

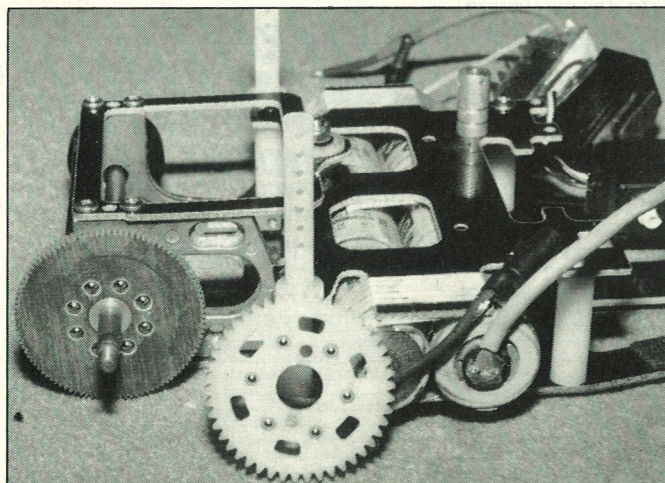
TRACK

Chris Evans

TALK

The Kawada 230 is tested this month.

Basically when I receive any kit for either review or racing I always tend to throw it together, without any modifications and usually with not much thought, to see how it goes for the first few races and take it from there. This was



the case with the 230 as I wasn't sure how competitive the car was going to be.

The venue for the initial track test was Sandwell Can-Am Cars.

Although the 1/12th section has started up again, the format is four minute sprint races, which on the small track makes for very, very fast running. One set of SC's was used all night, obviously in conjunction with a fan, and a Demon Gold series 22 turn double on zero timing. Even on 45mm per rev, the car still had good acceleration with ballistic top speed.

Tyres had been trued to 47mm and 53mm diameter,

Diff with 64DP spur gear fitted.

front and rear respectively which gave about 5mm of ground clearance which was just enough as the carpet was not that smooth. As the 230 has no ground clearance adjustment, a potential buyer would aim to start them larger, at least 49mm and 55mm

Checking the car over I revved it up and it would be fair to say that the quality of the trueing of the rear tyres was "rubbish"; I don't know what I did wrong but to be honest the plastic hub that holds the nearside rear wheel to the axle,

which had to be used on the lathe for trueing, was less than ideal. Anyway I could foresee big problems on the stability front but I did get away with it, especially as the tyres "bedded in".

Two spur gears are provided in the kit, a 46 tooth 32 DP gear and a 63 tooth 48 DP gear, and 1 pinion, being a 13 tooth long boss 32 DP type. I plumped for the 48 DP gear married with a short boss 17 tooth SRM pinion (now produced and distributed by RW racing). By the way, short boss pinions will just about fit.

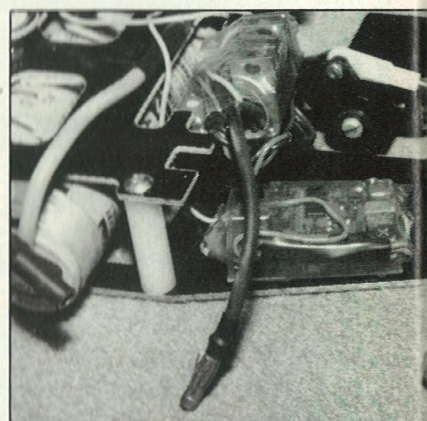
The final pre-race check was on the chassis to check for any tweaks. There is no way of accurately adjusting this but slight tweaks can usually be taken out by unscrewing the front two shaker plate posts, giving the chassis a slight flex longitudinally and tightening the screws back up. A bit crude but the only option open to you.

Right, first heat, awesome power, fairly low grip and plenty of traffic and I gave it some heavy stick for four minutes: conclusions — may the list begin.

The roll mast material for a start does not really have enough spring, and is prone to

bending. Removing a good five inches off its length does not impede its operation although replacement with a decent piece of piano wire would be better. The wheel inserts do not like staying in the wheels when the light turns to green and they were quickly jettisoned to the far corners of the track, and the gear mesh was audibly bad.

