

Tamiya TA03F

By Rob Marshall

And Now For Something Completely Different

You may recall in September's R.R.C. we had a snippet of information from the Shizuoka Hobby Show mentioning Tamiya's latest touring car the TA-03F. Well, it has arrived and it falls to me to tell its tale, I hope four years of Eurocup experience qualifies me for such a challenge.

The Kit

So what do you get for your money? Gone from the kit contents is the motor, as too is the wiperboard speedo and also the bodyshell leaving the builder the choice of what to use. You do get a fully ballraced car however with hardened suspension shafts, anti-roll bars front and rear and a one piece thrust race in the differentials, more on these later.

Drivetrain and Gearbox

The gearbox mouldings are up to Tamiya's usual excellent standards of finish however they are a little over engineered with lots of excess material present. They appear to be interchangeable between front and rear giving front or mid engined capabilities. I have yet to try this, but it should not be too difficult. Gears are made from the same material as previous models but beware as the pinions are Tamiya's fine pitch variety, so if you are thinking of buying this kit, budget for a new set of pinions. Unless like myself you have an F1 with fine pitch gears. The differentials do differ slightly from previous models, most noticeably the size of the main gear. It is approximately half the size of the original so gearbox friction should be considerably reduced. The aluminium castings are also smaller and they now have cut-outs down the sides which reduce the rotating mass and so increase acceleration.

As previously mentioned the differentials now come with a one piece thrust race which was only available as an option previously. No longer must you fight to keep the balls in the carrier while assembling the

As raced at Halifax, Parma Cavalier bodyshell.

Standard car as seen at the Broxstowe Euro-cup.

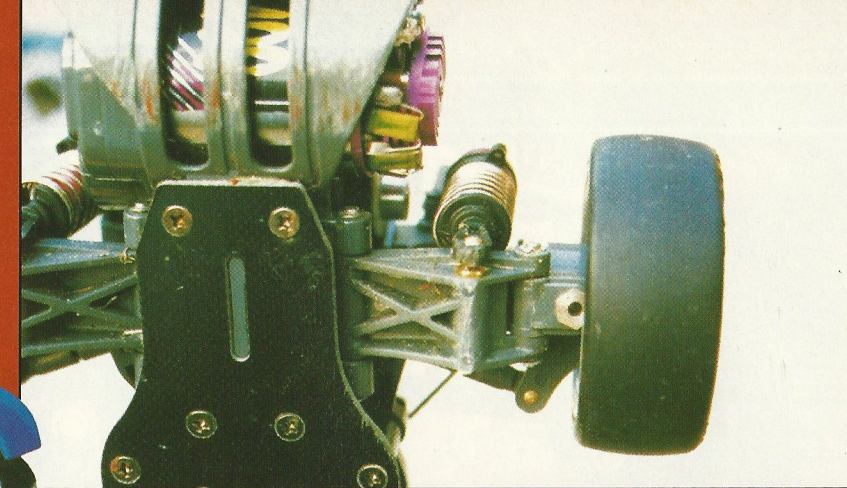
differential, they are held firmly in position. One point worth mentioning here is that to remove the differentials you now have to remove seventeen screws at the front and fourteen at the rear not good for a differential change between heats!

No propshaft

Gone is Tamiya's much loved centre propshaft, it has been replaced by a belt (with a rather crude but ball raced tensioner). Belt drive means there are no bevel gears in the gearbox, in simple terms this makes the gearboxes more efficient. Unless, that is, you have a Predator which has far fewer rotating parts and can therefore afford to run bevel gears. One excellent point regarding the drive train is that the drive shafts are now in line with the differential and the wheel axles. This is something that Tamiya should have done long ago when they launched the TA 02 chassis as it will drastically reduce the wear on the output cups.

