

Performance VW

BECAUSE RACE CAR!

Mk3 Golf GTI

Has SIC built the UK's lowest static Mk3?



Mk1 Golf 24v

Stateside custom Rabbit gets bags and 2.8 V6 swap



Mk5 R32 s/c

Greg Howell's masterclass in nu-wave tuning



WORLD EXCLUSIVE

We scoop the inside story on the car everyone has been talking about, Forge Motorsport's balls-out Berg Cup-inspired Mk1 animal!

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Badly Dubbed

Is it just me or do these issues seem to be coming round far more frequently than usual? Perhaps it's just the sign of old age, I don't know! What I do know is it doesn't seem like five minutes since we were banging on about Rotiform's stunning newer Beetle which broke cover exactly a month ago today. They say time flies when you're having fun and, despite the state of the global economy, I'm genuinely pleased to say that the majority of you guys are still doing just that; having fun with your builds and as a result we're equally enjoying showcasing all your hard work in these very pages.

If you're anything like us though, then chances are you're not being quite so extravagant and are a little more frugal with parts for your project, but then sometimes sniffing out a bargain and wheel-dealing your way through a project is part of the fun. This is clearly not always the case though, because Forge Motorsport has just finished wrapping up its Berg Cup-inspired Mk1 (a build we've been following exclusively in these very pages) which, despite being a whole bunch of fun for the team, they claim has cost in the region of £45k. My guess is that when the dust settles, and all the finishing pieces are added (the bits we never account for and always end up costing the most) then they won't get much change from £50k. Yes, doesn't matter how you say it, fifty thousand quids is a lot of dosh to put into a Mk1 Golf, even if it is one of the most radical on the planet. But as a marketing exercise, well what can we say, it's inspired. Not only does it clearly highlight the fact that Forge as a business must be doing pretty well, but more importantly, the fact it's chosen to use an old-skool vehicle as a base (rather than the obligatory nu-wave jelly mould) shows that deep down, the team is made up of hardcore enthusiast just like you and I.

To meet Forge MD, Peter Miles, you could easily be fooled into thinking, with his softly spoken west-country accent and genuinely warm nature, that he's a lovely bloke, in business solely to make a few quid and have some fun doing it, all of which would be true. However, make no mistake, this guy is a bloody genius when it comes to putting the Forge name on the global map, too. To put that into perspective, this Mk1 made its show debut just a few weeks back at the Autosport International Show at the NEC, where it rubbed mirrors with everything from Liam Doran's Global Rallycross Fiesta, to a large proportion of the current Formula One grid, and yet the car, which started out just a few months back as a knackered old '80s hatchback, some how managed to steal the show. Combine all of Peter's best traits with a rock-solid workforce and if world domination is what he has in mind for Forge Motorsport then who are we to stop him? We're just honoured to be the first magazine, forum, blog, whatever type of media you prefer, to bring you the full, inside story on the car's build, in its entirety.

So it would be nice to say things are back to normal this month with an old-skool Dub up front, but as with most issues of *PVW*, things are very rarely what you'd call normal. In fact, this was yet another month where every car we've featured was in the running for the cover slot, hence why we attempted to fit them all on the front page. There's certainly something for everyone inside, so we hope you enjoy the issue and it inspires those heading to Ultimate Dubs next month some much needed motivation to get that project finished. We'll see you at the bar...

Elliott Robert, Editor



There's just something about an old-skool Dub project that gets even the most 'been-there-done-that' of car nuts grinning from ear-to-ear

Performance VW



EDITOR: ELLIOTT ROBERTS

Chosen his new company car, and it's not what you think. Managed to fit in a weeks' holiday after being back three weeks, it sure is tough at the top. We're just hoping he's packed his flea collar...



DEPUTY EDITOR: DAVID KENNEDY

Fell in love with a borrowed Mk2 Golf this month, and it's all he's talked about since. The Boxster's been fixed, serviced and sorted but is now up for sale, he's come over all Mk2 mad. Want a sorted Boxster? Get in touch!



AD MANAGER: SARAH 'CHURCHY' HALLS

Churchy/Challs took her special brand of advertising selling power to Autosport and managed to hold it down pretty well. We know, we're as surprised as you are! Sensible Sarah is sensible these days...

