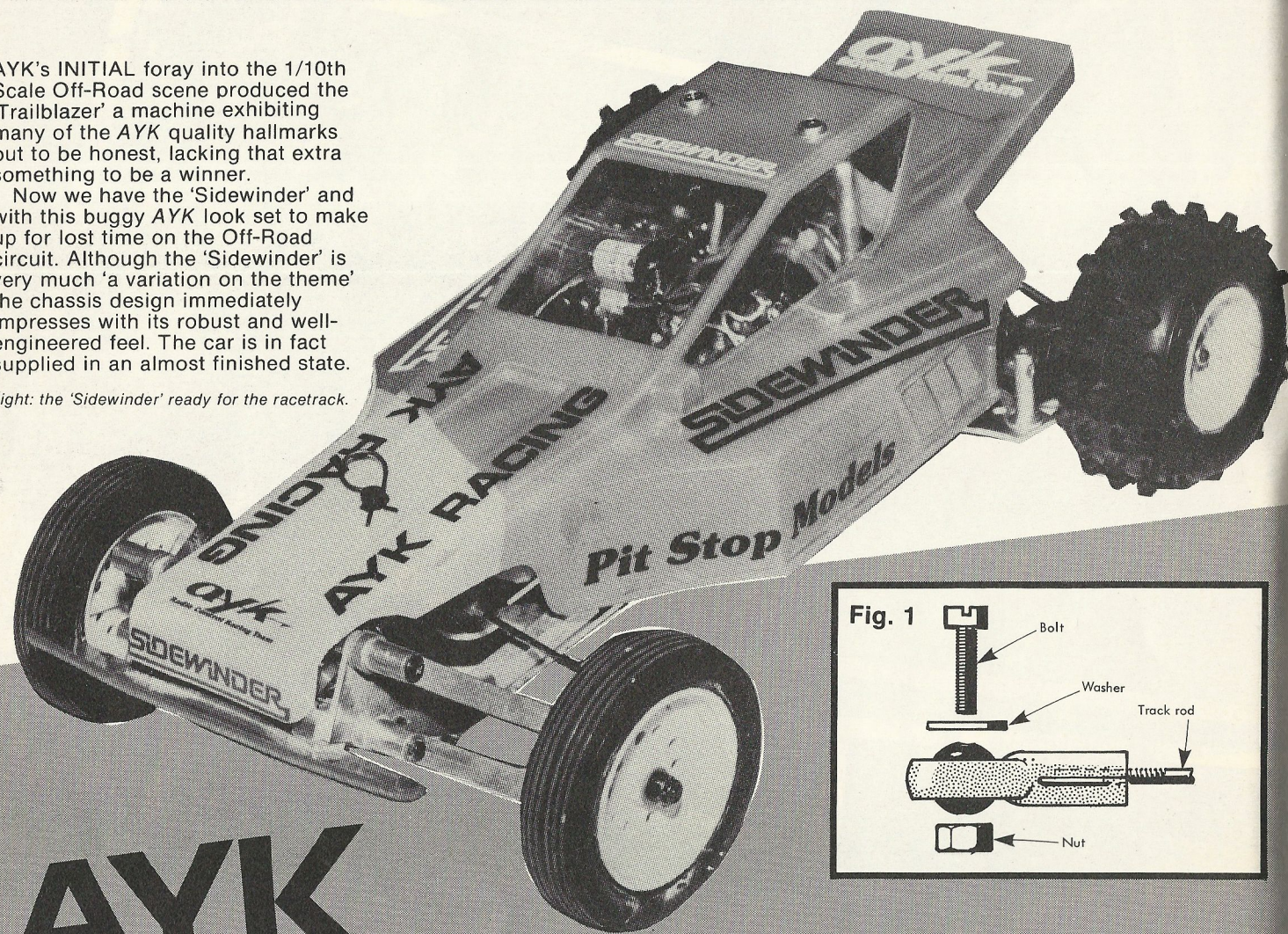


Track Test

AYK's INITIAL foray into the 1/10th Scale Off-Road scene produced the 'Trailblazer' a machine exhibiting many of the AYK quality hallmarks but to be honest, lacking that extra something to be a winner.

