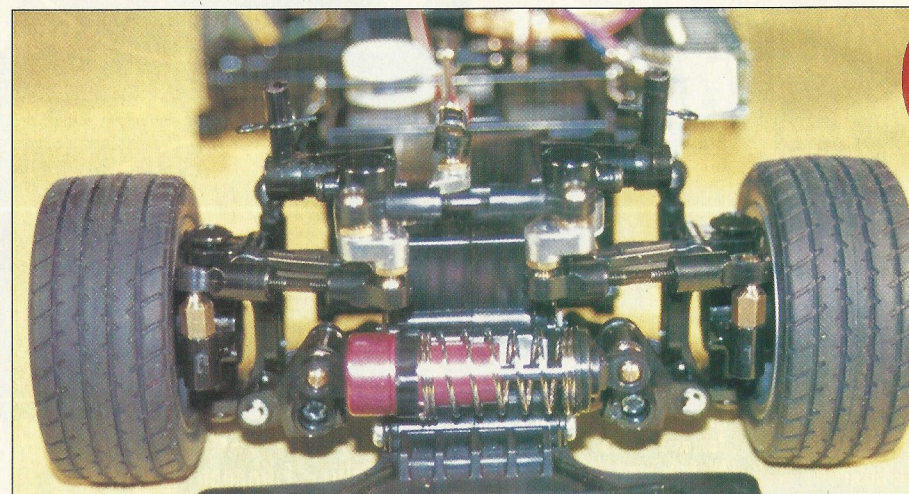


Tamiya Euro-Cup Mazda Eunos

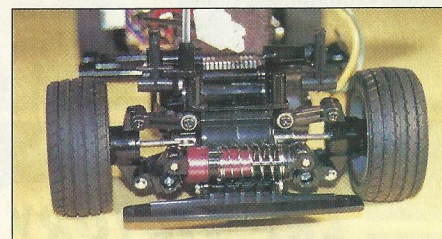
Reviewed by John Cheyne

Since Tamiya launched the Mini Cooper on an unsuspecting Europe at the Nurnberg Toy Fair back in February 1995, their M-Series cars have been a tremendous success. After the standard Mini Cooper came the Super Monte Carlo version, which was closely followed by the Fiat Abarth, the Renault Alpine and the VW Beetle. Up until now Tamiya's bodyshell choices

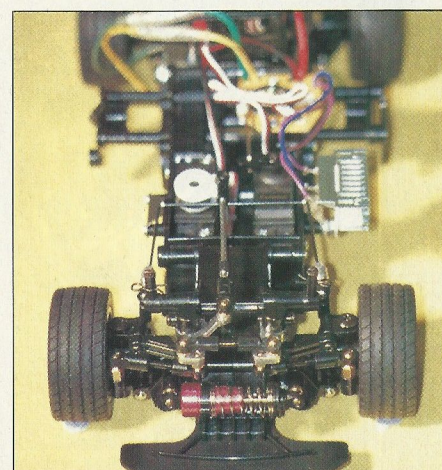
were firmly based amongst retro classics, but the launch of the Mazda Eunos (that's an MX-5 to you and me) offers us our first taste of modern M-chassis fun. The very fact that the MX-5 is a modern sports car should give it a slight aerodynamic advantage over the other M-chassis cars. Certainly it will cause less drag than the beautiful but boxy Mini, but it's superiority over



Above: From the front:- Pink Alloy Shocks and the Alloy Steering Bell Cranks— Very racy.



From the rear:- U/J Drive Shafts. Another Pink Shock Absorber.