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DISTRIBUTION

Seymour Distribution Ltd. If you have trouble finding *PVW* in the UK please contact: 020 7429 4000 or csu@seymour.co.uk

For overseas queries: Seymour International Ltd,

Tel: 020 7429 4000 Email: intl.query@seymour.co.uk.

PRINTED: William Gibbons & Sons Ltd

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Direct Input by Unity Media Communications Ltd.

Performance VW (ISSN 1364-2502), is published monthly, (12 times per year) by Unity Media Communication Ltd, UK, c/o USACAN Media Dist. Srv. Corp. at 26 Power Dam Way Suite S1-S3, Plattsburgh, NY 12901. Periodicals postage paid at Champlain NY and at additional mailing offices. POSTMASTER: send address changes to *Performance VW*, c/o International Media Service, 3330 Pacific Ave Ste 500, Virginia Beach, VA 23451, USA
Tel: +1 800 428 3003.

Subscribe online at www.imsnews.com/performancevw

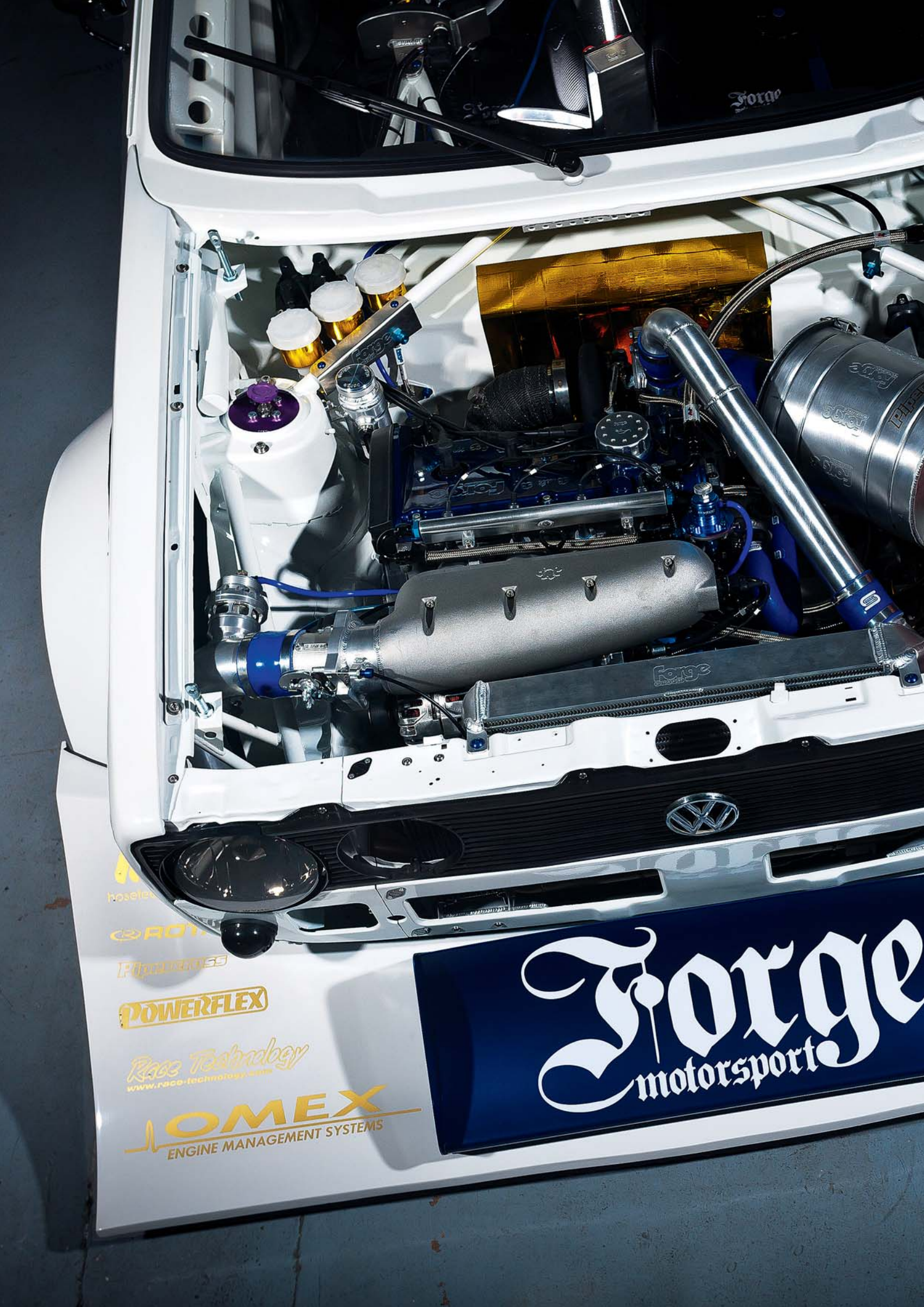
ISSN: 1364-2502

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PVW (established Oct 1996) is published by Unity Media PLC

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BECAUSE RACE CAR!