Now we have the 'Sidewinder' and with this buggy AYK look set to make up for lost time on the Off-Road circuit. Although the 'Sidewinder' is very much 'a variation on the theme' the chassis design immediately impresses with its robust and well-engineered feel. The car is in fact supplied in an almost finished state.

Right: the 'Sidewinder' ready for the racetrack.



AYK Sidewinder

Lewis Eckett gets to grips with another slippery customer

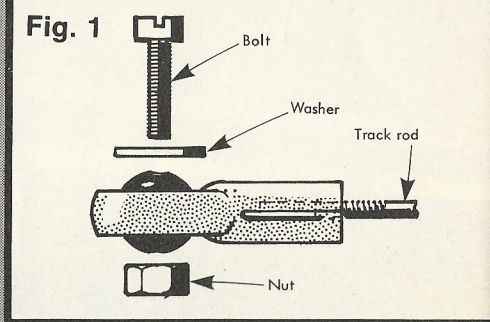
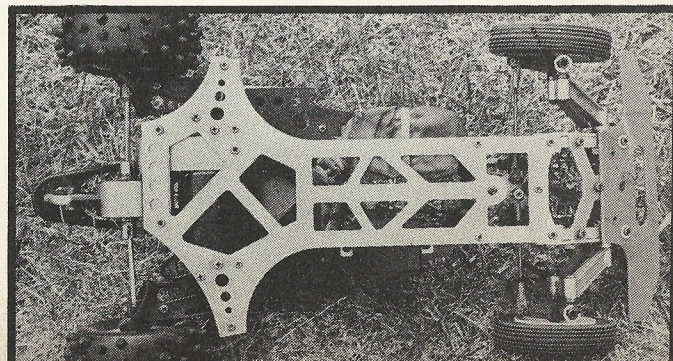
All you have to do is assemble the wheels and tyres, paint the bodyshell and install the radio gear. There isn't really much to say about building the car as most of it is done for you. However some of the design aspects are worth a closer look.

Main Chassis

This is a three-quarter length item manufactured from 2mm thick alloy and featuring cut-outs for lightness. The chassis supports the entire rear-

end and shaker plate. The front end bolts on separately. The rear wishbone pivot points are mounted directly onto the chassis and as such, a stronger, firmer base is achieved for the suspension movement.

Right: the chassis underside reveals the well thought out design. The 2mm thick alloy one-piece is very strong and protects the rear suspension. AYK have obviously made this component as light as possible.



Rear Suspension

This is another area where AYK have done their homework. The suspension trailing arms are produced from tough, injection-moulded nylon, with the alloy right angled damper pivot sandwiched between. These trailing arms look much more resilient to hard knocks and in any case are protected from the front by the chassis.

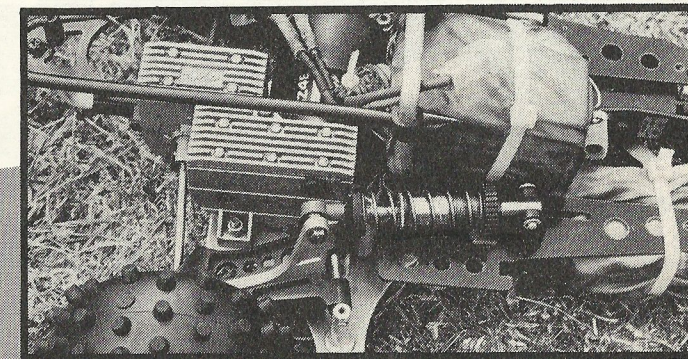
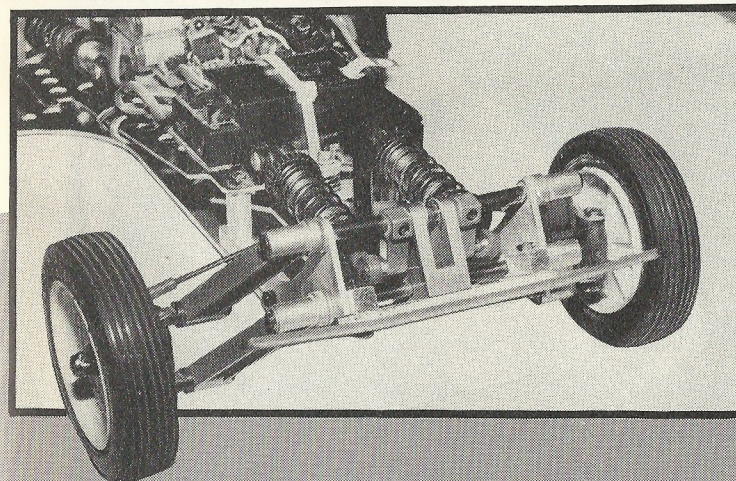
The front and rear dampers are all identical in size and shape and are mounted horizontally as opposed to vertically. The kit contains some extremely thin damper oil which I chose to replace with '3-in-One'. The ride height can be adjusted via the damper collet which adjusts the springs.

