

Tamiya's Mini Cooper

Mini Maniac Ian Young Has Some Fun With Tamiya's 1/10 Electric Mini Cooper!



Every so often a car captures people's imagination and becomes an automotive 'classic'. Well, the Mini is one such car, and now a 1/10 scale r/c replica of the ever popular Alec Issigonis design is available from Tamiya.

1995 looks set to be the year of the Mini, following the phenomenal response to the launch of Tamiya's Mini and the introduction of the UK based racing series especially for them.

The announcement of Tamiya's 1/10 Mini Cooper was greeted with much enthusiasm, both by the modelling press and Mini fans of all ages! The little front wheel drive car (just like the real

thing) has captured the hearts of magazine writers around the World, perhaps reminiscing about the Mini which gave them so much fun. Both myself and the Editor fall into this category, having owned and rallied Minis back in the '70s. The advent of this terrific little kit brought fond memories flooding back, but would it handle just like the real thing?

Tamiya have a knack of producing kits that are very easy to build, handle well and yet still capture the looks of the real car. This Mini is a superb example of their skill, looking every inch a

Mini Cooper, conjuring up images of three little Minis speeding through the back streets of Turin (take a look at that classic film 'The Italian Job' and you'll see just what I mean!).

Making A Mini!

So, how does Tamiya's Mini go together? As usual, Tamiya have produced a superb and easy

to follow set of instructions that leave little or no doubt as to how the parts go together. Stage 1 begins the construction with the assembly of the large differential gear, which will be familiar to those used to building Tamiya cars. The assembly is straightforward, taking just a matter of minutes to complete.

The next two stages cover the assembly of the gear casing and the fitting of the differential, and once again this is very straightforward. Stage 4 describes the addition of the pinion to the motor using the special spacer provided to ensure correct alignment of the pinion. The motor supplied in the kit is the standard 540 item as found in most Tamiya kits, but a Tamiya do offer an Acto-Power Touring Special Motor as an optional accessory.

Once the pinion is in

place, the motor is added to the transmission casing, but be sure to use the correct holes on the casing's side. Tamiya very sensibly provide an illustration to clarify this point, making it quite clear which holes to use, the other holes are only used when alternative pinions are used to replace the one provided in the kit.

The remainder of the gearbox assembly is dealt with in stage 5, with the addition of the spur and idler gears along with the associated cover.

Suspension

The suspension on the Mini is somewhat rudimentary

(much like the full size car!), consisting of an unusual system that incorporates 'hairgrip' type springs rather than coils. These springs are fitted to the stubby lower wishbones and then locate against the gearbox casing, providing the leverage for the suspension. You have to be sure to fit the correct springs to the appropriate sides, and to this end the springs are colour coded to identify the left and right handed items. The suspension assembled well, but at this point, with the system being so different to any I had encountered before, I had my doubts over how effective it would be.

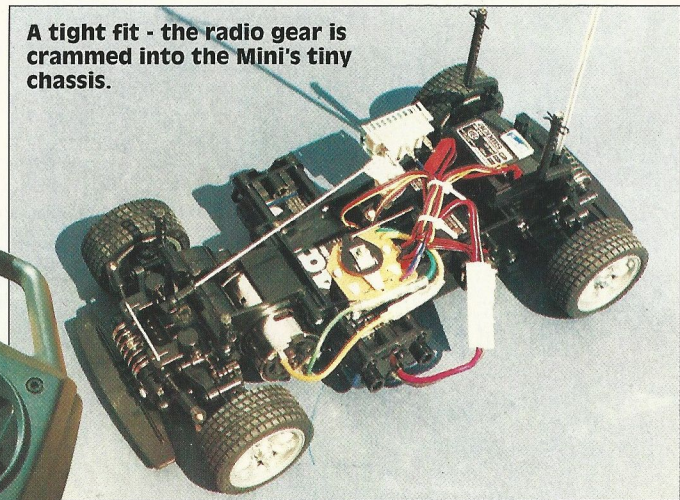
Stage 6 deals with the addition of the front axles, upper suspension links and the drive shafts to the gearbox casing, quickly leading to the assembly and installation of the front hubs and axles to the gearbox casing.

