

## The nuts and bolts of handling

**S**pend a little time chatting to hardcore MX-5 enthusiasts and pretty soon the A-word crops up. Alignment, they'll tell you, is the key to a sweet-handling MX-5.

What many owners probably don't realise is just how much adjustment there is in an MX-5's chassis. Camber, castor, toe, thrust angle, steering axis inclination – all these things can be adjusted, altering the feel and even the whole handling balance of the car. Which, of course, is a double-edged sword. Enthusiasts can tailor a car to their own tastes, but if the wheels aren't correctly aligned, it could cause a whole raft of handling issues.

You'd expect that an MX-5 supplied by Mazda UK for evaluation by a magazine such as *evo* would have had its alignment checked, but just to be sure we took the 2.0 Sport to Silverstone-based WRC Technologies

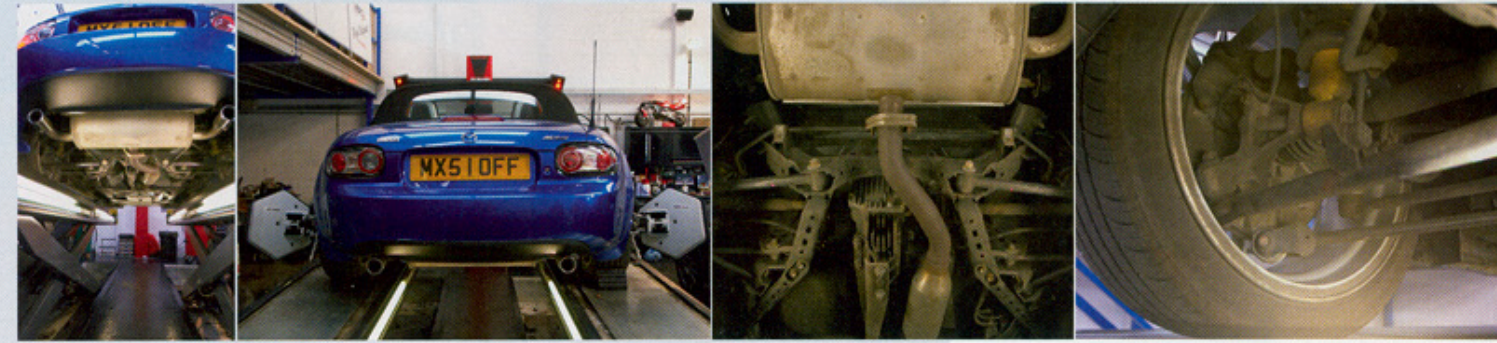
and put it on their chassis rig. WRC found that all the settings were within factory tolerances, but those tolerances are wide, and several settings were a long way off the optimum. Alignment is supposed to be checked by dealers as part of the pre-delivery inspection, but if a press car can be sent out with less than ideal chassis settings, there's a reasonable chance that regular customers' cars might also benefit from careful rechecking.

Properly set up, the 2.0 Sport felt subtly different. Most noticeably, the two ends of the car seemed more in tune with each other – there was less of the sensation of an ultra-darty front confusing a squidgy rear, and the car started to flow through corners in one natural movement. But it didn't transform it. As Jethro said, 'The car behaves more consistently. However, while geometry may help ultimate balance, it does little to correct the glassy steering, poor body control and general feeling that you're not really driving a sports car at all.' Closer, then, but still no cigar.

**Better lower?** 'It feels more like a sports car'

**M**azda seems to have acknowledged that the new MX-5 leaves something to be desired for enthusiast drivers, because its dealers already offer a set of Eibach 'sport springs' (£299 fitted) which lower the car by 35mm. Even if they didn't improve the driving experience, they certainly enhance the looks, as evidenced by David Bell's attractive 2.0i Sport in Winning Blue. Better still, driving David's car on some extremely testing cross-country roads suggests the handling is substantially improved too.

