

TECH: PROJECTS

AND THE WINNER IS...

A few issues ago we ran a competition to win an Eibach suspension makeover with springs, anti-roll bars and spacers, with the lucky winner having the full kit of parts fitted at Parr. Well, just to prove that people really do win these things, here's the full fitting story



Back in June we ran a competition with Eibach and Parr for a full chassis makeover, with goodies from renowned suspension manufacturers Eibach and full fitting at Porsche specialists Parr. The lucky winner was Billy Armitage, with his 2004 Porsche Boxster 986. Based up in Glasgow it is quite a drive for Billy to Parr in Crawley, but he certainly had ample opportunity to try out his suspension makeover on the way home...

Having never been into modifying his cars before, this was a whole new world for Billy. After discussions with both Eibach and Parr, Billy opted for an Eibach Pro-Kit, Pro-Spacers and Eibach Anti-Roll Bars and a date was fixed. Tying the fitting in with a trip to London for his son's wedding, the Boxster was dropped off at Parr for the week.

Parr used the time previous to the actual fitting day to run a health check on the car so no nasty surprises would be sprung on them on the day. They could see that under the car there was some corrosion on bolts and joints, which apparently is common when working on cars from Scotland. With the harsher winter weather, there is a lot

more salt used on the roads so the car can look beautiful on the outside but underneath it can be a totally different story. Luckily there was the corrosion mentioned, but no more than expected for a car of its age. Billy could breathe a sigh of relief!

The fitting day found us at Parr for 8am. Matt Woods the photographer gets straight on with the before shots, then quickly to get out of the rain, the Boxster is driven in on to the ramp. Inside Parr is rather impressive with 11 bays all filled with quality vehicles. The Boxster is tucked in next to a lovely Cayman S that is in for a Parr upgrade. Jamie Woods, the technician working on the Boxster, quickly had the wheels off. Starting work on the front first, it is a relatively simple job, the undertray is removed, then the car is lowered so Jamie can access the nuts to the top mount. He lowers the wheel hub just slightly to give himself some room to wiggle the front spring out. It is then a two man job to squeeze the new Eibach Pro-kit spring in. He hits a problem on the driver's side where the top mount is really corroded, after quite a bit of 'persuasion' the nuts undo but on removal of the top mount it is

found that the central bush, which is normally a fixed part has actually become detached. A phone call to Billy for the go ahead, and then to the suppliers, and a new one is swiftly on its way and delivered within the hour.

In the meantime Jamie cracks on with fitting the front anti-roll bar (ARB). Again this is a straightforward job, just needing to loosen the strengthening brace to give enough space to remove the bolts and then the original bar. Matt jumps in quickly to take a comparison picture. This particular Eibach ARB kit was specifically designed in the UK in response to demand for this vehicle, and is only available through exclusive dealers. The kit features a hollow front and rear bar which offers a weight saving of up to 60% compared to equivalent aftermarket ARB kits. The front bar also has the added benefit of being two times adjustable, Eibach having worked their design magic to offer this feature where the OEM version and other aftermarket front bars do not. The Eibach products are designed to be direct OEM replacement parts and as such are referred to as 'bolt on' parts. Jamie puts the new updated

Above left: Billy's Boxster as it arrived at Parr for its fit-up. Note standard ride height. Above: The parts haul as won by Billy in our 911&PW competition, which comprises of: Eibach Pro-Kit springs, Pro-Spacers and Eibach Anti-Roll Bars

Below: Typical of a car that's been on the road since 2004, there was a fair amount of corrosion to the suspension components, some of which, like a front top mount, had to be replaced





SuperPro bushes, which are included in the Eibach kit, on with lube and fits the bar. Having spoken to Billy with regards to the type of set-up he is after, the bar is set on the softer option. This gives Billy an option to stiffen the ride if so desired once he has the car at home, but as the car is mainly for road use this softer option is deemed perfect.

