Manufacturers Reference No. for Application

AH3/64

F.I.A. Recognition No. 163

ROYAL AUTOMOBILE CLUB

PALL MALL, LONDON, S.W.1.

Federation Internationale de l'Automobile.

Form of Recognition in accordance with Appendix J to the International Sporting Code.

Manufacturer Austin Motor Company Limited in association with Donald Healey Motor Co. I

Model Austin Healey 3000 MK III Year of Manufacture 1964.

Serial No. of Chassis HBJ8 or HBJ8L

Engine 29K or XSP

Type of Coachwork 2/4 seater G.T.

Recognition is valid from 11th April 1964 In category Grand Touring

Photog ont right.

Stamp of F.I.A./R.A.C. to be affixed here.

Form: R.F.I.A.

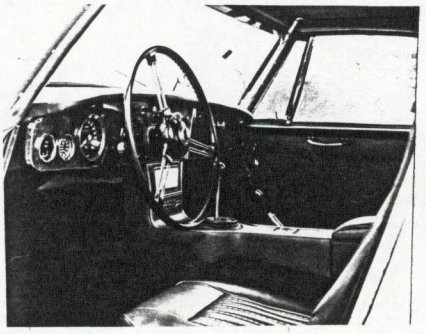
General description of car:

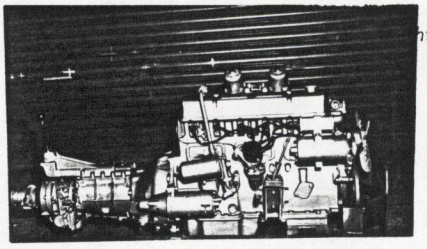
Specify here material/s of chassis/body construction

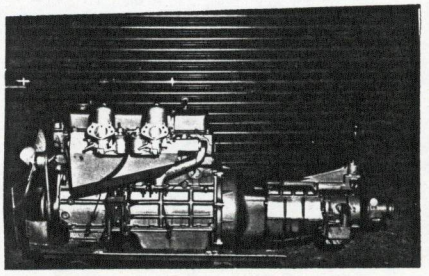
2/4 seater G.T. of steel/aluminium construction, fitted with hardtop or folding hood, powered by 6 cylinder OHV engine driving rear wheels through 4 speed synchromesh gearbox and hypoid rear axle. Front suspension by indepenaent wishbones coil springs with semi-elliptic springs and radius rods at rear.

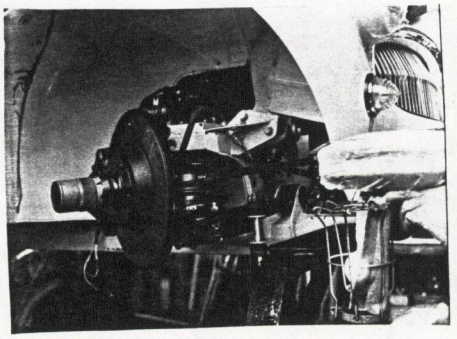
From Chassis No. 26705 a modification has been introduced featuring low-swept rear main chassis members.

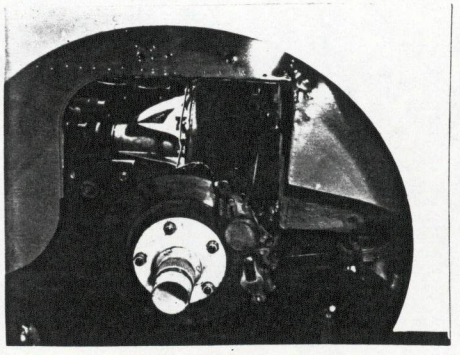
Photographs to be affixed below.











ENGINE

No. of cylinders 6 — in line Yes / in V / opposed

Cycle 4 stroke — Firing order 1,5,3,6,2,4.

Capacity 2912 c.c. — Bore 83.34 m.m. — Stroke 88.9 m.m.

Maximum rebore 1.2 mm — Resultant capacity 2967.6 c.c.

Material of cylinder block Cast Iron — Material of sleeves, if fitted Cast Iron

Distance from crankshaft centre line to top face of block at centre line of cylinders 260.35 m.m.

Material of cylinder head Aluminium — Volume of one combustion chamber 52.5 c.c.

Compression ratio 9.03:1

Material of piston Aluminium alloy — No. of piston rings 4

Distance from gudgeon pin centre line to highest point of piston crown 47.62 m.m.

Bearings:
- Crankshaft main bearings: Type Shell — Dia. 60.37 m.m.
- Connecting rod big end: Type Shell — Dia. 50.84 m.m.

Weights:
- Flywheel 9.1 kg.
- Crankshaft 22.9 kg.
- Connecting rod 1.015 kg.
- Piston with rings 0.505 kg.
- Gudgeon pin 0.132 kg.