We've seen some extravagant demo cars in our time, but when Forge MD, Peter Miles got the Berg Cup bug at Inters last year, not even he could have foreseen the near £45k project that lay ahead. But after scouring the globe for the best parts around, followed by the mother of all builds back at the ranch, is he pleased with the outcome?

Words: Paul Cowland Photos: Bryn Musselwhite

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With a factory full of trick CNC machine tools and a payroll full of die-hard VAG enthusiasts, creating a sublime Berg-influenced Mk1 seemed like a good idea to Forge MD, Peter Miles. Factor in a roll-call of industry names to assist, some incredible feats of fabrication – an unrealistic deadline and you’ve got one hell of a build...

As a rule of thumb, getting emotionally involved with a demo car is probably the worst thing you could do. It’s like watching a property development TV show, where the presenter offers well-versed advice to the budding home owner about not going over the top with the build – don’t get attached, think about the budget as well as the presentation – only to see them go against the script and end up building a house that simply won’t turn a profit. Why not build a well-presented property that looks top dollar, but one which you can sell quickly and make a nice return on?

Usually the same format can be used when building a demonstration vehicle for your

tuning company. Usually, we said! Okay, it still needs to be presentable and represent what the company does, but you don’t need to go OTT. Well, not in most cases.

Unfortunately, Forge Motorsport isn’t like most other companies and a simple spruce up of an iconic hatchback was never going to cut the mustard either. Welcome to self-indulgence and over extravagance like you’ve never seen it before!

“You can blame the whole thing on Michael Flynn and Harvey Rice, really,” begins Miles, the affable ex-rugby player who started it all off. “Well, that and SoWo. I’d seen Michael and Harvey’s amazing Berg cars at Inters and this just compounded the feelings I’d had for similar cars at SoWo. I go every year, and more recently, we’ve become the show sponsors. You know how it is. You go over there, meet all those cool people, drink a little more than you should, become immersed in amazing cars – and then come back with a head full of ideas as to what you should build. I couldn’t get the image of a really nicely engineered Berg Cup-style Mk1

