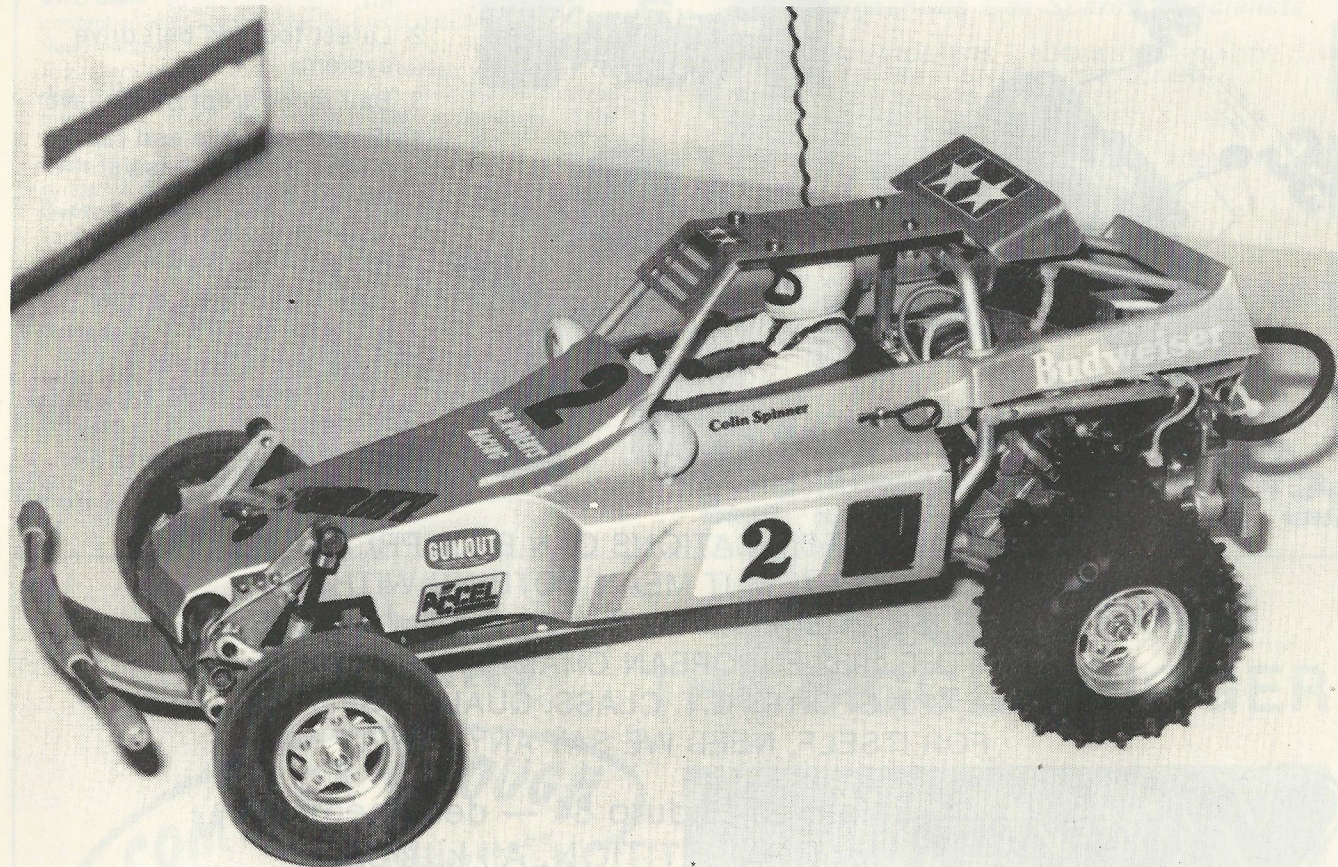


# Tamiya SUPERCHAMP

An RRC Track Test and Review



NEW TAMIYA SUPERCHAMP

AFTER many months patiently awaiting something new from the land of the Rising Sun, I finally received the new off road buggy from Tamiya – SUPERCHAMP. Similarity in style to the earlier model Roughrider is immediately obvious but there are substantial modifications.