This brought me to stage 9, where the steering linkage is attached to the assembly. Apart from adding the suspension damper, this completes the assembly work on the front gearbox section before it is added to the chassis.

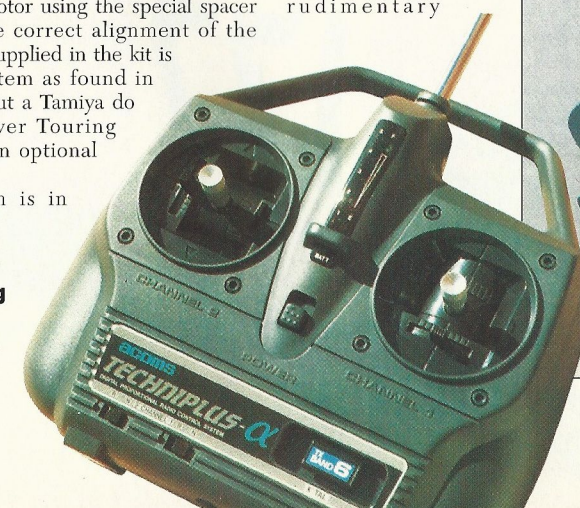
By now an hour had passed by, and I was well on the way to seeing the Mini's chassis completed. Stages 11 and 12 describe the construction of the rear section of the chassis and

completes the two suspension units (apart from adding the dampers) before adding them to the main chassis.

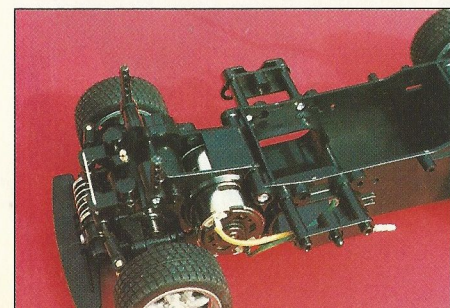
The chassis is a simple, two part 'coffin' affair, and is more of a spacer between the two suspension units. The dampers too are very simple, even to the point of being crude, relying on the friction between the metal piston and the



A tight fit - the radio gear is crammed into the Mini's tiny chassis.



Beam me up Scotty! The futuristic styling of the Acoms Techniplus transmitter.



The front end of the Mini's chassis, showing the transverse damper, the ultra short wishbones and those lovely treaded tyres fitted to Minilite replica wheels.

rubber shock liner for their damping, rather than oil as in conventional dampers. I wasn't overly enamoured with this set up, so after building the first unit as per the instructions, I decided to fill the units with grease instead of just lubricating the piston. This worked a little better, but at some point I think I'll try fitting conventional dampers to see how much difference they make to the handling of the car.

The reassembled dampers were added to the front and rear suspension units, at which point the assembly of the chassis was just about complete apart from the addition of the wheels, tyres and the installation of the radio gear, the next stage in the instructions.

Before I move on to talk about the radio installation, I should perhaps just touch on the fitting of the wheels to the hubs. I wasn't overly impressed with the method of fixing the wheels to the hubs, which involves the use of a tiny metal drive dog that has to be slotted through the hub pin before locating in the plastic boss (Part C6). Whilst this may be a satisfactory way of locating the wheels, it's a very fiddly process, and certainly not one that I would want to perform anywhere else other than on a work bench, and definitely not at a race circuit with cold hands where I think there's more than a fair chance of the tiny drive dog being lost!

Choosing A Radio

Two basic options are suggested for the radio gear to be used in the Mini, either the Tamiya Adspec system with its CPR unit, or the more conventional (and cheaper) Acorns Techniplus 2 channel set, with conventional servos and futuristically styled transmitter.

