

Super Pro Golf!

Project 7.5R already benefits from Ohlins suspension, which Simon Harper describes as the best modification he's ever made to a car. So, could he improve the handling still further? Simon takes up the story.....

WITH THE OHLINS suspension set-up (see the January 2018 issue) my Golf R not only handles much better, but is also more comfortable than the standard car. It's quite remarkable what Ohlins has achieved with its road and track kit, but someone on an internet forum with the same suspension said that the R could be improved still further. They suggested that SuperPro lower control arms (usually referred to as wishbones) and a rear anti-roll bar would improve the handling even further.

I didn't know much about SuperPro so started investigating. An Australian company with a strong link to motorsport, SuperPro's strapline is 'developed for the road, proven on the track'. I had concerns, though, that fitting control arms with polyurethane bushes and a bigger rear anti-roll bar might make my Golf R too harsh as a daily driver. Project 7.5R has always been about an OEM+ approach, so I was cautious.

I had previously tried another supplier's dogbone insert in the rear engine mount and the increase in NVH (noise, vibration

and harshness) was so bad that I took it off almost immediately. Interestingly, SuperPro have done some testing of dogbone inserts on the Mk 7 Golf and also dismissed it as being too harsh. They only offer a full set of specially designed engine mounts for this car, although they have found that dogbone inserts do work quite well on earlier Golfs.

Justyn Potter at Aurok, the specialist who had fitted the Ohlins suspension, reassured me when I spoke to him. He said that SuperPro had a good reputation and he was confident that fitting the lower control



arms and a larger rear anti-roll bar would work well with the Ohlins suspension.

The SuperPro lower control arms are not only made of lightweight alloy but are of different design to the standard wishbones. They feature a polyurethane front bush and a Duroball rear mount. The polyurethane front bush reduces flex under load transfer when cornering, but it's the Duroball rear mount where the real magic happens. It offers a free pivoting action throughout the range of arm movement. It is mounted in polyurethane for shock absorption and this provides precision along with the refinement needed for road use. The SuperPro lower control arms also offer more negative camber and an increase in caster to give better steering feel and weight.

Polyurethane is normally associated with an increase in NVH, but the unique blend of raw materials used by SuperPro means that they're no harsher than standard rubber bushes. SuperPro bushes have a lot less flex, though, than rubber ones and so hold the suspension components firmly in place, as well as being a lot less prone to wear and so last a good deal longer.

