



DBS VEHICLE INFORMATION SHEET





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Engine

Type	All aluminium alloy 48-valve quad cam V12, petrol, liquid-cooled, twin-turbocharged unit featuring:
.....	Variable camshaft timing
.....	Three driver-selectable powertrain calibrations
.....	Cylinder deactivation
.....	Engine Stop/Start System
.....	Twin Water-to-Air Charge Air Coolers
Capacity	5204 cc (318 cu. in.)
.....	5203 cc (317.5 cu. in.) – Japan only
Bore	89.0 mm (3.5 in.)
Stroke	69.7 mm (2.7 in.)
Compression Ratio.....	9.2:1
Firing Order	1-7-5-11-3-9-6-12-2-8-4-10

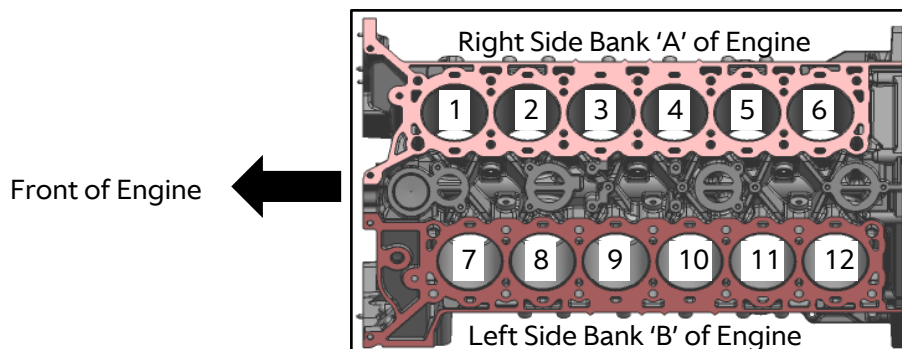


Figure 1 – Cylinder identification

Idle Speed:

Neutral	750 rpm
Idle-in-Drive.....	650 rpm

Maximum Engine Speed:

Maximum Engine Speed (Hard Fuel Cut)	7200 rpm
Maximum Torque	900 Nm (665 lbf ft) from 1800 rpm
Maximum Power	715 bhp (533 kW/725 PS) at 6500 rpm
.....	760 bhp (566 kW/770 PS) at 6500 rpm (DBS 770 Ultimate)
Maximum Speed (where permitted)	211 mph (340 km/h)
Acceleration (0-62 mph/0-100 km/h).....	3.4 seconds (Coupe)
.....	3.6 seconds (Volante)

Fuel

Fuel system	Multi-point sequential fuel injection
Engine Management System.....	Bosch ME 17.8.31



Ignition

Ignition System "Coil on Plug" Ignition

Lubrication

Lubrication System Wet sump pressurised system

Emission Control Systems

Emission Control Systems Four oxygen sensors (two per bank) with two catalytic converters (one per bank)

..... Evaporative loss purge system

Transmission

Transmission Touchtronic IV automatic transmission Rear-mounted ZF 8HP95 eight-speed automatic gearbox with "Shift by Wire" gear shift and Stop/Start ignition support

..... Front mounted transmission radiator with transmission-mounted heat exchanger and pump

Final Drive Limited-slip differential with integrated coolant jacket

Gear Ratios:

1st 5.000:1

2nd 3.200:1

3rd 2.143:1

4th 1.720:1

5th 1.313:1

6th 1.000:1

7th 0.823:1

8th 0.640:1

Reverse..... 3.478:1

Final..... 2.93:1

Drive line Cast aluminium alloy torque tube with carbon fibre drive shaft

Suspension

Front..... Independent double aluminium alloy wishbone incorporating anti-dive geometry. Coil springs over aluminium alloy monotube adaptive dampers and anti-roll bar

Rear Multi-link suspension with hollow-cast lower control arms and hot-forged aluminium alloy link arms. Coil springs over aluminium alloy monotube adaptive dampers and anti-roll bar



Chassis Features

.....	Adaptive Damping System (ADS) Three user-selectable adaptive damping settings:
.....	GT
.....	Sport
.....	Sport+
.....	Three-stage Electronic Stability Program (ESP)

Steering

Steering.....	Electrically-assisted, speed-sensitive rack and pinion power steering with 13:1 steering ratio. Electrical column adjustment for reach and tilt
Turns Lock to Lock.....	2.27 turns
Turning Circle.....	12.4 metres (40.7 feet)

Brakes

Front	Ventilated carbon ceramic disc 410 mm (16.1 inches) diameter x 38 mm (1.5 inches) width with six piston calipers
Rear	Ventilated carbon ceramic disc 360 mm (14.2 inches) diameter x 32 mm (1.3 inches) width with four piston calipers
Park Brake	Electrically-operated independent park brake calipers on each rear brake disc

Braking System Features

.....	Anti-Lock Braking System (ABS)
.....	Dynamic Stability Control (DSC)
.....	Dynamic Torque Vectoring (DTV)
.....	Electronic Brake Force Distribution (EBD)
.....	Emergency Brake Assist (EBA)
.....	Hydraulic Brake Assist (HBA)
.....	Positive Torque Control (PTC)
.....	Traction Control (TC)

Suspension Geometry

Refer to Workshop Manual procedure 04.00.AD - Check and Adjust the Four Wheel Alignment (Check and Adjust).

