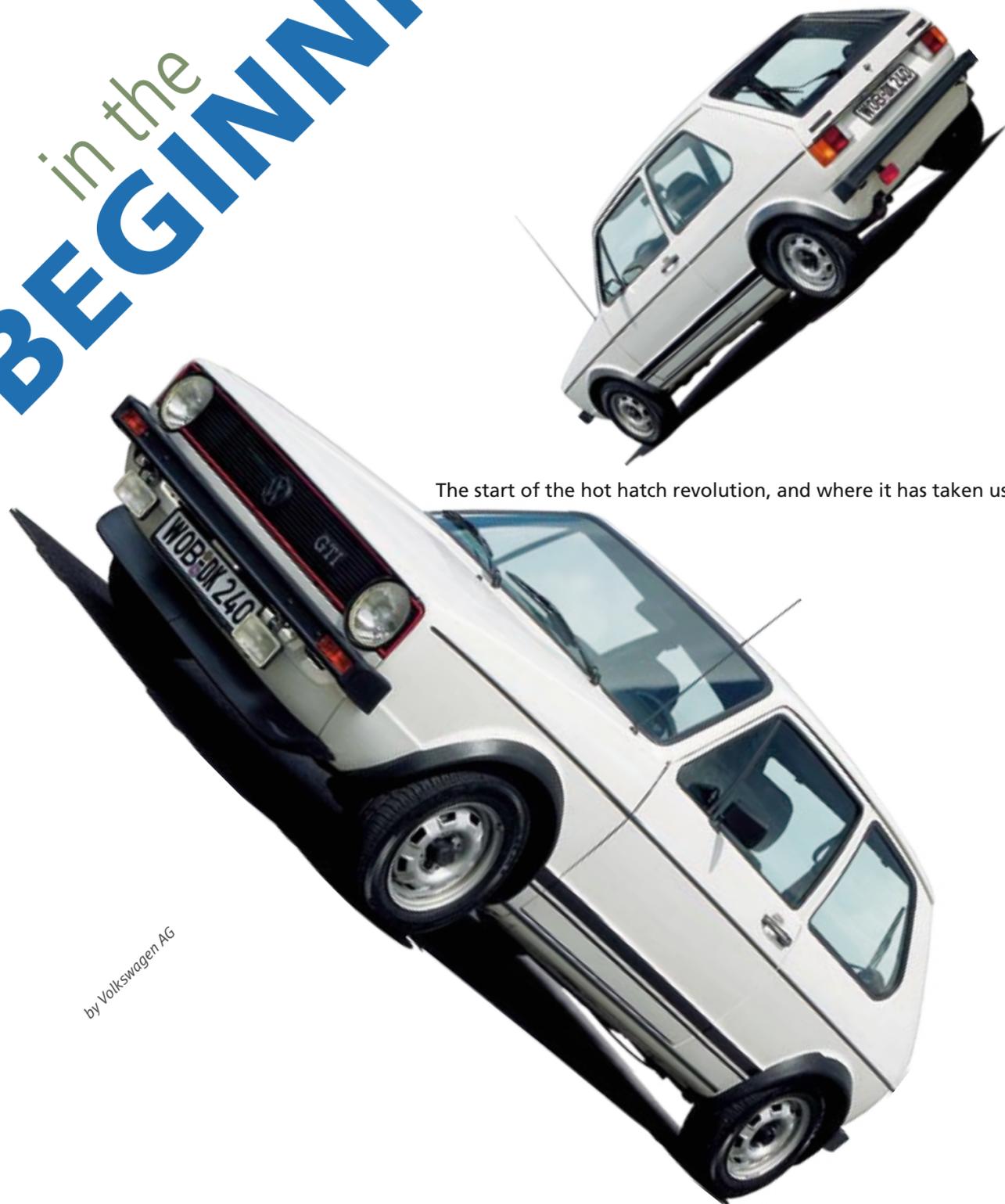


# in the BEGINNING

The start of the hot hatch revolution, and where it has taken us



by Volkswagen AG

The Golf GTI is a phenomenon, a marque within a marque, an automobile philosophy carved in metal and plastic and an unmistakable design statement — it is the original sporty compact. There have been many stories about how the first GTI came into being. At the centre there is always a “secret society” of people who pushed through the GTI right up to production stage against the clock and opposition from their superiors. Many of the tales about these developments that have been passed down are true, but just as many of them have become distorted over the decades and are often wrong. The fact is that the Golf GTI is the ingenious idea of a few men. This is their story and that of the GTI.