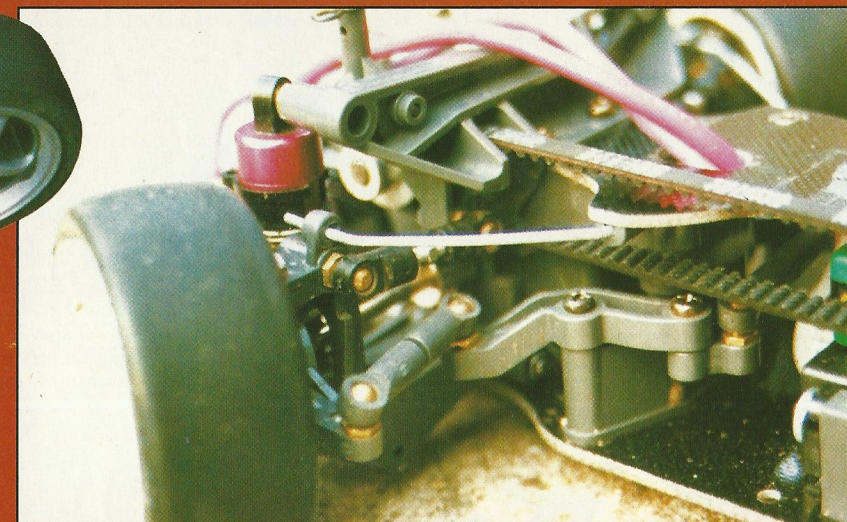
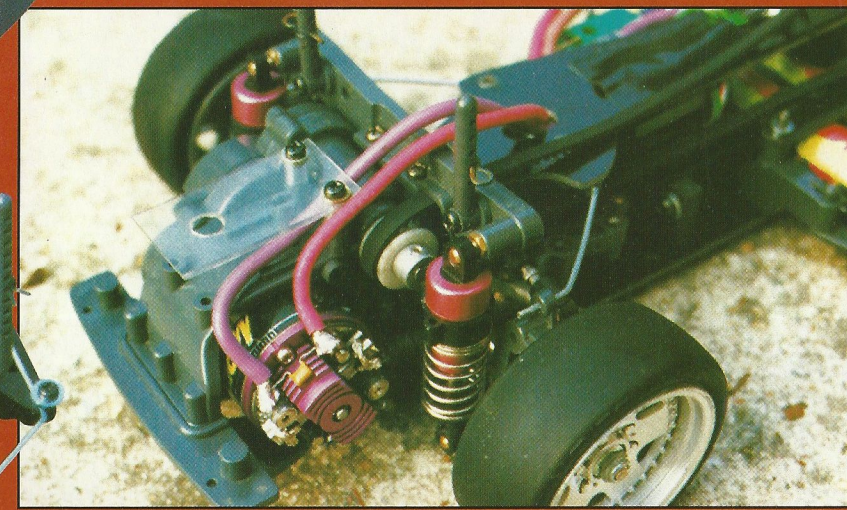
Suspension and Steering

The shock absorbers are Tamiya's proven black plastic items however you will see from the



