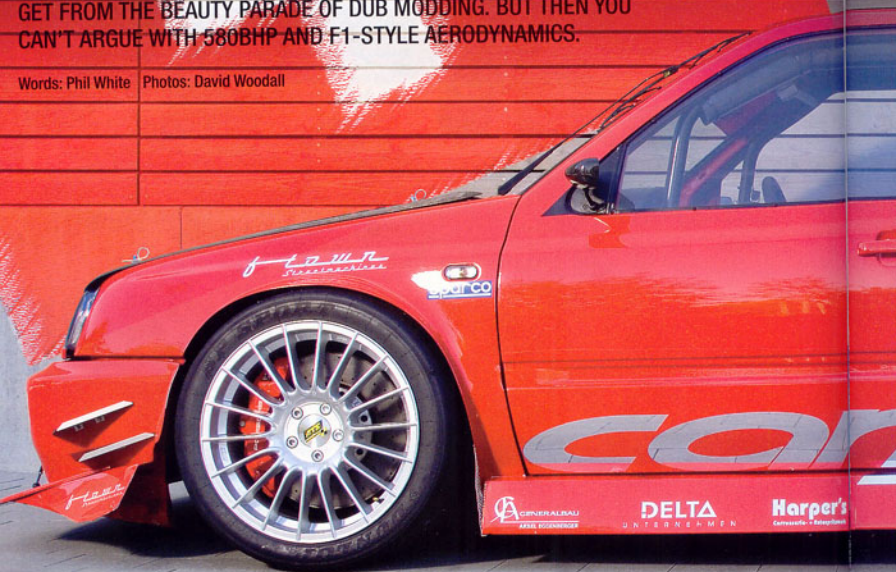


# SWISSmo

CARPI TUNING'S RED DEVIL VR6 GOLF RACER IS AS FAR AS YOU CAN GET FROM THE BEAUTY PARADE OF DUB MODDING. BUT THEN YOU CAN'T ARGUE WITH 580BHP AND F1-STYLE AERODYNAMICS.

Words: Phil White Photos: David Woodall



"The stereo," laughs Anthony Carpi gnano, pointing floorward, "is there." We follow his finger to a point just in front of the rear wheel, where a fat exhaust pipe sticks through a huge sill made of folded metal. He's right, too. In action the car makes an utterly fantastic noise. It can be heard in video footage on [www.carpi.ch](http://www.carpi.ch) on track at France's Circuit Dijon Prenois. The racket is a glorious howling, accompanied by the swishing of a large turbo in action. You wouldn't think it was a VR6, as it does a fair impression of an F1 motor during the glorious turbocharged days of the early 1980s.

In fact, this car owes a great deal to this fascinating period in F1 history. To get 580bhp through the front wheels and keep a Mk3 Golf on the ground at the resulting speeds requires quite complicated aerodynamic trickery. "Underneath," says Anthony, "is a big piece of carbon, for the downforce." His English isn't perfect, but he is describing the undertray part of a ground effect system, which acts like a huge inverted underfloor wing to suck the car downward at speed. The most visible part of this system is the massive rear diffuser, which smoothes the air rushing away from the rear to reduce speed-sapping turbulence. In case you haven't quite got

the message about this car's purpose, the outlandish carbon and alloy rear spoiler bears the word 'downforce' in big capitals.