As can be seen from our various photographs and diagrams this model is a continuation of Tamiya's engineering prowess and their uncanny ability to produce in miniature superb components to build a true scale model.

The usual high standard of packaging is evident with bubble pack sections securing most of the components. Plastic bags around crammed full of nuts, bolts, tie wraps and all manner of accessories to complete the model. A detailed instruction booklet (Japanese only for this review

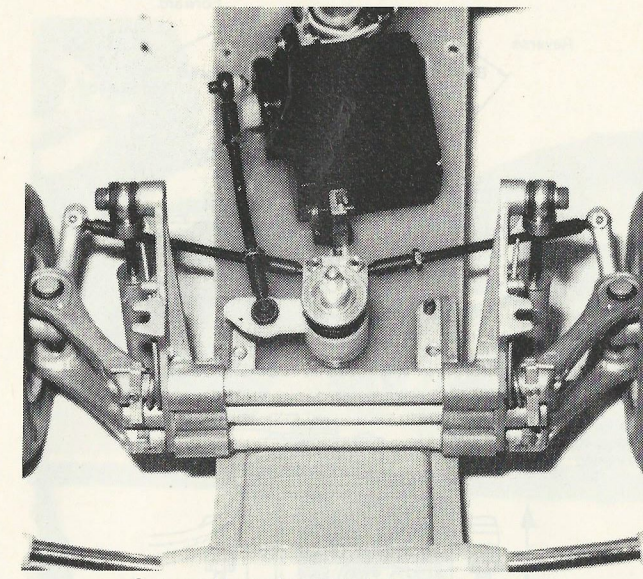
kit) was easily followed despite the lack of recognisable words!

## Chassis

A GRP chassis is used for carrying the front suspension assembly and the cast gearbox at the rear.

## Front Suspension

The well tried and tested double trailing arm set up is used. Hardened front arm shafts are an improvement over previous 'bendy' types. Tamiya even supply tie wraps to secure the top and bottom arms – we've been doing this for a couple of seasons now, giving greater reliability. Oil damped suspension units complete the front end assisted by hairsprings, their tension being

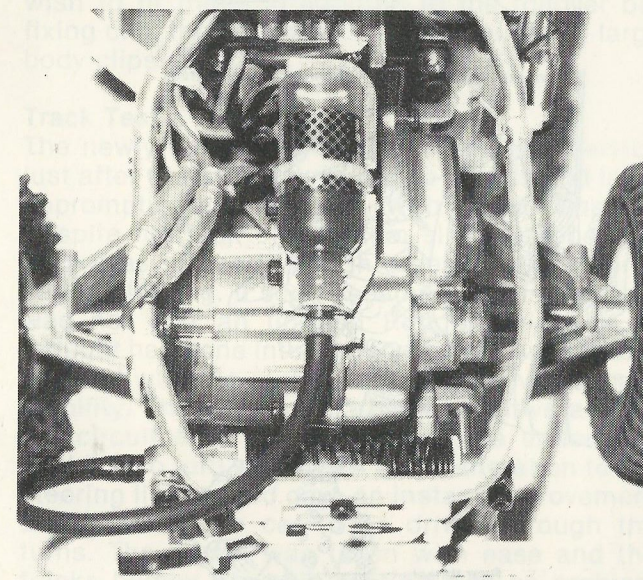


Superchamp's steering arrangement

adjustable simply by changing their location against cast stops on each upright. The new servo saver (VW Golf type) is linked to 3mm track rods and Golf type ball joints. The steering servo is mounted on two aluminium brackets and sits at an angle across the chassis.

