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RWD MK2 VRT

This unassuming Mk2 Golf hides more than a few tricks up its sleeve



STEER FROM THE REAR

Wide-bodied, mid-engined, rear-wheel drive V8 Mk1 is about as bonkers as they come. Find out more inside!



April 2015
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RADIKALBUGZ

We don't feature many air-cooled cars in PVW but when we do...



MK3 GOLF 1.8T
TRACK SLAG

1.8T-swapped Mk3s are pretty rare. Track-inspired versions, even more so!

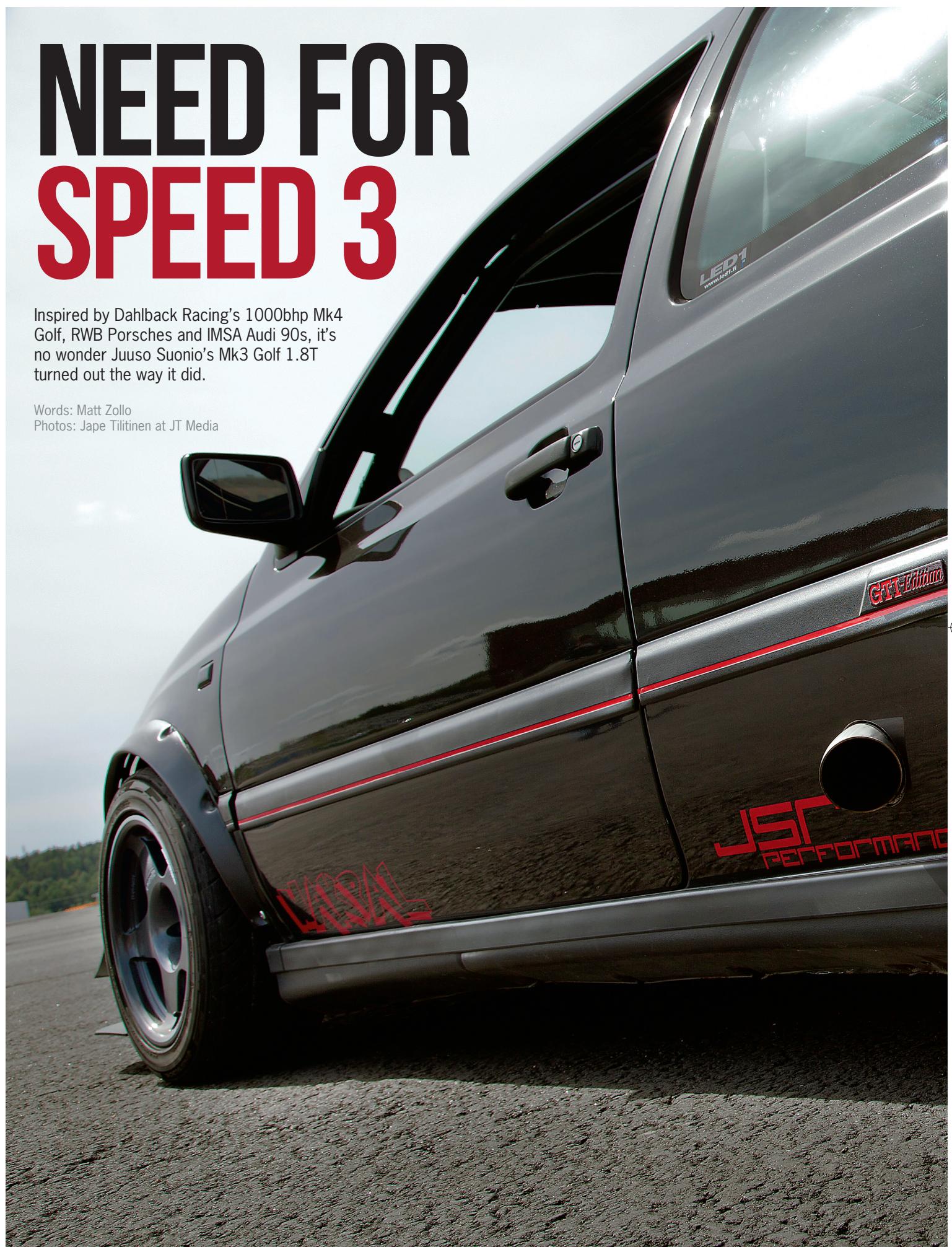


NEED FOR SPEED 3

Inspired by Dahlback Racing's 1000bhp Mk4 Golf, RWB Porsches and IMSA Audi 90s, it's no wonder Juuso Suonio's Mk3 Golf 1.8T turned out the way it did.