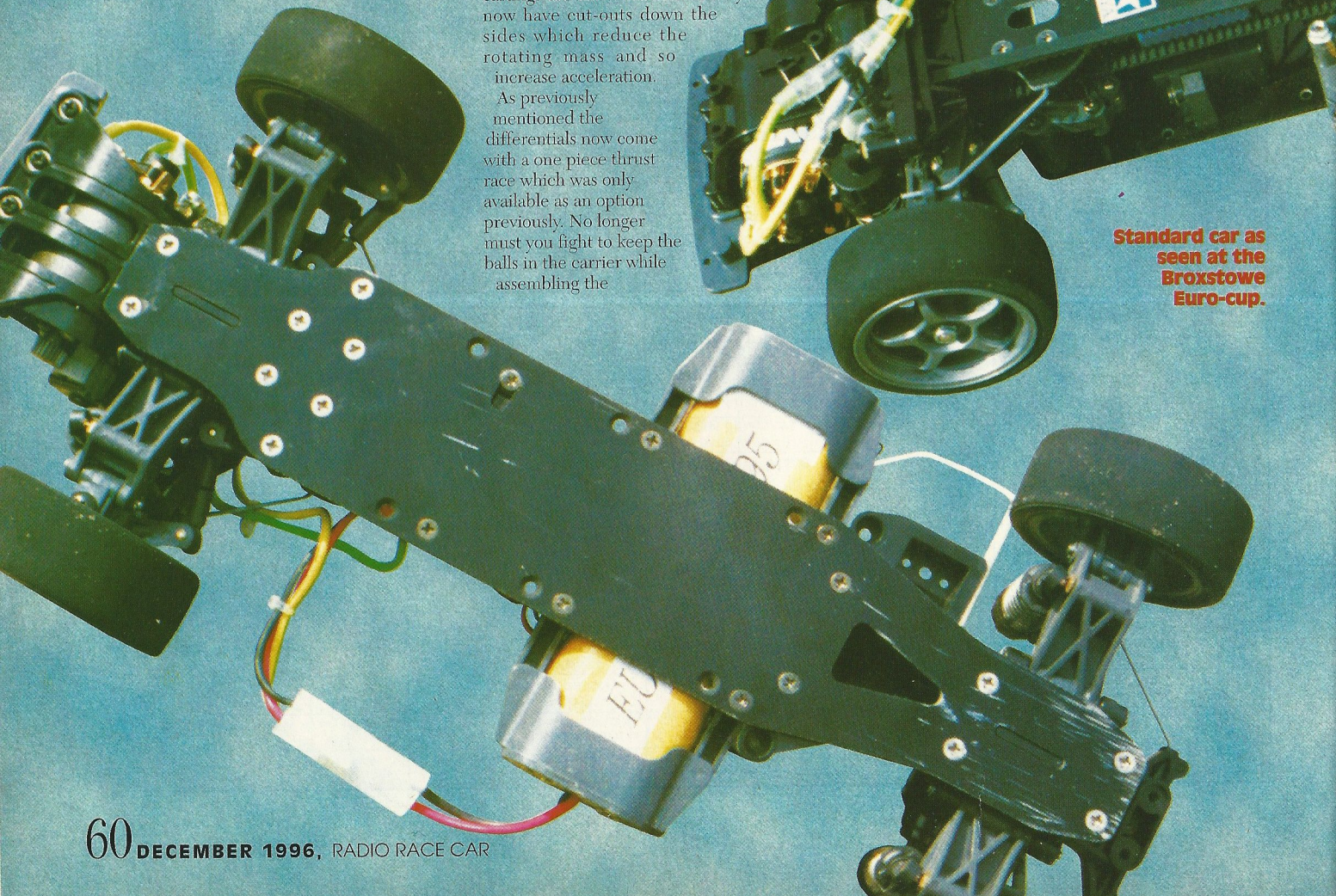
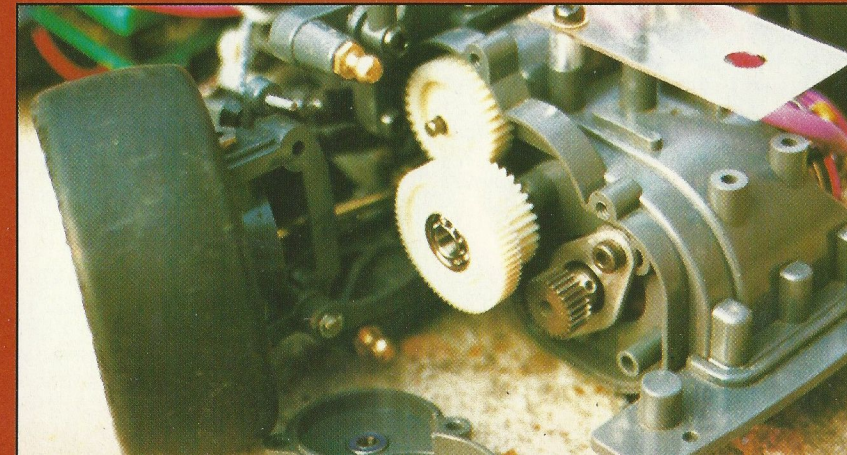
Above: Note the wear on the wishbones and ball joints.