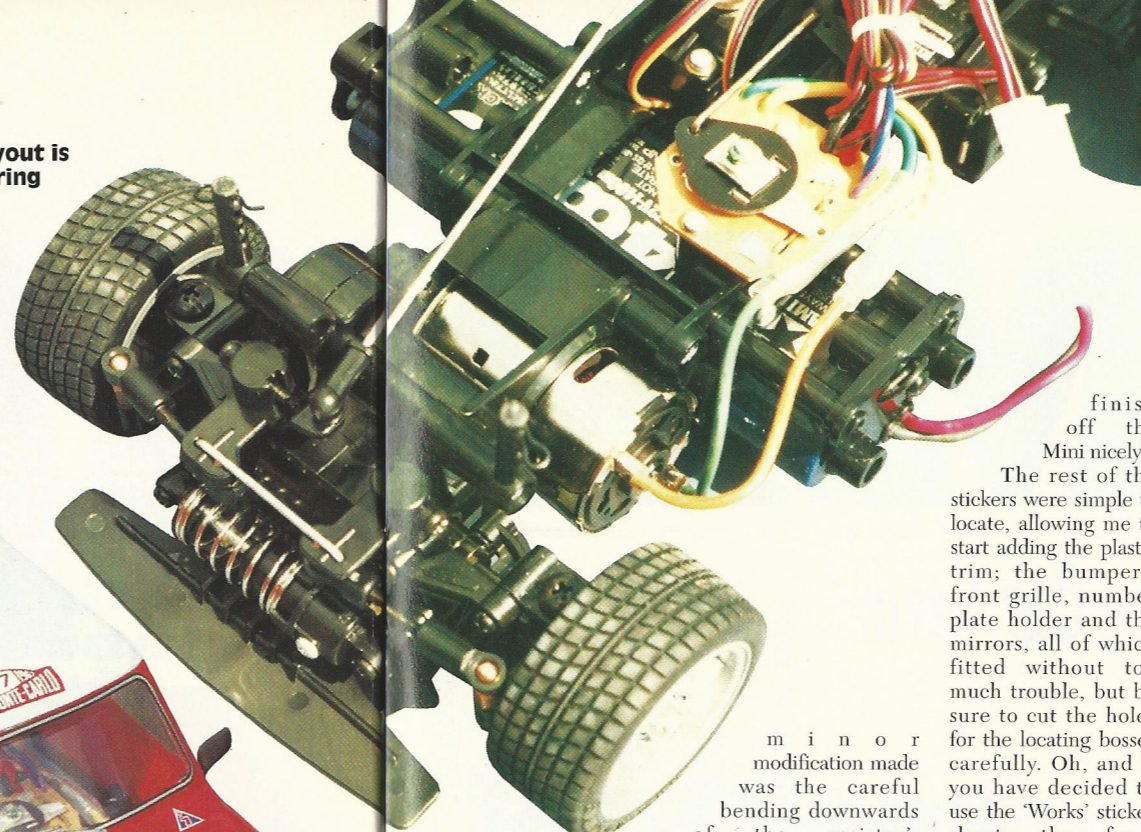
I used the latest Acorns Techniplus system for my Mini, and consequently moved on

One of the more unusual features of the radio gear's layout is the very long push rod between the rear mounted steering servo and the steering linkage. The car was fitted and run with the standard speed rotary controller supplied in the kit

to refer to the additional radio installation sheet supplied with the speed controller (the kit's main instruction booklet only deals with the Tamiya Adspec system).

Space on this tiny little car is at a premium to say the least, but the way that Tamiya's designers have crammed the radio equipment into the Mini is masterly, although 'crammed' is the word. The servos were installed in the chassis first, after having fitted the mounting blocks and set the servos to their neutral position by trial testing the system with a battery. Next it was the turn of the rotary speed controller and resistor. The appropriate connections were made between the resistor and the controller (the instructions are quite clear on this point), and then added to the chassis.

The fit of the speed control's board is quite tight, but it does fit after having manoeuvred some of the wires around. The resistor was first fitted to the left hand side of the chassis, as described in the instructions, but was later moved across to the right hand side where there is a duplicate set of mounting holes. The reason behind this change was the proximity of the battery connector wires to the resistor. I was concerned that the hot resistor could possibly come into contact with the wires, melting them and creating all sorts of problems. The only other



finish off the Mini nicely!

The rest of the stickers were simple to locate, allowing me to start adding the plastic trim; the bumpers, front grille, number plate holder and the mirrors, all of which fitted without too much trouble, but be sure to cut the holes for the locating bosses carefully. Oh, and if you have decided to use the 'Works' sticker sheet, the front number plate holder becomes redundant as the sticker for the number plate goes on the bonnet.