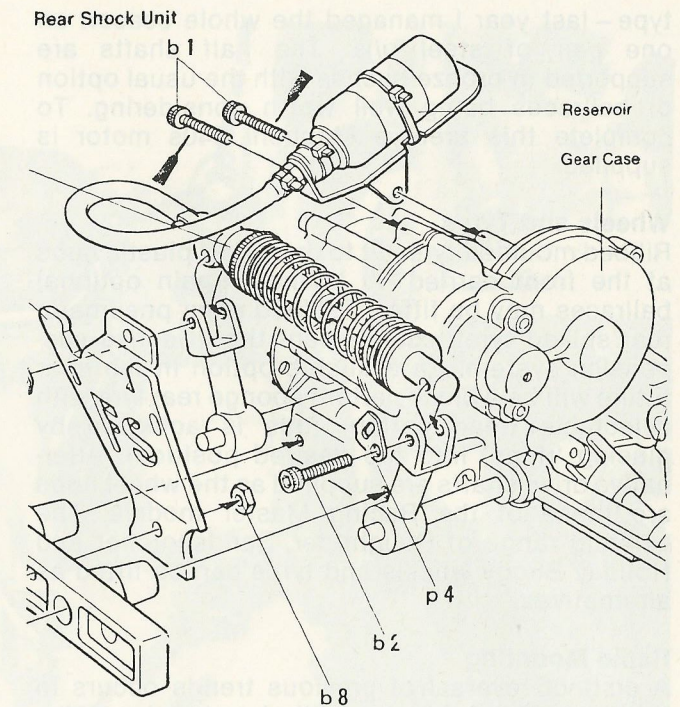
## Rear Suspension

The newly designed system – FFPDS – Free Floating Progressive Damping Suspension to the uninitiated, keeps the drive wheels in contact with the surface even under the severest road conditions. This mono shock system was developed to dampen out and eliminate 'rebound' to maintain surface contact for positive traction, yet allows a lesser damping effect for smaller



Monoshock and oil reservoir and odd rear tyres – not a tweak – just forgot the other side!

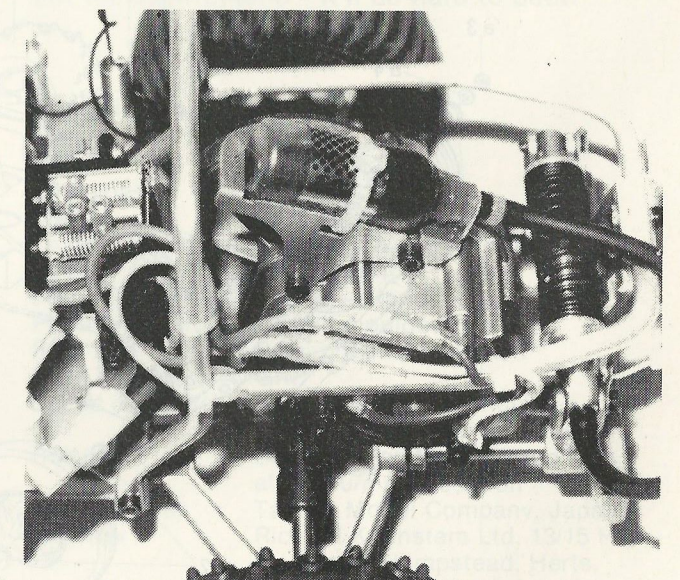
transmitted shocks. The left and right rear suspension arms are connected to one transverse oil damper and variable compression coil spring



which has a large oil reservoir for a constant supply connected via a rubber pipe. The suspension arms locate in the trailing arms that carry the rear wheels and are supported at the rear by a casting that doubles as a bumper. Overall travel of the set up is limited by tie wraps which enable different levels of suspension to be set.