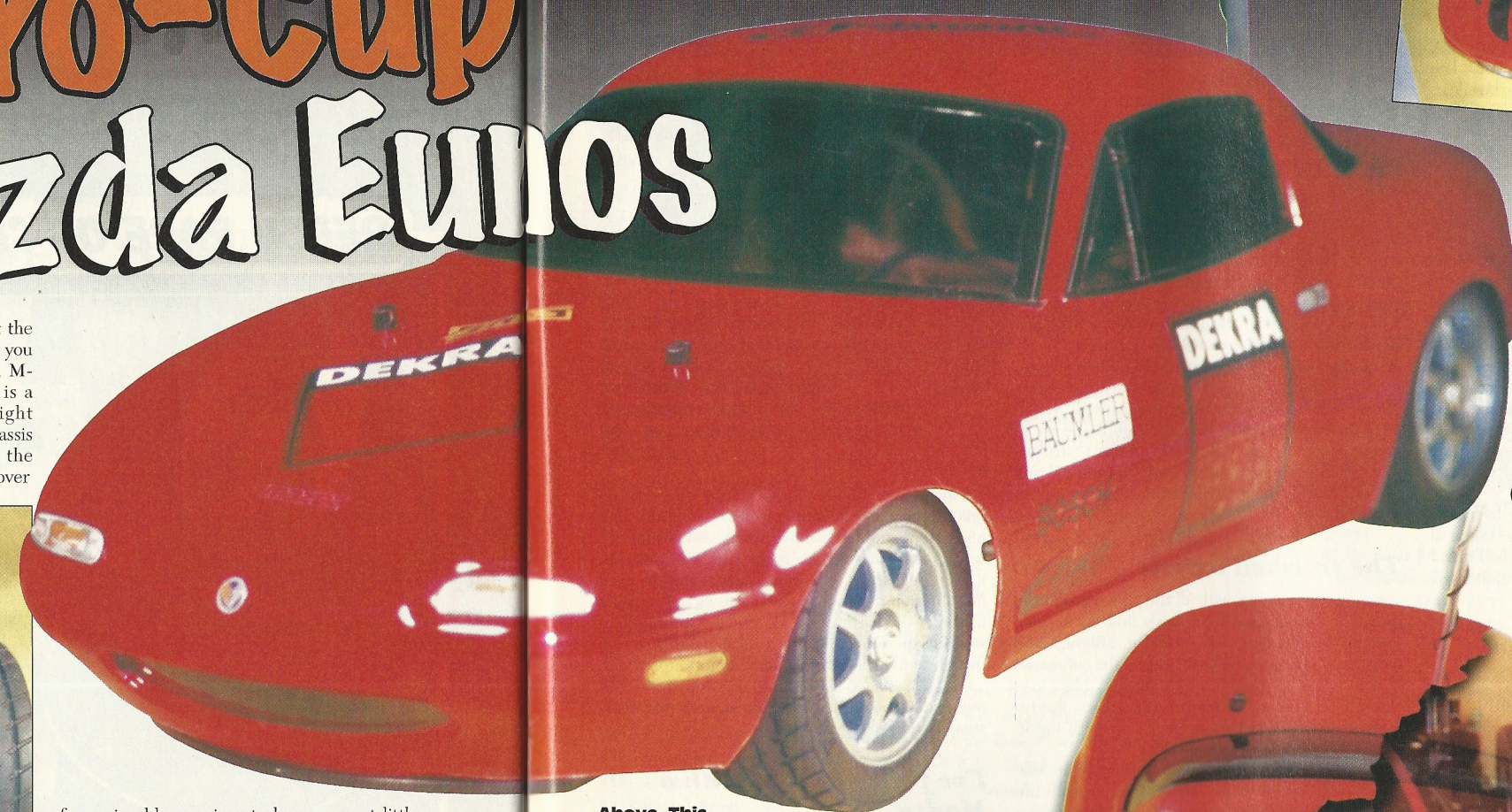
Ready for Euro-cup glory.

the more sleek Renault Alpine may be negligible. One thing is for sure however...it looks gorgeous! During our testing at Ashby the whole RRC team agreed that the accuracy of the shell and the realism of the chrome look 7 spoke wheels made the Mazda one of Tamiya's best looking models yet.

The standard spec

If you've read any of the M-Chassis reviews that have been published in previous issues of RRC (Mini-July '95, Abarth April '96 or VW Beetle October '96) then you should be more than familiar with the layout of the MX-5. The car is built around a basic sandwich chassis that the front and rear ends bolt onto.

The Mazda is the longer wheel base version and is rear wheel drive. The power is delivered from the supplied 540 motor via dog bone drive shafts. Up the front there's a nicely designed steering assembly which features a simple bent wire link and an unusually long steering rod. Both ends are fitted with a horizontally positioned friction damper which works in unison with two small tension springs which attach to the lower suspension arms. The whole package goes together beautifully, and any builder should be able to knock an M-chassis together in just a few hours and even a beginner should not take longer than a



few enjoyable evenings to have a smart little racer all ready to go.

Are you ready to race?