The last few stickers were applied, the battery pack was charged up, and at last the Mini Cooper was ready to roll (figuratively speaking that is!).

minor modification made was the careful bending downwards of the resistor's connections so that they had no chance of coming into contact with the metal steering linkage.

After completing these minor modifications, the receiver and the on/off switch were added, using the double sided tape provided. This, as a system is fine, but both of the items in question were to be mounted on the outside of the main chassis tub, raising the question of whether they would be adequately protected during use, we would just have to wait and see.

The connecting the motor wires to the speed control's and the installation of the battery pack completed the fitting of the radio gear in the Mini.

Finishing Off

The Mini was now just about complete, all that was left to do was trim, paint and decorate the clear lexan body shell, which it must be said, is the best representation of a Mini that I and everyone else who has seen it, has ever seen. When it comes to Minis, there is traditionally only the one scheme to choose, the Works Rally Team red, with a white roof and black wheel arches. To compliment cars painted in such a scheme, Tamiya have released a Hop Up Options Works Team sticker sheet (code number 53213) to enable builders of the Mini Cooper to turn their Mini into an authentic replica of a Works rally car of the '60s.

The sticker sheet also includes a set of markings for the Cooper Car Co racing cars, plus various other stickers such as a Union Jack for the bonnet and chequered bonnet stripes.

The shell was trimmed and masked off prior to applying the paint, and to this end, Tamiya provide a set of neat masks for the window apertures. Once the basic red, white and black had been applied, I started work on the stickers and plastic trim items. I elected to hand paint the chrome trim around the headlamps and rear lights, along with the rear lights themselves, rather than using the stickers provided.

The trickiest of the stickers to apply are those that run around the periphery of the windows to represent the window rubbers, it taking several attempts to get them to sit in the correct position. Do take some time with these, because they do

Fun And Games!

Fun is definitely the Mini Cooper's middle name! The Mini is an excellent fun car, with definite performance car characteristics. My initial fears over the unusual suspension set up were soon dispelled, as it handles really well. Tamiya's Mini Cooper certainly doesn't handle like the real thing, as it has a distinct tendency to oversteer rather than understeer, which actually makes it terrific fun to drive! A quick lift on the throttle entering a turn results in a positive response to the steering, making the little Mini great fun to drive on carpet, even with the kit's treaded tyres. As a matter of fact, Jonty the Ed reckons that driving the Mini indoors on carpet is a real blast, and even more fun than his 1/12 car! There is only one thing missing, and that's the induction noise of a pair of 11/2" SU carbs, mixed with the whine of a straight cut gearbox and gravel ricocheting off the floorpan... (those were the days!).

As for the dampers, I will certainly be looking into the logistics of replacing them with conventional oil filled items. Having said that, the characteristics of the Mini are those of a 'fun' car, which is what it's all about, and one mustn't forget that this terrific wee beastie retails for just £80!

Altogether, the fun factor of Tamiya's Mini is enormous because it's similar in many ways to the full size car: It handles well, gets you out of trouble when you need it, and is ideally suited to the beginner, in terms of both its ease of construction and driving characteristics. Having said that, how many will stay on the shelf as display models? This kit is certainly going to go

down well with Mini fans everywhere!

As always, I would suggest replacing the standard kit's nylon bearings with proper ballraces to reduce rolling resistance and to remove some of the slop out of the steering, and for those who are looking at racing the Mini Cooper, Tamiya are now running a Championship Series specifically for the little Mini, and any modifications will, of course, have to conform to the rules and regulations laid down for the Class.

For details of the '95 Mini Cup dates, refer to the April issue of RRC (page 29). For entry details, contact Mr Colin Spinner at the address below.

Tamiya's Mini Cooper is distributed in the UK by: Richard Kohnstam Ltd, 13-15a High Street, Hemel Hempstead, Herts. HP1 3AD., and is available from Tamiya stockists everywhere.



Tamiya's 'Hop-Up Options' sticker sheet as used on the review car