Everything began with the Beetle in 1973. Volkswagen launched a very sporty version of the Beetle. The “Yellow and Black Racer”, as it was called, differed from the normal Beetle in that it had a black front lid and engine cover, slightly broader tyres, sports seats with head restraints and a leather steering wheel. Technically it was still the same Beetle with 1,600cc, and 50hp. Despite this modest output, this “aggressive model from Volkswagen” caused a stir in Germany.

But to the disbelief of many, it was popular among customers. This Beetle model, which only looked faster, sold out in next to no time and laid the foundations for a two-year project in Wolfsburg that, even within the company, only a handful of people would know about.

The pioneers assemble. It is still 1973, 18 March to be precise. On this (from today’s viewpoint) memorable day, the test engineer Alfons Löwenberg wrote an internal memo to a few colleagues from the Research and Development department, RD for short. He proposed that Volkswagen should put together a proper sports model. After all, a new vehicle with the project code EA 337 (the internal code for the future Golf) had reached the final stages of development - and a modern high-performance car with front-wheel drive would gain Volkswagen a completely new audience.

The recipients were reluctant at first. Only chassis specialist Herbert Horstmann and development chief Hermann Hahlitzel were at least

**HOT**  
hatch

basically interested in Löwenberg's idea. However, Löwenberg kept trying and found other like-minded colleagues. For example, marketing man Horst-Dieter Schwittlinsky and Anton Konrad, the then Volkswagen PR boss. Konrad, previously manager of the Formula V association for many years and himself a racing driver in his spare time, was particularly taken with the idea. He was also aware, however, that the delicate sport seedling needed to be cultivated in great secrecy within the company. The high development costs for the new model that would be launched as the Golf in 1974 were a heavy burden on funds as it was.

Secret meeting over beer and sandwiches. Konrad invited the secret developers from the "Sportgolf" work group to meet at his home. Hablitzel, Horntrich, Konrad, Löwenberg and Schwittlinsky sorted through the possibilities like conspirators over some beer and sandwiches. Hablitzel was now definitely on board and his silent toleration allowed Löwenberg and Horntrich to get down to work. Taking a Scirocco prototype with a rock-hard chassis, they lowered the suspension dramatically, souped up the basic 85hp 1.5-litre Scirocco engine to 100hp with a two-stage carburettor and crowned it all with an exhaust pipe that resembled a stove pipe and also sounded like one.

Prototype 1 is over the top. Today, Konrad remembers the car as being "a roaring monster". The secret team soon agreed that this is not what they want. The Sportgolf should feel sporty, but should still be modest. Löwenberg and Horntrich therefore decided to build a tamer version. The result was not quite as ferocious, but it was still pretty fast. The whole undercover group felt much better about this new model and Hablitzel plucked up some courage. He told the development chief Professor Ernst Fiala about the sporty car and asked him what he thought. Fiala delivered a fatal blow: "It's far too expensive, you're all mad," he retorted.

However, Hablitzel and his men would not be deterred. The Sportgolf prototype based on the Scirocco was officially declared a disguised chassis prototype, unofficially though development continued. Löwenberg fine tuned the engine while Horntrich configured the chassis for the proposed beefy tyres. 205/60 HR 13 would be the format that, back then, would even put a Porsche 911 to shame — the quintessential Teutonic sports car still ran on 185/70 tyres in 1974...

Spring 1975 green light from the management. Not surprisingly, the "disguised chassis prototype" caused a big stir when Hablitzel & co. demonstrated their latest projects to the management at the Volkswagen test centre in Ehra-Lessien in spring 1975. Even Professor Fiala was now taken

with the Sportgolf in a Scirocco outfit - and gave his approval. At the end of May, a official assignment was sent to the development department: A sporty version of the Golf is needed.

The Golf becomes the GTI. At the same time, the sales department now also saw good market opportunities for a sporty Golf and, in any case, Volkswagen still needed a crowd-puller for the upcoming International Motor Show Frankfurt. The project suddenly gained dynamism from all sides. Six prototypes with different configurations were created ranging from a beast with maximum sports characteristics to a modest comfortable version. Chief designer Herbert Schäfer was responsible for all the small details that would distinguish the Sportgolf from its weaker rivals. For example, the red stripe on the radiator grille, the larger front spoiler, the discreet plastic wheel arch extensions, the matt black frame on the rear windscreen, the black roofliner, the golf ball gear stick knob and the chequered seat covers.

