

# Hot Dog

Entry level cars are an essential part to the future of model car racing. In order to get potential customers interested in the sport, we require cheap and reliable models are required that can be used and abused



## KIT REVIEW

Report by Matt Benfield  
and Gary Paffett

**H**opefully from here, their enthusiasm will roller coaster, resulting in more people enjoying the sport that so many people know and love. The Yokomo Hot Dog is a budget priced multi purpose four wheel drive buggy. Based around a mid mounted motor like all the current top specification models available on today's market, the Yokomo offers performance at a conservative price, incorporating all the design features and looks of many more expensive models. Selling at around £140, the Hot Dog is packaged as a rolling chassis, so does not include any electrical items. A ready-to-run "deal/package" costs around £280, which would have to include an electric speed control rather than the inferior mechanical design.

### Kart racer

Due to the specification of the kit, and the requirement with the Yokomo product range, Model Cars felt in necessary for someone with a little less experience to build and test the model, rather than a seasoned racer. This role was entrusted to a person with a promising future, not in model cars but in the full size versions. Gary Paffett, at 15 years of age, has been racing karts for approximately 7 years culminating in a number of wins and championships that has made him very hot property within the kart racing scene. Last year, Gary took the Junior TKM Championship aboard his Zip Kart, while this season, introduced to a new kart and class, he became the first holder of the Champions of the Future Junior Intercontinental A (JICA) title, and finished very strongly as runner up in the National Series. Gary was extremely keen to get involved in the review as he has raced a little before, while his dad was one of the founders of the Eden Park Overlanders, based at Beckenham, Kent.



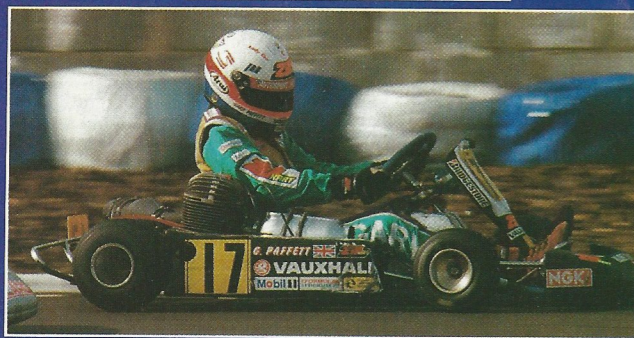
## Chassis

The chassis is unique to the Hot Dog and utilises a battery tray that is screwed down across the line of the car. Designed for stick pack batteries, the battery tray secures the cells well, and yet battery changes are carried out quickly and easily. Saddle pack battery designs do fit, though they are a little of a compromise. The chassis is made out of regular black fibreglass in an effort to keep costs at a minimum, and flex is also limited by the upper chassis which is also made out of the same material.

Two plastic bulkheads are fixed to the front and rear of the lower chassis, and as well as providing the point for the inboard suspension pivot, they are also the housing for the front and rear differentials.

## Transmission

The layshaft is supported by a neat piece of cast magnesium,



*In action for what he's famous for - RCMC test driver Gary Paffett at the wheel of his works Zip Kart. Gary tested the Yokomo at the EPO club where his dad was once an organiser.*

that also acts as the motor mount. The layshaft provides drive to the front wheels, and as there is no one-way mechanism, results in four wheel braking which makes the car very easy to drive. Drive from the motor is transmitted to the front and the rear differentials through a pair of course pitch belts. A few years ago, it was thought that fine pitch belts were the way to go but unfortunately, the levels of grip and the severity of some of our tracks resulted in the belts wearing out very quickly. With the introduction of a course pitch version, the car can be run with less tension on the belt, and the life of the belts tend to be extended.

Front and rear differentials utilise only half the number of balls as slots in the differential gear, and this is something that the American drivers have been doing for a few years now as it seem to improve the feel of the differential. Once installed, the general look of the car begins to take shape.

## Steering assembly

The steering assembly is the next area of the car to be constructed, following in the very much tried and tested design that Yokomo have adopted for such a long time. Included in the design is a neat servo saver that is such required for inexperienced drivers. In the case of an accident or crash, the spring on the servo saver will absorb all the energy, rather than the gears within breaking caused by the shock.

