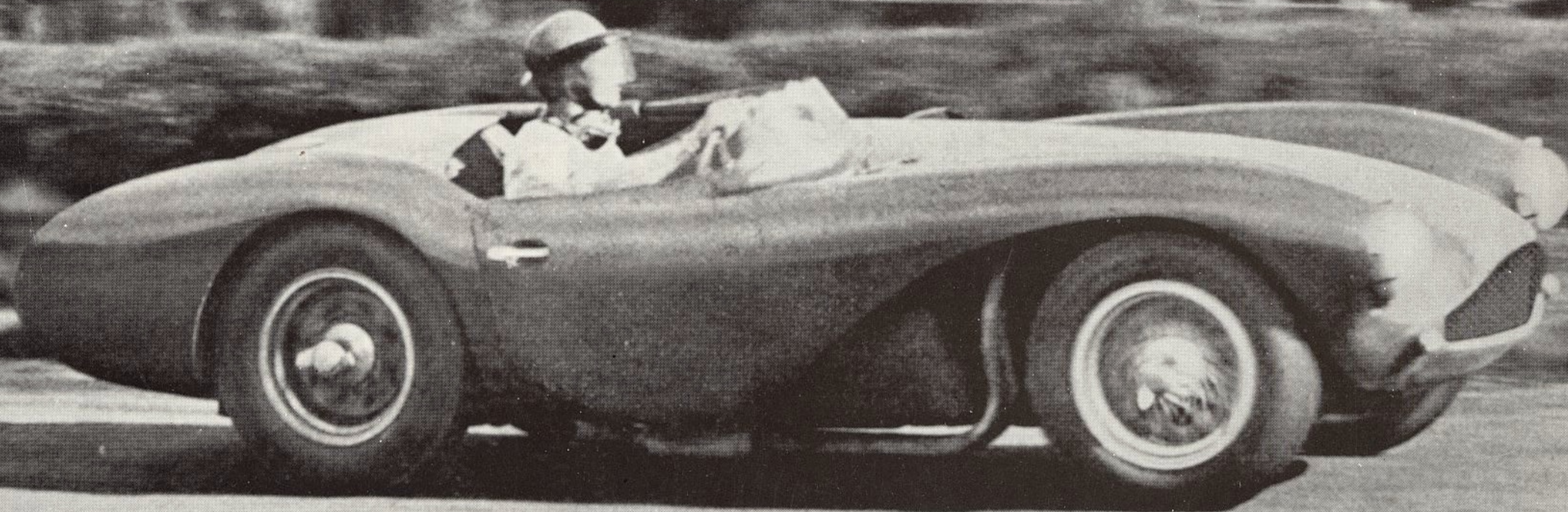


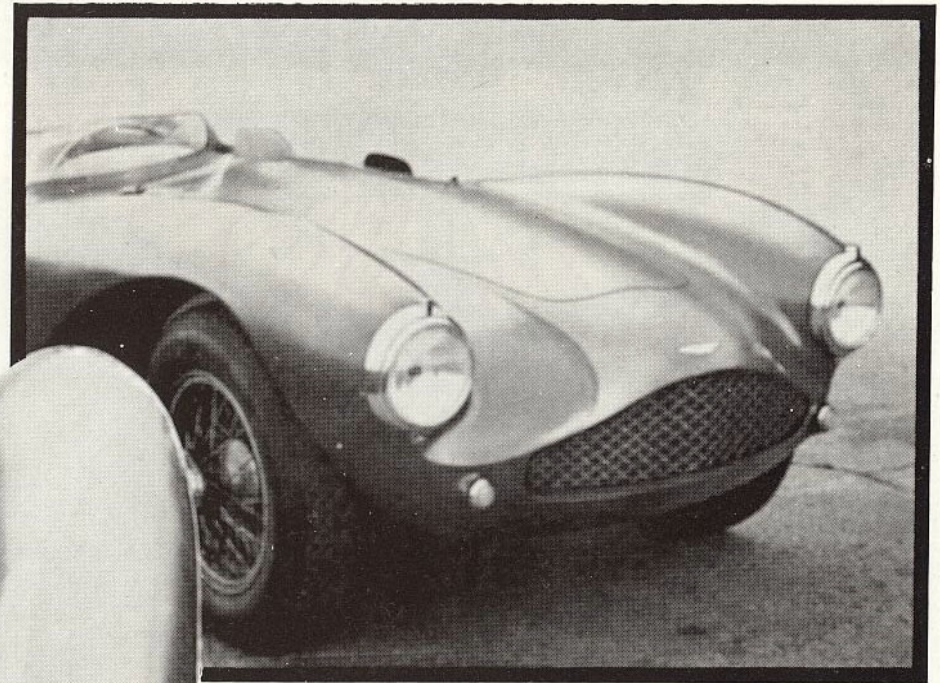


DB3S

COMPETITION CAR