Once built the Mazda just cries out to be raced, so the obvious next step is to enter the Tamiya Euro-Cup. "Hang on a minute though", I here you cry, "won't I need lots of Hop-Ups fitted before I can race in the Euro-Cup, I don't want to make a fool of myself!"

The simple answer is..... no! The Euro-Cup series is all about fun and really hop-ups aren't that important. Any racer who spends his or her spare time practising will always be faster than a racer who spends all their time buying hop-ups. Don't forget Euro-Cup rules specify a standard 540 motor and a mechanical speedo, so top speeds are fairly limited anyway. The real beauty of the M-Series races is how evenly matched the cars are, and how often it's the best driver who wins rather than the racer with the most expensive car. Having said that however, all the hop-ups available are designed to improve the basic performance of the car, so just how well do they work and which ones make the most difference...

Race Trek : The search for speed Ballraces: (Tam53206)

A set of Tamiya ballraces is probably the most effective hop-up you can buy. The standard plastic bushings that come with the kit are perfectly adequate, but they do slow the car down and increase battery drain due to the amount of friction they cause. A set of Stainless Steel ballraces will smooth everything out and what's more, included with the pack comes two lightweight hollow gear shafts to replace the heavier solid ones that come with the kit.

Above: This has to be the best looking M-chassis yet.

VERDICT: They definitely make a difference. This should be your first investment!!

Aluminium steering set: (Tam 53253)

This steering set consists of two aluminium steering arms to replace the plastic ones in the kit, and a ball jointed adjustable steering linkage to replace the kit supplied bent wire version. The upgraded steering set provides the car with more positive and accurate handling as it cuts out much of the slop that quickly works into the kit supplied parts.

VERDICT: This set does improve the steering assembly and as well as allowing more adjustments to be made and cutting out slop, and the Aluminium parts look great and certainly improved my confidence in the pits!

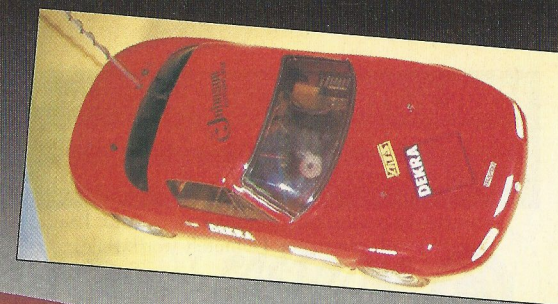
Hi Torque Servo Saver: (Tam 50473)

The kit servo saver is not much more than a plastic spring which is quite weak, which can make the steering very sloppy, the High Torque Saver has a steel band which stiffens the outer gear so all the steering servo movement goes to the wheels.

VERDICT: This is a major improvement to the handling of any "M" chassis. Steering is sharper and very positive. Well worth the cost.

Turnbuckle Steering Rod: (Tam 53246)

The Turnbuckle replaces the kit wire rod from the steering servo to the bell cranks. It's made from stainless steel, so is much stronger, and has



Love is a Red Mazda.

left and right-hand threads cut on it, allowing fine adjustments to be made to the steering neutral point without removing the link.

VERDICT: Adjustment of the neutral point was very easy, also as we found we needed to move the steering servo when we fitted the front Anti-roll bar, and the standard link would not fit. Looks great too.