Technical fine tuning. Herbert Schuster, the new test manager, immediately gave the chassis development top priority. To cut costs, he reduced the width of the wheels from 6.0 to 5.5 inches and shrunk the tyre size to 175/70 HR 13. He did, however, also add stabilizers for the front and rear axles and developed a spring/damper configuration that provided a perfect synthesis between comfort and sportiness. In collaboration with Audi, the ultra-modern 1.6-litre fuel-injected engine delivering 110hp was produced.

World Premiere in 1975 at Frankfurt International Motor Show. The former undercover team finished their work dead on schedule. When the 46th Frankfurt International Motor Show opened its doors to the public on 11 September 1975, a red wonder celebrated its debut on the Volkswagen stand: the Golf GTI study. "The fastest Volkswagen ever" boasted the advertisement - and that was no exaggeration. The GTI accelerated from nought to 100km/h in nine seconds leaving considerably bigger and more expensive cars behind. The carefully announced price of "under DM13,000" was still over DM5,000 less than the closest German rival. As result, the trade fair visitors were so impressed that the management had no other choice than to build a special series of 5,000 cars.

GTI mania starts. The GTI cost DM13,850 when it was finally launched in mid-1976. However, the dealers still managed to sell ten times the planned number in the first year of sale. No surprise: "Climbing an Alpine pass in the GTI — that is one of the most exciting tasks that can be set for a car driver" claimed the German trade magazine "auto motor und sport". That sums it up. Nothing has changed since then between the first and fifth series of the GTI. 🇩🇪

Drivetrain	
Engine	in-line 4, iron block, Al heads
Layout	front engine, front drive
Capacity	1.588 litres
Bore/Stroke	79.5mm/80.0mm
Compression	9.5:1
Power	83kw @ 6100rpm
Torque	73nm @ 5000rpm
Transmission	5-speed Manual
Diff Ratio	3.89:1



Chassis	
L/W/H	3815/1625/1390mm
Wheelbase	2400mm
Front/rear track	1405mm/1346mm
Weight	812kg
Distribution F/R	64/36%
Fuel Capacity	44.7 litres
Fuel Consumption	6500/6750rpm
Front Suspension	MacPherson Struts, coil springs, stabilizer bar
Rear Suspension	Independent, trailing arm, coil springs, stabilizer bar
Front Brakes	240mm discs
Rear Brakes	180mm drums
Tyres	175/70HR 13
Wheels	13 x 5.5in

Performance	
Power to Weight	9.8kg per kw
Acceleration	0-50km/h: 2.85sec
	0-100km/h: 8.65sec
	1/4 mile: 16.6sec @ 133km/h
Rolling Acceleration	80-120km/h: 5.9sec
Verdict	🇩🇪🇩🇪🇩🇪🇩🇪

## development HISTORY

With mass production, cars are not built to whim, but literally for the masses, exceptions and tweaks are not allowed, and this especially holds true for a 'peoples car'.

But for every rule there is an exception, and the Golf was to prove that exception, the GTI was first and foremost an 'engineers' car.

Today, a new hot hatch, or performance car is generally conceived in the mind of the marketing department in order to create interest in their car and lift sales of more mundane models. In 1973, the marketing people were not involved. The 'Sport Golf', as the engineers called it, was an 'evening and weekends' project, developed in secret outside normal working hours. Even when it was shown to the management, interest was lukewarm, in fact sales and marketing were against it, unable to see a market for the car.

Thankfully, having been developed by engineers, it was devoid of stripes, spoilers and pretensions. It had no rear spoiler because it didn't need one, it had a front spoiler because it was found to reduce front end lift by 65lbs at 100 mph. It had wheel arch trim to protect it from stone chips, not because it looked good. It had wider steel wheels to

provide extra grip, a standard, widened exhaust system for the higher capacity engine. Lowered and stiffened suspension was there because it provided the best handling and response. Fortunately, the type 827 engine had been enlarged for use in the Audi 80 GT, which was introduced in 1974. With a 3mm longer stroke, the new engine had a 80mm bore and a 79.5mm stroke giving 1588cc and with the benefit of a Solex twin choke carburetor, it developed a hearty 100bhp. By now, the 'Sport Golf' was about 80% ready and had attracted more serious attention from the management, and it was decided to go ahead with a limited run of 5000. It was May 1975.