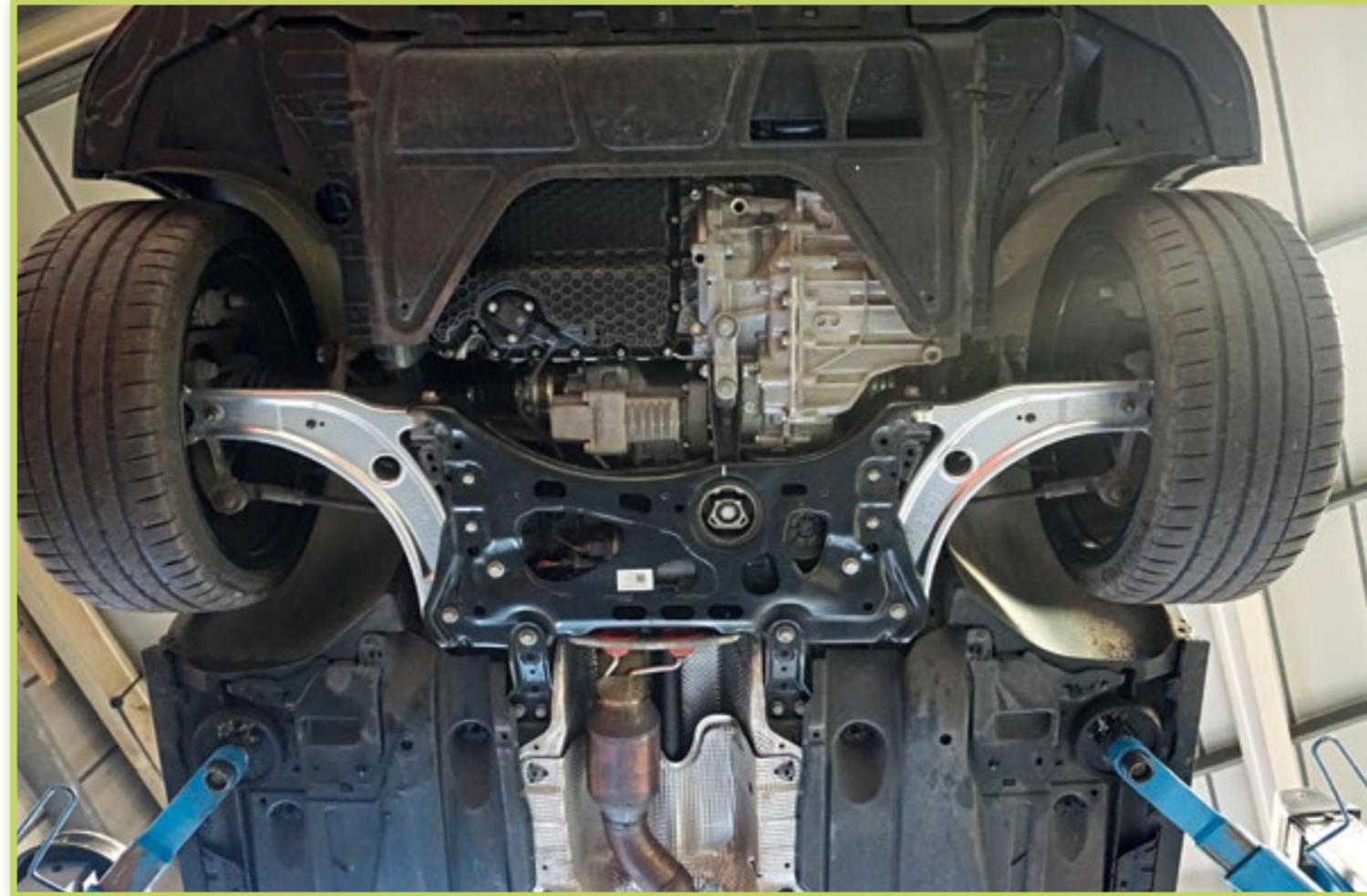
One of the problems with a Haldex



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four-wheel drive car like the Golf R is that when approaching the limit of grip it wants to push on at the front, commonly referred to as understeer. I spoke to Justyn Potter at Aurok and Richard Fearn from SuperPro and they both recommended a 24 mm rear anti-roll bar to stiffen the rear of the car.

The principle is that a stiffer rear anti-roll bar encourages the car to rotate more around the front axle, although it's not a good idea to make the car too stiff at the back with an even thicker anti-roll bar because then it would have a tendency to rotate too much – commonly referred to as oversteer. Richard said that it was unwise to do anything more to upgrade at the front, as it would negate the effect



of the larger anti-roll bar at the rear.

Dialling out the inherent understeer seemed like a good idea, but I certainly didn't want to go too far the other way and create an oversteering monster. I have some experience of powerful rear-wheel drive cars from another German manufacturer and what was considered 'agile and responsive' on a dry road soon became truly frightening on a slippery road. They were very stiff at the rear and constantly wanted to throw you into the nearest hedge, given half a chance!

So, what does the R feel like with the SuperPro bits on? In a word, Fabulous!

The straight-line stability is much improved and there's significantly better steering feel. The greater propensity for the steering to self-centre on corner exit makes the car feel more sporty. There's a tightness to the set-up, but it's not harsh at all. The car is neutral when pushed and there's a lot less understeer as you near the limit of grip on a wet road.

