

Volkswagen Racing R32 Mk5

This is the first and only Mk5 Golf R32 converted for motorsport. Not only that, it uses the DSG gearbox to make this one of the most technically-advanced cars on the grid.



The regulations of the Volkswagen Racing Cup are based on power to weight, which means that for the R32 our power output objective is 250bhp; as this is what the car produces as standard the engine development on the car was very straightforward! The regs also put weight penalties onto a 4 wheel drive car, and also those using the DSG gearbox. So the R32 DSG in race trim had to be a relatively heavy car.

Much of the challenge was getting the handling optimised to make the most of the 4-motion system and this higher weight of the R32. The R32 weighs a full quarter of a ton more than the Golf TSI that we ran at the same time, which meant that we had to develop some new settings to make the most of the chassis. Similarly, braking all of this weight needed some serious upgrade to the hardware and our front bumper extensions were used to channel more air into the lower intake holes.

Using the Volkswagen Racing suspension kit as our basis, this gave the negative camber on the front wheels that is needed to get the front wheel grip on track. At the rear, we did a lot of set up work to balance the grip levels - too much and it made the car understeer; too little and it became twitchy!

Obviously the 4-motion system gave the car a huge advantage off the start and when exiting tight corners. In order to make the most of this traction, more engine work was done to add in mid-range torque without increasing the overall power level beyond 250bhp. The Volkswagen Racing exhausts not only sounded fantastic, but also allowed us to tune further power out of the engine. New VWR exhaust manifolds were developed mid-year which gave another mid-range power increase.



This was a real favourite car; not only did it look and sound fantastic, but it's traction gave it a real advantage on-track, particularly in the wet.


RACINGLINE

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Technical Specification

Engine	Front, transversely mounted 3189cc V6 24V VWR uprated engine mounts Gas-flowed cylinder head
Engine Management	VWR mapping
Max power	250ps @ 6250
Drive	4Motion four wheel drive system
Gearbox	DSG
Exhaust	VWR Manifolds VWR Full Exhaust, 100-cell catalyst
Shell Safety	Production shell with welded in multi-point roll cage Recaro seat, built in fire extinguisher system, 6-point safety harness
Steering	Power assisted rack and pinion
Brakes	VWR 6-pot callipers, 360mm front discs Production vented rear discs VWR racing pads front & rear Steel braided brake lines
Front suspension	VWR Competition adjustable coil-over damper Solid adjustable top mounts Poly bushes
Rear suspension	Adjustable anti-roll bar Rear semi-trailing arm VWR Competition adjustable damper Adjustable rear geometry Adjustable anti-roll bar
Wheels	8x18" VWR alloy wheels