Anthony would be the first to admit that his Golf will never win any beauty contests, but he simply doesn't care. His job is to win trophies, and this it does very well indeed. Despite his racing being interrupted recently by the relocation of his Zurich-based company Carpi Tuning, Anthony has made a reasonable showing in this year's Divinol-Cup touring car series. It also gains regular podium places in Tuner Grands Prix. Ten years ago this was a standard Mk3 Golf VR6. The following year Anthony and his brother started Carpi Tuning and the car

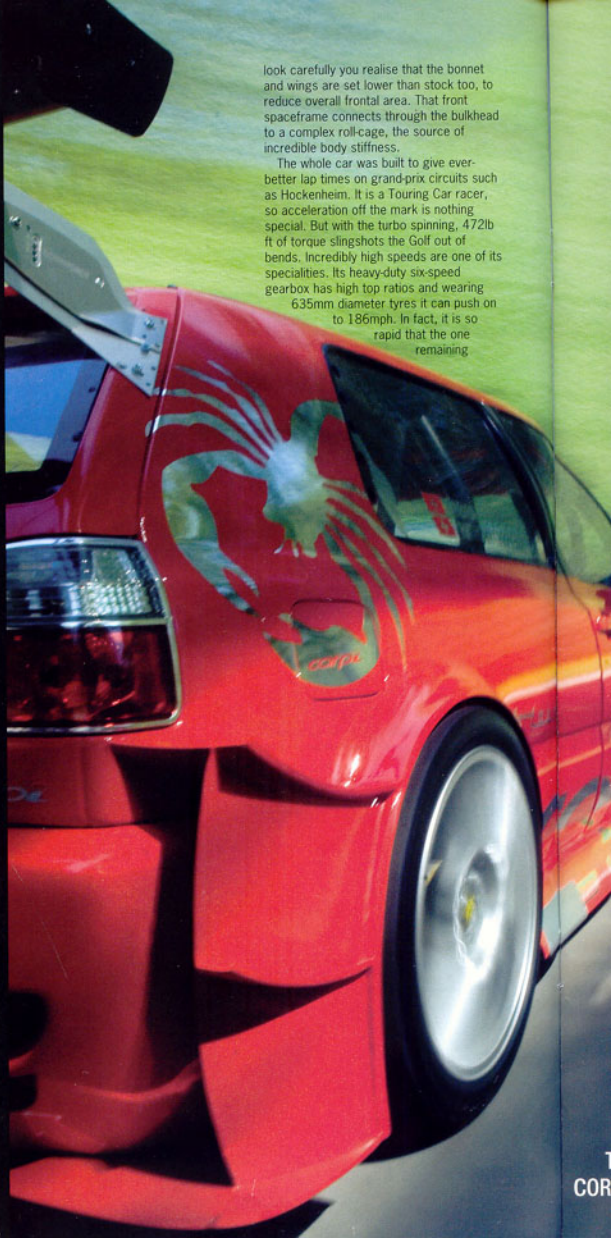
# Development



seems to have evolved with the business. It has become faster and more capable with every passing season, and when we visited it was undergoing engine development, which will see the motor giving more than 600bhp. The narrow-V unit has been persuaded to more than treble its original power output by forced induction. The huge turbocharger sits low behind the block, not the greatest position in terms of heat management but an enormous intercooler occupies the nose. Oil temperature is closely managed and every trick in the book is used to keep intake temperatures down, including a pressurised cold-air feed and water injection.

One of Carpi's specialities is developing and fabricating as much of its stuff as possible, and this is how the Golf was built. The engine was put together in-house, with items such as manifolds and engine mounts being made to measure. In fact, the whole front end is essentially created around the engine, being a spaceframe with the purpose of mounting it lower and further back in the car than standard. "I worked to push the weight further back," Anthony says. This is a huge understatement. The VR6 was a rather nose-heavy car, but now it has the ideal 50:50 weight distribution thanks to carbon fibre wings, bonnet and doors. While the side and rear windows are

lightweight plastic, the roof, boot and rear wings are still made from steel, retained to keep mass in the tail. Despite this, the car is a featherweight 1012kg on the scales. And no, your eyes aren't deceiving you. There is something distinctly odd about the nose of this Golf. The bonnet droops forwards and down in bad-boy-style, but for purely aerodynamic reasons. Anthony wanted smooth airflow over the lip for better high-speed stability and to create an area of low pressure just behind to suck hot air out through a large vent. Aftermarket headlamps lurk behind the lip, but set further forward than usual, to allow extra air passage into the engine bay. If you



look carefully you realise that the bonnet and wings are set lower than stock too, to reduce overall frontal area. That front spaceframe connects through the bulkhead to a complex roll-cage, the source of incredible body stiffness.