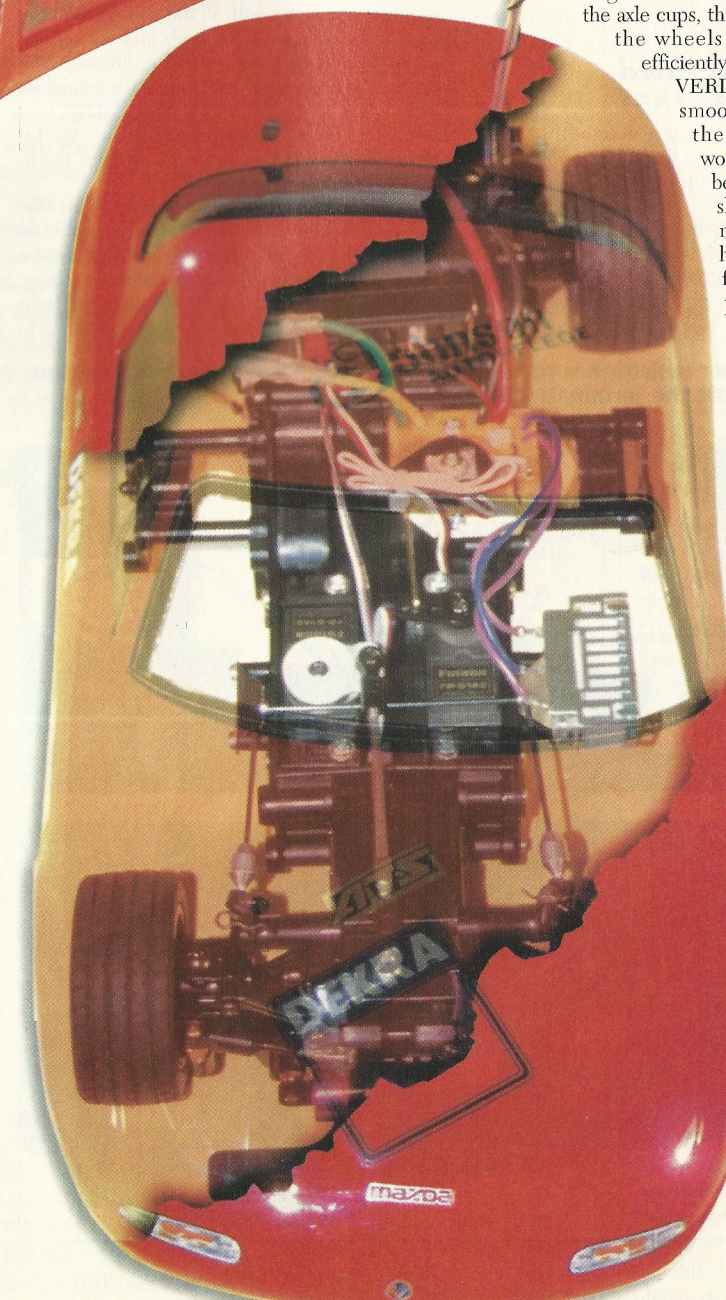
Universal Shaft set: (Tam 53205)

The universal shafts make both the rear dog bone drive shafts and the rear wheel axles redundant. Without the dog bones moving freely around inside the axle cups, the power is delivered to the wheels more smoothly and efficiently.

VERDICT: Unless you drive smoothly and consistently the universal shaft set won't offer you enormous benefits. However, for a skilful driver looking for more consistent handling and reduced friction, this set does provide an edge over the opposition.

Alloy motor mount: (Tam 53241)

During the extreme demands of R/C racing, motors can get very hot. A motor that runs at too high a temperature will be less efficient in the short term, and in the long term will wear out much quicker (Ed's note: The kit Mabuchi motor are very susceptible to heat damage). The Alloy motor mount protects the plastic motor case from damage from an overheating motor and dissipates the heat via an extremely smart looking heat sink which sticks out of the



top of the gear case, allowing the motor to run cooler and more efficiently.

VERDICT: Looks great, works well, and will greatly improve the performance and life expectancy of your motor. Definitely worthwhile.

Front anti-roll bar: (Tam 53239)

Designed to stabilise the car and prevent too much roll during heavy cornering. The stabiliser rod actually comes with the standard kit, a longer rod is needed for the increased wheel base of the car. So discard the stabiliser rod that comes with the hop-up kit if you are fitting it to a M-02M chassis (this rod fits the shorter Mini chassis). The hop-up kit does contain the essential mounting brackets ball joints and threaded rods however. We did find that the roll bar would not quite fit as the instructions suggest, this may well be because the Mazda is a much later kit. All we had to do was space the speed controller resistor away from the "Tub" and turn the mounting brackets around, not a major problem.