## Final Drive

The cast gearbox is longitudinally split and is the well proven Roughrider type. There are additional holes for carrying the shaker plate pillars. The plastic motor end cap and gearcase covers now sport lubricating holes. The final shaft still carries a plastic gear, whilst the counter shaft is now made in brass, as is the drive shaft gear. Steel universal joints are an improvement on the brass



Rear end of the Superchamp



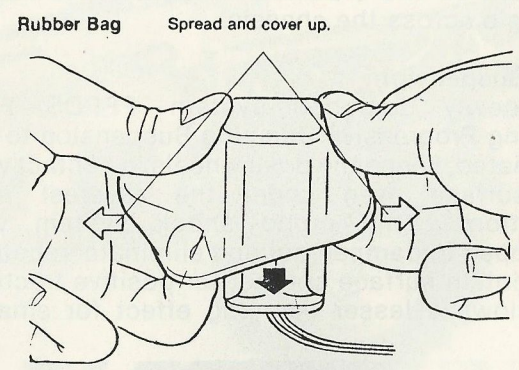
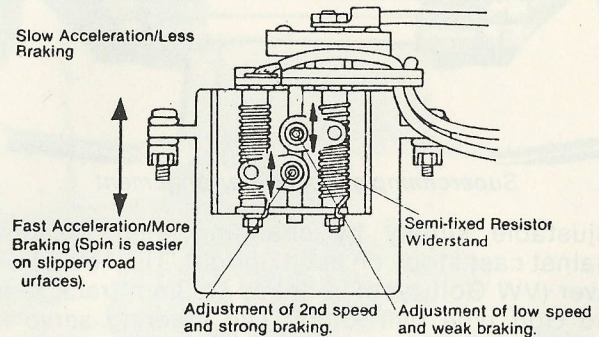
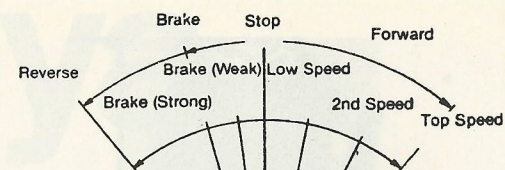
type – last year I managed the whole season on one pair of steel u/j's. The half shafts are supported in bronze bushes with the usual option of ballraces being well worth considering. To complete this area, a Mabuchi 540s motor is supplied.

**Wheels and Tyres**

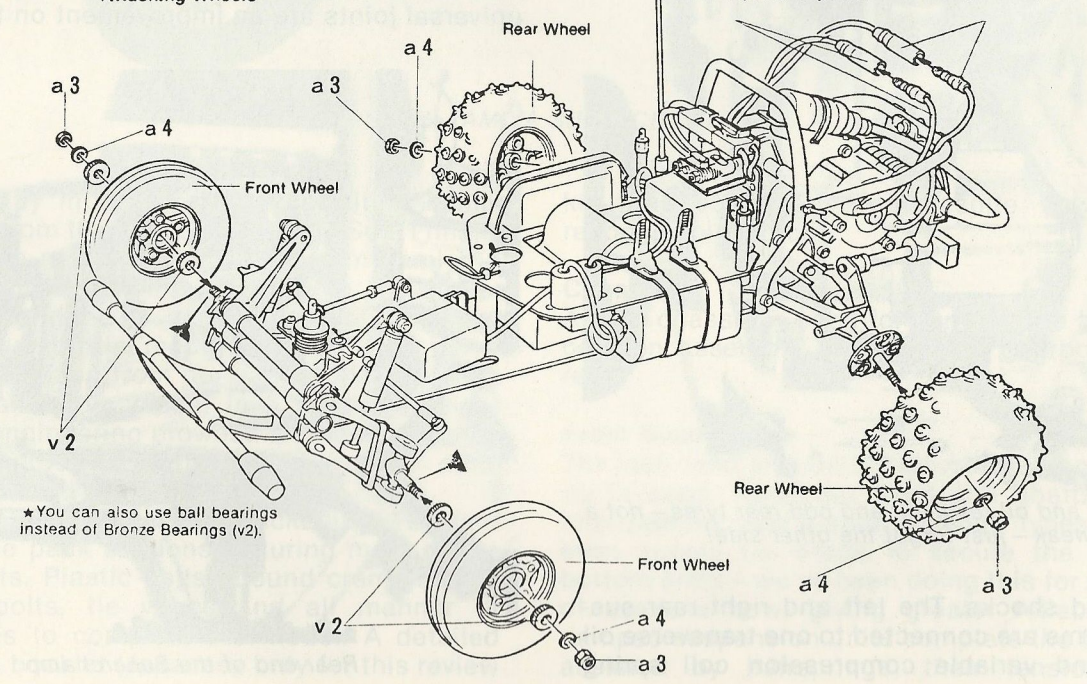
Ribbed moulded tyres fit to three part plastic hubs at the front carried on bushes, again optional ballraces may be fitted. Profiled semi pneumatic rear spiked tyres complement the effective suspension system. An available option in the near future will be a block pattern sponge rear tyre with selectable tread pattern (this is achieved by glueing 'rings' into the desired position). Alternative drive shafts are supplied as the wheel hubs are those of the Racing Master models. The existing range of Roughrider, Sandscorcher and Holiday Buggy wheels and tyres can be fitted as alternatives.