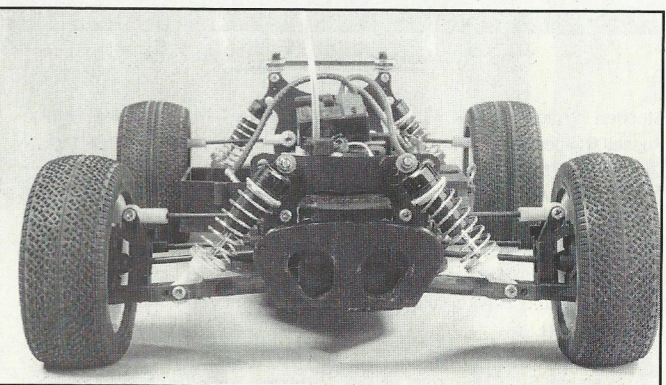
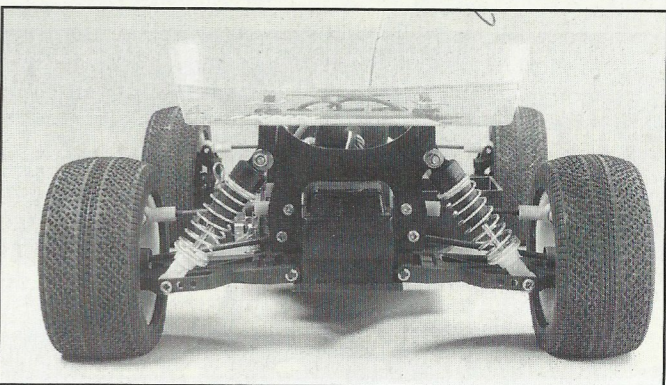
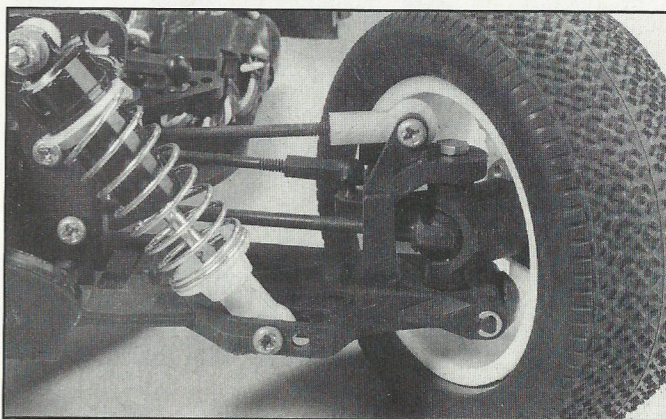
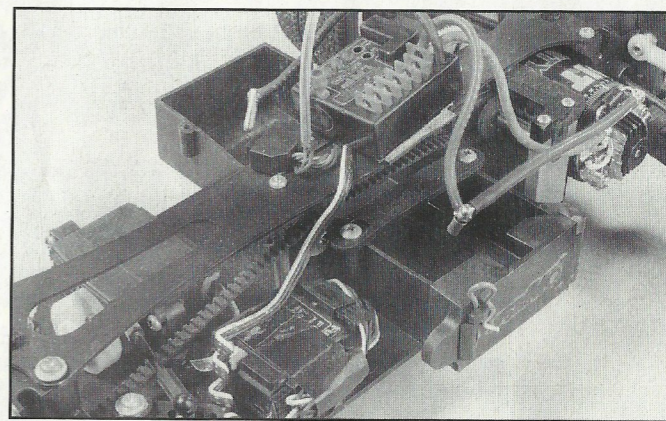
Once the steering has been fitted, the belts can be installed and the gearbox tops screwed down. The aforementioned top deck is bolted to the gearbox tops with completes the chassis structure. two shock towers at the front and rear provide a mounting for shock absorbers to be constructed at a later date. The rear shock tower, also provides a platform for the rear wing to fit to, rather than the wing wire design which tends to bend on a regular basis. At this stage, the main part of the drive train has been completed, with just the rest of the wishbones and suspension remaining.

## Suspension arms

Pivoting around the plastic bulkheads, the four wishbones around the car are made out of tough plastic that are very resilient to breaking, which makes them ideal for this type of kit. The rear hubs are fitted to the rear wishbones while two bronze bushes are installed into each of the hubs. The front like the rear, uses original Yokomo parts that have been in production for many years. As a result their design is well recognised and there are no problems with them failing. This has a second advantage in that using these well known parts, means that model shops are more likely to stock these items if the model gets damaged.

Universal driveshafts are included for the front half of the car, while at the rear, dogbone style shafts are employed, to help cut costs to a minimum.

With these items completed and fixed to the car as instructed, it simply remains for the shocks to



*Top; the moulded battery tray is light and very practical. Wheel detail; the hubs are straight from the world champs winning YZ10. Front and rear; the car has limited suspension droop but still handled the bumps at the EPO circuit with ease...*

be filled with oil. At the track, Gary changed the shock oil for 60 weight as the car was very under damped in kit form. The springs in standard length were much too long, so they were cut down in order to make the ride height adjustable.

## Track time

With the kit completed as Yokomo intended and a body shell fitted, it was time to hit the track. Up against a normal Yokomo YZ-10, the wheelbase on the Hot Dog was found to be much shorter, although this did not appear to be detrimental to the handling of the car. It is always expected that due to prices and final specifications, introductory kits will always be a little different to drive. The dampers often seem to be the main point were a full race tuned buggy is superior to that of a budget priced model. The changes were made therefore, to try to improve this situation, rather than the more expensive method of simply throwing money at it.

The tyres were changed from the kit items, which appeared to be suitable more for the street than a race track, and with the adjustments made to the shocks, the Hot Dog appeared to handle quite well. At the Club meeting, the car was good enough for the A Final and although Gary did not win the meeting, he did enjoy both the building and the driving.

## Options

As the car is heavily based on previous Yokomo models, the number of upgrades and options are incredible. One way layshafts, slipper clutches, ballraces and universal driveshafts can all help to improve on the performance. As a whole though, at £140, the kit cannot be knocked as it provides tremendous performance in relation to the price.

## Thanks to

Gary Paffett - for taking the time to build and race the car.  
CML Distribution - for supplying the model (UK Importers).