AYK ball-races are available as optional extras. Nevertheless the size needed for the gearbox drive outputs are the same as those used in the Kyosho 'Scorpion' and 'Tomahawk'. Unfortunately the rest are of very funny sizes and only the AYK importers will be able to help you with these.

A fully adjustable servo-saver bolts directly onto the chassis and connects to the servo and steering blocks using ball-joints. A word of caution here, to ensure that the ball joints don't pop-off install a washer under the screw head. See Fig. 1.

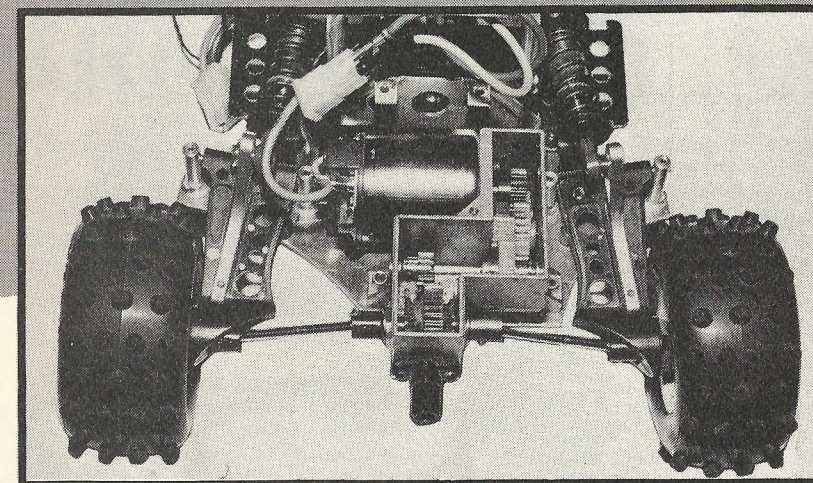
Lastly a very small bumper protects (?), the front of the car.

Below: close-up of the front suspension showing ride height cam-adjusters and pivot bars.



Above: close-up of the rear trailing arm and damper arrangement. The pivot posts are of different heights (higher on the outside) to promote slightly negative wheel camber.

Below: general view of the rear-end and suspension layout. The downward travel of the wishbones is limited by two bump stops. This stops the driveshafts from dropping out.



Gearbox

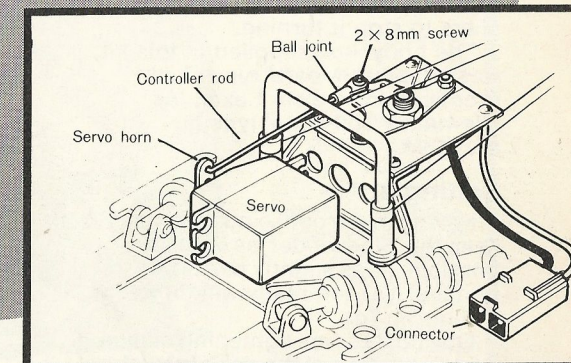
Once again another well thought out item, although still in keeping with Japanese fashion in such things. The gearbox is a one-piece, cast alloy piece of fairly large dimensions. The motor mounting holes are slotted to allow fine meshing of the gears as well as the use of alternative gear ratio's (not supplied). Three stages of reduction are contained within, ending in the drive to the rear wheels via a bevel gear differential. This latter item, features hefty plastic gears and is, if looks are anything to go by, quite strong.