Back to the pits, the gear mesh was checked but it

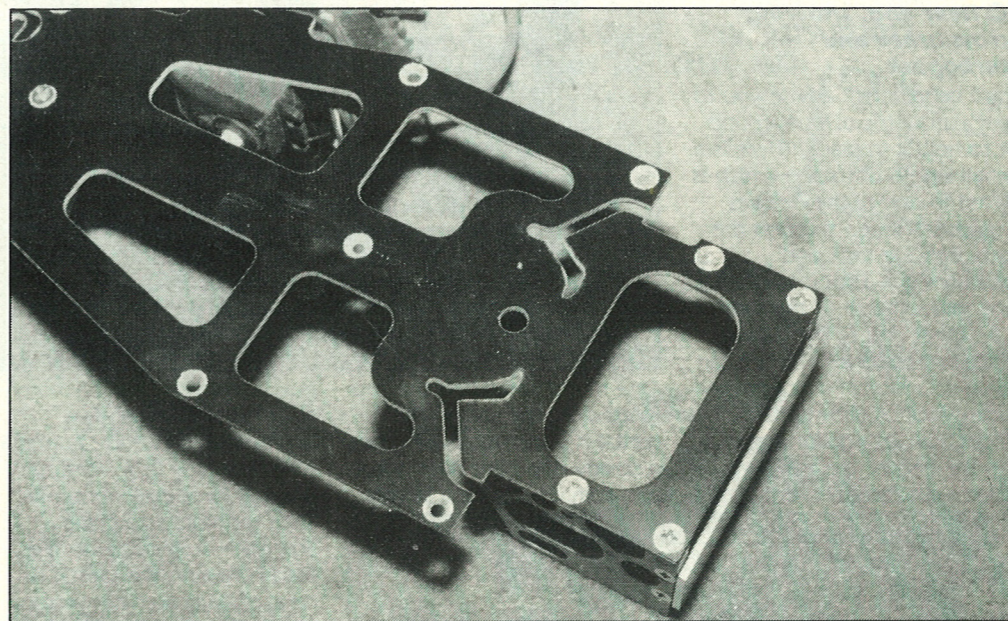


Live axle extending from the bearing which needs to be "loctited" into the front wheel hub.

seemed okay so I thought I'd try the 46 tooth 32 DP gear with the 13 tooth pinion which on the 53mm diameter rear tyres put the mm per rev up to 47. One thing to notice when meshing the gears is how far the motor is from the shaker plate, especially when the car is sitting on the track; with a lot of gear ratios you will find that the motor is resting against the shaker plate so it is advised (by me) to file away about 4-5mm from the plate behind the damper post. During the race the stick cells had also been knocked out, even though I had used servo tape in conjunction with the red cable ties. The best

method is using glass reinforced tape with a small amount of servo tape for good measure. As a final check I checked the tweak and this was a mile out, I found that the two sides of the rear pod were well out of line. Actually provided in the kit was a piece of machined alloy for bolting between the two metal plates of the motor block but I thought I'd try it without, which obviously now was a mistake.

The next race saw me once again drive the car too aggressively which resulted in an end bell parting company from the motor. Don't ask me how, but the race was cut short by a front wheel coming off the car. Where the live axle passes through the bearings in the front steering block, there is a threaded section on to which the wheel hub is screwed, you are advised to use loctite! The gear mesh using the 32 DP



gears was a little better but somewhat poor in relation to normal standards.

The final run of the night saw me starting to get a hold of the car and very well it was going too. One thing though that does need modifying, is the amount of rear end chassis flex. In its standard form the rear end is too stiff, making the car far too prone to overturning. I wasted away about 1cm from the chassis, i.e. thinned the slots where the rear pod joins the main chassis to increase rear end flex. In conjunction with doing this you need to increase the size of the hole in the damper plate as not to restrict

this extra movement. Don't worry, the chassis material is black glass reinforced plastic, not a graphite derivative so it is fairly easy to work on.

