

## The V12 Vantage S

In May 2013 Aston Martin announced that V12 Vantage production was ceasing, later that month they threw a curve ball by unveiling an awesome new driver's car, called the V12 Vantage... S! The hardcore new S is a well considered evolution of the standard V12V and, in typical Aston VH-platform style, it also benefits from new technology developed for the Vanquish, Rapide S and DB9. So, as you would expect, this British bruiser features the latest generation V12 engine, with CNC machined combustion chambers, hollow camshafts, dual variable valve timing and knock control. But in order to maximise efficiency and best interact with a new transmission and ADS set-up (more on these later!) Aston have also elected to use a Bosch engine management system (ECU) - which we expect to see in other models shortly - and the mighty V12 is identified with a different engine code - AM28. Maximum power output is the same as the new Vanquish, but with around 74 kg less weight to lug around! Compared to the previous V12 Vantage power has increased by 55 bhp from 510 bhp@ 6,500 rpm to - 565 bhp@ 6,750 rpm and torque by 37 lb-ft from 420lb-ft to 457 lb-ft of torque @ 5750 rpm. The kerb weight has also been reduced by around 15kg and the simply awesome power to weight ratio is now 339 bhp per tonne (+36 bhpt). No wonder the S is being acclaimed as (One-77 aside) the fastest ever Aston with a 0-60mph time of only 3.7 seconds (-0.4 secs) and a top speed of 205 mph. Not only does the S go faster it now sounds better, courtesy of a new lightweight (One-77 style) sports muffler.

Of course the original V12 Vantage was hardly lacking in power and one of its issues was a lack of traction on poor road surfaces or in colder/wet weather and the S runs the same width/style of tyres as the previous model. But before you break out in a cold sweat, we are pleased to unveil that the new model features Aston's latest version of their ADS adaptive damping system (a first on a Vantage)

with three settings, Normal, Sport and Track. This not only improves traction but also ride comfort in the Normal setting (although it can now be a bit "bouncy!"). We are fans of the adaptive set-up which offers a choice of settings to suit your mood and improves the breadth of the car's abilities, from GT to track racer. Having said this, we aren't fans of the standard fit Corsa track tyres (more mainstream P-Zero's are an option) and would have preferred the engineers to extend the wheel arches and fit Vanquish sized tyres to match the Vanquish sized grunt! But, thankfully, the Dynamic Stability Control (DSC) systems have been fine tuned to match the car's increased performance potential and best utilise the Bosch ECU's computing power, while new underbody aerodynamics have reduced rear end lift.

The ADS now also varies the amount of steering assistance offered, with two modes, and the power steering is a Servotronic set-up, two more "firsts" for the Vantage range. Both press and customers alike have praised the more direct 15:1 steering ratio which features on the V8S (and 12.25MY+ standard V8) and the new S now benefits from this with a similar more "pointy" direct feel to the steering and just 2.6 turns lock-lock (from 2.8).

Aston claim the V12 Vantage S is born from their passion for motorsport, and specifically the V12 Vantage based GT3, which features an Xtrac sequential semi-automatic paddle shift gearbox. While a full-on racing gear box would not be suitable for best road use A.M. have worked with their long term transmission partners Graziano to unveil a Sportshift III automated manual gearbox for the S. It is a development of the air-cooled Sportshift II, uprated to include the twin plate clutch and slave cylinder from the One-77 hypercar and a tapered flywheel for improved low-speed driving. There is also a new clutch-learn programme to improve the consistency of the bite point. In combination with new plug-in lightweight drive shafts and advanced electro-





hydraulic controls, each gear-shift can take less than 70 milliseconds. If you compare this with the 200/160 milliseconds offered by Sportshift I/II you can see what a quantum leap Aston have taken with the new transmission. The final drive ratio is also slightly shorter than the manual V12 Vantage at 3.727:1 and with the new 7-speed box the first six gears sit closer together. The shorter gearing combines with lightning fast changes to ensure pulse quickening forward thrust from the mighty new V12 engine. There is also a longer 7th gear to aid best economy and allow the headline top speed of 205 mph! Aston have stayed with the single clutch design because of its reduced complexity and weight when compared to a dual clutch system, and to prove this the new design actually weighs 20 kilos less than the previous manual box, mainly due to the lack of oil cooling.

The standard Sport button now also alters gearshift speed and timing, alongside the exhaust and throttle map as before. Opinion is divided over whether the new automated gearbox is the right choice for what is designed as Aston's most hardcore driver orientated car, and we have to agree that manual is ultimately more involving. But with the competition moving to dual or single clutch "flappy paddles" and production of the standard V12 just finished above the promised 1,000 units, this choice will keep the original V12V more unique, aiding residuals, while also providing what buyers seem to want these days as the "stick-shift" moves towards the pages of history books!

The huge Carbon-Ceramic CCM brakes are the same size as before, but they have been upgraded to the latest 3rd generation Brembo specification, they are quieter with a new coating and larger front calipers, offering awesome fade free stopping power, which is a good thing considering the new models performance potential. The VH-bodyshell is now the latest Gen-4 specification, ensuring a more rigid base for best handling (but without the Carbon-fibre elements featured on the Vanquish).

Externally, defining changes include a new Carbon-fibre grille surround with two spars (which can be painted body colour) and Titanium mesh instead of the previous alloy bars. The design is inspired by the CC100 concept car. There are also

black surrounds for the front and rear lights (silver bezels are a nco). You can choose an optional black mesh finish and the Graphics Pack allows you to add a black roof, black rear upper panel, light infills and racing lipstick around the grille. Aston's current obsession with all things carbon or black also sees the option of black window surrounds, black side mesh and a Carbon-fibre exterior pack! The standard wheels are the same as before, but there is a new optional 10-spoke design, which are around 1kg lighter, and yes they are available in black!

Inside the specification mimics its predecessor, but you will find new glass switch gear, graphite air vent surrounds and the alarm upgrade is standard. Other new features include DAB radio, Easy Start and a new tracking system by Cobra. The drivers information module can now be displayed in either the left or right dials and the tyre pressure sensing system is also upgraded to be the same as the V8V. Refinement has also been improved with new sound deadening materials reducing noise levels by around 30%. There is also new centre door detailing (with piano black door pulls) and seat designs, with unique stitching and a centre stripe. The redesigned lightweight seats are optional and we are told they are likely to be required if you wish to achieve the claimed 1665 kg kerb weight. You can also specify an interior Carbon Pack and black pedal rubbers!

Although many enthusiasts have decried the lack of a manual gearbox, the new S is an intelligent development of the previous car. It is even faster and more exciting, while also being more refined with a greater breadth of abilities than before. Aston's most driver orientated hardcore model just got better, now where did we leave our wallet.

**KEYPOINT CHANGES** to standard V12 Vantage  
Latest gen AM28 V12 + 55 bhp/37 lb-ft - improved sound.  
New Sportshift III automated manual with 7 speeds.  
Gen-4 VH platform with improved rigidity - 15kg lighter.  
3 stage ADS adaptive dampers - gen-3 CCM brakes.  
More direct Servotronic steering with variable weighting.  
New grille design and black light surrounds.  
30% quieter inside - new seat and door centre styling -  
Glass switchgear - Alarm upgrade standard. New options.