Shortly after this the car received its official name, 'The Golf GTI', and the engine received Bosch K-Jetronic fuel injection. Strangely it appeared that the 'I' in 'GTI', did not originally stand for 'Injection' as the German word for injection is 'Einspritzung', which leads you, heaven forbid, to a GTE! Perhaps it was suggested by Guiguaro himself, as in Italian you would get 'Gran Turismo Iniezione'. Others have suggested that since Audi already had the Audi 80 GTE, Volkswagen simply used 'GTI' to be different.

The final development dealt with brakes (rear disks were considered but, in hindsight, unfortunately rejected!), uprated anti roll bars, rims and tyres. These were finalised as 175/70R13s, hardly a performance size by modern standards, but very generous at the time. The gearbox initially had 4 gears.

The Golf GTI prototype was completed just in time for the September 1975 Frankfurt show, though it did not go on sale until June 1976. The engineers set themselves the same standard of performance, durability and road behaviour that every normal VW had to pass.

The car was not shown in the UK until late in 1976, the first appearance being at the London Motor Show. It was stated that no RHD versions would be available due to 'technical reasons'. It was reviewed by 'Motor' magazine which credited it with a 0-60 time of 9.6 seconds and a top speed of 108mph. It was available to import at £3,372. This car, MKT 512R, a Mars Red example, was probably the first Mk1 Golf GTI in the UK. Volkswagen dealers in the UK lobbied Volkswagen Germany hard for two years and at last, in early 1979, the Golf GTI was on sale in the UK with right hand drive. Shortly

by VWGolfmk1.org.uk

afterwards the 5 speed gearbox was also added to the 1.6 engine. Only 22 Golf GTI's were sold in the UK in 1978, but over 1500 were sold in 1979, and the Golf GTI has never wavered in terms of sales success in the UK since, except during the insurance problems of the early 1990s and even then, it was still one of few hot hatches to weather the 'insurance recession'.

In November 1979 'What Car?' lined the 1588cc 5-speed Golf GTI against what they perceived as its nearest competitors at the time; the Ford Escort RS2000, the Talbot Sunbeam Ti and the Vauxhall Chevette HS. The Golf GTI won by a considerable margin, and history shows that, with the exception of the Ford, the other cars have disappeared into obscurity.

By 1980, the hot hatch concept had been established, and rival car makers were producing their own versions. Notable ones included the Vauxhall Astra Mk1, the Alfasud, and the new Ford XR3. But each time the various cars were lined up, there was always the same winner. 'Motor' magazine commented that "At the risk of sounding interminably repetitious, the GTI still rules!"





**Aaron Stehly:  
1984 Rabbit GTI 1.8T**

VW technology has come a long way over the years, and for many the pinnacle of VW's engineering might is the 1.8 Turbo engine. Powerful, compact, and tune-able, the only downside is that this wonderful engine is typically saddled with a heavy modern VW to lug around. Wouldn't it be cool to combine VW's latest, greatest engine with their oldest and lightest chassis? Of course, this has been done many times over many years.

But Aaron Stehly, a bicycle mechanic from Minneapolis, doesn't care that this combination isn't so unique, it's rare enough for him. Standing out from the crowd is one thing, but the idea of placing such a powerful engine between the front frame rails of a lightweight Golf was intoxicating. Aaron studied up on the necessary technique and made sure he had the tools he would need to do the work himself. A nice big garage was his to use, except for one small detail – it belonged to his parents and they liked using it for such silly things as parking their cars in it each and every night. Our man Aaron is a bright guy and after negotiating in the currency relevant to all parents – the promise of good grades – they agreed to let him use the garage for the few weekends the swap was supposed to take. The process actually took some two years.

The engine swap pretty much defines this particular Rabbit and Aaron put a great deal of thought into how he wanted to do it. He chose to go with an Audi A4 AEB-style 1.8T and added accessories from a non-A/C 2.0 ABA. For now, the turbo is the stock item from 1997, but it's bolted to a Techtonics downpipe and from there he's using a 2.5" set-up all the way back. A front mount intercooler with custom piping is used to cool intake temps and add a little more power at the same time.

The toughest aspect to this swap was without a doubt the wiring. Aaron and his friend Jack spent hours looking over wiring diagrams and seeking advice from various tuners. In the end Aaron decided to eliminate the factory ECU and employ an SDS EM4-F stand-alone system for engine management duties. The Rabbit still has an o2o gearbox, but it's no stock unit. Aaron outfitted the 'box with a Quaife limited slip differential and upgraded to taller Mk3 gearing.