Vehicle Body

Type	Two door coupe with 2+2 seating
.....	Two door convertible with 2+2 seating
.....	Extruded aluminium alloy bonded monocoque body structure
.....	All aluminium alloy door structures
.....	Curlicue front and Aston Martin AeroBlade™ rear integrated aerodynamics

Dimensions

Interior Dimensions – Front

Effective Headroom.....	980 mm
Effective Leg-room.....	1145 mm
Effective Shoulder-room.....	1380 mm

Interior Dimensions – Rear

Effective Headroom.....	635 mm
Effective Shoulder-room.....	1235 mm

Luggage Compartment Volume	280 litres (Coupe)
.....	260 Litres (Volante)

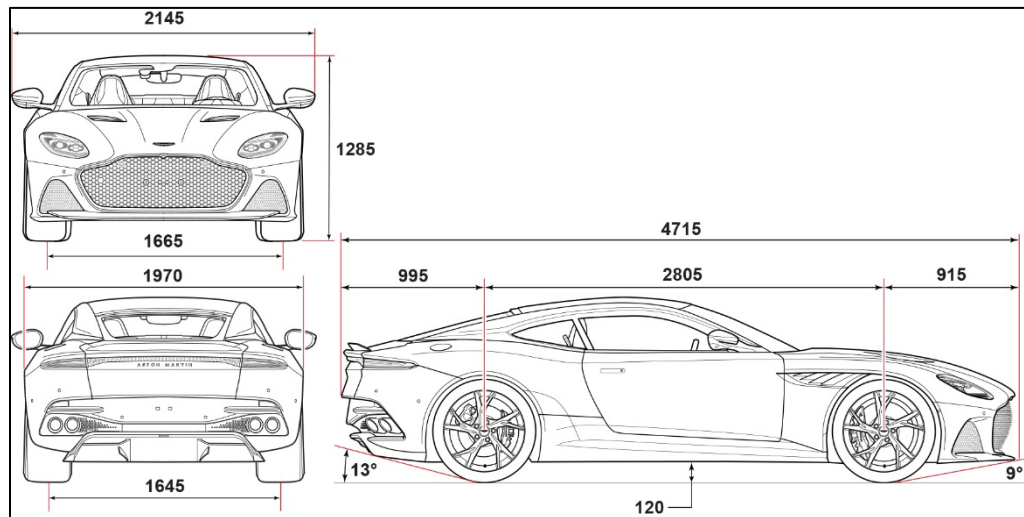


Figure 2 – Coupe Exterior Dimensions (in millimetres)

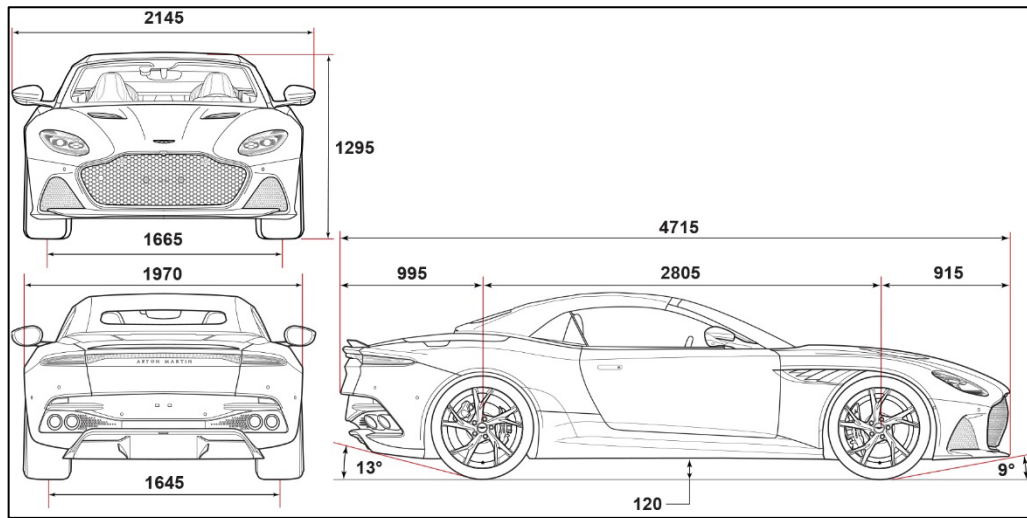


Figure 3 - Volante Exterior Dimensions (in millimetres)

Vehicle Weights (ROW)	Coupe	Volante
Kerb Weight	1845 kg (4070 lbs)	1945 kg (4290 lbs)
Gross Vehicle Weight (GVW)	2265 kg (4995 lbs)	2365 kg (5215 lbs)

Vehicle Weights (Federal)	Coupe	Volante
Curb Weight	1850 kg (4080 lbs)	1950 kg (4300 lbs)
Gross Vehicle Weight (GVW)	2265 kg (4995 lbs)	2365 kg (5215 lbs)

Towing

This vehicle is not engineered to tow any form of caravan, boat or trailer. No towing devices are approved to install to this vehicle, other than a front towing eye to aid recovery and loading of this vehicle onto a transporter.