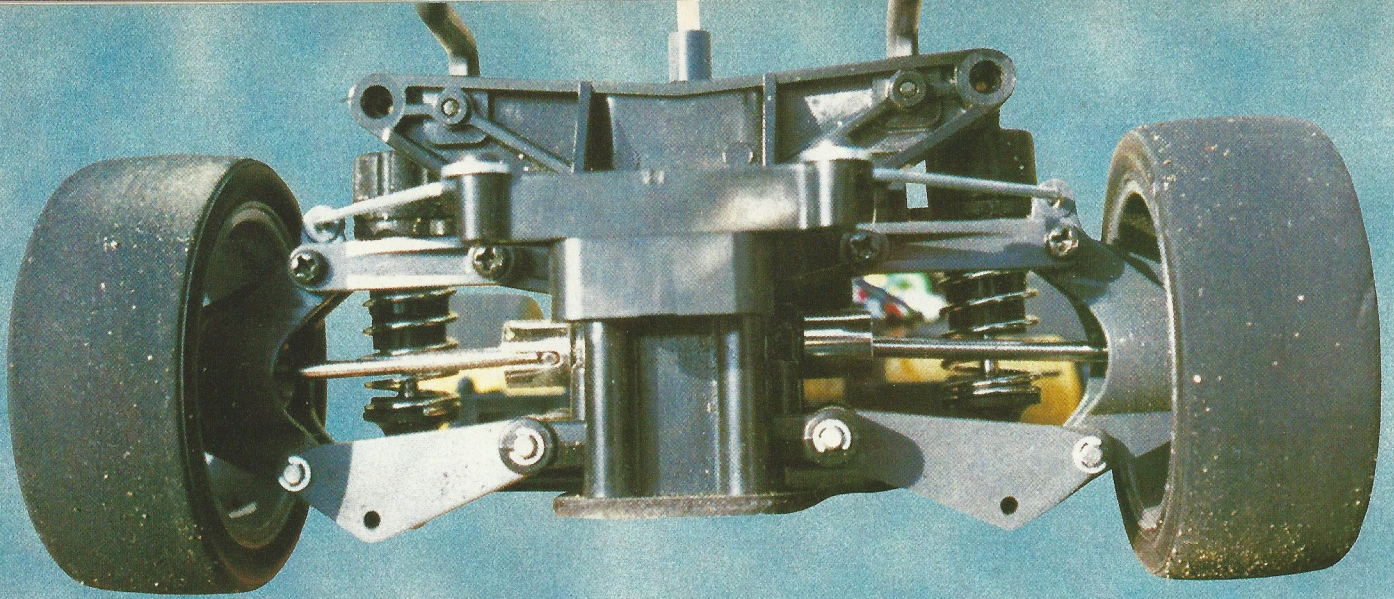
Below: Optional low friction shocks, turnbuckles. Note the front to rear drive belt.



Above: Steering bell cranks and anti-roll bar.

Below: Idler gear installation, note the fine pitch pinion gear. The metal motor plate was pinched from my F1.





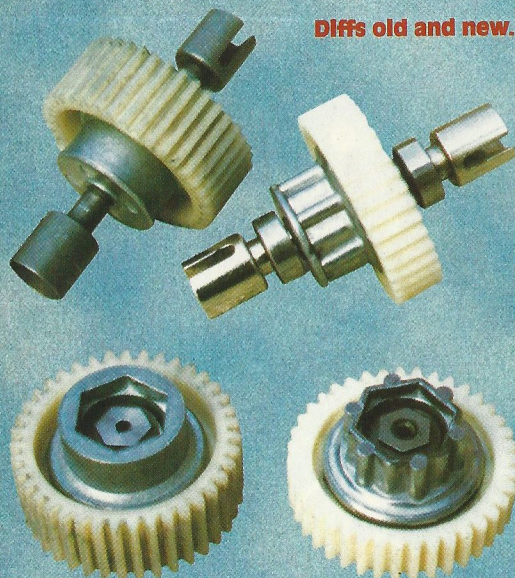
photos I opted for the hop up low friction ones for the test. The wishbones are new, and are much narrower with a dip in the middle to which the shock absorber lower end attaches. In my opinion these are very poor, the ground clearance is tiny and after only one meeting the shock absorber ball joints needed replacing due to excessive wear. The steering knuckles are the same as the blue ones from previous cars and so are the knuckle carriers however they have an extra lug on top which the anti-roll bar passes through. The rear hub carriers are totally new and now use the same hubs and bearings as the front. These appear to have the same geometry as previous models and should fit them providing you use the longer driveshafts. The upper suspension arms are fixed as standard but the optional adjustable links fit with no problems at all. (See photos).