Words: Matt Zollo

Photos: Jape Tilitinen at JT Media





When an owner says the following when asked what cars influenced his build, you know the motor in question is going to be something right up our strasse: "Audi 90 IMSA GTO, Tilton Interiors' Civic, RWB Porsches and Dahlbäck's Golf Mk4 RSI. It's a mix, with influence from JDM racing and Euro," says Fin Juuso Suonio.

Indeed, this frankly awesome MK3 is something very much in the spirit of the above legends, with an unapologetically no-nonsense air and an aesthetic that states very clearly that form has followed function. This includes chunky doughnut-esque 205/50s wrapping tiny lightweight 15-inch rims and brimming riveted-on arch extensions; numerous slithers of plastic protruding purposefully from various places at various angles; a comprehensive trellis of metal tubing, a towering shifter, a pair of full-width harnesses and an acreage of bare metal inside. Home-made homages to circuit car greats come no more authentic than this.

It's hardly a surprise Juuso was inspired by

those wild track cars and motorsport brutes: "During my teenage years I spent many summers in Sweden and there was this small group of people there who had a huge passion for building replicas of old Audi legends such as the Sport Quattro, S1 Quattro and 90 IMSA GTO. All of those cars were built with passion and bare hands and that was really inspiring to watch."

Combined with a family love affair with VWs that started back in the '60s, with his granddad and a Beetle, it was a pretty inevitable motoring future for Juuso – which he didn't mess about in initiating. A black three-door Mk3 GTI with a GTI-Edition interior and Recaros was his first car; then it was just a case of turning it into a road legal track weapon...

Before that there was a detour, however, with the car initially getting a respray in its original LA9V paint, some 16-inch BBS RSs and only a partial strip of the interior during the first round of mods in winter 2010. "Okay, it already had classy Veedub aesthetics, but that wasn't really how I wanted it to look," he explains. "There was a lack of something. I wanted it to be meaner."

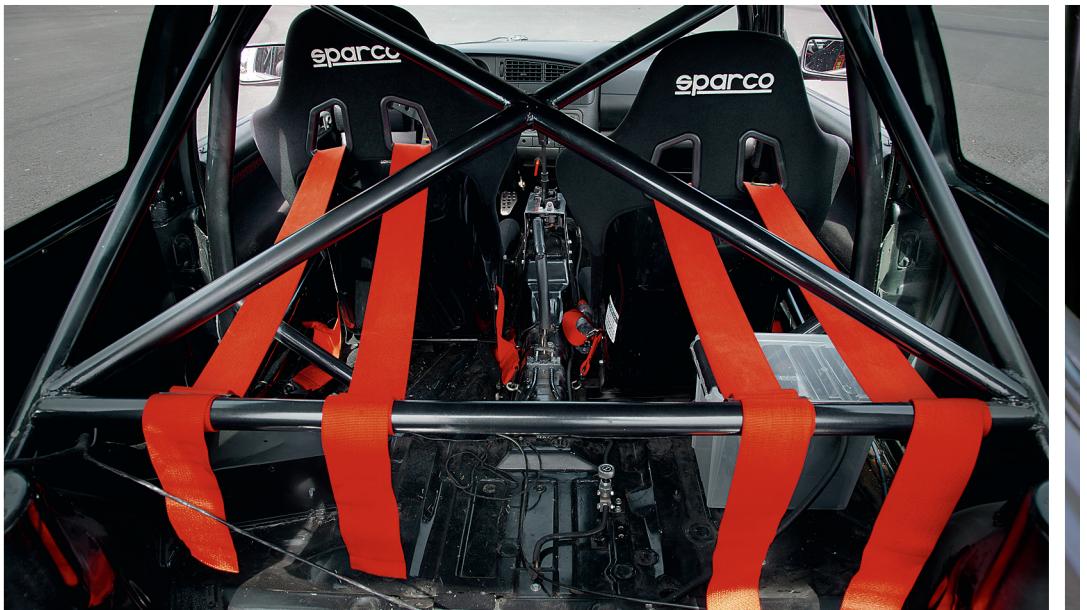
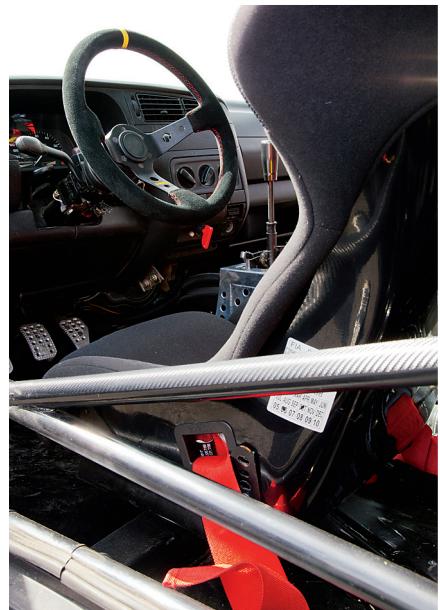