**Radio Mounting**

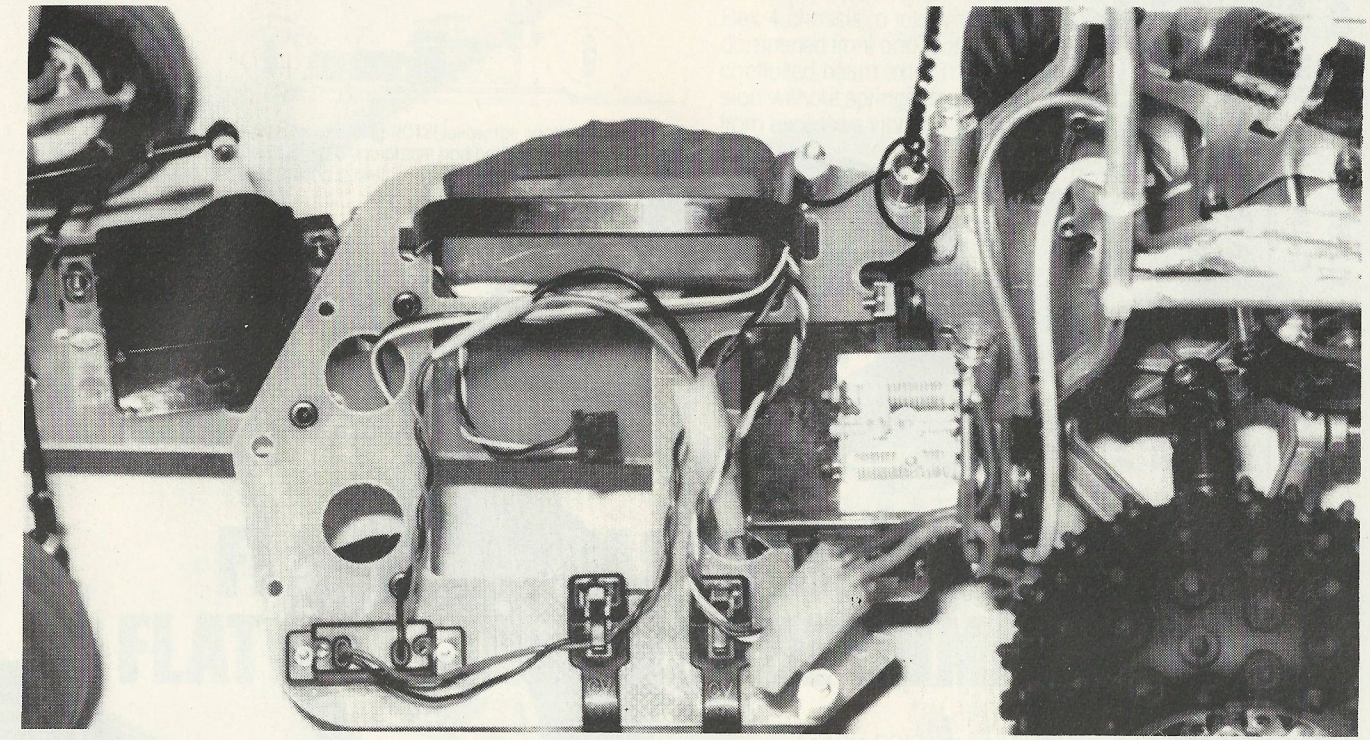
A distinct reversal of previous trends occurs in this area. The enclosing radio box has been discarded in favour of a one piece quickly detachable mounting plate which also secures the drive battery along the length of the chassis. The radio receiver and it's battery pack are carried in rubber balloons suspended through the plate. The switch is similarly fixed using the rubber boot supplied. A new three speed servo mounted mechanical controller is located to the rear of the radio plate out of harms way, though unprotected from water. This controller is fully adjustable for back EMF braking strength and variable stages of acceleration and top speed (see diagram) Full speed reverse is available at full 'pull back' position.