No. of valves per cylinder 2 — Method of valve operation OHV Pushrod & Rockers

No. of camshafts 1 — Location of camshafts Cylinder block

Type of camshaft drive Chain

Diameter of valves:	Inlet	44.45 m.m.	Exhaust	39.68 m.m.
Diameter of port at valve seat:	Inlet	42.06 m.m.	Exhaust	36.51 m.m.
Tappet clearance for checking timing:	Inlet	0.46 m.m.	Exhaust	0.46 m.m.
Valves open:	Inlet	50° BTDC	Exhaust	75° BBDC
Valves close:	Inlet	70° ABDC	Exhaust	45° ATDC
Maximum valve lift:	Inlet	11.48 m.m.	Exhaust	11.48 m.m.
Degrees of crankshaft rotation from zero to—				
Maximum lift:	Inlet	157°	Exhaust	157°
¾ Maximum lift:	Inlet	98°	Exhaust	98°

Valve springs:

	Inlet	*Exhaust*
Type	Coil	Coil
No. per valve	2	2

Carburettor: Type Semi-down draught (up or down draft, horizontal) — No. fitted 2

Make S.U. — Model HD8

Flange hole diameter 50.8 m.m. — Choke diameter 50.8 m.m.

Main jet identification No. 0.125

Alternative Carburettor Equipment - Art 265

Type - Horizontal No. fitted - 3 Make - Weber Model - 45 DCOE

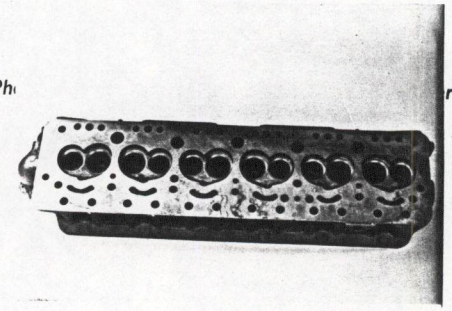
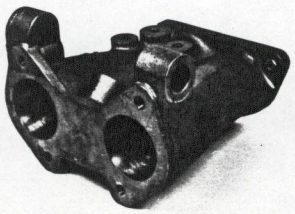
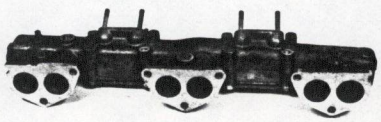
Flange Hole Dia. - 45 mm Choke Dia. - 38 mm

Air filter: Type Pancake No. fitted 2

Inlet manifold:

Diameter of flange hole at carburettor 44.45 m.m.

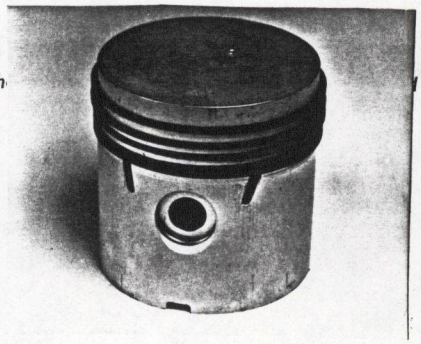
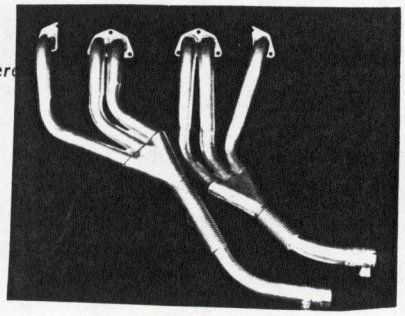
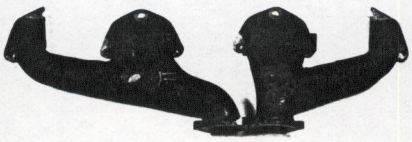
Diameter of flange hole at port 38.10 m.m.

Photo.   

Exhaust manifold:

Diameter of flange hole at port Four 38.0 Two outer 27.0 x 43.0 m.m.

Diameter of flange hole at connection to silencer inlet pipe 45.0 m.m.

Photo.   

ENGINE ACCESSORIES

Make of fuel pump S.U. No. fitted 2

Method of operation Electrical

Type of ignition system Coil coil or magneto

Make of ignition Lucas Model DM6

Method of advance and retard Centrifugal and vacuum

Make of ignition coil Lucas Model HA12

No. of ignition coils 1 Voltage 12

Make of dynamo Lucas Model C40 - R

Voltage of dynamo 12 Maximum output 28 amps.

Make of starter motor Lucas Model M418G - R

Battery: No. fitted 1 Voltage 12 Capacity 32 - 57 amp. hour

Oil Cooler (if fitted) type Capacity pints

Make Austin Healey Model 3000 MK III F.I.A. Recognition No.