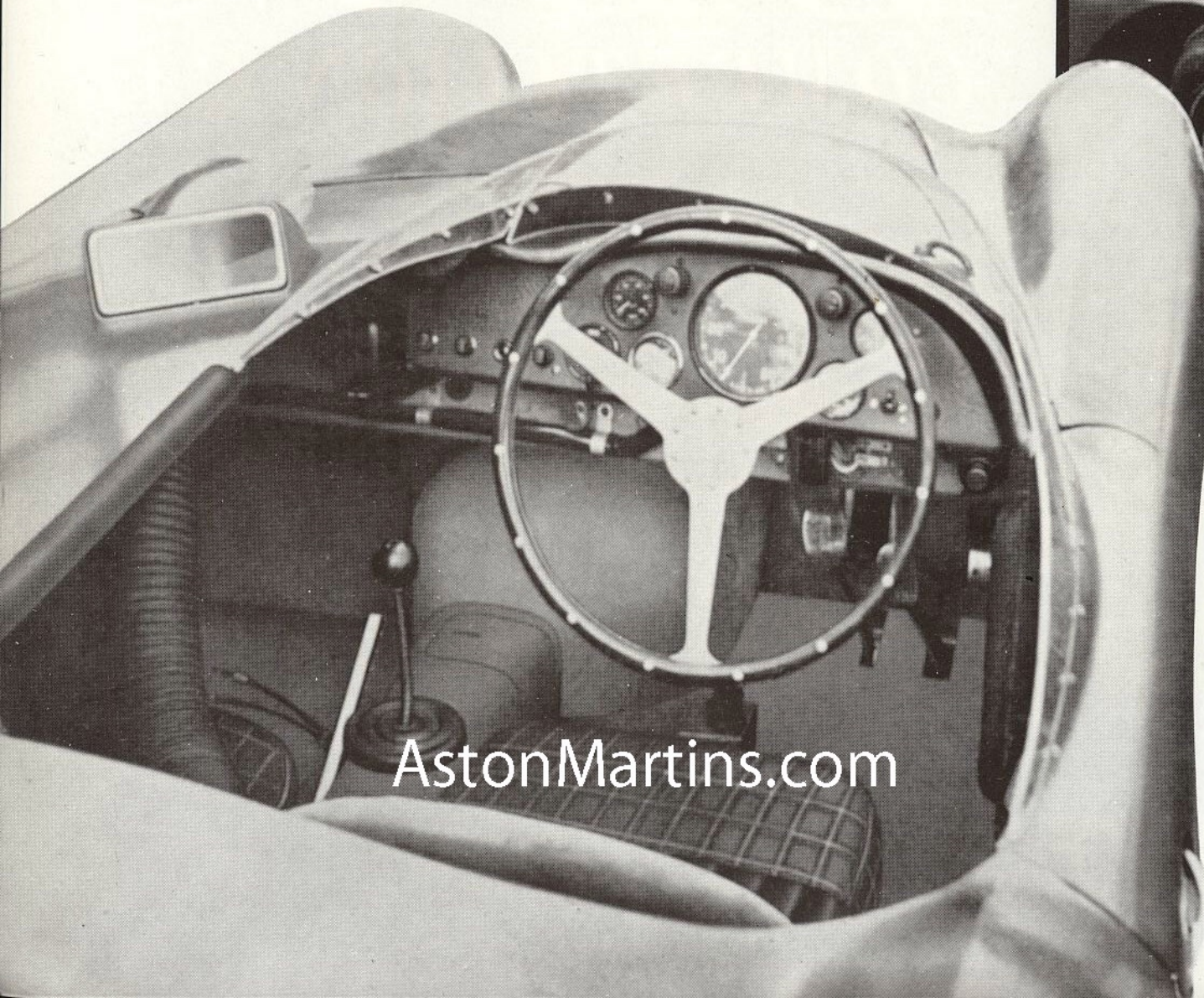
*Developed during two seasons of
highly successful international racing
by the David Brown equipe.*



