

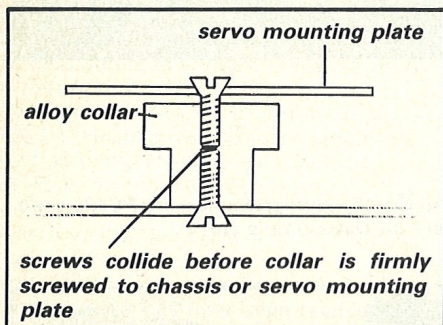
Schumacher SPC Car

Since the SPC car has just won the European Championships in the capable hands of Phil Davies, I thought it was about time I sorted out the review. A full rolling chassis was provided by the Northampton based group which normally retails at around £100. Unlike other kits on the market, the outside of the box leaves something to be desired but lets be honest, you want to pay for a good car, not a flash box. Inside everything is neatly packaged with the differential already assembled and wheels and tyres, glued and tread.

The first thing to remember is that the SPC is identical to the 'C' car but you are using a new chassis and replacing the shaker plate with a single beam on the rear two shaker plate posts to support the rear bodyposts and damper assembly.

The first job of assembly is to take all the GRP items and remove any "flash" or "pips" with some fine sandpaper or a small file. Having smoothed all the GRP edges, a chamfer needs to be filed on the upper sides of the six battery slots so that the nicads sit flush with the bottom of the chassis. Particular attention should be paid to the chassis areas where the battery tape will rub, these want to be well smoothed so they do not cut into the tape under the load of a heavy collision.

The next job was to build the front end, and was duly started by fitting the wishbones, kingpins and servo mounting plate and this is where my first problem occurred. The servo mounting plate is screwed to three aluminium collars which are in turn screwed to the chassis. Although the shortest countersunk screws are used from both sides of the collar, they are both a fraction too long and hit one another inside the collar before the collar has been tightly screwed to the chassis or top plate.



To cure this problem a small amount of material can be machined from the bottom of each thread or a small washer can be placed between the collar and the chassis. As a starting point I placed one of the white M3 washers under the alloy collars which support the front of the wishbones which I estimate gives 4 degrees of positive caster.

The next awkward job is to fit the antiroll bar which is clamped to the chassis under the front body posts and attached to the wishbones by an 'O' ring and metal peg. The simplest way to attach the 'O' ring and peg is to first put the 'O' ring on the antiroll bar and locate it under the hole in the wishbone. Thread a fine piece of wire or twine through the hole from the top, pass it through the 'O' ring then back through the wishbone and secured with the metal peg.

Having fitted the servo to the servo mounting plate via the supplied posts, the servo saver is assembled. Before I mention the servo saver, the servo mounting plate



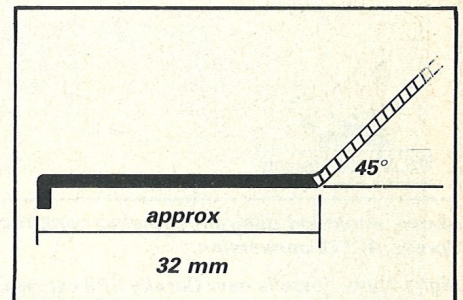
The Schumacher SPC car as supplied.

has holes drilled in it for the posts for the fitting of a Futaba 132H servo but another plate is supplied, undrilled for you to fit a different servo.

The servo saver is a two piece affair with a spring and comes with attachments to fit four of the leading servo brands. The next few words are simply a personal view and should be taken as such. Having to fit and build the servo saver, I found was a bit tiddly considering that I am used to running one of the pre-built kimbro units. According to Schumacher the spring on a kimbro servo saver is a bit on the strong side and yes, doing back to back tests on them, I must agree, but I have never damaged any servo gears using one so I used my Kimbro for the track test.

