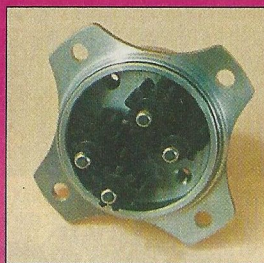


The substantial front end.

are some of the best that I have seen. The casings are machined from aluminium, and are fitted with 'O' rings on both the output shafts plus an 'O' ring seal for the two halves of the casing, so when locked together they become perfectly sealed units. The crown wheel and pinion gears are conical thus making for a good mesh. To adjust the mesh, the kit comes with four brass shims which can be fitted between the crown wheel and the differential casing for fine adjustment. In the instruction manual with my kit there was no mention of this, but I found that one shim was sufficient for getting the backlash just right. The output cups from the differentials are grub screwed to the shafts, so a dab of good quality



Nicely machined diff casing with straight cut gears.



The crown wheel mounted on the completed diff.

The latest 1/8 Rallycross car from Eltham Models is reviewed by Kevin Griffin.

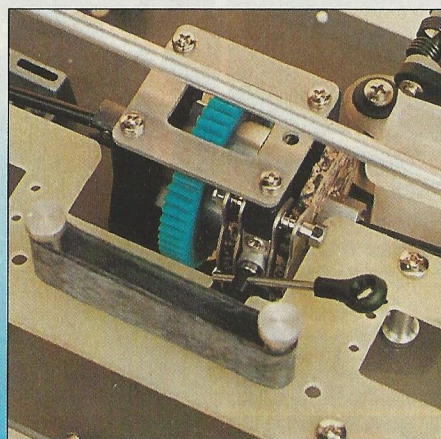
The Super Pirate M4

Heave to, me hearties —ye're about to be boarded by a new Pirate! What's more, it's the all-new Super Pirate M4!

Well, let's not waste any time talking about the pretty box it comes in and how well packaged it is, let's get down to basics. You know me lads, there's nothing I like better than talking basics! What are the main differences between the old Pirate and the new? Well, the list is as long as Long John's wooden leg. See for yourself.

- 1) New, longer chassis.
- 2) New wishbones.
- 3) New tank.
- 4) Side guards.
- 5) Double brakes.
- 6) New shocks and shock towers.
- 7) New bodyshell.
- 8) Strengthening rod.
- 9) New wheels.
- 10) New anti-roll bar.
- 11) New steering tie rod.
- 12) New aluminium diff casings.

The kit that was provided for me to review was an early example which unfortunately didn't include the new instruction manual, as the only new ones available were in French — ooh la la, mes amis! See — I'm even bi-lingual! I am assured though that the new batch of kits will have a new instruction manual in ENGLISH.



The fibreglass radio plate makes installation easier.

The kit's components are packaged in the usual style of sealed plastic bags that contain the whole of the front transmission, then the rear transmission and so on. The first stage of the construction involves the building of the differentials, which are of the four straight cut gear variety, common in both the Mugen and Probe cars — extremely efficient and hard-wearing. The differential casings that they fit in

threadlock must be applied here. Personally, I would use the Locktite Green variety, sometimes referred to as stud and bearing lock. It is the strongest and, once the grub screws are tightened, will not come loose.

The next job to do is to hang the suspension arms on to the diff casings, then the shocks. Again, these are new and are of a larger volume than the earlier variety. One or two features to mention here are, firstly, the adjuster on the shock for the spring is of the threaded variety,