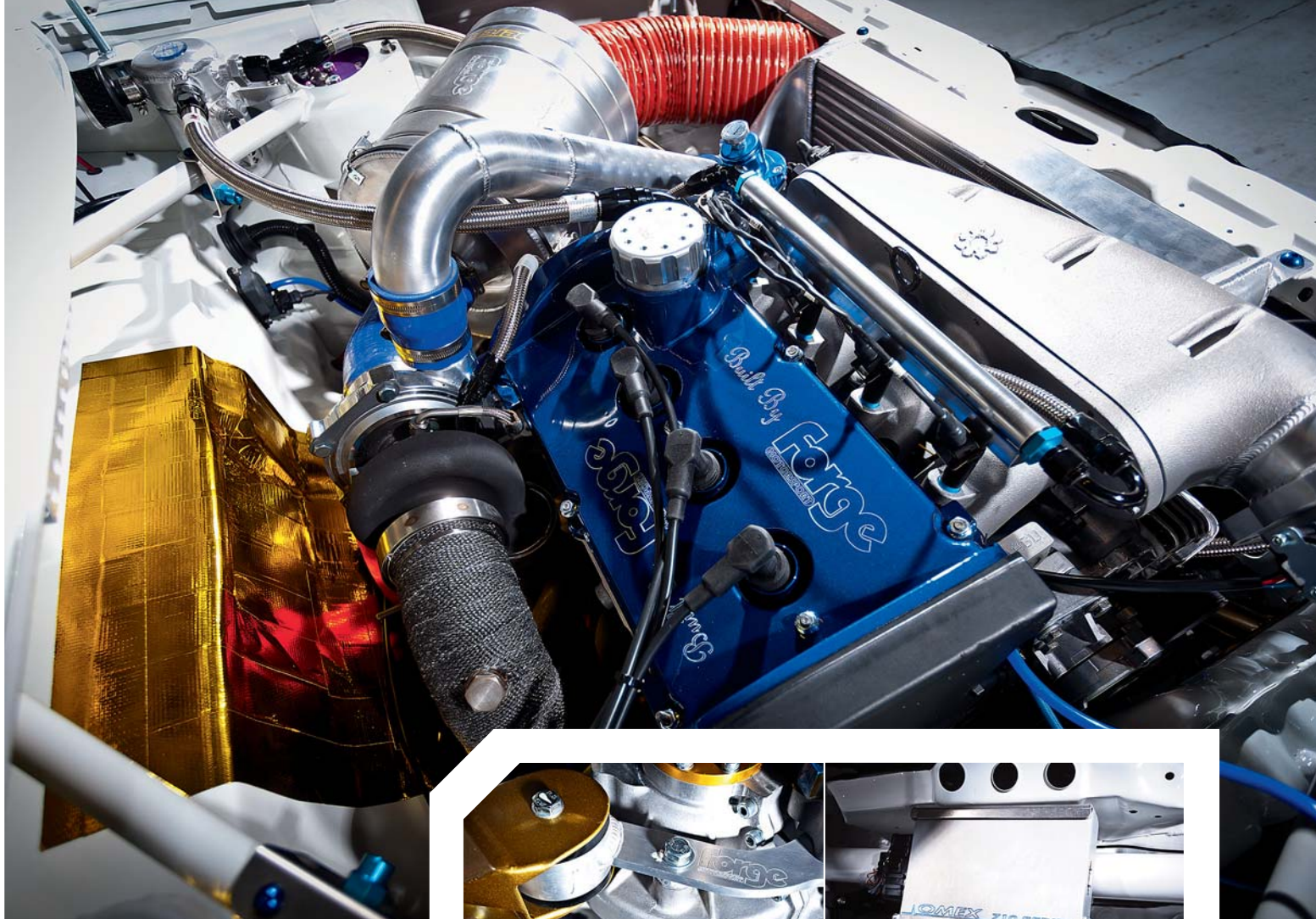
out of my head... so when I got back this year, I decided to do something about it!

Scouring the classifieds revealed a complete-but-tatty ’81 GTI in Stroud, just ten miles away from Forge HQ. Although reasonably sound in places, it needed a fair bit of metal – although its lack of a running motor didn’t phase the Forge team too much. “We had always planned to run a sorted 1.8T, anyhow,” smiles Pete.

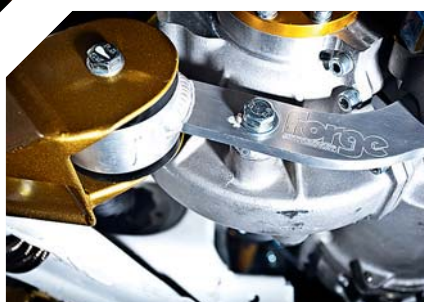
A plan was set in place early on; to build a showpiece to display the talents of Forge’s many accomplished craftsmen, but also to allow a few of the firm’s drinking buddies and good friends to come along for the ride. “It’s amazing how many people said they would be a part of it when we mentioned that we might be doing something a little different this year,” says Pete. “I think the Mk1 is a special car like that. Everybody likes them, and all of our extended ‘Forge family’ pledged support from very early on, meaning we could really up the ante, spec wise.”

While plans were being formulated in the back rooms of Forge Towers, the Special





The engineering that has gone in to the engine and chassis is mind-blowing, and that's before you get in to the list of top-drawer products that have been bolted in. Put simply, this is automotive art





Projects team began the thankless task of stripping it all back to a bare shell to see what they had to work with. With every panel off, the carcass was then taken to SPL in Dudley to take everything back to 'Day One' conditions, before the shell could be returned to the workshop to begin welding new panels in. Forge simultaneously began the fitting of a Custom Cages T45 full competition-spec cage which would not only add considerable protection for the lucky occupants, but also make the shell infinitely stiffer than it ever would have been in its factory trim.