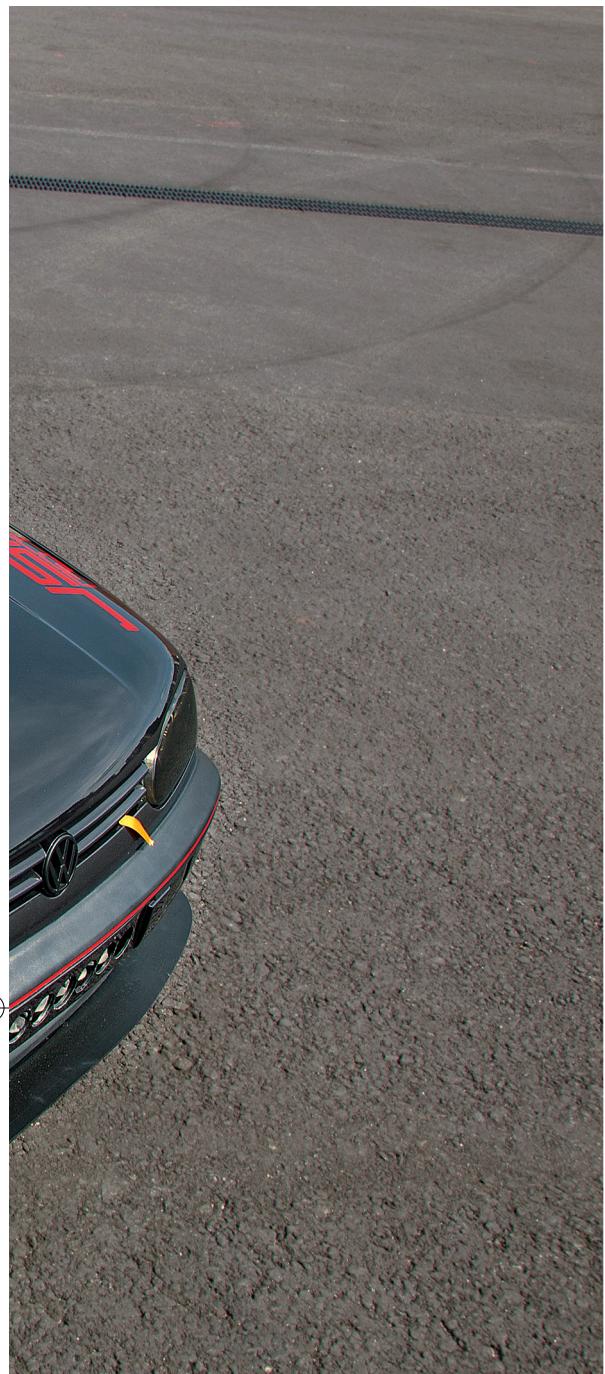
Thanks to a few years of consequent evolution, Juuso has certainly managed to achieve that, adding own-made canards, splitter and diffuser, changing the wheel and tyre combo and adding all sorts of motorsport-inspired interior features. But it's obviously not just about the look, the Fin also put a huge effort into making the Golf perform as well as it looks.

The first round of mods did include Bilstein B14s, and they remain today. "They're a nice choice; not the cheapest, but easily modified for specific needs," Juuso enthuses. "One of my friends recommended Bilstein and I don't regret buying them. On stock setup it won't let you go really low, but with the right mods on springs you can easily make the front soft, the rear stiff and the ride height low enough, which is a very good base for a front-wheel drive track car."

Of course there are now plenty more chassis mods besides, including a full complement of Powerflex bushes, beefier Mk4 rear hubs, stiffening and boxing of the Mk3 rear beam and plenty more reinforcing of chassis and suspension components. The car in its current







DUB DETAILS

ENGINE: 1.8T AGU, chipped ECU, custom intake, three-inch stainless side-exit exhaust, custom boost pipes, upgraded intercooler, modified wiring loom; five-speed, short-ratio dogbox, Kaaz LSD, lightweight G60 flywheel, Sachs SRE clutch kit with custom sintered disc

CHASSIS: 8x15" Compomotive MOs with 205/50/15 track tyres, Bilstein B14 coilovers, Powerflex polybushes, stiffened and boxed rear beam; Brembo GT Junior front brake kit, Mk4 Golf rear brake setup with 239mm Brembo discs and Ferodo 2500 pads

EXTERIOR: Factory LA9V Brillantschwarz respray, custom-made front splitter, front canards, rear diffuser and seven centimetre wider fender flares, smoked lights, debadged, black VW emblems

INTERIOR: Sparco Evo seats, FIA-spec roll-cage, six-point harnesses, handmade shifter tower, dished suede three-spoke wheel

SHOUT: My father Timo Suonio for all the support, Anssi and Hannu Miettinen for all the advice, ideas and help, Pertti Soronen for the ideas and big support through bad times when I almost gave up, Rony and Olli Hoffren at Wakpal Jyväskylä for the sponsorship and help when needed



form is pretty serious, but Juuso plans more...