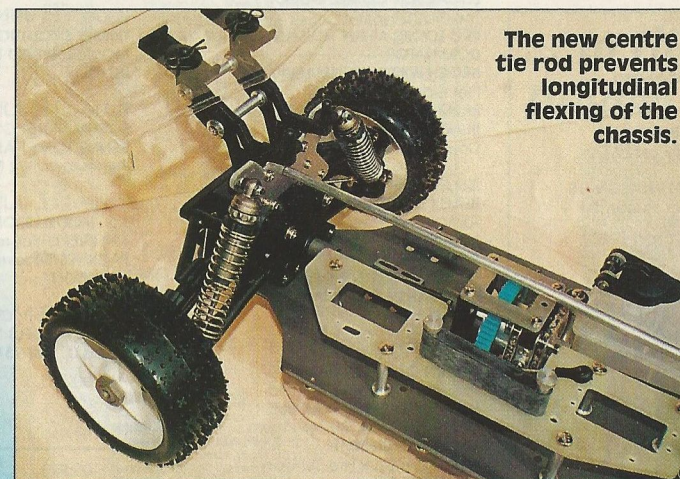


making adjustment easy and very definite. Also, the shock spring locators have a groove for the spring to lock against —a nice touch. The front suspension has provision for an anti-roll bar to be fitted, which is not a standard item, but I'm sure it is available as an option.

Moving rearwards we arrive at the centre differential. This is where the braking system is to be found. The old car was simply fitted with a single disc that was mounted onto the centre diff, which meant that it would brake on all four wheels until one lifted and lost adhesion, then all braking effect would be lost totally. The new system is similar to that found on the other makes of Rallycross cars —one disc braking on the centre diff, which in effect brakes the rear of the car, and the other disc operating on the output shaft to the front gearbox, thus we have four wheel braking.

At the rear of the car, to compliment the new shock absorbers comes a new anti-roll bar, neatly attached to the wishbones by two small eyelets.

The earlier car suffered from a certain amount of longitudinal chassis flex, so with the Super Pirate this has been overcome by the fitment of a bracing rod between the front and rear shock towers as a standard item. The British importers, Eltham Models, have also decided to include in this kit a fibreglass radio plate, rather than the



The new centre tie rod prevents longitudinal flexing of the chassis.

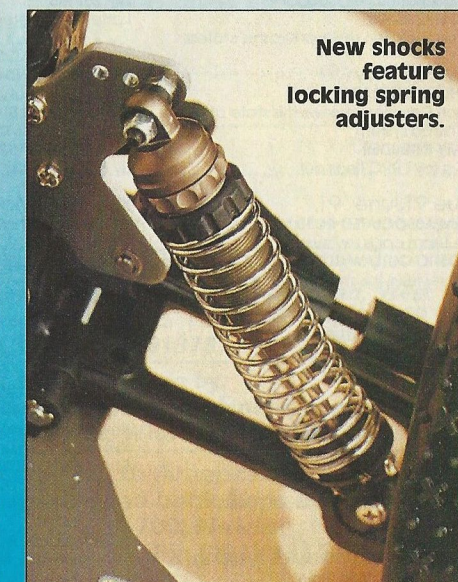
standard alloy item. This allows for easier installation of the radio equipment. Any radio gear will fit, the most popular steering servos being either the KO1003, the Futaba 9302 or the Sanwa EXGXT. One or two of the team Pirate drivers seem to favour the use of twin 3001 Futaba servos, which are an economy ball-raced unit that seems to work very well. As regards the throttle and brake servo, the Futaba 9301 is more than adequate for the job, in fact Eltham Models suggested that the Futaba 148 is more than sufficient.

Covering the mechanicals we find a new body shell and wing which compliments the car very well, and the final touch is a very stylish set of three-spoked wheels, boasting the extremely good X pattern tyre, which has become a very popular tyre among racers.

The conclusion — the new Super Pirate M4 is

certainly a much improved version of the early Pirate. The new importers, Eltham Models, are very keen to offer a second to none back-up service to make the car a 'household' name in British racing. Results are what counts and their top team driver, Ian Oddie, regularly qualifies the car in the BRCA Championship A finals.

So where can you purchase the new Super Pirate M4. Well, I suggest that you ring Eltham Models and speak to John Bennett, who will be only too pleased to either supply you with this excellent car direct, or will be able to give you the name of your nearest stockist. Imported and distributed by: Eltham Models, 54, Well Hall Road, Eltham, London. SE9. Tel:(081) 850-4324.



New shocks feature locking spring adjusters.