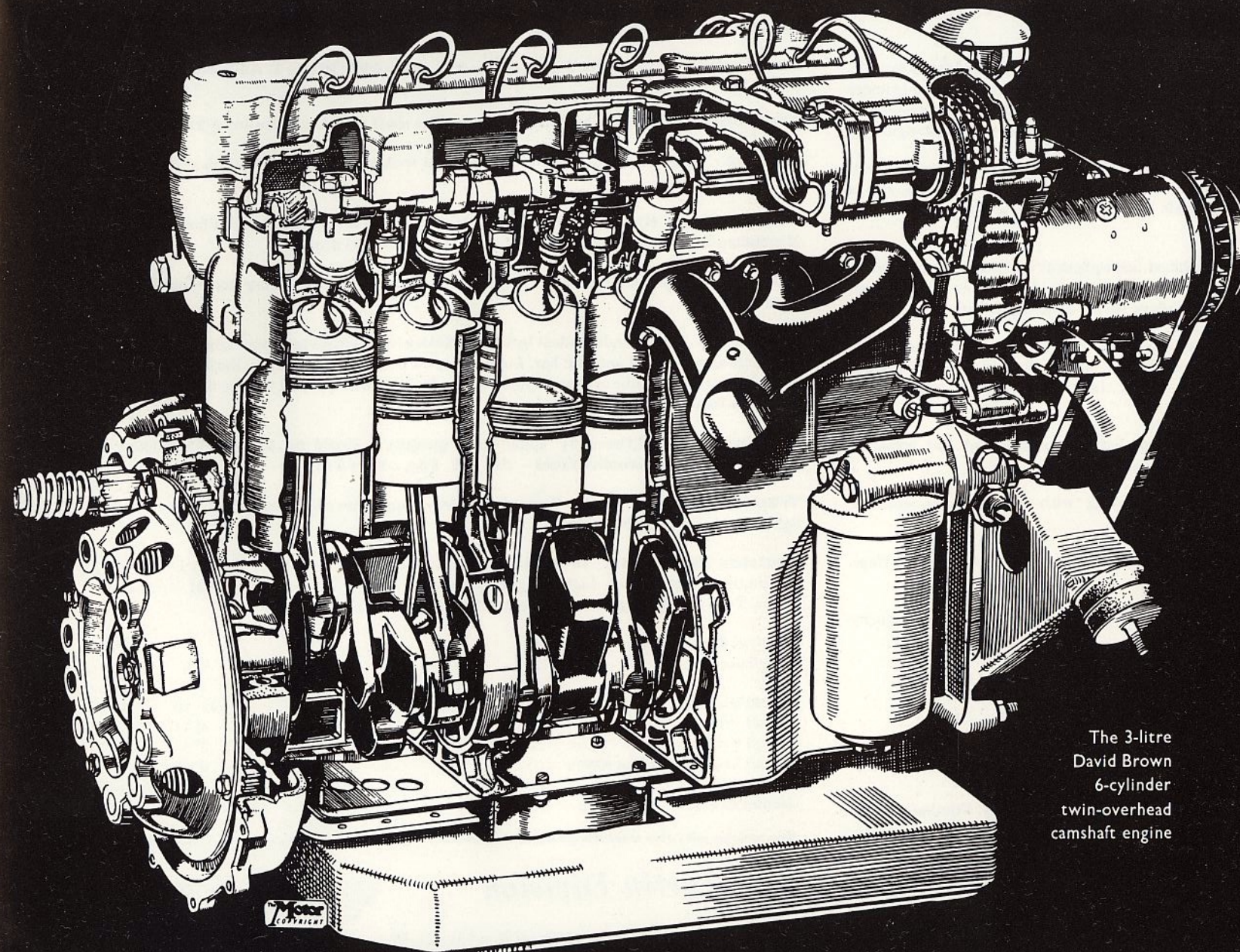
ABOVE. Note the clean functional design of the air intake. There are separate sections for engine and brake cooling.