All in all for a first night out the car went very well and shows good potential. For its next outing in a couple of weeks time, the chassis modifications will have been carried out, and the brace for the rear pod fitted. The tyres will be re-trued and I have also managed to fit some 64 DP gears. The steel axle did seem to have a slight bend in it but this was easily removed, and although the small front bumper supplied was not used,

The modified chassis. There is now more rear end flex by filing away the chassis, just in front of the motor pod.

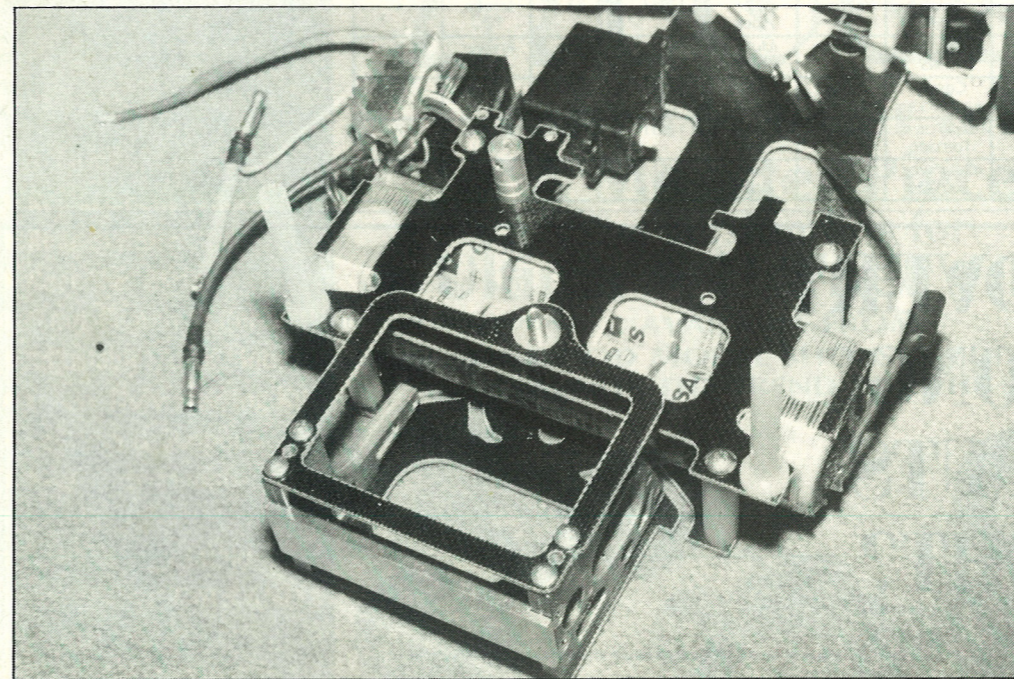
the body stood up very well.

The next outing will see the car really tried competitively and also utilising the 4WD conversion out of interest, which for the four minute sprints should make it unbeatable — more next month...

