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Black Beauty



FEBRUARY 2002

Tamiya TA04R

Striking good looks



Tamiya have not really been a major force to be reckoned with in recent years as their race projects almost disappeared after the off road boom back in the early '90s'. Since then they just seemed to be plodding on with the ever-popular Eurocup, and why not! But, as you probably know, they have recently been developing the TRF414 chassis to make a full blooded assault on the touring car championships around the world, and they are not messing around either!

Jimmy Jacobson finished an excellent 2nd in the US ROAR carpet nationals, with David Junn taking 9th. Surikarn Chaidajuriya finished 3rd in the Malaysian international touring car race, beaten only by Masami Hirotsuka and touring car world champion Atsushi Hara. The 'production' version of that car is the TA04. The TA04 has been out for a while now and has already had the customary Tamiya makeovers with various chassis and bodyshell combinations. So far though none of those have really come close to the 'R'. It has every hop up part that you can think of already on it, the only things that separate this car from the TRF414 are the absence of the carbon chassis and shock mounts, and the alloy gearbox housings. Other than that it is a pure race version of Tamiya's latest creation.

My favourite part

Straight away to my favourite bit, painting the body shell. Here are the basic steps:

1. Take the Toyota Altezza shell out of the box.
2. Cut it out.
3. Add stickers
-there, done.

Yes it really is that easy. The shell comes pre-printed in a very sleek looking carbon fibre finish, which looks absolutely gorgeous. The only thing about the pre-printed shells is that they don't have clear windows, which (depending on your taste) tend to spoil the realism a little. The headlight and grill sticker sheet that comes with the car are pre cut which is a very good idea, so no more messing around with sharp knives. But, the other sheet doesn't! Why, I don't know. So don't throw the knife just yet.

I decided not to put sticker sheet number 2 on the car because it is full of bright blue flashes and streaks, which when applied takes away that sexy looking carbon pattern which I think really makes this shell stand out. But again it's a matter of taste. I cut the body to the line marked on the shell, apart from the wheel arches, which I noticed from pictures I had seen that there was a large gap between the tyres and the bodywork. So I cut the wheel arches about 2-3 mm inside the lines marked and it looks a lot neater.

Because I can't resist painting a shell for a new car, I thought that I'd better get another shell for it in case I race it in any 'non eurocup' events. The shell I chose was a protoform BMW M3, just because I like the looks.

Quick Spec

1/10th scale 4WD competition electric touring car. Carbon/graphite parts, ball diffs, fully ballraced, low friction belts. Required to complete: 540 type motor. 2 channel radio with receiver, 1 x servo and electronic speed controller. 7.2 v Racing packs and suitable charger.

Testers Kit

Hitec flash 4 radio gear
BRM stock motor
Sanyo 2000 batteries
LRP Quantum competition Speed control
Novac chrome receiver

Likes

Bodyshell (obviously!)
Handling
Quality

Dislikes

Lumpy non countersunk chassis

Available from

Your local hobby shop. Contact The Hobby Company for details of your nearest stockist.
Tel: 01525 385798

What's new?

As I said earlier this car comes with a lot of 'hop-ups' already included. Here are some parts that are in this kit but don't come on the standard TA04:

- Moulded graphite chassis
- Carbon fibre upper stiffening deck
- Alloy heat sink motor mount
- Full ball bearings - including the steering
- Front and rear adjustable ball diffs
- Universal joint drive shafts
- Fully adjustable turnbuckles
- Suspension down travel set up screws
- TRF low friction alloy threaded shocks
- Anti-roll bars front and rear
- 5 degrees or 8 degrees castor blocks
- 2 degree rear toe-in hubs
- low friction drive belts

It just makes you realise that this is obviously not your average Tamiya kit. This kit was not made for your average kid to crash around the street, oh no. This kit is made especially for racing (hence the 'R' in its title), for fine-tuning and for ultimate performance on the track.

I did add a few parts to it though just to make it even better. I added the carbon fibre shock mounting kits (part numbers 53460 & 53461) just to add that bit of 'tunability' to the shock positions. I also added the racing body mount set (part no. 53426) which places the front body posts on the bumper (instead of the shock mounts), which makes the body more stable/firm on the front end, preventing it from scraping on the ground.