The steering feels more direct, its weighting meatier and more consistent. The primary ride (the way the car deals with the bigger bumps) feels initially firmer, but there's still quite a bit of suspension travel. Indeed, over a series of large-amplitude bumps taken at speed, body control



Below: David Bell's 2.0i Sport has lost its lofty stance thanks to Mazda-approved Eibach sport springs. Feels a lot better too. However, session on chassis rig at WRC Technologies (above) reveals alignment is outside recommended tolerances, suggesting dealer that fitted springs didn't check the geometry afterwards. Above right: MX-5's set-up is very tweakable

[Mazda MX-5s]

still feels slightly at sea, though even over the sharpest compressions it hits its bump-stops without actually bottoming out.

It does, however, feel more like a sports car than a cabriolet. Just being closer to the tarmac makes you feel much more at the centre of things rather than riding along on a platform. It also makes the car feel smaller and more wieldy.

'Body control isn't perfect,' says Jethro, 'and it still feels like it's trying to get the rear stepping out, which is a strange sensation. But the steering doesn't feel so darty and the front and rear are better matched. The real killer, though, is that lack of steering feel, which still makes you ill at ease. It's not a patch on an MR2, but it is closer

to what a sports car should be.'

We take the lowered car to WRC, just to check that the Mazda dealer that fitted the springs checked the alignment carefully. Apparently it didn't. The camber on the front wheels is half a degree different left to right, the right being outside factory tolerance. At the rear there's considerably more toe-in on the right wheel than the left, though this time both measurements are within tolerance. Though it's not actually dangerous, and it's not as far out as The Scottish Car, WRC still recommends a full four-wheel adjustment. It's a frustrating business, not least for owner David who had every right to assume his car was correctly set up.

## CONCLUSIONS

**T**he original MX-5 remains a work of genius. If it's simple rear-wheel-drive fun you want, pick up a Eunos Roadster with a slippery diff (the UK version of the mk1 MX-5 didn't have one, but all but the most basic Eunoses did), ideally on original-size wheels and tyres. If you want a more modern car with airbags and door-beams and smarter heater controls, then the mk2 updates the whole experience but keeps the fundamentals and the character largely intact.

The mk3 feels like a different car. It's quicker, better built, undoubtedly safer in a crash, better equipped and better finished. Mazda deserves lots of credit for achieving all of this with a negligible weight penalty and only moderately increased cost. But the new MX-5 feels closer to a BMW Z4 than an old MX-5. If that thought floats your boat, then buy one and you'll probably love it. Just a few notes of caution.

Firstly, if you don't fancy getting to grips with occasionally snappy oversteer when the roads are greasy, avoid the 1.8. It's a lot of little slides and one big slide waiting to happen. The 2.0 masks this trait to a large extent with its stability and traction controls. Secondly, whatever MX-5 you drive, get the wheel alignment checked. And finally, unless you intend to do some off-roading, get the car lowered. At least with the Mazdaspeed Eibach kit it looks like a sports car; it starts to feel more like one too. Our only reservation is that this really should be the standard set-up.

But although the 2.0 Sport was improved after its trip to WRC, and the lowered 2.0 was better still, for us the mk3 still ultimately lacks the wonderful intimacy, communication and fluidity of the early cars. As we said at eCoty, these are things you can't put numbers to. At the climax of its technical presentation of the new MX-5, Mazda proudly announced that it was 15 seconds faster round the old Nürburgring. But since when was the magic of an MX-5 measured by lap times? The mk3 is arguably a better product, but for us it's not a better MX-5.

■ A big thank you to Andrew Ackerman, Ashley Oliver and David Bell for providing their cars, to the MX-5 Owners Club for their assistance ([www.mx5oc.co.uk](http://www.mx5oc.co.uk)), and to WRC Technologies for the use of their chassis rig ([www.wrc-tech.co.uk](http://www.wrc-tech.co.uk))

Pictures: Andy Morgan