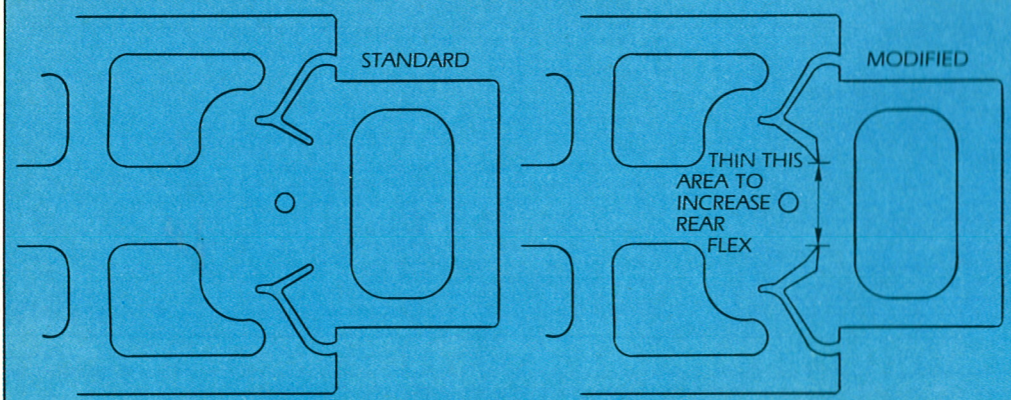
Paragon Turbo Pack — Revisited

Yes fans — many of you sharp eyed Radio Race Car readers couldn't help but notice the Turbo Pack tank fitted to the rear pod of the 230, offering unlimited horsepower. Believe you me, trying to fit this and get it working is certainly not a job to be tried when you've got back from the pub, I know, I was that man, talk about Mission Impossible! Seriously though, after about two hours of messing I eventually got it into a situation where it probably would work. From the pictures you can see how using the velcro tape, I fixed the tank to the damper plate but under

Along with thinning down the chassis, the hole in the damper plate also needs to be made larger, as not to restrict the extra movement that the rear pod now has.



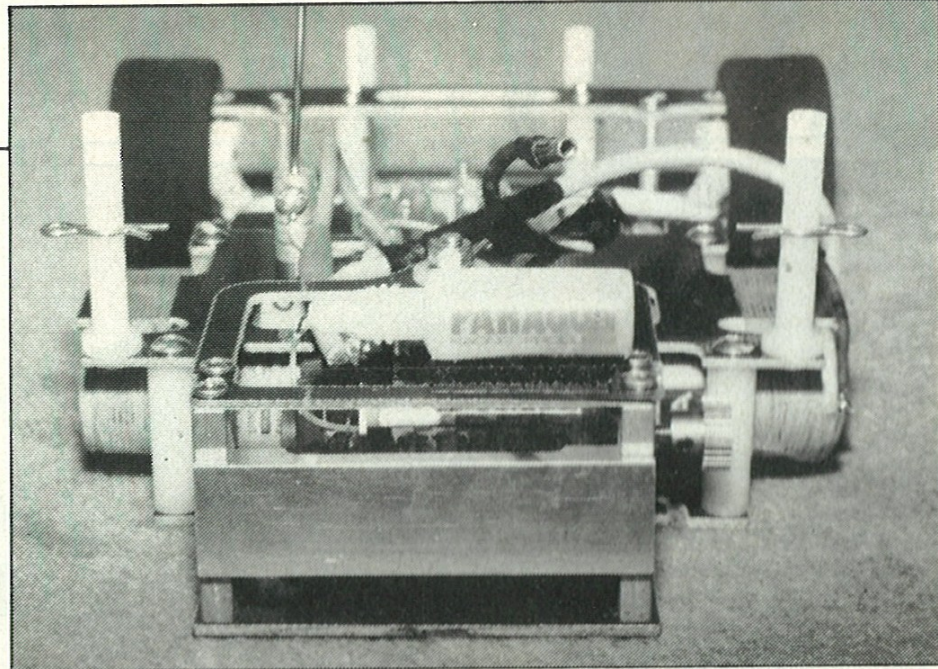
Kawada 230 Chassis Modification



Track Talk

► Rear end, showing cross brace and turbopack.

race conditions I advise you to put a small strip of tape around it to hold it in place. There is a small length of tubing which is fitted to one of the needles which is pushed through the cap, into the tank and positioned so that it touches the lowest point of the tank. The other end of the tubing must be positioned where it can dose your motor fluid on to the brush face or commutator. Right then, let's go for a test run on the bench. The tank was filled with Paragon Formula



One motor spray and the cap refitted. As the spray still contains some dissolved gases, a steady drip flow does occur and combined with a steady

build up of heat from the motor, which rapidly expands a volatile substance like Formula One, a steady flow continued but only for about one minute. Time for head scratching. Solution — obviously as the fluid is leaving the tank it is creating a vacuum which stops any further flow (well before the tank is empty). All you have to do is put a small pin hole in the top of the tank and as long as the dispensing tube is at a lower level than the end in the tank, a steady flow is achieved for at least eight minutes — I was amazed. Again this will be tried in full the next time the 230 is run but it should be okay now a continued flow has been achieved. ●