"The next step is to lower the body instead of just shortening the shock absorbers. At the moment on this ride height the roll centre isn't really where it should be. That modification will give more options to adjust to correct the height. Also I have a plan to replace the rear beam with Mk3 kit car parts."

Initially, the car started off with S3 stoppers inside the RS rims, but there's a very different setup now. The four-pot Brembo GT Junior calipers and 305mm EBC drilled discs are a proper squeeze inside the 15-inch Compomotive MOs, but the time spent finding compatible 15s was clearly worth it as the combo is one of Juuso's favourite elements of the car.

"It was really tricky to find wheels which are small, wide and will fit on Brembos. I tried three or four until I found that Compos are probably the only ones that will fit. There is only around one or two millimetres of space between the spokes and caliper. It's got Brembo original racing pads and there's really good braking power, even when they aren't warm. This is meant to be a Time Attack car so they don't need to last long... but it worked really fine on test days, even after 20 laps."

The rear setup is just a Mk4 GTI with Brembo discs and Ferodo pads. "Pretty much everyone wonders why I drive almost stock brakes on the rear of the car. Well, there is an explanation. The smallest set available is light and, secondly, at the rear you don't need that much braking power – they warm up easily and achieve full braking potential very quickly."

The "lousy eight-valve engine" (as he puts it) was inevitably "just too boring", so that first winter in 2010 was spent finding garage space to install a 1.8T (the conversion is still a rare one in Finland, with Juuso reckoning that his is one of only four Mk3s with the swap). However, the self-proclaimed "noob of modifying" quickly decided he should fix up the chassis and running gear before almost doubling the horsepower, so the engine conversion didn't happen until the following winter.

The AGU 1.8T is from a wrecked '98 A3, the engine and loom worked into the Mk3 using bits and pieces from both. "Basically all the sub parts, like coolant hoses etc, are hybrids between the original 2E and the AGU," he explains. "I would say that the project hasn't been as hard as people may think, but one big setback was with the engine when I had it nicely running and then suddenly no power at all. After two months of fault-searching I discovered one solder joint in the immobiliser that blocked all power. Come on! Two months for that!"

With a bigger intercooler, custom intake, remap and that unrestricted side-exit (routed that way due to the rear diffuser), it's enough for now, but really this is just the beginning: Vems engine management awaits fitment along with a modified Mitsubishi Evo 8 TD05 turbo with custom exhaust housing, motorsport v-band and external wastegate.

One of the current highlights has to be the dogbox and custom-made tower shifter. According to Juuso, it defines the driving experience: "The dogbox was one of those things that really took the car closer to a real racer. The sounds are just amazing, the whine and rattle is just pure racing especially when mixed with the sound of a turbo. It also gave good acceleration and a lot of traction due to its



short ratios and 1.5-way LSD.

"I had a dream to go big with this car, and go all the way to the end where there is nothing more to do. But back in the early days I wasn't really sure if I would have what it takes. But during the years I just decided that if you don't really know what to do, just do it as many times as it takes!"

"The aspects of the build I haven't done myself are the roll-cage and painting. The roll-cage is the biggest thing in safety when going flat-out on the circuit, so I left it for the professionals to do. Painting is one of those things that people see first when they look at the car, and even a

fantastic car with bad painting will not be fantastic anymore, so I let my friend who paints in a BMW dealership do that.

"I have had a wonderful team around me which has helped me anytime I've needed it. I've learned so much during this project, and also got a chance to meet different people in motorsport who have given me so much advice about how I should do the things I've planned."

Yes, in case you haven't picked up on it already, Juuso has only just started with this Mk3. He calls this 'Evo 1', with more evolutions planned not only for the chassis and engine, but also the body and aero. A bigger, better diffuser

will be going on, as well as an upgraded front splitter and canards, while the wheel arch extensions will grow a few centimetres too. "Maybe it needs also a Tilton's Civic style rear wing..." he hints at with a wink.

"This car is a combination of dreams, passion, love and not giving up," Juuso concludes. "Modifying a car is like painting a picture: you have imagined how it would be when it's ready, and it's basically the same with cars, at least in my case. Doing things that only a small amount of people will understand and an even smaller amount can really achieve is one of the reasons I keep doing this." ●