Radio installation

As I was testing the car at a race meeting I decided to fit some reasonable gear. My KO 100l servo with M-Troniks 900 VHF speedo and mini Futaba receiver all fitted quite snugly. It is difficult to fit everything between the chassis plates unless you have micro equipment so most will end up with one item on top such as the receiver.

Testing Time

As the TA-03F is not legal in Eurocup yet I decided that its maiden voyage would be at the



Diffs old and new.

Schumacher Scale Touring series round held at Halifax. This would give me some comparison against non-Tamiya cars. In view of the weather conditions experienced 'voyage' is a very apt term.

First impressions were good, it handled well with standard springs and oil and unlike the more sophisticated cars the back end did not break away. When confidence began to grow I started pushing it harder and found lots of understeer. No real change was made by altering the springs. For example I tried Tamiya blues on the back and the softest silvers I could find on the front with little difference. Even moving the battery position forwards had little effect, something you could not do on the previous bath tub chassis. As there were no alternative shock absorber mounting positions on the chassis the only option was to increase the rear ride height. This was the only way I could produce more turn in and even then the improvement was minor.

The first race saw a waterlogged track and a retirement due to water in the motor, so no result. Round two and the speedo shut off due to the damp conditions so no result again. Round three, new speedo but the torque was set to zero (what an idiot, should have checked before the start). For round four the track had dried and conditions were good, all eyes were on the new Tamiya car. It pulled slightly to the left off the line but this was easily corrected and went on to set a time one second short of my personal lap record for a Tamiya car on this circuit. (Which was also the track record for touring cars until later the same day when Ian Foxwell shaved a few seconds off it with his Predator.) This gave an overall end of qualifying position of third. Not bad for its first outing against much more sophisticated machinery.

Conclusion

Is it any good? Well yes and no. On first appearance it looks totally different but once you get beyond the front mounted motor and belt nothing has really changed. Tamiya have obviously tried to make a thoroughbred racing machine but have only produced a re-arranged TA-01/02 with hop-ups included. I feel they should have spent more time looking into improving the suspension geometry, providing more adjustment and removing the play between components rather than redistributing the weight, but that's only my personal opinion. As far as driving the TA-03 is concerned and in particular in Eurocup I think that anyone who has struggled with the previous chassis will notice a difference with the new one - it drives and handles well straight from the box which can only be good for the series.

To try and help you make your own decision about the car I've produced a list of what I feel are the good and bad points.

Likes

- Ease of assembly
- Belt drive
- Fine pitch pinions
- Common wishbones, diffs, drive-cups etc.
- Ballraces as standard
- Anti-roll bars front and rear
- Alternate battery positions
- Differential thrust race
- Drive shaft angles

Dislikes

- Lack of ground clearance under wishbones
- Large gearboxes
- Belt tensioner
- Flexing of wishbones and large amount of slop in components
- Lack of adjust ability in suspension
- Difficulty of differential removal and maintenance

QUICK SPEC

4WD. Belt Drive. Fully Ballraced. Adjustable Ball Diffs. Fine Pitch Gears. Dog Bone Driveshafts. W.F.E. Chassis & Top Deck. Plastic Motor Mount, Transverse Stick Pack (Position adjustable). Independent Suspension. Top Link. Moulded Bottom Wishbone. Plastic Oil Filled Coil-over Shock Absorbers. Front & Rear Anti-roll bars. 5 Spoke Wheels. Slick Tyres.

Hop-ups Options Fitted

- Low friction Shock absorbers
- Turn Buckles
- Ball Joints
- Spring Tuning Set

THE TESTERS KIT

- Servo:** K.O. FET 1001
- Speedo:** M-Troniks 900VHF
- Receiver:** Futaba Mini
- Motor:** Corally
- Cells:** Orion Activated 1700 SCRC
- Bodyshell:** Parma Cavalier
- Tyres:** Tamiya Kit
Schumacher Control (Slicks)