



Spicy stoppers

Want to experience serious retardation on your Golf MkIV? Then you'll need to fit massive Porsche Cayenne front brakes. VAG Tech shows us how with its mighty ECS Stage V braking kit install

Words: Peter Knivett Photos: Dave Wigmore

Being a flabby SUV, Porsche's Cayenne isn't exactly the stuff of *PT* dreams, but it does have unexpected benefits, as its mighty girth means that it's graced with a serious set of anchors, vital for shaving speed off its 2355 kilo mass – albeit probably on the yummy mummy school run. Indeed, glance under the rims of the portly Porker and you'll see that the front stoppers are vast six piston Porsche branded Brembo alloy calipers, matched to enormous discs, which look meaty enough to haul a fully laden 747 to an abrupt halt, even in a tailwind.

"So what?" you might say? Well amazingly, it seems with some clever engineering by US-based firm ECS Tuning these vast anchors and similarly sized discs are quite capable of nestling under the wheels of a VW Golf MkIV, Audi TT or Skoda Octavia VRs. These are core *PT* style cars, particularly as they all run the oh-so-tuneable 1.8T engine, so it's a shame that VAG chose to grace the base versions of these models with weedy single piston ATE front calipers and 285mm discs. That's fine on cars with standard power outputs, but marginal if you turn up the motor's wick or venture trackside, so it means that brake improvements are a high priority for owners seeking more urge

in safety. Which brings us back to the Cayenne's Brembo front calipers. Potentially they're the ultimate roadgoing front brake upgrade for a Golf, TT, or Octavia VRs, so we wanted to find out more about how they can be shoehorned onto the front of one of these cars. Hence why we're here at Soulbury-based ECS Tuning agent VAG Tech to see a Golf GTI MkIV getting the Cayenne caliper treatment to discover just what's involved.

VAG TECH'S GOLF MKIV

Our guinea pig for the day is VAG Tech partner Jon Watt's personal transport, a mint silver 1.8T that runs a Remus exhaust, R32 front bumper,



Top row, from left: original GTI discs and calipers; taking the caliper off; removing the disc. Bottom row, from left: fitting the huge 358mm discs; six-pot caliper slots on; bolting it all up takes an hour



I-Line sideskirts and bodykit, along with KW coilover suspension. Jon's also dispensed with the standard factory 285mm discs, opting instead for the 312mm versions run on the 225bhp Audi TT and the Octavia VRs, which improved retardation somewhat, but now he's opting for the whole hog with the Porsche front anchor conversion. Known as the ECS Tuning Stage V brake upgrade, it costs £1468.75 including VAT, while you can expect to pay VAG Tech £88.12 for the fitting, which takes around one and half hours.

Obviously shoehorning these massive front brakes onto a stock Golf does alter the VW's brake balance, biasing it towards the nose of the car, beyond the stock brake distribution levels. That's not a problem on a front-wheel-drive car such as the Golf, but for owners keen to restore the original brake balance an ECS Tuning rear upgrade kit is also available, although this just features larger discs matched to the standard rear Volkswagen calipers.

But our focus is on the front ECS Tuning kit, so what do you get for your money? Naturally a pair of the previously mentioned Cayenne six-pot alloy front calipers in either blue, red, yellow, black or silver finish, which despite their continent-sized dimensions, weigh surprisingly little and bolt onto the beautiful CNC machined billet aluminium mounting brackets supplied in the kit.

You also get a pair of huge ECS Tuning manufactured 358 x 32mm grooved and fully floating 'Trufloat' vented discs that run alloy bells, plus a set of enormous

19 inch BBS motorsport alloys, so there's no problems here. In fact you could say that his wheels have been waiting for his brakes to catch up with them.

And this was shown in our braking test

You also get a pair of huge ECS Tuning manufactured 358 x 32mm grooved and vented discs with alloy bells

Hawk Racing road compound brake pads, while a set of braided steel brake hoses complete the plumbing.

Naturally, given the vast increase in brake dimensions, wheel clearance is an

issue and 17 inch alloys simply aren't big enough for the job. Given the correct VW offset, some 18 inch rims are fine, but in this case Jon's Golf runs gorgeous 8.5 x

Enormous discs with Brembo six-pot calipers can be fitted to a few PT VAG faves; they're designed to haul 2.4 tonnes of Cayenne to a halt, so on a MkIV Golf they offer seriously good stopping power



ECS discs (far right) in situ; they will fit behind 18 inch wheels, but test GTI has gorgeous 19 inch BBS rims, so fitting was easy



results. Due to time constraints it wasn't possible to conduct in depth testing at the Bruntingthorpe Proving Ground, but VAG Tech's Greg Brookes found us a recently closed off road that allowed some sample stops from 60mph. As tests go this isn't ideal, but it gives us a baseline to work from. Even with the VAG parts bin larger disc upgrade, the Golf took an average distance of 140.3ft to stop from 60mph, taking 3.1 seconds to halt, pulling a maximum of 1 negative G into the bargain. The process wasn't without dramas though, as the ABS bought the VW to a shuddering stop,

one side. Then he removes the disc retaining screw and pops off the old stock disc, followed by the brake heat/dustshield, which won't be going back on, as there simply isn't room with the Porsche set up.