**Attaching Wheels**



\*You can also use ball bearings instead of Bronze Bearings (v2).



Radio tray (detached) showing easy removal

**Bodyshell**

An attractive shape has been utilized for this model coupled with authentic accessories if required. If you want a true scale finish then you can even fit side netting to the window openings. A moulded driver figure is also supplied. The roof/airfoil section is stamped from aluminium and can be burnished to a mirror finish if desired. The usual 'knockoffable' lights are provided if you wish to fit them. In addition to the rollover bar fixing clip, the bodyshell is also retained by large body clips.

**Track Test**

The newly built model was pressed into service just after Christmas down at the Worlds End in an impromptu test session with Mark Chaplin. Despite the lack of attention since October the track was in good enough order to put in some serious testing. It soon became obvious that this was not just an uprated Roughrider, a lot of thought had gone into the monoshock system and coupled with the rocking action achieved superb stability. The car was extremely positive around the circuit although suffering acute understeer (inability to turn sharply). A quick alteration to the steering linkage rod gave an instant improvement and enabled the car to be driven through the turns. The 'jump' was taken with ease and the tracks bumpy downhill section was no problem either. The car was getting so much grip through the rear spikey tyres that it was able to pull wheelies coming out of some of the turns. After five minutes there was still plenty of power left. Back to back testing with a Digger and Scorpion proved conclusively that here was an out of the

box car that seemed instantly competitive. The early National events will prove whether our opinion of this new buggy is justified.

**Conclusion**

Worth the wait? Well, despite it's weight disadvantage this is an obvious contender to bring the trophy home.

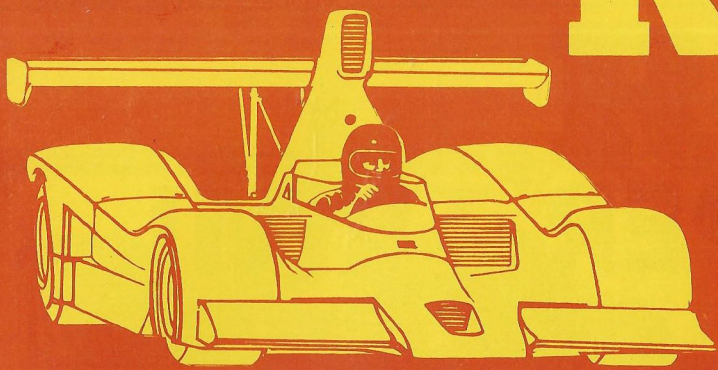
Expensive? Fully ballraced and fitted with a performance goodie viz a differential around £150. Basic kit price around £99.50 but can be obtained for a lot less due to special 'deal' offers. Watch out for Superchamp – it'll be hard to beat!

**Specification**

Length	420mm
Width	230mm
Wheelbase	250mm
Weight	2225 grams, including drive battery, etc, ready to run.
Motor	Mabuchi 540S
Front suspension	FFPDS – Monoshock System
Front tyre	Ribbed moulded
Rear tyre	Semi pneumatic spiked
Main chassis	GRP
Speed controller	Three speed servo mounted adjustable speed controller
Bodyshell	Styrone injection moulded with aluminium roof section
Manufacturer	Tamiya Model Company, Japan
Importer	Richard Kohnstam Ltd, 13/15 High St., Hemel Hempstead, Herts. Available from all good model shops.



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