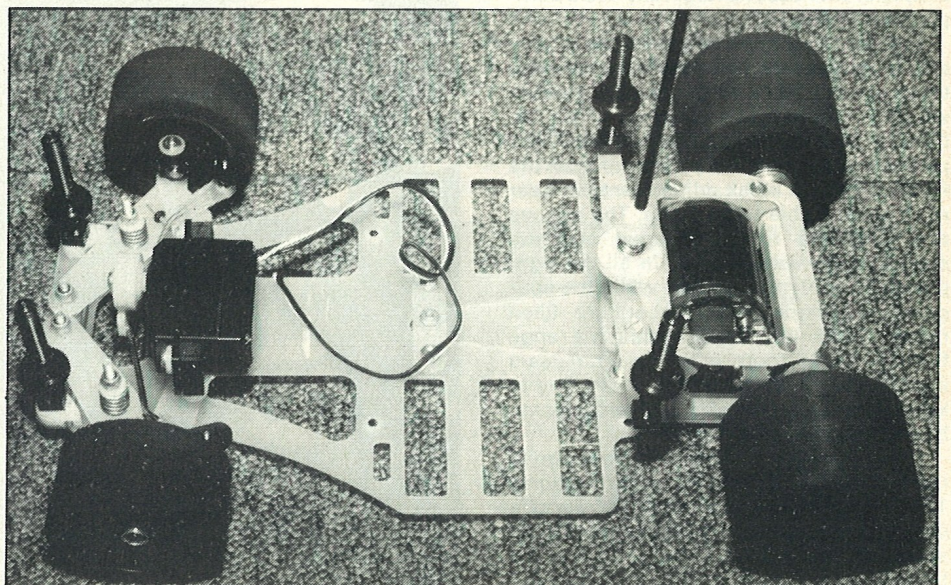
The next job after fitting the steering arms and live axles is to fit your steering linkages which must be first bent at the correct point and to the correct angle. Assuming you are using a 132H servo like myself, with the ball joint fitted in the middle hole

of the servo arm, the following bend in the linkage was made.

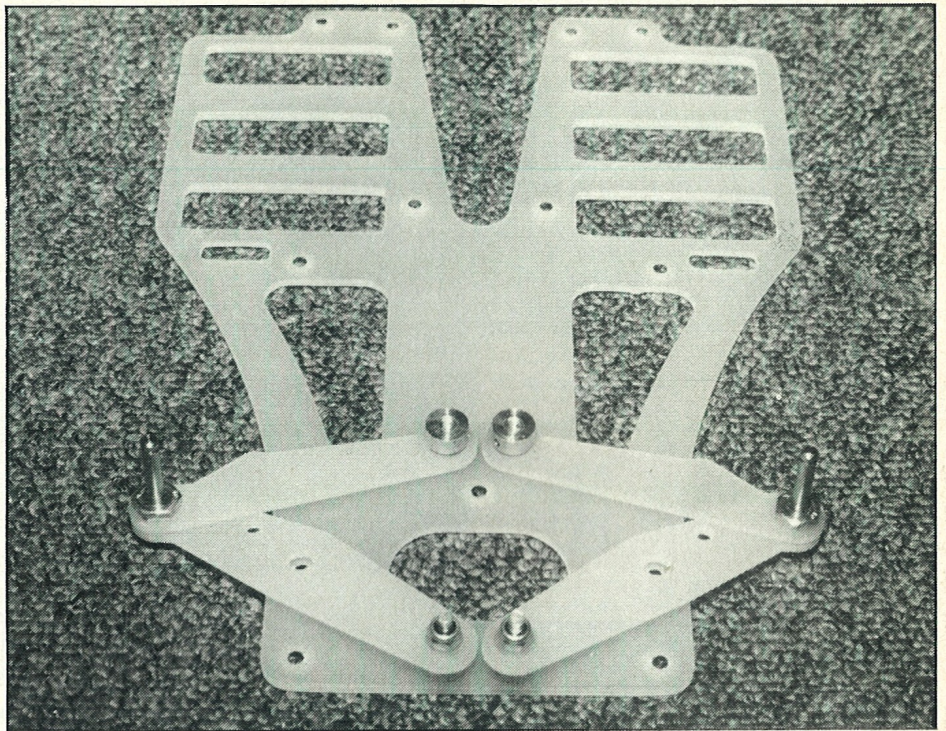
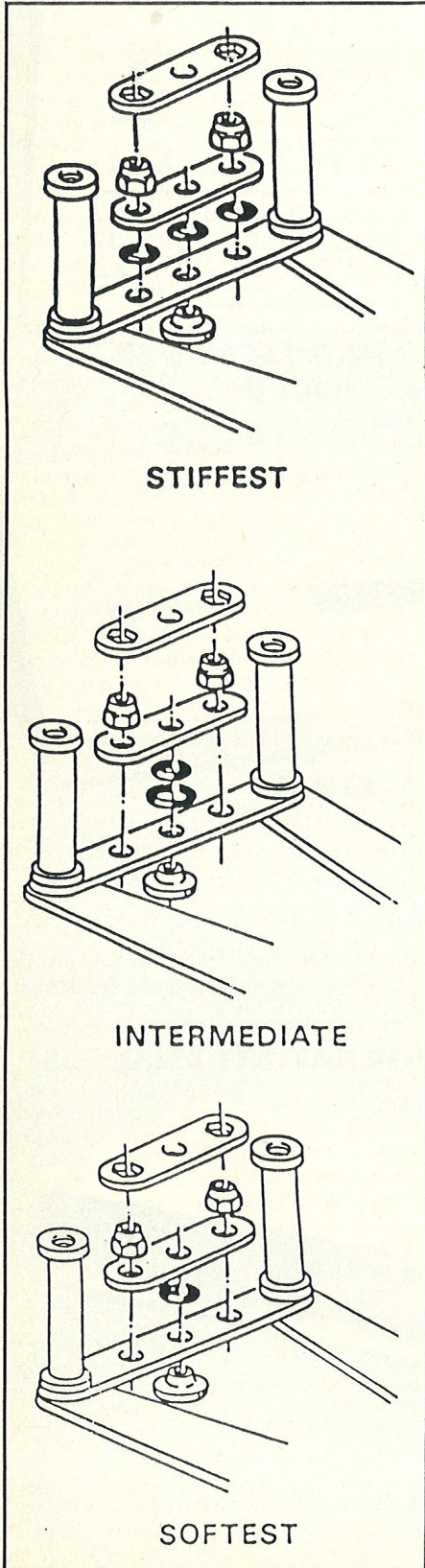