Aaron did not neglect his Golf's rather sorry stock braking abilities. Though updates were called for, the Rabbit's lightweight meant that it wasn't necessary to go crazy with huge rotors and multi-piston calipers in order to make the faster Golf stop, and Aaron ultimately decided that some 10.1" front rotors and a rear disc conversion would do just fine.

For suspension, H&R Cup kit components were chosen, but the truth is that Aaron wishes he had gone with a good set of coil-overs from the beginning so that he could drop the

Rabbit just a little bit more. The Golf 1 never had the stiffest of chassis, so a custom front upper stress bar from S&L Imports is used.

With looks in mind and before the engine swap took place, Aaron performed a bare-metal restoration on the Bunny and at the same time added a few custom touches as well. After any traces of rust were gone, along with a couple of dents and dings, the entire shell was treated to several coats of glossy black paint.

Euro bumpers were added to smooth and simplify the exterior look, but at the same time, the raised metal "VOLKSWAGEN" script from the tailgate of a Rabbit pickup truck was welded and blended to the Rabbit's hatch. Stock taillights have been tinted a uniform red, and at the front a set of round headlights from a Cabriolet were grafted in.

When it came to wheels for his Rabbit, Aaron figured a proper set of old-school wheels were appropriate and you don't get more old-school (or more proper) than a set of 15x7 Ronal Turbos. Shod with 205/50-15 Falken Azensis tires, they do more than just look good, too.

Aaron understands the importance of a nice interior and his Corbeau seats and custom 6-point cage drives the point home. The rear bench and backrest have been removed and each door and interior panel has been replaced with an aluminum sheet metal version for good measure and a motorsport look. There is more aluminum to be found along the dash, but

this is no mere decorative trim kit – Aaron used the material for mounting custom Autometer gauges.

Certainly, there are more radical projects on the road these days, but very few are as complete and as true to an original vision as Aaron Stehly's '84 Rabbit. If the right person with the right offer were to come along, Aaron tells us the car is for sale, but in the mean time he's happy to drive and enjoy a car for which he justifiably proud. He's also already planning for his next project.

Hopefully, Aaron's parents haven't gotten too used to having their garage back. **E**

by Brad Beardow



The fifth generation GTI model you see pictured is the most complete GTI that Volkswagen has produced in some 13 years. It goes, handles, brakes, sticks and looks the part. Some will cry foul, but for long-time GTI enthusiasts, we all know that something was definitely lost after the second generation GTI model stopped production in 1992 - the cars got heavier, more luxurious, and while they also became powerful, they lost sight of what a true hot hatch should be. Even the Volkswagen brass in Germany admit the GTI "lost its way". Outside of a few limited edition models like the 25th Anniversary GTI, the GTI, by its very definition, has been floundering. Well, we're here to tell you that the GTI is back.

When it comes to sheer driving enjoyment, the new GTI currently stands in a class of one. True to its pedigree, it can make you feel great - and that's "the best any car can do for its driver." Accolades further continued; "Listen, we ought to give this car a medal or something. Partly

the **SUCCESSOR?**

The MKV claims to be the spiritual successor to the MKI

by Jamie Vondruska

wrote, "Now that VW has done the definitive econoracer, copying it should be easy." No kidding... Before long there was an onslaught of hot hatches: Dodge Omni GLH, Ford Escort GT, Honda CRX and Civic Si, and more. While the competition was busy trying to build a better GTI, Volkswagen began making their GTI bigger, heavier, more luxury-oriented and overall less fun to drive. It was still a nice car, but it started to pale in comparison to the competition while the price continued to rise - a 1991 GTI 16v cost nearly \$16,000 (not accounting for inflation).

In the early '90s, the Golf III was introduced and while the GTI gained an impressive 6-cylinder powerplant, the car again got heavier and less performance oriented. The introduction of the Golf IV was a clear indication that Volkswagen had lost its focus completely with the GTI. The Golf IV platform itself is one of the most rigid and well-engineered chassis ever created for a small car, leaving no excuses as to why it handled so poorly given the obvious potential it had. Further, the Golf IV GTI on the outside looked no different than the two-door Golf. At the time, this was an overall trend seen with most car companies as they strove to build models that tried to appeal to the widest audience possible at the expense of everything else. The GTI still felt like a German car, but it didn't feel like a proper GTI.