LEFT. The comprehensive range of instruments and fittings on the fascia are (left to right) Voltage control box, Fascia panel lamp switch, Spare switch, Ignition warning light, Spare switch, Head and side lamps switch, Oil pressure gauge, Oil temperature gauge, Panel lamp, Revolution counter, Panel lamp, Water temperature gauge, Ammeter, Ignition switch, Starter button, Horn and dipping switch unit.

Two further points of interest are: the stream-lined casing of the large driving mirror and the fly-off hand brake lever to the left of the gear lever.



AstonMartins.com



The 3-litre
David Brown
6-cylinder
twin-overhead
camshaft engine

SUCCESSES OF THE DB3S

JUNE 1953

British Empire Trophy,
Isle of Man.
Outright Winner.
New average and
lap records.

JULY 1953

Silverstone International
Sports Car Race.
Outright Winner and
2nd and 3rd.
New lap record.

AUGUST 1953

International Charterhall
Sports Car Race.
Outright Winner.

AUGUST 1953

Goodwood International
9-hour Race.
Outright Winner and 2nd.

SEPTEMBER 1953

International Ulster
Tourist Trophy.
Outright Winner and 2nd.

JULY 1954

Silverstone International
Sports Car Race.
1st, 2nd, 3rd and
Manufacturer's Team Prize.

SEPTEMBER 1954

Prescott Hill Climb.
47.63 seconds.
Fastest sports car of the day.
New 3-litre record
equalling unlimited
record for the hill.

Aston Martin DB3S competition car specification

Engine. Six-cylinder in line. Bore 83 mm. (3.267"). Stroke 90 mm. (3.54"). Capacity 2,922 c.c. (178.315 cu. ins.). 180 brake horse-power at 5,500 r.p.m. Compression ratio 8.5:1. Cast iron cylinder block with highest grade centrifugally cast iron detachable liners, provides maximum cooling with substantial weight saving. Diaphragm main bearing construction gives extreme crankshaft rigidity.

Crankshaft. Carried on four massive main bearings, with steel-backed lead/bronze liners. Short, stiff and light, the shaft has an appreciable overlap of the pins and journals on the webs, and is statically and dynamically balanced. The four crankshaft bearings supported in special aluminium alloy housings to dissipate heat.

Cylinder Head. Quickly detachable, with fully-machined hemispherical combustion dome. Valves inclined at 30° in cylinder head, of generous size and efficiently cooled, guides being in direct contact with the coolant. Ports polished and matched. Sparking plugs 10mm. centrally situated.

Valve Operation. Twin overhead high-lift camshafts with direct-attack valve actuation, eliminating tappet adjustment. Cams contact large-area thimble tappets directly over end of valve stems ensuring minimum wear. Camshafts driven by duplex chain with hydraulic tensioners to prolong chain life.