Next up the new ECS Tuning 358mm vented disc is mounted up to the front hub and the retaining screw is refitted. On goes the CNC machined ECS Tuning caliper mounting bracket, followed by the enormous Porsche logoed six piston Brembo caliper itself. That done, the original ATE caliper is unbolted at the end of its flexi hose, then the ECS Tuning

this by chopping and soldering the wires together, then heat shrinks a protective cover on for durability.

That finished it's time to swap the brake fluid to VAG Tech's choice of ATE's Super Blue Racing variety, after which the system is bled, the wheelnuts are torqued up and it's off for a test drive to bed the new discs and pads in. Fifteen minutes later VAG Tech's Greg Brookes returns professing he's happy with the install, so it's time for me to sample the power of Cayenne anchors on a humble Golf GTI.

Initial impressions are of a far greater 'punch' than anticipated, as the ECS brakes really pin the 1270kg GTI down

accompanied by that distinctive 'hot brake' aroma, with the front Semperit tyres just locking. So with our baseline stopping figures in the bag it was time to decamp to VAG Tech's premises to install the ECS Tuning Cayenne kit.

INSTALLATION

Easy fitting is the hallmark of any well-designed upgrade and the ECS Tuning kit is no exception, as VAG Tech's Charlie Gates soon demonstrated. Working one side at a time he swiftly loosens the two 18mm bolts from the standard ATE caliper from the Golf's hub – pulling it to

braided steel line is plumbed in place. From here the massive Hawk Racing pads supplied are fitted – after they've been lubricated on their rear faces with a blue liquid grease that's a modern version of Copaslip, to keep them sliding freely in the calipers. And by massive, we do mean huge, as the Hawk brake pads supplied with the ECS Tuning kit are roughly twice the surface area of the stock VW items! Installation on the nearside of the Golf is identical, bar one crucial difference – VW's pad wear sensor is incompatible with the ECS Tuning kit, so VAG Tech neatly bridges

TESTING, TESTING

Initial impressions are of a far greater 'punch' than anticipated, as the ECS Tuning Cayenne brakes really pin the 1270 kilo Golf GTI down with effortless retardation, even from three figure speeds. Across country this endows the VW with much greater pace, allowing you to confidently lean on the brakes into corners and pick a far later braking point than prior to the conversion.

Happily, this awesome power doesn't come at the expense of control or comfort – yes there's a meaty, solid feel to the pedal, but it's well modulated, doesn't feel overservoed and doesn't require a right leg like Linford Christie's to scrub off the GTI's speed. Whatever way you choose to look at it, it really is a stunning improvement.

To a degree this showed when we



revisited our test road with to measure how the ECS Tuning Cayenne kit performs in stopping the Golf from 60mph, but the figures reveal half the story. Yes, the conversion hauls the MkIV up to a halt without breaking into sweat, but such is the power of the new set up that the Porsche brakes simply overwhelm the bite of the front Semperit tyres, causing the ABS to work overtime in a series of mini lock ups. Even so, the ECS Tuning Cayenne kit still shaves the average stopping distance down to a mere 126ft, pulls the negative G up to 1.1 and cuts the time down to 3 seconds to halt from 60mph. Clearly though we've reached the limit of the Golf's Semperit rubber, whereas with stickier, grippier tyres we'd see greater benefits in the 60-0 deceleration tests. As ever, this upgrade highlights that a single modification in isolation will only serve to throw up a weakness somewhere else down the line...

CONCLUSION

So does VAG Tech's ECS Tuning Stage V brake install live up to its billing thanks to those massive six-pot calipers and vast discs? You bet. Size matters in the braking world and sure enough the hike in front brake dimensions offered by the Cayenne-based kit produces a confidence-inspiring pedal feel, massive stopping power and the promise of huge fade resistance. Add it all together and



it'll bring real benefits for Golf/TT/Octavia drivers on the road, let alone for circuit use, plus there's the undeniable paddock credibility of having the Porsche logo underneath your front wheels. Granted, the nigh-on £1500 pricetag of VAG Tech's ECS Tuning Stage V conversion means it isn't exactly a bargain basement modification, but as ever if you want the best, you've got to

pay for it and make no mistake, it's a quality set up. Cayennes – don't you just love 'em?

CONTACT AND THANKS TO:

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Nearside pad wear sensor fitted to Golf needs slight custom mod to work with the upgrade (top left); braking power is huge, but is limited by the tyres' grip... Modding! It never seems to end...



VAG Tech demonstrated the ECS kit on Jon Watts' MkIV GTI; it costs £1468.75 for the discs and calipers, and a further £88.12 for the hour's fitting it takes to put them on