Drive to the rear wheels is carried by the usual ball and pin drive shafts. All the bearings supplied in the kit are of the sintered bronze bush type.

Finally, the 'Sidewinder' kit includes a standard buggy motor which features Yokomo style brushgear.

Front Suspension

Two angled alloy bearers bolt onto the main chassis and provide the suspension mountings. Upper and lower trailing arms carry the stub axle blocks. The arms pivot upwards on two steel bars which are mounted across the front end. The dampers project forwards from the shaker plate and connect onto two cranks bolted onto the upper pivot bar. By altering the angle of these cranks on the bar, different ride height settings can be obtained.

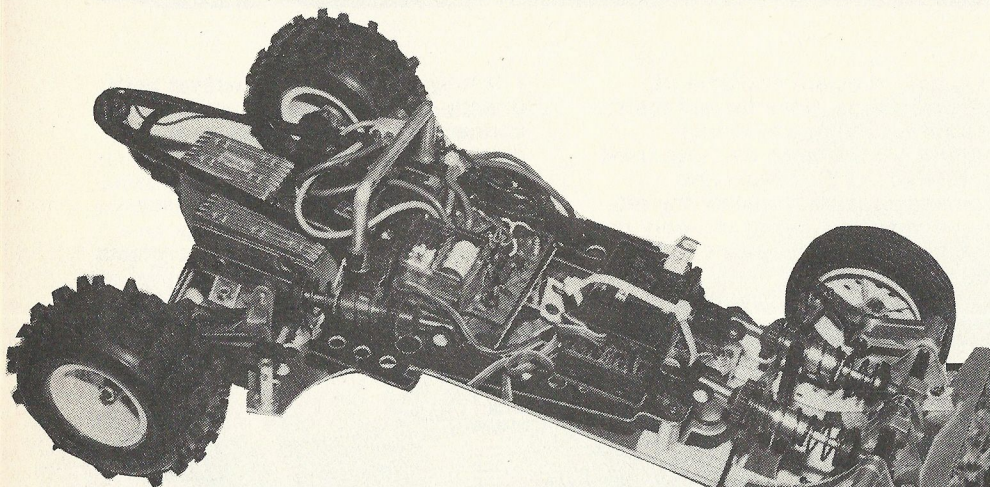


Speed controller installation.

R/C Installation

The only real work needed here is the fitting of the steering servo if, like me, to you choose to fit an electronic speed controller. Whilst I am sure that the resistor type, supplied in the kit is perfectly adequate, I had no wish to let a perfectly good (and expensive) 'Laser Turbo Buggy' go to waste in my pit-box. So, in the 'Lazer' went. The steering servo mounts between the chassis and shaker plate on adjustable mounting brackets, this means that most common types of servos can be accommodated. The receiver fits either side of the shaker plate, servo tape and linkages are all supplied. The Ni-Cad pack fits across the chassis mounted on the shaker plate in either side-by-side or stick configuration. Tie warps are supplied to keep the Ni-Cads in place, although I would suggest using heavy-duty rubber bands or strips of cycle inner-tube as an extra precaution.

Track Test



duration but not the speed. The 12 tooth pinions were substituted for 16 and 17 tooth items respectively and no problems were encountered all day with Ni-Cad duration.

Incidentally, Dave was using a Parma 'Porsche,' Off-Road Yokomo motor (standard) whilst I was using the AYK 480B on its standard settings.

Overall, both cars performed well on the handling side and looked and felt easy to drive with no twitchiness. The

Wheels, tyres and Bodyshell

The rear wheels are of the usual three-part sandwich type with the inner and outer plastic hubs gripping the plastic tyre. The rear wheels fit onto the drive shafts with a nylock nut, a collet with a serrated face is pushed into the hub plastic on the inside when the nut is tightened. To tighten the nut fully, the drive shaft will have to be gripped with a pair of pliers to stop it turning.

