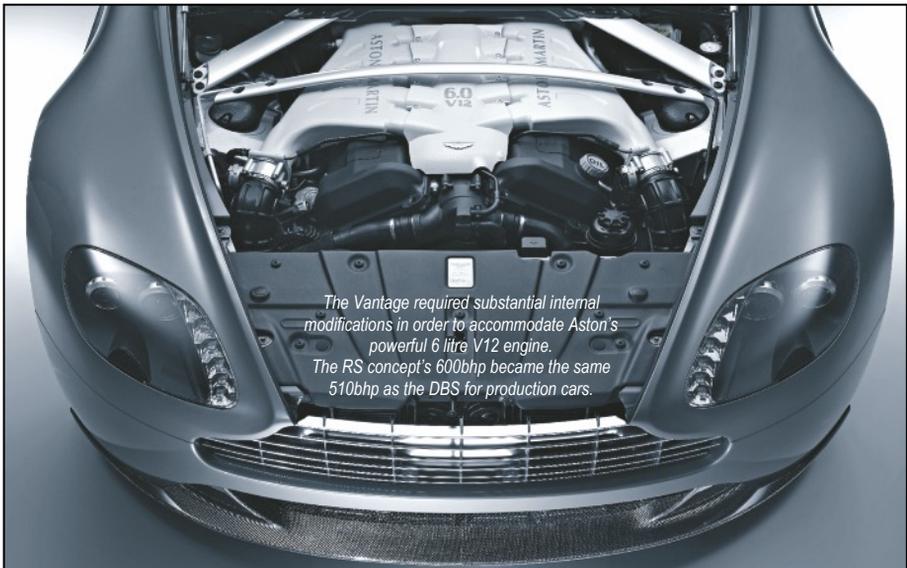


The V12 Vantage - "Aston Martin's most exhilarating sports car"

Just as the V8 Vantage had reached its full potential and the world's media was test driving the facelift model, announcing that it was the car everyone hoped for first time around, Aston moved the goal posts by unveiling the V12 Vantage RS concept: the smallest, lightest, most rigid and nimble sports car of the range was to receive a 600 bhp V12 engine! If ever there was a recipe for creating the ultimate Aston Martin driver's car this looked like providing all the right ingredients, and so it would prove to be, even though production cars were to receive slightly less power: using the 510 bhp V12 from the DBS.

As with most of Aston's recent achievements, creating the V12 Vantage would be anything but straightforward. For a start the engine, in standard DBS form, wouldn't fit into the Vantage engine bay and then engineers had to consider that it weighed some 100 kg more than the V8 it was to replace; potentially affecting weight distribution and handling. While the overall external dimensions have remained pretty much the same as the standard V8, the internal front structure has been heavily revised forward of the suspension towers, in order to accommodate the larger

engine, new brake cooling and air intake system. If you lift the bonnet you will see that the V12 engine takes up virtually every millimetre of space, while the V8 looks like it's too small for the area, the bigger engine appears to have been shoe horned in! Not only is the Vantage's front end shorter, but the car also sits lower than both DB9 and DBS causing further issues with the depth of the V12. Engineers had to reduce the oil sumps depth by around 15 mm and re-work the internals in order to ensure effective oil delivery in a car that would be capable of cornering faster than its bigger brother. The DBS "bypass" air-intake system (see DBS section) also had to be re-worked and moved for most effective placement, still allowing the engine to breath properly in order to achieve its lofty 510bhp peak. Cooling a large engine in a tight space is obviously crucial, so the standard V12 cooling system and radiators also had to be assessed for maximum efficiency. This involved changing their placement allowing them to fit. The more aggressive front end features much larger front air scoops and the new 6-bar grille (reduced from 8) also aids airflow while the Carbon-fibre bonnet vents and lack of undertray help further



The Vantage required substantial internal modifications in order to accommodate Aston's powerful 6 litre V12 engine. The RS concept's 600bhp became the same 510bhp as the DBS for production cars.