The build

Looking at the parts in the box you could be forgiven for thinking this was not a Tamiya, because everything looks so professional and certainly not toy like. As usual the parts are neatly packed into their own little packs, all numbered or lettered up for ease of construction.

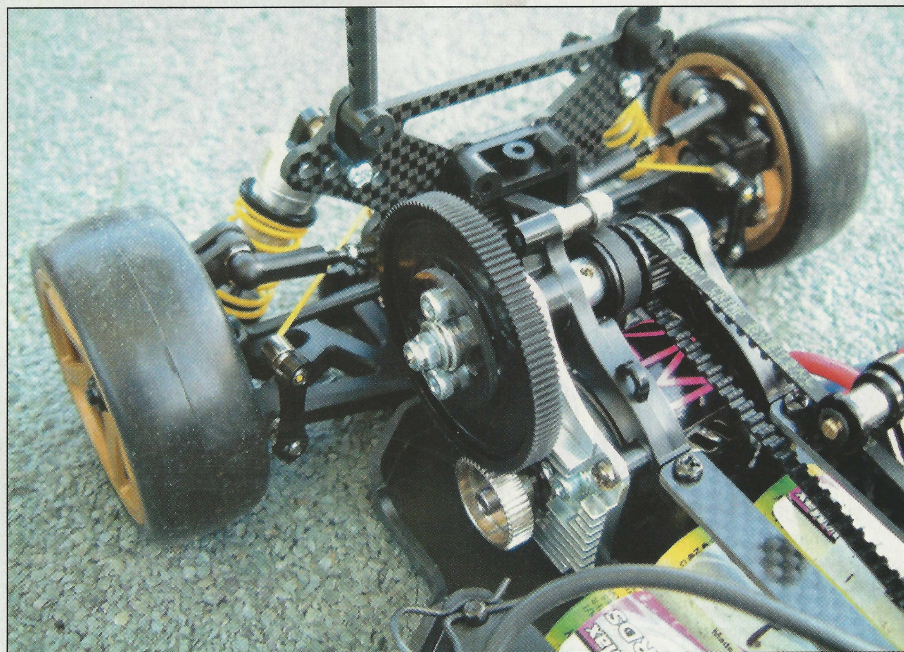
First up are the differentials (and here comes my first moan). The diff pulleys don't have any form of dust protection, so diff rebuilds are going to be very frequent. But on the plus side of things, it does have a lock nut on the centre screw. So that when you do tighten the diffs up they won't work loose like so many do. Once built they are mega smooth in operation, even if they do seem a little on the heavy side.

Next up are the gearbox housings, which are the usual plastic type. Onto these go all of the suspension arms and so on. The arms themselves look as though they are injected with graphite for extra strength and rigidity, which

A real 'barn door' of a wing - should do the business



'threaded TRF oil filled dampers which are just superb'



The heatsink motor mount, anti-roll bar, alloy shocks all indicate a top drawer touring car

will help the handling reaction and strength should you crash it. I did have to do a little 'fettling' at this stage, as the wishbones didn't quite fit properly. When you build your suspension it is very important that all of the suspension arms drop under their own weight. If they don't your handling will be greatly affected, for the worse. To help this you may need to trim the wishbones where they rub with the gearboxes. This just involves filing them down a little bit at a time (so that you don't take too much off) so that the arms drop by themselves. I do advise you not to trim them with a sharp knife, which is what I usually do, because you may have an accident - as my thumb found out!

Included in the kit are front and rear anti-roll bars. What grade they are I'm not sure but they don't seem very thick/strong, so they are probably soft which will only make a little difference to the way the car handles depending whether they are attached or not. I did find that if you do want change them it does involve a lot of work, virtually dismantling the gearboxes.

Lumpy

After constructing the gearboxes they are mounted to the moulded graphite/carbon chassis along with the rest of the drive train, belts etc. Once the carbon fibre top deck and aluminium motor mount are fitted the overall construction creates a very, very stiff chassis indeed.

One thing I did notice though is how tight the drive belts are. I went through the instructions to make sure that I had put everything together properly. Yep, all put together right. Loosened the mounting screws and then tightened them back up on a flat surface, to make sure that they all went in square. Still tight. Maybe they will loosen off after a few runs, and then the belt tensioner will be needed.

Looking over the chassis as a whole, most of the parts so far have either been alloy, carbon fibre or graphite injected. This certainly shows that this is a quality kit and that Tamiya are definitely providing you with your moneys worth.