Then work moves onto the rear. The plan is to try and lower the hub enough to be able to work behind it but after quite a lot of time and effort, Jamie has to remove the hub as he isn't able to lower the suspension unit enough to get the spring off in situ, so the whole unit needs to come out. On the rear, the top mount access is through the boot so part of the interior has to be carefully removed. In taking the hub off the droplink bolt has seized. Jamie tries many ways to undo it, but it is seized tight so has to be broken to be removed. This is the main issue when starting any work like this. You need to be aware, particularly on older model vehicles that nuts, bolts and bushes can seize or perish and cause unexpected work and costs. Luckily Parr is able to order a droplink to arrive that day so work doesn't have to stop. As Jamie works and replaces bolts throughout the day, he sprays them with an anti-seize grease to hopefully prevent this happening again in the future. Once the suspension unit is out, the top mount is removed and the unit is placed into the spring compressor and the springs are swapped for the uprated Eibach springs. A protection wax is sprayed to give an additional barrier to the spring before being fitted back on the car. A quality powder coated polyester resin is used on all Eibach springs meaning this procedure isn't

really necessary, but it is another example of the attention to detail and thoroughness of the Parr technicians that is proven again and again throughout the day.

The new top mount for the front arrives so Jamie is able to move back to the front and finish up. After it is in place and fixed, he continues on with cleaning the hub, so there is no dirt or grit on the surface before he puts the wheel spacers on. Billy has decided on the 7mm Eibach Pro-Spacers all round. This may not sound a great deal but by increasing the Porsche's track measurement this will improve turn-in and steering feel, as well as the more obvious benefit, which by pushing the wheels out to fill the arches will further enhance the Boxster's good looks. With Pro-Spacers and wheels back on both sides Jamie can continue on with the rear. After a quick sandwich that is!

All that is left of the fitting is the last rear side which should be straightforward, but as we all know things never quite turn out like that. In this instance it was the 17mm bolt that is really corroded and Jamie literally tries every trick (and tool it seems) of the trade. With sheer persistence and a little brute force finally he loosens the bolt and the unit is out and in the spring compressor. Once the unit is back on the Boxster, the undertray is then removed and the strengthening frame loosened so Jamie can access the rear anti roll bar. Again it is a direct swap with the Eibach bar making it a very quick upgrade. Once the Pro-Spacers and the wheels are back on it is time for a test drive. This is to ensure there are no knocking noises and that the car handles as expected. Once Jamie is satisfied the Boxster is brought back in for

Matt to take his 'after' shots, as the geometry set up is booked to be done the following day.

Having spoken to Billy about how he wanted to use the car and his expectations from it, it was decided that the Parr fast road geometry set up would be used. This has been designed for, as the name suggests, fast road use and the occasional track day. By changing the camber, castor and toe settings better grip levels are achieved on turn in, cornering and braking. An additional bonus is improved tyre wear. The set up can take 2-3 hours, even longer if the vehicle has ride height adjustable suspension. It starts with a road test, which the Boxster has already had, then is put on the designated geometry ramp. A visual check is made before they start to make sure there are no worn bushes/components, and if there are these are replaced first. Lawrence Stockwell from Parr says: "The importance with a geometry set up is accuracy and ensuring what you are working with is sound. We use our Beissbarth wheel alignment system to then record the current settings and then adjust to achieve our target settings. After this process is complete we then road test again to ensure all is well and the steering angle is correct."

So the job is complete, and when Billy arrived to collect his car he was delighted with the Boxster's transformation. **PW**

Feedback from Billy

'Just a short note just to say thank you, on the long journey home the car was great, feels much smoother and a much better ride overall, couldn't be more happier, thanks again'

Above left to right: Life is so much easier with a ramp! Removing the old anti-roll bar. New Eibach spring in position

CONTACT

Parr,
parr-uk.co.uk
Thanks to Parr for fitting and setting up Billy's suspension kit

Eibach
eibach.com
And thanks to Eibach for putting up such a good prize. With Eibach springs fitted to many of the 911&PW fleet, we can vouch for the quality

Below: Stubborn bolts require heating up to release them. Copious amounts of copperslip used for reassembly, so hopefully this won't happen in the future. Boxster fitted and set-up. Note lower ride height. Job done!