Faced with the prospect of increasingly stiff competition, particularly in the European market, Volkswagen set

out to right the floundering course that had set the GTI adrift. First, Volkswagen needed to determine what makes a proper GTI:

1. Handling
2. Fun to drive
3. A flexible powerplant
4. Hatchback utility
5. Economy
6. German feel

First impressions upon seeing the new GTI leave no doubt that you are in fact looking at a GTI model. From A1 GTI touches like the red keyline around the front grill, retro GTI badging up front and in back, to the plaid cloth seats nearly identical to the original ones found on the very first GTI back in 1975, Volkswagen has given the Golf V GTI a clear link cosmetically to its past. To further differentiate the GTI from lesser Golf V models you'll find 17 inch and 18 inch wheel packages, an aggressively styled front bumper with honeycomb mesh grill and lower bumper inserts, integrated driving lights, side skirts, unique rear valence with dual exposed titanium (!) exhaust tips, tinted front head lamps with high intensity discharge light units, red brake calipers and more. Overall the car has an aggressive look (particularly in black), an improved stance and ride height, and overall appearance that clearly identifies the car as a GTI.

Opening the door the first things you'll notice are the sport seats with near-perfect size bolsters on the upper and lower cushions. The plaid seat pattern that might look slightly garish in photos, actually looks tasteful and unique and will put a reassuring smile

on those of us that grew up with the original GTI (and many other European sports cars).

The new Golf V claims an increased rigidity of nearly 80% over the outgoing Golf IV model. That's pretty significant given the Golf IV had a body rigidity nearly identical to the Mercedes C-class sedan. Late model Volkswagen owners will also notice a host of other small details. For instance the drip rail that used to be formed from a metal tray and a rubber seal where the roof and doors meet, is now gone, replaced by a perfectly laser welded seam and ridge - something that not only looks good, but also helps with that increase in rigidity. The doors also no longer wrap into the roof itself and instead are counter sunk into the sides of the car and are triple sealed all the way around - no more dust and water in the door jambs.

Inside the new GTI you'll notice that the doors close with a very solid thunk. Volkswagen redesigned all the door hinges, particularly on the two door models to combat door sag that



could happen with the older generation cars. Whereas the Golf IV could have the tendency to make you feel like you are sitting on a phone book, the Golf V is the opposite, giving the feeling of being more ensconced in the interior. That said, outward visibility is quite good all around, controls are all logically laid out and more ergonomically friendly, and the GTI's unique dish gauge faces are very easy to read at a glance. The new dual-zone Climatronic controls in particular



because it'll put the hurt on so many so-called 'sports cars' in the stand-on-it-and-steer-it mode. But mostly because the GTI isn't another one of those dumb boy racers that ride like produce wagons and make power like blenders stuck on purée."

So what happened since then? Competition and a lack of focus on Volkswagen's part. Car & Driver



are a huge improvement with easy to use round rotator rings and separate temperature controls for the driver and passenger.

The GTI sports a unique steering wheel that looks like it was lifted right off the aftermarket shelf - perfect thickness, thumb cutouts at the proper 10 o'clock and 2 o'clock positions covered in a combination of regular and perforated leather with hand stitching complete with a flat bottom plane to the wheel harking back to open wheel cars and a brushed aluminum GTI logo. The GTI also comes with a dark anthracite grey headliner and real brushed aluminum trim accents on the doors and dash. The shift knob in the GTI is also unique with aluminum accents and increased heft which makes slicing through the gears that much easier. The MQ350 six-speed manual transmission has been revised once again in this application with better feel, more direct shift action and slightly increased effort that overall gives a better, more connected feel through the cable shifter mechanism. Clutch pedal effort has also gone up slightly



of horsepower, along with wonderful engine noises that climb right to redline with no drop in power or the harshness more common in the 1.8T. Not since the original 16v engine has a VW 4-cylinder had this kind of liveliness and character... and that sound! Volkswagen engineers are keen to point out that the new 2.0T received extensive intake "tuning" to give it a unique sound. This was accomplished not simply through air box design, but also through the throttle body and intake tract itself. Whatever they did, we really like it.

All of this power would be pointless if it wasn't backed up by proper handling and braking. The Golf V platform received not only increased rigidity, which takes some of the heat off the suspension to do all the work, but also a completely revised MacPherson front struts with revised sway bar links and a completely new (and complex) fully independent rear suspension. The GTI goes even further with increased spring and damper rates, 15mm lower ride height and increased roll bar diameters front and rear. We're happy to report that the dive, squat and roll that plagued the Golf IV platform has been all but completely exorcised from the new Golf V platform. This, in spite of the fact that general ride quality has gone up as well giving the GTI not only a very sporting demeanor, but a compliant ride that is far from harsh.

