

Attachment 7

Aston Martin DBX: Powertrain

Powertrain Highlights:

- **New evolution of the 4.0-litre, Twin-Turbo V8 found in Vantage and DB11**
- **Outputs of 550PS and 700Nm provide exhilarating levels of performance**
- **Active exhaust delivers sound and character of a sports car**
- **9-speed automatic gearbox calibrated to the unique requirements of DBX**

At the heart of the Aston Martin DBX is a new, more powerful version of the 4.0-litre, twin-turbo V8 that has been so widely acclaimed in the Vantage and DB11. Thanks to upgraded turbochargers, a different compression ratio and updated charge coolers, the V8 sourced from Mercedes-AMG has gained in power delivering the performance levels required of a high-performance SUV.

The new, smoother delivery better suits the engine's application in DBX. A change in the firing order of the cylinders has also altered the vocal character of the engine. With very pure tones in the lower sound order, followed by more complexity as it rises through a louder mid-tone character to the higher frequencies, DBX maintains a distinct Aston Martin exhaust sound character. The active exhaust valves provide a pleasing duality to the nature of the soundtrack, with a clear step change in volume when the valves open, yet maintain a refined tone when required.

In GT mode, the valves remain closed for the quietest, most relaxed experience. In Sport mode the valves open to reveal more of DBX's inner sports car. In Sport+ the valves open and the idle speed is also increased from 650rpm to 800rpm to add an extra note of aggression.

DBX retains the distinctive engine start flare, the exhaust valves will open on a single, short press of the glass stop/start button. If the owner wishes to activate the quiet start option, such as early in the morning or in more discreet surroundings, then all they will need to do is hold down the stop/start button when bringing the engine to life.

In select markets DBX will be the first Aston Martin to be fitted with a gas particulate filter (GPF) as part of new emissions regulations. A GPF smooths the airflow as it passes through and acts as an expansion chamber, which means it has the effect of a second muffler, particularly in regard to the higher-frequency exhaust tones. Despite these challenges, Aston Martin's engineers have managed to ensure that the driver and passengers in a DBX enjoy a truly rich Aston Martin soundtrack. For

those markets that don't require the fitment of a GPF a sports exhaust will be an option ensuring the richest exhaust sound character

DBX offers a 9-speed torque converter automatic, chosen to suit the demands of an SUV, with the complexities of the all-wheel drive system and active centre transfer case also helping to deliver the smooth and refined driving experience required, alongside off-road capability & towing capacity. Once again, versatility was a key consideration and while the gearbox has been calibrated to deliver swift, crisp shifts in Sport and Sport+ modes, the ability to also handle the loads required when towing up to 2.7 tons makes it an ideal solution.

Chief Engineer – Powertrain, Joerg Ross said: “With this new iteration of the tremendous twin-turbo V8 combined with the 9-speed torque converter gearbox we have got the perfect blend of smooth and useable with exciting and powerful. It delivers exactly the character we wanted for an Aston Martin SUV.”