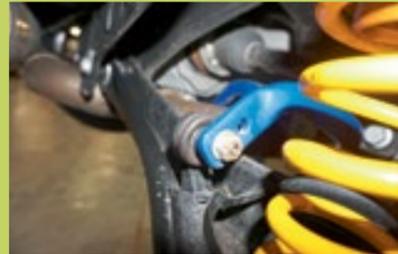
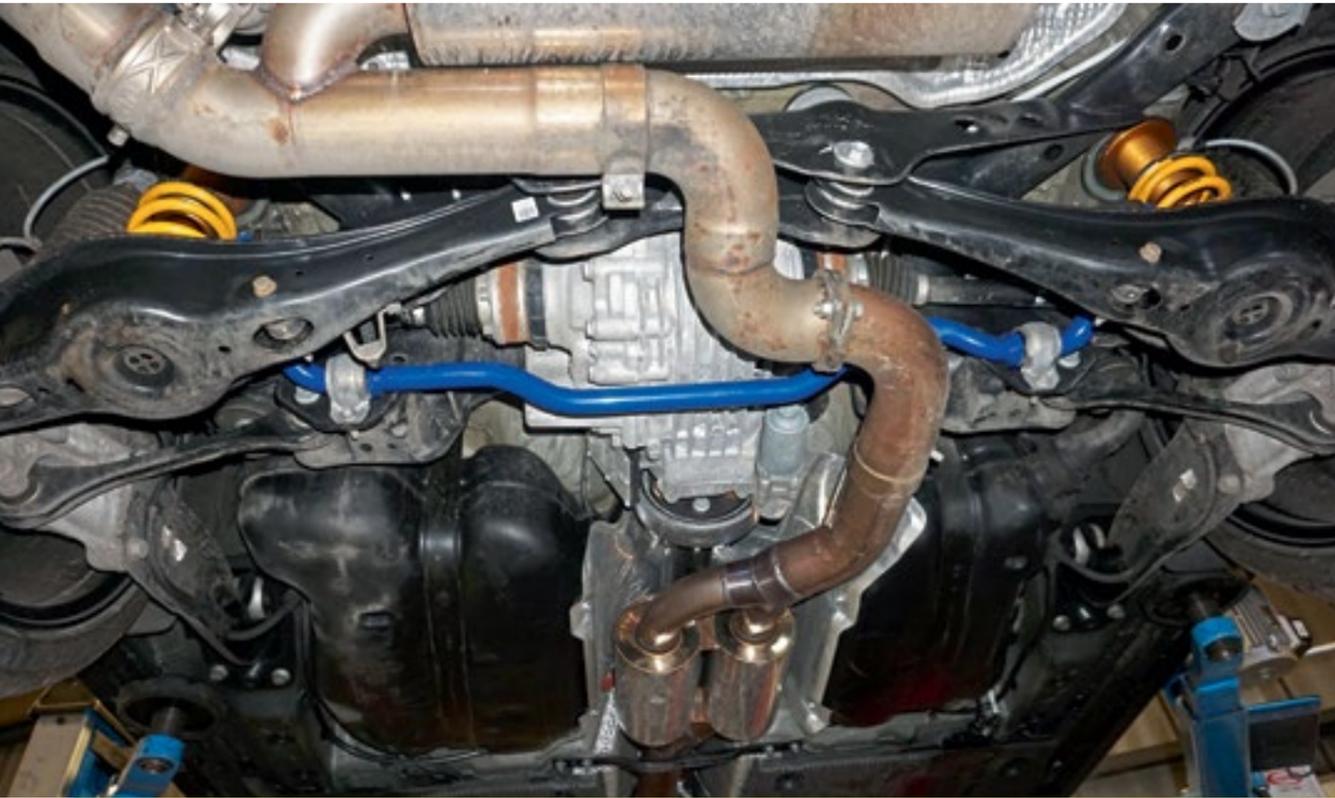
I can hear you saying who on earth reaches the limit of grip on a public road in a Golf R with all that 4WD traction? But that's not the point, as long before that it's the neutral feel of the car that

translates into a lovely cornering mode, with no hint of oversteer or understeer in normal driving. The standard car is not as engaging as it might be, but the combination of Ohlins / SuperPro upgrades really improves things on that front.

So what's next? I've just fitted a new set of Michelin Pilot 4S tyres, along with new wheels from Rimstyle, and I'll tell you all about them next month. I've also been talking to some people 'in the know' about hybrid turbos. They've reassured me that hybrid turbos are a world away

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from the big turbos of yesteryear with their boosty / peaky power delivery, and can be set up with OEM levels of response and refinement but deliver even more power and performance.

But if I go that way I think I'll have to bite the bullet and get some uprated engine mounts first. With my experience of SuperPro so far, they have to be the people to go to if I want to retain OEM levels of refinement.

Volkswagen Driver has previously reported on the use of SuperPro engine mounts, on a Mk 7 GTI in the July 2016 'GTI Special' issue, and Editor Neil Birkitt tells me it is probably one of the first modifications that he would want to make to a Mk 7 Golf GTI or Golf R.

I'm also looking to get a leather interior fitted, along with some paint protection film to prevent damage from stone chips. And that will pretty much

be it I think, but if there's something you would like to see done to Project 7.5R please drop me a line at sharper96@gmail.com 🇩🇪

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