The new GTI is very easy to drive quickly with fast steering, little body roll and overall neutral behavior that gradually breaks away into light understeer that can be coaxied back in line with a slight lift of the throttle or change in steering direction. The new electro-mechanical steering has been completely reprogrammed for the GTI and while it won't be mistaken for the mechanical unassisted rack as found in a Golf 1 GTI, it does provide decent feedback regarding what is occurring with the front wheels. Braking is phenomenal with no fade, great pedal feel and a very direct response that hauled the car down very quickly. This is owed to the 312 mm (12.3 inch) front ventilated rotors and 286 mm (11.3 inch) rear disc ro-



tors. Volkswagen also reprogrammed the stock electronic stability program (ESP) in the new GTI. They've made it far less intrusive with surprisingly high threshold levels before it intervenes and reigns you back in when you get in over your head. Like past models, ESP is defeatable via a center console mounted switch.

On our trip from Wolfsburg to Paris we found the GTI very livable with lots of interior space even for rear passengers. The interior is quiet, particularly out on the highway. Wind noise is minimal until you start pushing into 130mph plus speeds. On several stretches of Autobahn we saw an indicated 225 km/h (about 140mph) and stability was typical German car solid even at those speeds.

Volkswagen says to expect fuel mileage of around 8.0 l/100 km or 30 mpg, which, despite the increase in displacement and power, is nearly identical to the 1.8T, no doubt thanks to the direct injection gasoline design.

So when will we see the new GTI over here on our side of the pond? Volkswagen of America tells us to expect the new GTI at the end of calendar year 2005. Pricing has not been finalized but expect it to be around \$23,500. There is a push within Volkswagen to make the GTI consistent across all world markets so what you see in the photos should be very close to what we will see here. Expect options to be limited to leather seating, an even more aggressive sport seat, navigation (!) and 18" wheels with ultra-high performance summer tires and the Direct Shift Gearbox (DSG) transmission.

Overall we were surprised how well sorted the new GTI is, particularly with the amount of power it is putting to the ground through the front wheels. Torque steer never reared its ugly head, wheel spin rarely happened unless purposely provoked or in the wet, and the GTI never spun an inside tire mid-turn. Our driving time was limited to streets and highways, so we'll have to wait for a proper flogging out on the track before making final decisions, but what we've experienced so far is well beyond anything you could ever accomplish in a recent stock GTI and even surpasses the ability of many aftermarket modified cars as well.

The Golf V GTI is supposed to get back to its "roots" according to Volkswagen and we believe they have finally done that. Looking back at the laundry list of desirable traits that made the original GTI such fun (1. Handling, 2. Fun to drive, 3. A flexible powerplant, 4. Hatchback utility, 5. Economy, 6. German feel) we feel Volkswagen has successfully managed to incorporate them all in a thoroughly modern GTI.

The GTI, after a fair amount of soul-searching, is finally back. E

## MODERNCLASSIC

# NINE RULES

How to make the top ten of all time

**S**o what makes a hatch hot? And just as important how does one define the genre? Can you simply place a more powerful motor in a small family car and call it a day? Is an Integra coupe a hot hatch? After all it has a hatch back there. Enthusiast is a bit more picky about the hot hatch world, and want to lay down some ground rules for what ingredients are key to a great hot hatch.

### 9. Defining the basics

Simply put, a hot hatch needs to be based on a small upright economy car. Obviously the Golf GTI is the perfect example (hard not to be when you start the genre!), it is based on the simple upright hatchback body so skillfully penned by Giorgetto Giugiaro, a car designed to be cheap transport, and never truly intended to give Porsches a scare on the track. However now that the genre is so popular, being designed for performance from the outset does not necessarily show you the door out of the club.

### 8. Power!

Yeah, its an important ingredient, after all more grunt is almost always a welcome prospect, especially in a simple economic car. A power to weight ratio of 25 lbs per hp or less is desirable, and a 0-100km/h time in less than 10 seconds is about the slowest we look for.

### 7. Engine Location

It gets a bit fuzzy here thanks to the French. Normally it would be simple to say that any real hot hatch should be front engined. But the R5 and Clio V6 upset this, placing powerful units right smack in the backseat, but ultimately they are exceptions to the rule.

### 6. Driven Wheels

The basic formula is front engined, front wheel drive, but there are exceptions (and any driving enthusiast has some bias towards rear wheel drive). BMW put out the 1 series, and proper hot hatch versions will be appearing soon (think M1). AWD is also perfectly acceptable (think 323 GTX).