Vehicle Battery – DBS

Type	Banner H8 Absorbent Glass Mat (AGM)
Rated Voltage	12 V
Capacity	92 Ah (K20)
Reserve Capacity	150 minutes
Cold Cranking Amps	520 (DIN), 850 (EN)

Vehicle Battery – DBS 770 Ultimate

Type	Yuasa 70Ah L3 Absorbent Glass Mat (AGM)
Rated Voltage	12 V
Capacity	70 Ah
Reserve Capacity	120 minutes
Cold Cranking Amps	450 (DIN), 760 (EN)

Lubricants, Fluids and Capacities

Use	Lubricant/Fluid	Quantity
A/C compressor oil	Sanden SP-A2 PAG or meets the specifications of PAG oil ISO 46.	80 cc
A/C Refrigerant *	HFC-134a/R-134a.	0.85 ± 0.01 kg
	HFO-1234yf/R1234yf.	0.77 ± 0.01 kg
<p>* Note: Refer to the label in the engine compartment for information on the refrigerant used in a particular vehicle. You must use only the refrigerant specified on that label.</p>		
Brake Fluid	Castrol React Performance DOT 4.	0.5 litres (0.5 US quarts) approximately
Coolant:		
Engine Coolant – V12	50% BASF Glysantin® G40®/50% clean water.	29.7 litres (31.4 US quarts)
<p>* Note: Clean water must be used. Demineralised or distilled water is recommended, but you can use tap water if it is not harder than 3.5 mmol/l. If you are not sure about the water quality, or if your tap water is very hard, we always recommend the use of demineralised or distilled water.</p>		
Engine Oil – V12	Premium-branded fully-synthetic high-performance engine oil of viscosity SAE 0W-20 which meets or is better than the requirements of specifications API SN or ILSAC GF-5.	14.17 litres (15 US quarts) initial fill
		10.8 litres (11.4 US quarts) oil & filter change
		10.26 litres (10.8 US quarts) oil change
		2 litres (2 US quarts) approximately to top up (Minimum to Maximum marks on dipstick)
Fuel	Unleaded petrol, minimum octane rating 95 RON. 98 RON Super unleaded recommended for optimum performance.	80 litres (17.6 Imperial gallons/21.1 US gallons) total capacity
Automatic Transmission	Shell ATF L12108 (alternative ZF Lifeguard Fluid 8) or meets the specifications of this recommended fluid.	8.5 litres/9 US qts inc. cooler
Final Drive	Millers TRX1219M Synthetic 75W-90 or meets the specifications found in OTH-30-1691.	1.1 litres/1.2 US qts inc. cooler
Windscreen Washer Fluid	Solution of clean water and screenwash concentrate, mixed in proportions applicable to possible ambient temperatures. The concentrate must include an applicable antifreeze in winter.	4 litres (4.2 US quarts/0.9 Imperial gallons)



Wheels

	Front	Rear
Size	9.5J X 21"	11.5J X 21"
Offset.....	ET48	ET55
Pitch Circle Diameter (PCD).....	5 X 128	5 X 128

Wheel Bolt Tightening

Refer to Workshop Manual procedure 04.04.EC – Wheel and Tyre (Remove and Install New Part).

Tyres

Summer:

- Front..... Pirelli P Zero 265/35 R21 101 Y
- Rear..... Pirelli P Zero 305/30 R21 104 Y

Note: Summer tyres installed on this vehicle shall have a maximum load rating not less than 825 kg (1819 lbs) front and 925 kg (2039 lbs) rear, or a load index of 101 (front) and 105 (rear).

Winter:

- Front..... Pirelli SottoZero 265/35 R21
- Rear..... Pirelli SottoZero 305/30 R21

Note: The recommended Winter tyres have a maximum load rating not less than 730 kg (1609 lbs) front and 825 kg (1819 lbs) rear, or a load index of 97 (front) and 101 (rear).

WARNING: THE RECOMMENDED WINTER TYRES HAVE LOWER MAXIMUM SPEED AND LOAD RATINGS THAN THOSE RECOMMENDED FOR SUMMER USE. WHEN YOU INSTALL WINTER TYRES, YOU MUST REDUCE THE MAXIMUM SPEED LIMIT OF THE VEHICLE.

Tyre Pressures (tyres cold)

- Front tyres..... 2.6 Bar (38 psi)
- Rear tyres..... 2.8 Bar (42 psi)

To contact Aston Martin for further information about this document, please refer to the "Contact Us" page in Technical Hub.