The decision was made from the outset to give the car a competition-quality build, but keep it all technically road legal for a bit of fun in between track outings. A set of Harvey Rice Engineering arches were ordered and offered up, before other neat bodywork

tricks, like the carbon fibre roof were added and trial fitted, as well as the beginnings of what would become the car's essential aero-additions. With the possibility of the car competing at a round of UK Time Attack at some point, the brief shifted slightly to ensure that the finished product would be more than up to snuff in the world of competition. "It did make for a few design changes," says Pete. "We knew we couldn't keep it strictly period, looks-wise as we'd need more downforce, so we tried to keep with the Berg theme, but made sure it really worked dynamically too. So things like deeper front spoilers custom-made in-house, Lexan windows from Plastics for Performance and rear diffusers all suddenly got thrown into the mix."

After trial fitting a dummy 1.8T lump and

the rather special Quaife sequential box that was chosen for the build, the shell went away to be painted and prepped at Ultimate Paint & Valeting in Gloucester. This allowed the team to turn their full attention to the motive power behind it all and begin spec'ing what was to be a heady engine spec. A decent donor block was bored out 2mm in readiness for the new sexier internals that were to follow with an Integrated Engineering stroker crank taking the whole displacement up to 2.0 litres. A great start for what was to follow.

The list of partners and parts that have been assembled for the build reads like an industry 'Who's Who?', with the entire engine build bill coming in at a heady £8k once engineering and labour costs have been factored in. "It had to be right," says Pete. "We don't build too many cars from top to

You can see how much the Forge team enjoyed working on the Mk1 by just how well everything has been put together; it's one of those cars you can walk around for hours just taking in all the details



bottom so we wanted to really spec this one out properly and show what was possible."

That gorgeous looking turbo is the very latest Garrett GTX 2860R and despite the lengthy nomenclature, it's a cutting-edge bit of kit; an anti-surge 3" inlet, stainless steel Tial turbine housing and billet compressor wheel. When it's all hooked up with Forge's own 44mm wastegate, it should be adding a decent contribution towards the target bhp figure of around 400 angry dobbins.

Integrated Engineering provided the rather pleasant pistons, but after lengthy conversations with one of its directors, Forge also added a raw-finished Integrated Engineering intake manifold, Titanium Retainer Kit and all manner of other exotica including a 144x20mm con-rod set. ARP bolts and studs are keeping it all together

and Calico-coated bearings throughout should keep things spinning happily, even at the kind of crazy rpm and torque that this thing should dish out when it's all bolted together, and happily, Integrated Engineering was able to supply those too.

That Quaife 34G six-speed sequential FWD box with integrated Quaife differential was the final ticket to a proper race car look, feel and sound and, as you can imagine, took more than a little head-scratching to make it all fit beautifully. Nothing the Forge techs couldn't run up in a lunchtime or three, though. Custom-built with much shorter ratios for rapid track acceleration rather than top speed, it should be more than up to the job of handling the mighty power from the blown 2.0 lump. Factor in the reduced gear-change time thanks to the rapid-fire

mechanism and you've got the perfect drivetrain partnership. Bespoke engine and box mounts were created in-house and augment a brace bar running across the chassis legs to give the drivetrain every chance of exploiting its power.

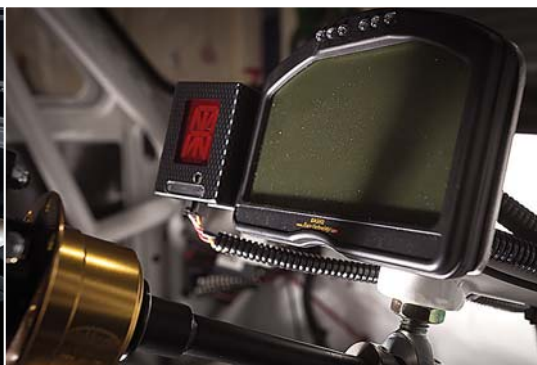
With everything fitting up, the plumbing could be started. Working closely with its induction partners Pipercross, a bespoke filtration setup was created, with serial co-conspirators Scorpion exhausts taking care of extraction duties. As you might imagine from a firm that designs and manufactures its own range of air, coolant and fuel hoses, getting everything else to connect wasn't too much of an issue. With everything held in stock at its Gloucestershire HQ, it was simply a case of running along the Hosetechnik and

SiliconHoses parts warehouse shelves in a 'trolley dash' style. Getting it all to run however, would be down to the boffins at Omex, along with one of their effective 710 ECUs, which means the car can run launch control and anti-lag together with flat shifting to make the most of the sequential 'box.