Moving onto the rear end, I decided to fit the motor mount and torque tube assembly to the T piece. My second but final gripe of the building was the fit of the torque tube in the ride height adjuster cams and their subsequent fit into their mounts because its all a very tight fit and a few hours

The completed Schumacher SPC rolling chassis including servo and motor.



patient work with some fine sandpaper was needed to remove this tightness. It is best if you have one end of the torque tube to be a free fit in its ride height cam and I mean free, not loose so that the chance of a tweak is alleviated with a rear end collision. Another tip is to earth each side of the motor pod (via the two rear damper plate screws) to each side of the torque tube (via the two large C clips) to prevent any radio problems.



Front end of the Schumacher SPC chassis with two piece wishbones attached.

The front of the T piece is then bolted rigidly to the chassis and once the front brace has been bolted to the T piece, I always used to superglue it to make sure it never came loose.

The rear T piece brace is then clamped to the chassis beneath the two remaining rear shaker plate posts and the T piece adjustment set-up can be finished. By varying the position of the 'O' rings, varying degrees of rear roll stiffness can be "dialed" in but for best results with the SPC car, Team Schumnacher recommend a soft set-up, and this is best achieved using two silicone washers, one on either side of the cone washer and this was the mode used by Phil

to become the European Champion.

The final job of constructing the rolling chassis is to fit the rear body post and damper post support and to attach the damper plate. Since the damping area is much smaller between the damper plate and the damper washers, compared to those on the RC1ZL, I used the thick Schumacher damping fluid on both washers although this is not supplied in the kit. The rear axle is then fitted and there you have it, one rolling chassis. All that remains is to fit the radio gear, set the tweak and hit the track and you can read the results of that in next months issue, but so far all looks good!

The rear end of the SPC car with T Piece and torque tube arrangement in place.