### 5. Brakes

Upgraded brakes aren't a requirement (after all some pretty basic cars come with decent binders), but up rated brakes are always welcome, and more stopping power is required as power output goes up.

### 4. Weight

Now we get to the real meat of what makes a hot hatch great. Its the simple fact that being based on a relatively cheap economy car, that hatches tend to be small and light. This means less mass to accelerate, turn and stop, and just as important its what makes them so tossable.

### 3. Suspension

No ifs ands or buts, if the suspension isn't aggressive, you end up with a soggy grand tourer (think MKIII Golf GTI). Thankfully firmer suspension doesn't need mean rock hard, we have the French to thank for teaching us that one.

### 2. Road Feel

This is what separates an OK hot hatch from the all time greats. The feedback from the wheel, knowing every inch of the road, like any great enthusiast car, it has to communicate.

### 1. Something Special

Then again its not always so easy to just set everything in stone, there is no secret formula for how to make a hot hatch, its an easy thing to get wrong, even with experience (it seems all of the greats have turned into mush at one point or another). Its not the sum of the parts that makes a Clio 172 better than say a Civic Type-R, its something beyond that. Perhaps its having passionate, enthusiastic people in the background, just like the grandfather MKI Golf GTI, people making a car for the love of driving, the same thing driving this magazine.

# HOT hatch

## Top 10 Hot Hatches of All Time

10	<b>Renault Clio V6/R5 Turbo</b> <i>Mid-engined madness will always bring in the votes, it seems, and you guys love the fact that Renault stuck a 3.0-litre V6 in the middle of a supermini. And so do we. The predecessor R5 though was the car that really got people's attention, with a turbo-charged unit in the back seat and a real rally heritage to call upon.</i>	4	<b>Volkswagen GTI MKV</b> <i>As outlined in the previous article, the original GTI is back. Its more luxurious and heavier than ever before, but it shrugs off this excess and brings a real driver's focus to the table with 200hp to motivate its mass, and top of the line handling.</i>
9	<b>SEAT Leon Cupra R</b> <i>The best of the Volkswagen group's A4 chasis. The Leon took the underpinnings of the Golf and turned them into a hot little number from Spain. With up to 225hp from the 1.8T and superb brakes and handling it has all of the elements of a true hot hatch unlike its cousins (VW GTI, Audi A3) from that generation.</i>	3	<b>Honda Civic Si</b> <i>The car that epitomizes the Japanese entrants to the segment. A hotter engine, some upgraded suspension and brakes, nothing overly ground breaking, but the Civic certainly is a major spark in the import tuner crowd, and its a blast to drive thanks to direct unfiltered steering and low weight.</i>
8	<b>MINI Cooper</b> <i>We don't want to give too much away, but the original Mini did considerably better than its modern cousin. Still, the new MINI is a brilliant car to drive, if not the revolutionary package that the original was. Basically, it drives like a small BMW, which is what it is.</i>	2	<b>Volkswagen Golf GTI</b> <i>This is the car that created the cult of the GTI. Now in its fifth generation, the original Golf GTI almost didn't happen back in the 1970s as the marketing folks at VW couldn't see that people would want to buy a small, sporting hatchback. A bit like the producer who dismissed the Beatles as a passing fad, really. Engineers persevered anyway, and a star was born.</i>
7	<b>Peugeot 205 GTI</b> <i>Staffer and Pug-head Tom will be pleased to see the 205GTI doing so well. One of the greatest hot hatches of all time, this really is a driver's car, although it'll reward cack-handed treatment with an impromptu hedge-encounter. Glad to see 4Car-istas are so discerning, though.</i>	1	<b>Renault Clio Williams (1985-90)</b> <i>Maybe this car just proves that having a real race team behind the development of a car is what makes for magic. After all Williams' arch-rivals McLaren hit the perfect note with their supercar, the F1. More impressive is the Clio, which is made to a budget but still has that special quality that makes it one of the all-time great cars.</i>
6	<b>Lancia Delta Integrale</b> <i>You could barely separate the two four-wheel-drive rally replicas in the top 20, but in the end opted to place the Integrale in 12th. Born from the world rally championship winning car, the Delta was evocative to look at, but even better to drive.</i>		
5	<b>Honda Civic Type-R</b> <i>While the MKV GTI brings a strong mix of luxury to the hot hatch segment, the Civic does away with it and brings a highly focused tool for the real hooligan. With equal power (but less torque) and less weight its faster on track, and even allows the rear to step out a fair degree on high speed sweepers</i>		

