

Volkswagen Racing Golf TSI

The world's first ever use in motorsport of the 1.4 TSI engine, which uses both a supercharger and turbocharger.



When we first decided to develop the TSI engine for Volkswagen UK, it was a leap into the unknown.

We already knew that the TSI engine was a full 40kg lighter over the front wheels than the 2.0T GTI motor. But nevertheless we calculated that we would need to get the 1.4 engine up to around 230bhp to be competitive.

Speaking with some of the Volkswagen engineers in Germany we were told in no uncertain terms that this sort of output would be impossible! But, never ones to be beaten, we continued with our development programme until we reached the stage where we had enough confidence that this sort of power level was achievable.

And so, with cars hard to source in the UK at the time, we got one from the Germans, and started with our development.



The engine, fitted with a development exhaust manifold and a revised turbocharger, was soon up to power. The TSI engine misses a little of the low-down torque that we can achieve from the 2.0TFSI engine, but made up for this with the lightweight high revving nature of the engine.

The lower nose-weight of the TSI compared with the TDI and GTIs that we had built before really made a difference to the agility and turn-in of the car. The TSI was driven by a selection of journalists all through 2007, with a highest place finish of 7th place.

And, even with a 60bhp increase, it was completely reliable all year.

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Golf TSI Sport

Engine capacity (litres / cc)	1400 TSI
Configuration	4 cyl, 16v, turbocharged and Supercharged
Engine management	Volkswagen Racing mapping
Power output (PS @ rpm)	230 PS (std model 170)
Drive	Front-wheel drive
Gearbox	Six speed sport ratios, limited slip differential, Quickshift gearchange
Clutch	Sintered metal plate
Exhaust system	VWR race system with Race Catalyst
Shell	Production shell, fully stripped, welded-in multi-point roll cage to FIA standard. Volkswagen Racing front splitter
Safety	Recaro HANS racing seat, six-point harness, plumbed-in fire extinguisher system
Steering	Power assisted rack and pinion
Brakes	360 mm VWR ventilated front discs 12 pot calipers VWR ventilated rear discs ABS disabled, Adjustable bias
Front suspension	VWR two-way adjustable race dampers, Adjustable anti-roll bar Solid bushes
Rear suspension	Multi-link production suspension, VWR two-way adjustable race dampers, Adjustable anti-roll bar Solid bushes
Wheels	18 in VWR alloy wheels




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