



## Volkswagen Golf (third generation) Ecomatic 1.9 Diesel

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Kim Henson goes back to the future in a fascinating Golf...



From the front the Ecomatic looks like any other third generation Golf, but this model was years ahead of its time.



Such is the rate of change in terms of technologies built into the latest cars, that I feel often it is useful to drive an older model to appreciate just how much things have altered. In any case, as friends and colleagues will testify, I need little excuse to drive any part of automotive history!

To me, a car built in 1994 is not very old, but in fact nearly 20 years is quite a long time in automotive technology progress. So it was with particular interest that I took the wheel for a brief test drive of Volkswagen's own third generation Golf Ecomatic.

The name of this ahead-of-its-time model (produced from late 1993 until mid-1994) is a combination of 'economical' and 'automatic'.

The car featured a 64 bhp non-turbo diesel engine, mated to clutchless manual transmission (so, effectively, a 'semi-automatic'), and in conjunction with a system that allows the car to freewheel when power is not required (so that it just sips tiny amounts of diesel during this time), and which cuts the engine after a further 1.5 seconds of inactivity, thus saving more fuel. A touch on the accelerator is all that is needed to re-start the engine.

Of course, in the early 1990s engine stop-start systems were not in general use, so this was advanced thinking by VW. Incorporated within the clever set-up was a vacuum pump for the clutch system, plus various control units and sensors to enable correct functioning.

The Ecomatic currently owned by VW in the UK is a very sound, tidy example, with just 68,000 miles on the clock (when I drove it), and which required very little work to bring it up to its present excellent condition.

Despite the power output being just 64 PS, the car felt reasonably lively and quiet, and the way in which it stopped (as designed) when it judged that fuel should be saved, and re-started again on command, was impressive.

Yes, of course, having stepped out of the latest Golf to drive this third generation car, it showed how much the cabin design had changed over the years, and ultimately this VW is less powerful than today's models. Yet it represented an commendable early attempt to



effectively cut emissions and fuel consumption, and in both missions it succeeded. Sadly, only 4,000 or so examples were built.

For the record, by comparison with the standard 64 PS diesel Golf of the era, the Ecomatic produced CO emissions down by 36 per cent, CO<sub>2</sub> emissions lower by 22 per cent, HC and NOX emissions improved by 25 per cent, and particulate emissions down by 11 per cent. Equally worthy of note was the improvement in fuel consumption, with the Ecomatic returning 61.4 mpg in 'Urban' mode, compared with 43.5 mpg from the standard equivalent Golf. That represents an improvement of more than 41 per cent!

## HISTORICAL TECHNICAL NOTE

As a point of interest, automatic starting systems and freewheel devices were in common use as far back as the late 1920s/early 1930s.

By contrast with today's stop-start systems designed with low emissions and fuel economy in mind, the set-ups of 80 years or so ago (such as the well-known Startix system) were arranged primarily to start the engine automatically (by means of a magnetically operated switch) when the ignition switch was operated, and to rapidly re-start the engine without driver intervention, if the car stalled (at, say, a junction).

Freewheel devices were incorporated into many British cars of the pre World War II era, including (for example) Rovers - until 1960 - and Standards. Very early Land Rovers also had them, as well as some Saabs. The freewheel systems helped to minimise high speed engine running when not



Subtle badging tells following drivers that this is an Ecomatic version. Few today will realise just how much more efficient this model was compared with other Golfs, and indeed most contemporary rivals of its era.



required, and thereby saving petrol too.

## WHEELS-ALIVE TECH. SPEC. IN BRIEF

### GOLF III ECOMATIC DIESEL 1.9 64 PS

Engine: 1896cc four cylinder normally-aspirated diesel, mated to clutchless manual transmission and incorporating freewheeling and stop-start technology

Power: 64 PS @ 6,000 rpm

Torque: 91 lb.ft/123 Nm @ 4,400 rpm

0-62 mph: 17.6 sec

Top speed: 97 mph

Fuel consumption:

('Urban'): 61.4 mpg

('Extra Urban'): 67.3 mpg

('Combined'): 47.1 mpg

Price when new: £11,495.