There was no way that the new stiffer chassis would ever go back on to its old struts, so KW Suspension stepped into the breach to supply on its superb two-way adjustable race-spec coilover kits, in full 'Berg Cup' trim to allow both ride height and damping rates to be infinitely fettled. Every suspension bush had been junked during the strip down, so Peter's long-time chums at Powerflex were drafted in to completely re-do the lot with precision polyurethane replacements. Eibach provided a

set of its re-issued anti-roll bars and Italian braking gods Tarox provided the rear stoppers to balance the seatbelt-bruising antics of Forge's Big Brake Kit up front. The wheels are 9x15" Rota Grids in a custom gold finish, which not only suits the car's blue and white period-perfect paint scheme, but also help to balance the Golfs 'old and new' demeanour.

With a body and chassis turned to '11', it was time to create the perfect 'office space' for track work. Cobra Seats performed some amazing custom work on a pair of its Suzuka Pro perches and a pair of matching 3" six-point harnesses, to provide the perfect balance of support for track work and comfort for the occasional road outing, whilst Race Technology provided the electronic dash with its many whistles, bells and tell-



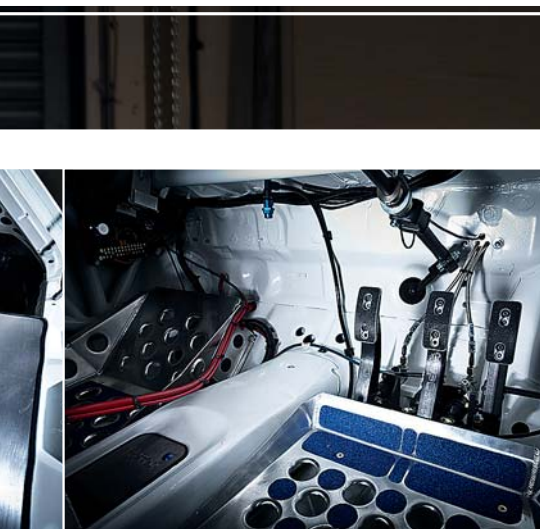
tales. As you can see, it's pretty functional in there, but totally in-keeping with the look and ethos of the rest of the car. As with everything on the build, execution is right up there with the best European show cars!

As if building this car wasn't enough of a challenge in its own right, Forge decided to unleash it to what turned out to be a very impressed public at the 2013 Autosport Show. While it turned out to be one of the highlight reveals at this year's event, it did mean more than a few late nights as the deadline loomed nearer. "I lost count of how many 2am finishes the boys put in to get it all done," says Pete. "There was never a chance that we could miss it, and I'm so grateful to everyone that helped and the Forge team in particular for their unending hard work and belief in the project. In

the end, it turned out better than we could have ever hoped, and I'll never forget those who helped us to get there."

With the lack of rolling pics, you might have already guessed that time precluded getting it all up and running in time for our exclusive shoot, which involved snapper Musselwhite having to escort the car back from Autosport in order to get it shot in time for the mag. "I'm sorry about that," says Pete in his soft west-country burr. "But there's still the base map and running in to set up. I promise you we'll get you over for a drive and some video shooting as soon as it's a runner. Why not come over to the 'Ring with us in April and you can have a go?" Having seen this car close up and everything that went into it, I can assure you, it's in the diary already!

SHOUT: Big shout out to all that helped, including Omex (Richard and Guy), Cobra (Mark and Simon), Garrett (Yukio), Rota (Julian and Ben), KW (Richard), Scorpion (Shaun), Tarox (Nick), Eibach (Greg), Race technology (Dr Andrew Durrant), Powerflex (David and James), Pipercross (Luke and James), Quaife, Hosetechnik (Bill), Siliconhoses (Geoff), Autoglym, Pro-motive (Paul Cowland), Scene Media (Ben Chandler), Ultimate Paint (Jamie and Staff), Plastic 4 Performance (Bas), INA Engineering, Integrated Engineering, HR Engineering (Harvey), Amber Performance (James), Chris Hamer, and last but not least this car would be absolutely nothing without the fantastic Forge Motorsport staff that contributed to building something this special ●



Whether you come across the Mk1 on one of its rare trips out on the road or in its natural habitat on track we imagine this is the view of it you'll be seeing a lot of!