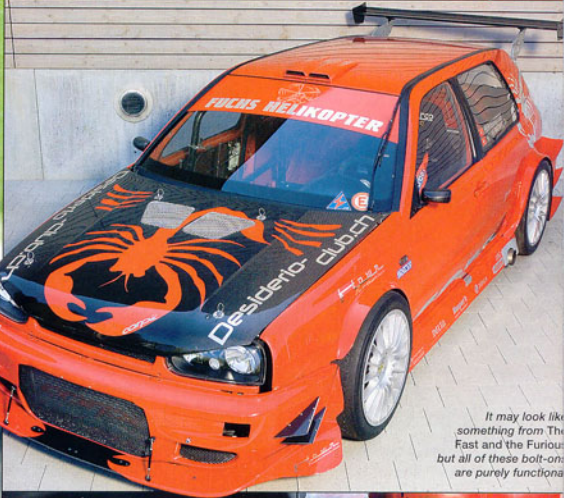
The whole car was built to give ever-better lap times on grand-prix circuits such as Hockenheim. It is a Touring Car racer, so acceleration off the mark is nothing special. But with the turbo spinning, 472lb ft of torque slingshots the Golf out of bends. Incredibly high speeds are one of its specialities. Its heavy-duty six-speed gearbox has high top ratios and wearing

635mm diameter tyres it can push on to 186mph. In fact, it is so rapid that the one remaining

windscreen wiper has to park vertically, to the far left-hand side of the screen. If it spent too long parked horizontally at top speed it would simply snap off.

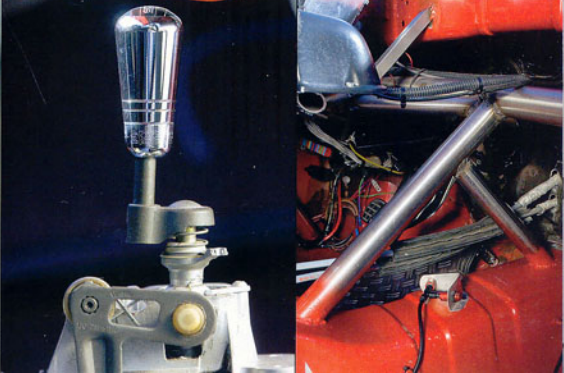
Performance such as this places enormous demands on the chassis, and enormously capable underpinnings have been employed here. KW coilovers allow height, bump and rebound adjustment and contain heavy-duty springs. The whole system is fully adjustable for geometry, and Anthony has set what seems an incredible degree of negative camber. To meet the strain of huge wheels working hard, the stub axles are strengthened and Teflon-coated units. Those wheels are massive: 9.5x18" at the front and 10x18" at the rear, wearing 250- and 255-section slick tyres respectively. Anthony also uses different compounds for the front and rear tyres, to further hone the car's cornering characteristics, very clever indeed.

The very size of the wheels, plus the fact that they are set as wide as possible to maximise the track width, dictated that fat wheel-arch extensions were required. Again, these were never going to be just stick-on parts and they presented Anthony with another great opportunity. He built the bodywork out behind the rear arches in big corner wings, which add to the downforce and help smooth turbulence for less



*It may look like something from The Fast and the Furious, but all of these bolt-ons are purely functional*