Now onto moan number two. Tamiya have gone to the trouble of providing you with a graphite chassis, so why have they not countersunk all the crew holes. This means that the chassis has little 'lumps' all along the bottom of the chassis which means constant running on tarmac will wear down the protective lumps and then the screws. You would have thought that they would have countersunk the chassis so that it was nice and flat. It will also affect your ride height at meetings where this is a factor. After all they can make the FRP chassis this way so why not the tub chassis?

With the chassis being graphite it does conduct electricity so at this stage it may be worth insulating it so that you don't short your batteries out. If you use Tamiya style stick packs you will be OK, but if you run them the other way with the cells placed along side each other you will need it sorting. I used the soft fluffy part of some sticky Velcro, cut in half along its length, and the stuck it to walls of the 'battery bay', this also helps stop the cells from moving around in the bay too.

Now to the drive shafts. Quality, that is all I can say about these. They look like Tamiya's version of MIP drive shafts, and very good they are too. They go together well and work well as you would expect.

At the rear of the car, the rear uprights are the 2-degree toe in versions, which help the high-speed stability of the car and improve the handling. All the upper suspension arms are adjustable turnbuckles for that extra bit of easy fine tuning trackside, instead of having to unclip the upper arms all of the time. If you use the carbon shock mounts you will have to make adjustments to upper arms to achieve the right amount of camber.

Threaded shocks

This kit just gets better and better. Provided in this kit are threaded TRF oil filled dampers which are just superb. You do have to build them up totally from scratch, but as I've said before - if they don't work properly you only have yourself to blame.

Always make sure you have either some card or thick cloth to hold the shock shaft with when putting the end joint on them. Never use just the pliers otherwise it will scratch the shaft. I used to wonder why people did this because mine never use to scratch when I used the pliers. But then I also used to wonder why my shocks were always leaking oil, and that is why! You may not be able to see the scratches but they are there, believe me.

The shocks are very easy to assemble and once complete, are very smooth and work great. On the outside of the shocks there is a thread, which runs from top to bottom with an adjustment nut. This saves having to keep putting those little spacers in to adjust the ride height, plus its a lot more accurate and finer adjustments can be made. For the test I inserted the usual oil that I use which is 35wt in the rear and 50wt in the front.

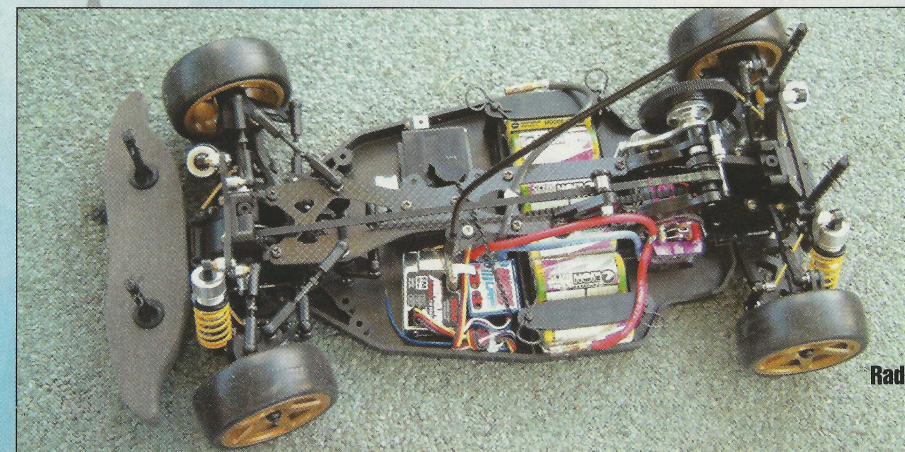
The spurs that come with the kit - that's right I said spurs because there are three of them - are 112t, 120t and 128t. I chose to use the 120t spur to start with as a mid range set up to get going. The pinion is a 45t gear and is Tamiya's .04 type. I normally use 48dp on the touring cars that I've had, so in non-eurocup events I may continue to use 48dp. In which case the 120t (.04) kit spur is equivalent to around a 90t (48dp) and the pinion is the same as a 33t (48dp), which is a reasonable gearing to start with.