Lubrication System. Full pressure system to all crankshaft, connecting rod and camshaft bearings. Large capacity, positive filtration system incorporated.

Connecting Rods. Steel beam section, polished and balanced, with integral bolts, ensuring maximum stiffness with minimum reciprocating weight.

Pistons. Die-cast aluminium alloy. Two compression rings (chrome top ring), two scraper rings. Large diameter gudgeon pins, located by circlips.

Cooling Systems. Closed circuit layout incorporates centrifugal water pump and large capacity radiator with integral oil cooler and separate header tank.

Ignition. High voltage coil and distributor, with in-built automatic advance and retard.

Carburation. Three horizontal dual-choke Solex carburetters.

Fuel System. Tank capacity 35 Imperial gallons (159 litres — 42 U.S. gallons). Twin high pressure electric fuel pumps. (3 gal. reserve 13.63 litres — 3.6 U.S. gallons.)

Clutch. 9" single plate, high clamping pressure. Reinforced cover plate assembly. Friction material cemented and rivetted. Clutch balanced with flywheel. Hydraulic withdrawal operation.

Gearbox. Of David Brown manufacture. Light alloy casing. Incorporates four close ratio forward speeds and reverse. Baulk ring synchromesh on 2nd, 3rd and top.

Gear Ratios. With standard axle, ratios: 3.73, 4.69, 6.97, 10.88 : 1. All constant mesh gears on needle rollers.

Transmission. Specially balanced open propeller shaft with David Brown spiral bevel final drive.

Steering. Special steering wheel with duralumin spokes and polished wood rim. Rack and pinion steering mechanism.

Brakes. Girling Hydraulic, specially designed and exclusive to the DB3S. Front shoes, 13" x 2½". Magnesium back plates. Rear shoes, 12" x 2¼". Al-fin bi-metal drums.

Frame. Of simple construction of large diameter round tubes ensuring maximum torsional and beam stiffness.

Suspension. *Front:* Independent by trailing links with triangulated upper arms engaging the shock absorbers and torsional anti-roll bar. Lower arms on needle roller bearings. Springing by torsion bars housed in transverse tube of chassis frame. *Rear:* De Dion with parallel trailing links. Transverse tube of chassis frame houses torsion bars.

Final Drive. David Brown 7¼" spiral bevel specially designed for the DB3S. Standard ratio — 3.73 : 1. Extras — alternative ratios — 3.0, 3.27, 3.54, 3.91, 4.5 : 1.

Wheels and Tyres. Dunlop Centre-lock quick-change wire wheels ensure maximum rigidity with light weight. Tyres: 6.00" x 16".

Electrical Equipment. 12-volt positive earth system. 38 amp./hour light-weight battery with automatic voltage control. Light-weight dynamo. Le Mans type headlamps, and separate parking lamps. Twin stop/tail lights and reflectors. Two-speed windscreen wipers.

General Dimensions.

Wheelbase	...	...	...	...	...	...	...	...	7' 3"	(225.98 cms.)
Track	...	...	...	...	...	...	...	Front and rear	4' 1"	(124.46 cms.)
Overall length	...	...	...	...	...	...	...	...	12' 10"	(391.16 cms.)
Overall width	...	...	...	...	...	...	...	...	4' 11"	(149.86 cms.)
Overall height	...	...	...	...	...	...	...	...	3' 5"	(104.14 cms.)
Overall height excluding screen	...	...	...	...	...	...	...	...	3' 0"	(91.44 cms.)
Turning circle	...	...	...	...	...	...	...	...	30' 0"	(914.40 cms.)
Ground clearance	...	...	...	...	...	...	...	...	6"	(15.24 cms.)

These goods are sold subject to and with the benefit of the Conditions of Sale printed in the Catalogues and/or Price Lists of the Company.

The David Brown Corporation (Sales) Limited · Aston Martin Division

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