**ANTHONY USES DIFFERENT COMPOUNDS FOR THE FRONT AND REAR TYRES, TO HONE THE CAR'S CORNERING CHARACTERISTICS**





## DUB DETAILS

**ENGINE:** 2788cc VR6 narrow-V six-cylinder, twin-cam, fuel injected unit. Cold-air induction, Carpi Tuning turbo conversion. Front-mount intercooler, water injection, Oil cooler, High-spec steel internals, lowered compression ratio, race cams. Fully machined lightened, balanced and blueprinted head. 60-litre touring race fuel cell, high-flow fuel pump system. Bespoke 90mm diameter side-exit exhaust. Competition-spec six-speed gearbox. Six-paddle, triple-plate clutch. Multi-plate limited-slip differential with 45% lockup

**CHASSIS:** KW Variant 3 coilovers, race springs. Fully rose-jointed suspension, fully adjustable camber, caster and toe. Upper and lower strut braces front and rear. Full welded roll-cage and spaceframe front. Porsche Cayenne Brembo 370mm diameter brake rotors, six-pot calipers. ABS removed. Manual bias adjustment in cockpit. 9.5x18" front, 10x18" rear ultra-light alloy competition wheels. 250/655 front, 255/635 rear competition slick tyres

**OUTSIDE:** Carbon fibre bonnet, front wings, front bumper, front splitter, corner splitters and doors. Lower nose profile, bonnet line extended forward and down. Roof-mounted cabin air vent, alloy side skirts, wheel-arch extensions, rear corner wings for downforce and air extraction, alloy and carbon adjustable rear wing. Red Carpi livery

**INSIDE:** Stripped cockpit, dials and instrument binnacle mounted on roll-cage cross bar, Sparco steering wheel, seat and harnesses. Fire fighting system

**SHOUT:** Carpi-tuning, Kaiserstuhlstrasse 36 CH-8154, Oberglatt ZH, Switzerland:  
0041 44818 0404 or www.carpi.ch/net

disturbance in corners. "Also," he says, stuffing his hand inside the gaping maw of one, "hot air is drawn out from the brakes and tyres." This is mirrored at the front, where small carbon fibre splitters stick out of each corner in another effort to smooth airflow round the nose. Large nacelles direct the cool air to the front brakes, too.

And lordy, what brakes they are. The 370mm discs and six-pot calipers are a Brembo system, originally specified for Porsche's Cayenne. With the Pagid front and Ferodo rear pads up to temperature, they are brutally effective and fade-free.

However, to stay safe, Anthony has them setup in a two-circuit-system. Naturally there is none of that pussy-footed ABS nonsense here, just a big, manly bias adjustment sitting in front of the driver's seat.

In fact there isn't much else surrounding the driver. Carpi has taken the concept of the spartan interior to its logical extreme. The only remnant of dash is the shell of an instrument binnacle carved from a Honda, in which sits a couple of dials wearing the Carpi logo. These are bolted to the cross bar of the roll-cage, as are smaller gauges showing boost pressure, oil temperature and, curiously, exhaust gas temperature.

There is one Sparco seat in place, although terrifyingly, a chassis is left in situ for a passenger chair for the ultimate in white-knuckle rides. If you want to escape, the door furniture has been pared down to a length of plastic-coated wire, held in place by webbing.

The Red Devil, as this Golf is known, is a curious machine in the context of the styling-obsessed Dub scene. It ain't pretty, but it has to be one of the fastest, most insanely ballistic Golfs in the world. And the best thing is, it will never be declared finished. "There is always something we can improve," says Anthony with an obsessive look in his eyes. The worlds of F1, Touring Car racing and the Veedub scene meet in this incredible automobile. Since the video footage of it in motion went up on the Web, debate has raged. Many think the film is sped up to make the action seem faster. Others believe there is no way a VR6 Golf can take Lamborghinis and Porsches to pieces. It does seem improbable that the car we know as the Golf's middle-age spread can out-gun a high-spec Impreza as though it were about to achieve flight but take it from us, it can. Feel the downforce, Luke ●





ANTHONY'S THE FIRST  
TO ADMIT THAT HIS GOLF WILL  
NEVER WIN BEAUTY CONTESTS:  
ITS JOB IS TO WIN TROPHIES