Electrics

When it came to installing the electrics I was surprised at how much room you actually had. If you use the small type of speed control and receiver there is no problem at all. If you use the larger ones you may get them both in the same side if you lay the receiver on its side but otherwise you might have to mount it on top of the servo.

The motor I installed was a BRM BRCA approved stock motor that I've used all year through the TORC series. Battery power for stock motor is very strong. You would think that to get the extra power a stock needs you would use 3000s, but no. What you actually need are 2000s because they provide you with better 'punch' out of the corners. The Speedo (ESC) I used was an LRP quantum because I've found LRP to be very good reliable Speedos for the last 3 years and

Add body and place on track....



the receiver I used was a Novak chrome.

I was a little disappointed not to have the option of a saddle pack layout as opposed to just the stick pack across the chassis. But then in the Tamiya eurocup, anyone with this car will be in the same boat.

Tyre-ing stuff

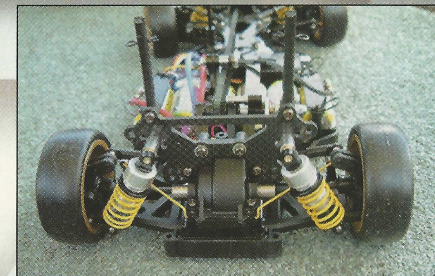
The tyres that come with the kit are Tamiya A compound, which your Ed tells me wear out and chew up fairly quick in hot weather. So it will probably be worth investing in some B compounds in the hot summer months of next year. The tyres come complete with a set of moulded inserts. The wheels are very nice gold 5-spoke alloy style, which compliment the body no end. They are 0° offset and have a spacer placed inside the wheel before putting them on, to bring the width to 186 mm. If you use the 2 mm offset wheels the width of the car stretches out to 194 mm. Which although is legal for Eurocup will be illegal for BRCA events.

Testing times

As a first run for the car I thought that I would enter the CML Carpet Masters at the excellent Stafford club. As I said earlier I purchased a protoform BMW body shell for non-Eurocup meetings. I also purchased some Pit Shimitsu D20 BRCA control tyres for the stock class. Everything else was as per kit.

First off I just wanted to get a clean run in without breaking anything, I put up a time that placed me midfield on 19 laps (the fastest being 24 on the day). The car was a little bit pointy and wanted to spin when I backed off into a corner. So I disconnected the rear roll bar and increased the rear camber. The car then felt OK on cold tyres but when they warmed up it again became very pointy. Changes this time were - change to a stiffer spring and loosen the grub screws gripping the front roll bar.

Round 4 fantastic! Absolutely on rails. After starting 6th in my heat I had moved up to the lead by lap 4 (the driver leading my heat was already in the A final), and I was pulling away, when at 1 minute they called the race order. I was last, but why? That's right I had forgotten to put my transponder in. What a Wally! I decided after 3 minutes to pull off and not risk breaking anything. But afterwards we watched video footage that my brother had filmed, and if I had got my transponder in and completed a 'clean' run then it would have easily been a 23 lapper, which would have put me in the mid to top of



I added the carbon shock towers



The foam bumper is a welcome addition

the A-final. But unfortunately it was only the C-final 3rd.

The final, don't ask! After being taken out on the second lap I lost all concentration for a few laps (and also lost some positions) so it was 4th in the end, after making a lot of ground up and unlapping myself to get back up with the leaders by the end.

And finally

All in all I think that this car is absolutely brilliant. It has all the set up changes on it that you need to make. It's well designed, well made and when you're out on the track you'd be pushed to tell the difference between this and the other top touring cars, because it certainly didn't feel like a Tamiya, more like a TC3. I did prove though, that it was just as fast as the competition had I got my transponder in! I thought that the battery position would make it feel a bit numb and unresponsive but it didn't make any difference at all, it is just as responsive as any other. In fact it handled better than other, more 'proven' cars. If you are going to buy a new touring car for next season (or have a mid winter change) and you fancy something different from what everyone else has, then I would seriously consider one of these. I just can't wait till next year now, when you will be able to keep up with my progress in the Tamiya Eurocup in RRCi.

I must say a big thank you to the Hobby Company, Mikes Models of Birmingham and to LRP/Helger Racing for quickly helping with problems I had with the Speedo, without whom I would not have been able to test the car in time to get this review to you. Also to Kon Kazee who lent me his transmitter battery on race day after mine decided to start melting.

RRCi