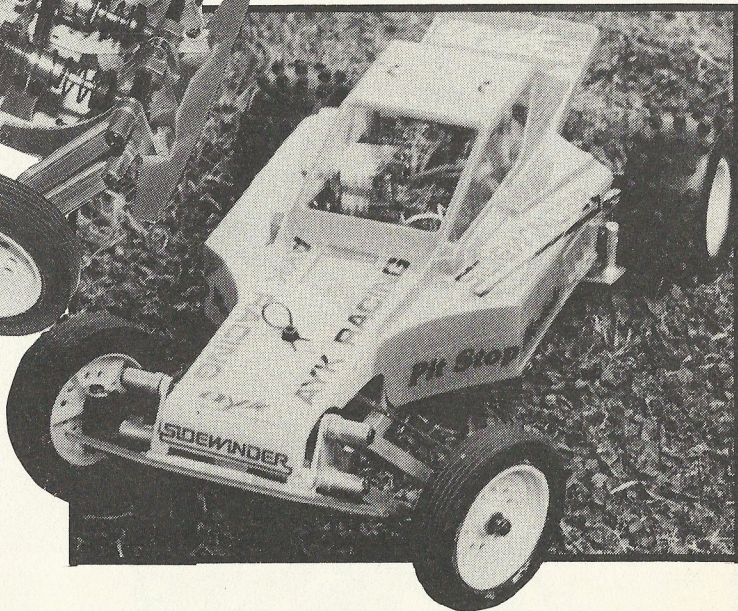
The bodyshell supplied in this kit was a typical 'Mears' type shell produced from clear Lexan. An alternative 'roll-cage' type is available.

Setting up

Having made conscious efforts to keep the 'Sidewinder' as light as possible, I was slightly perturbed to find that its race-ready weight was just on 3lb 7oz.

Obviously some lightening can be done, although at the risk of structural

Above left: the complete 'Sidewinder' chassis ready for the racetrack. Right: topped off with smart 'Baja' bodyshell. Below left: transmission detail of the gearbox complete with removable cover.



weakening. Still, extra weight can be an advantage.

The instructions show what effects the front ride-height has on the car's handling characteristics. High = understeer, low = oversteer and neutral, well = perfect.

The damping, both front and rear is excellent and the springing should be set as weak as possible, however, harder springing at the back will promote more steering bite at the front. It is essential to check that the servo saver is working perfectly and is not binding up. The nylon outer should pivot around the central screw and not with it. Also check that the ball joints are not binding and if necessary free them off on the inside of the plastic cups with a fine file.

On the track

The 'Sidewinders' first outing was at a 'Chesham Hooligans' 'Open' meeting held at their permanent circuit at the 'Royal Oak' pub, Little Missenden. This course has a long, smoothish straight with a very bumpy and tight infield section. An ideal test — I thought!

Of the rest of the entry only one other 'Sidewinder' was present, in the hands of Dave Taylor of Pit Stop Models. We had both decided that the kit gear ratio would give the necessary

only major problems were with the differentials which kept spinning loose. The problem was the small set screw which links the drive shaft outputs together, no facility to lock this in place was available and drastic measures were needed. The end of the screw thread needed to be chewed up, the screw bent slightly and copious amounts of thread lock applied to keep it in place. This solved the problem.

Back on the track and the only disadvantage was understeer but this was slightly unavoidable due to the very fast nature of the circuit.

The qualifying system called for very consistent driving as the best three scores from four were added up to give the eight finalists. Interference and lack of power in my case put me well down but Dave scored three ten lappers, qualified for the final and ultimately came fourth.

In conclusion the 'Sidewinder' has great potential, with a controlled diet, ball-races and experimentation success is assured. This design is there and it will only need someone to take it and win to prove that. On the whole the 'sidewinder' is an instant performer from the box with slight reservations, isn't that the same with all of the other kits on the market?

UK distributor: SRM Racing, 140 West Street, Fareham, Hants.

Price approx. £100.00.

