

## VW Golf

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Author: Kim Henson

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First impressions of the seventh generation of Volkswagen's trusted family favourite.



Kim Henson drives three of the new models, and samples an ahead-of-its-time Mark III version from 1994...

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If you were around in 1974, I expect you will have changed a bit - but most likely you're still much the same at heart. Well, this generalisation also applies to the Volkswagen Golf, of which a total of 29 million examples have been sold worldwide, with 1.6 million of these finding homes in the UK.

It scarcely seems possible that the original model was launched way back in May 1974. Just in case you are wondering, at that time Edward Heath was Prime Minister, audio cassettes and eight track cartridges provided stereo music on the move, and the UK music charts were dominated by Abba's first single, 'Waterloo', plus acts such as Mud, Terry Jacks, The Rubettes and The Wombles.

So, much has changed over the last four decades or so, but speaking personally I still like Abba (and those other performers of that time), and from an automotive perspective (get on with it Kim), the Golf is still widely respected as a sound bet. So what is different about the latest incarnation, and what is it like on the road? I've been finding out.

## NEW, NEW, NEW

While outwardly the new Volkswagen (based on VW's 'MQB' or 'Modular Transverse Matrix' platform) is entirely recognisable as a Golf, every component has been changed. In fact I could probably write a book on the multitude of amendments, but I'll spare you - and instead, in this feature I'll give a flavour of some of the important aspects. Incidentally, in due course I hope to bring you a more in-depth report, based on a longer acquaintance with the new Golf.

In the meantime, a very significant point is that the weight of the new model is (depending on version) up to 100kg or approximately 220lb less than that of the outgoing car.



Since it is estimated that nearly one quarter of a car's fuel economy performance, in miles per gallon, is directly attributable to the weight of the vehicle/rolling resistance, this is an increasingly important aspect as manufacturers, including VW of course, strive to further improve mpg and emissions.

The new Golf's weight reduction has been achieved by a combination of methods. For example, throughout the body shell, much use has been made of high tensile steel. This material is heat-formed and up to five times as strong as 'standard' or normal steel. This means that the gauge of the metal can be varied as required to provide extremely high strength, through comparatively thick sections, as needed in localised areas, whereas thinner gauge material can be used elsewhere. The result is a stiffer, stronger, lighter structure.

Just one more example of weight reduction is in the engine, where the cylinder block is now made of aluminium, rather than cast iron.

As a point of interest, the original 1974 Golf weighed between 750 and 800kg (depending on version), whereas the average weight of the outgoing sixth generation version was 1215 kg. In the latest model, the average weight has been reduced to around 1150kg.

So the new Golf is said to be stiffer, stronger and safer, while at the same time being lighter than its predecessor. Interestingly, the newcomer is also longer and wider, and provides more interior space (thanks to changes within the engine bay, it has been possible to move forward the front wheels, to help in this respect).

Clever touches abound throughout the car, such as the way in which the rear hatch tray, when removed from its normal 'rear parcel shelf' position (to accommodate bigger loads), fits neatly beneath the boot floor. The boot is larger than before too, and deliberately has a low sill height.

In conjunction with technical advances (more of which anon), the new model's weight reduction has contributed to improvements in fuel consumption of up to 23 per cent.



## THERE'S MORE

In addition, throughout the vehicle, attention has been paid to making the car less costly to produce. Just one example of this is the standardisation of engine mountings, also of the gearbox and gearchange positions, within the various models across the range.

Major factory redesign work has also taken place, enabling cars from Polo to Passat size being to be assembled on the same production line, thus streamlining the build process.

Since it is claimed that overall the new Golf is 20 per cent less expensive to make than the previous version, so more standard equipment can be included in the asking price - providing buyers with better value for their money.

## GETTING TECHNICAL

A myriad of technical innovations has raised the Golf's game even higher than before.

The engines have been fully re-engineered, and a significant change for the new petrol units is that the exhaust manifold is now built into the cylinder head. In addition, for both petrol and diesel models, when the motor is cold, the water pump does not operate at all. The diesels also feature separate cooling circuits for the cylinder block and cylinder head. These refinements improve engine warm-up from cold, aiding fuel consumption and allowing the heater to work more quickly.

Another fascinating improvement on the petrol engines is that at high loads, the temperature of the exhaust gas is reduced by the engine's coolant, reducing fuel consumption by up to 20 per cent.

As part of the quest to reduce internal friction with the petrol engines, the twin overhead camshafts are driven by a low friction toothed belt, which is made from upgraded materials so that the belt's service life covers the expected life of the vehicle.

On 140PS versions of the 1.4 litre TSI engine, 'Active Cylinder Technology' (ACT) is



incorporated. This clever system employs specific camshaft activation to temporarily shut down two of the four cylinders (in fact, cylinder numbers 2 and 3) under light load conditions. This significantly improves fuel consumption.

The mechanical activation of the system occurs within a single camshaft rotation, and (depending on engine speed) is said to take between 13 and 36 milliseconds! The transitions into and out of ACT operation are smoothed by ignition and throttle valve interventions.

It's fascinating that the mechanical components in the ACT system weight just 3kg (or about 6lb).

All Golf engines incorporate stop/start and battery regeneration systems, which help to minimise fuel consumption.

The ultra low emissions/low fuel consumption Bluemotion variants now produce CO2 emissions of just 85 g/km, compared with the 99g/km originally achieved from earlier versions. Now, some 'ordinary' variants of the Golf produce 99g/km (and so qualify for a zero rate of road tax, as they come below the 'magical' 100g/km limit).

## SYSTEMS GALORE!

According to the variant chosen, the latest Golf features a number of high tech solutions to difficult situations encountered on today's crowded roads.

Radar-based 'Automatic Distance Control' (ADC) helps to maintain a sensible distance between the Golf and the car in front, and this, plus 'Front Assist' and 'City Emergency Braking' (all standard on SE models and above) help to prevent accidents.

Optionally available (and standard on the SE and GT) is a 'PreCrash' system which closes the windows and sun roof, and pre-tensions the seat belts, in anticipation of a collision. Another electronic aid (standard equipment) is the new 'Automatic Post-Collision Braking System' which applies the brakes following a collision.



(Reassuringly, the Golf has been a 'Five Star' NCAP rating, which means lower insurance premiums).

Further interesting and useful technologies available on the Golf include 'Park Assist', 'Driver Alert System', 'Lane Assist', 'High Beam Assist', and (from the summer of 2013) a universal phone holder incorporating an inductive aerial.

Slightly controversial is the standardisation of an electronically-operated handbrake, complete with an 'Auto Hold' mode which holds the car at a standstill when required, and releases on driving away. Many motorists still prefer the familiar, positive operation of a traditional handbrake lever...

## CHOICES

Three and five door body shells are available, and three trim levels are offered from launch in Britain - S, SE and GT.

Petrol engine choices are between 85 PS and 120 PS 1.2 litre TSI units, or 122 and 140 PS 1.4 litre TSI motors (the 140PS engine incorporating ACT, as already mentioned).

Diesel power comes from a 105 PS 1.6 litre unit or a 150PS 2.0 litre motor.

The line-up starts at £16,285 (for the 85 PS 1.2 litre S), which is £155 lower than the cheapest previous Golf. From launch the range topper is the 150 PS 2.0 litre TDI DSG five door, costing £24,880.