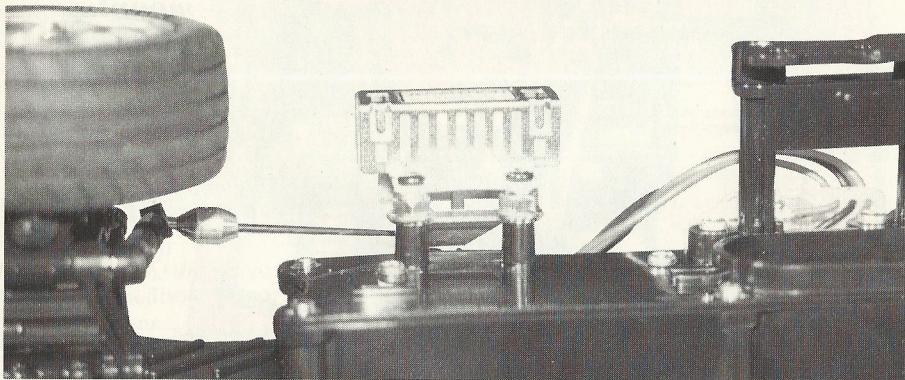
VERDICT: Does make the car easier to handle at speed, allowing tight corners to be taken at greater speed and on a tighter line. A good driver will make this advantage count and a beginner will lose control less often.

Aluminium oil filled shocks:(Tam 53155)

Designed to work far more smoothly and efficiently than the foam filled friction dampers that come as standard with the kit. Will improve overall handling especially on tracks with a fairly uneven surface or especially tight tracks.

VERDICT: Much more efficient dampers than those supplied with the kit. This Hop-Up does improve the cars handling. They look extremely cool too, as the shock barrels are pink anodised

The speed controller resistor has to be spaced away from the tub when the front roll bar is fitted, else the terminals will "short" on the bar.



**Moulding by
Tamiya. Styling
by RRC**



aluminium. A must for any pit lane poseur!!

Lots of Practice and careful maintenance! (Tam DIY 1)

This hop-up won't cost you much money but it will require you to spend lots of your valuable time. If you don't believe that practice and careful preparation can win you races, just try giving Brian Kinwald/Masami/Craig Drescher a standard car and find yourself a hopped-up car that will allow you to beat them!! Take time to learn from more experienced racers, if there's a corner you have particular problems with, watch what line the A-finalists take through it and try to copy them...only slower!! Don't forget maintenance either, a clean well adjusted car will not only perform better but will last longer and so save you cash.

The finished article

As you can imagine, with all the above goodies in place the Mazda review car was a little bit special. Overall the handling was excellent, although the lack of a spoiler and the small size of the car meant that it wanted to wander a little down Ashby's long straight. To help solve this problem, Chris the Ed suggested we re-build the back end with toe-in rather than the standard toe-out.

This is done by swapping the rear up-rights side to side (ie. Left Hand upright on Right side suspension). This helped a lot and I was soon putting in some nice, smooth consistent lap times. If anything the car understeers a little as the front end doesn't allow for a lot of steering lock.



**From the top:- The
Finned Alloy Motor
Mount . High Torque
Servo Saver. Front
Anti-Roll Bar. Steering
Turnbuckle. Note the position
of the receiver, where else can you
put it??**

Personally this suits my driving style, and I would recommend any beginner to learn on a car that understeers rather than oversteers, as not only are you far less likely to lose control and spin out, but it also means that you concentrate more on good line through the corners as it's simply not possible to throw the car around too much. One problem we did experience was that I managed to snap the front bumper off during a fairly minor impact with a kerb. I managed to fix things up with a few blobs of Araldite, but this is certainly an area that really should be beefed up a bit.

I've fallen in love with a Madza

The Mazda in standard form is a great little car, in it's RRC Euro-Cup form I have fallen in love with it. The only problem is, that all the hard work is still to be done. We've spent our hard earned cash and we've built and tuned the Mazda as well as we can, but now it's a matter of practising for as many hours as possible and remembering that it's more important to enjoy yourself than to win (that goes for Man UTD supporters as well).

Standard Kit Likes:

Superb wheels
Excellent bodyshell
Easy to build
Reliable gearbox

Dislikes:

Weak front bumper
Very little room to mount standard size receiver
No racing decals supplied

RRC Euro-Cup Hop-ups TOP TEN

- 1/ Ball Bearing Set
- 2/ High Torque Servo Saver
- 3/ Low Friction Dampers
- 4/ Front Anti-roll bar
- 5/ Alloy Motor Mount
- 6/ Alloy Steering Set
- 7/ U/J Drive Shafts
- 8/ Turn Buckle Steering Rod
- 9/ S/Steel Suspension Shaft Set
- 10/ Alloy Flange Wheel Nuts

Testers Kit

Radio Futaba Attack
Servos Futaba 148
Motor Kit standard 540
Speedo Kit standard mechanical
Cells Tamiya 1400
Tyres Kit radials (S60)