and 1.5° negative camber on the rear.

The front castor and rear toe-in are not adjustable, so you get what you get. In standard form these angles look pretty much as one might expect, though, and seem to work well enough! Another useful hop-up for the front suspension is the racing hub carrier set (53458), which includes rear radius arms for the top links. This effectively converts the top link into a triangulated wishbone and eliminates any slop. Definitely worth having and again not too expensive!

Front toe-in/toe-out is adjustable by way of adjustable tie rods. As in the case of camber adjustment, though, one of the rod ends has first to be popped off the ball connector to permit adjustment. If you don't fancy this, a hop-up turnbuckle tie rod set (53457) can be substituted. We set our car with about 1° toe-out, because we prefer sharp and crisp steering. If you are not very experienced, though, we recommend that you start with a little toe-in and then work from there.

Shockers

Shock absorbers were assembled exactly as per the instructions, even to the extent of using the shock oil provided! Take care to fit the piston rod spacers V3 and V11, to use the one hole pistons V8, and to remove all the air bubbles from the oil by slowly moving the piston up and down before fitting the diaphragm MC18 and the top cap W2. At least with this car all four shock absorbers are the same, so there's no danger of mixing up front and rear! The gold springs provided are quite stiff and give a relatively firm ride.

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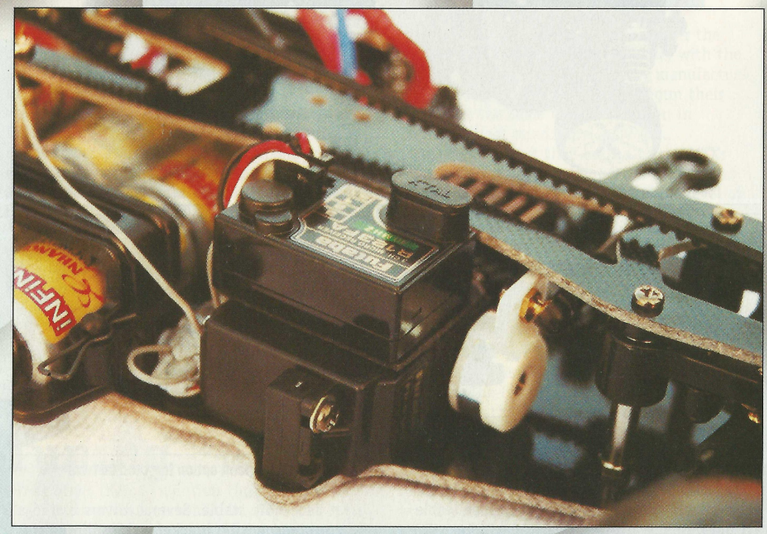
The only other thing to watch out for when assembling the suspension is the connection of the front anti-roll bar drop link to the lower wishbone. The instruction manual is clear and correct, but like me you may need to do a double take to make sure that you get the parts in the right place!

Radio Room

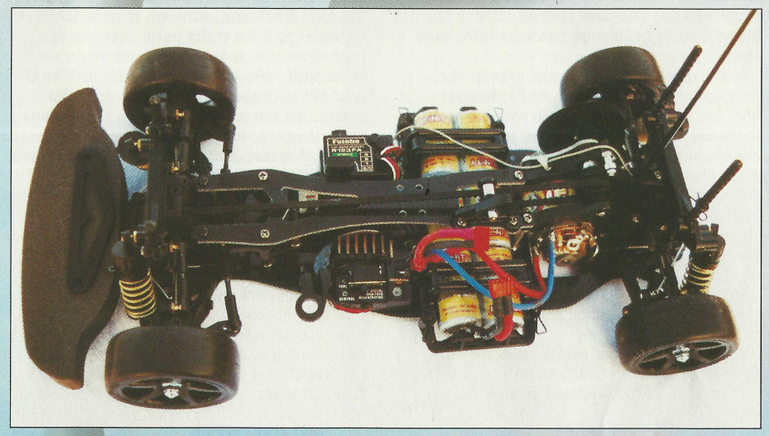
With the battery bay parts, steering servo, and transponder bracket in position, there's not much room to spare for the electronic speed controller and receiver. We found the best arrangement was to position the speed controller on the left-hand side between the battery bay and the transponder bracket, and to mount the receiver on top of the steering servo on the right-hand side. Take care to ensure that none of the items or any of the wiring fouls the front drive belt.

Wheels and Tyres

All new 24 mm wheels and tyres are provided. The wheels are black; five spoke, and are functional and robust. Also available separately in white should you prefer! The tyres are very low profile and unlike anything I've seen from Tamiya before. They also grip like nothing I've seen from Tamiya before!

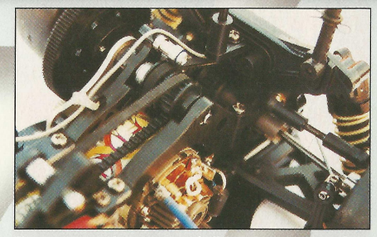


We found the best arrangement was to mount the receiver on top of the steering servo. Note the Tamiya high-torque servo saver that is provided as standard

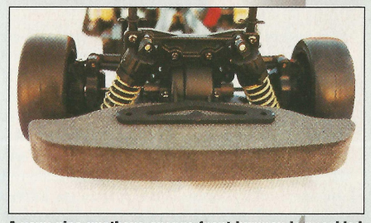


The finished article

'When they see it go they definitely can't believe it's a Tamiya!'



The centre shaft rotates on ball bearings and carries the drive pulleys for the front and rear drive belts



A very nice urethane sponge front bumper is provided and suits most Tamiya shells

It's hard to say whether they are as good as the very best available, but our initial impression is that there's probably not a lot in it. This is one kit where you can happily use the tyres provided!

Time to Play!

The first thing you'll notice when you take this car to the track is that people can't believe it's a Tamiya. When they see it go they definitely can't believe it's a Tamiya! It handles superbly and has a similar feel to any of the current crop of top line 4WD racers. With a 12 x 2 aboard it certainly has some pace and should be very competitive in the right hands. For us, though, it's just a delight to at last have a Tamiya that can mix it with the best!

As many of you will know, we race a Schumacher Axis 2 in the Ashby winter series. This is a highly competitive series that attracts some 80 plus drivers and is dominated by Associated TC3s and Schumacher Axis. Following our first test of the TA04, we believe that a fully hopped-up version with a good driver could almost certainly make the B-final and with a bit of luck might just scrape the A! Yes, it really is that good!

Summary

Tamiya excellence coupled with competitive performance. What more could you want? Watch out, because from now on the car in front might just be a Tamiya! Grateful thanks to Tamiya for supplying the review model and to Eurocup ace, Lee Woodhams, for help in preparing this review.

RRCi