Manufacturers Reference No. of Application AH3/64

TRANSMISSION

Make of clutch Borg & Beck Type 9½ DS/G (Diaphragm Spring)

Diameter of clutch plate 24.13 cm No. of plates 1

Method of operating clutch Hydraulic

Make of gearbox B.M.C. Type Synchromesh

No. of gearbox ratios 4 forward, 1 reverse

Method of operating gearshift Manual

Location of gearshift Central on gearbox - tunnel

Is overdrive fitted? Optional

Method of controlling overdrive, if fitted Electrical manual switch

	GEARBOX RATIOS		ALTERNATIVE RATIOS					
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth
1.	2.637	$\frac{24}{21} \times \frac{30}{13}$	2.413	$\frac{23}{22} \times \frac{30}{13}$	2.64	$\frac{24}{21} \times \frac{30}{13}$	2.207	$\frac{22}{23} \times \frac{30}{13}$
2.	2.071	$\frac{24}{21} \times \frac{29}{16}$	1.722	$\frac{23}{22} \times \frac{28}{17}$	1.88	$\frac{24}{21} \times \frac{28}{17}$	1.575	$\frac{22}{23} \times \frac{28}{17}$
3.	1.306	$\frac{24}{21} \times \frac{24}{21}$	1.195	$\frac{23}{22} \times \frac{24}{21}$	1.43	$\frac{24}{21} \times \frac{25}{20}$	1.093	$\frac{22}{23} \times \frac{24}{21}$
4.	1.00		1.00		1.00		1.00	
REV.	3.391	$\frac{24 \times 18 \times 30}{21 \times 13 \times 14}$	3.102	$\frac{23 \times 18 \times 30}{22 \times 13 \times 14}$	3.39	$\frac{24 \times 18 \times 30}{21 \times 13 \times 14}$	2.83	$\frac{22 \times 18 \times 30}{23 \times 13 \times 14}$

Type of final drive Hypoid or limited slip

Type of differential Bevel

Final drive ratio 3.9:1 Alternatives 3.54:1, 4.1:1, 4.3:1, 4.875:1

No. of teeth 11/43

Overdrive ratio, if fitted 0.822:1 or 0.788:1

WHEELS

Type Disc (steel or alloy) or Wire Weight 6.92 - 4.53 kg.

Method of attachment Nuts or centre lock

Rim diameter 381.0 m.m. Rim width 114.3 or 152 .4 m.m.

Tyre size: Front 5.90 x 15 Rear 5.90 x 15

BRAKES

Method of operation Hydraulic

Is servo assistance fitted? Yes

Type of servo, if fitted Vacuum

No. of hydraulic master cylinders 1 or 2 Bore 15.875 or 22.22 m.m.

	Front	Rear
No. of wheel cylinders	4	4
Bore of wheel cylinders	53.97 m.m.	38.14 m.m.
Inside diameter of brake drums	m.m.	m.m.
No. of shoes per brake		
Outside diameter of brake discs	285.75 m.m.	279.4 m.m.
No. of pads per brake	2	2

Dimensions of brake linings per shoe or pad (if all shoes or pads in each brake are not of same dimensions, specify each)

		Front	Rear
Length	Segment (	76 m.m.	58.8 m.m.
	(	54 m.m.	38.1 m.m.
Width		54 m.m.	38.1 m.m.
Total area per brake		6709.0 m.m.²	3574.0 m.m.²

SUSPENSION

	Front	Rear
Type	Parallel wishbone	Semi-elliptic & radius rods
Type of spring	Coil	Leaf
Is stabiliser fitted?	Yes	No
Type of shock absorber	Hydraulic lever	Hydraulic lever
No. of shock absorbers	2	2

STEERING

Type of steering gear Cam & Peg

Turning circle of car 10.72 m., approx.

No. of turns of steering wheel from lock to lock 3

CAPACITIES AND DIMENSIONS

Fuel tank 54.5 litres Sump 13.5 litres

Radiator 10.3 litres

Overall length of car 400.05 cm. Overall width of car 152.4 cm.

Overall height of car, unladen (with hood up, if appropriate) 127.0 cm.

Distance from floor to top of windscreen:

Highest point 93.0 cm. Lowest point 91.0 cm.

Width of windscreen:

Maximum width 120.0 cm. Minimum width 105.5 cm.

*Interior width of car 129.54 cm.

No. of seats 2/4

Track: Front 123.82 cm. Rear 127.0 cm.

Wheelbase 233.7 cm. Ground clearance 117.47 m.m.

*(To be measured at the immediate rear of the steering wheel, and the width quoted to be maintained in a vertical plane of not less than 25 cms.)

Overall weight with water, oil and spare wheel, but without fuel 1030.0 kgs.

Additional information for cars fitted with two-cycle engines

System of cylinder scavenging.....

Type of lubrication.....

Size of inlet port:

Length measured around cylinder wall.....m.m.

Height.....m.m. Area.....m.m.^{2}

Size of exhaust port:

Length measured around cylinder wall.....m.m.

Height.....m.m. Area.....m.m.^{2}

Size of transfer port:

Length measured around cylinder wall.....m.m.

Height.....m.m. Area.....m.m.^{2}

Size of piston port:

Length measured around piston.....m.m.

Height.....m.m. Area.....m.m.^{2}

Method of pre-compression.....

Bore and stroke of pre-compression cylinder, if fitted.....m.m.

Distance from top of cylinder block to lowest point of inlet port.....m.m.

Distance from top of cylinder block to highest point of exhaust port.....m.m.

Distance from top of cylinder block to highest point of transfer port.....m.m.

Drawing of cylinder ports.

Supercharger, if fitted

Make..... Model or Type No.....

Type of drive..... Ratio of drive.....

Fuel injection, if fitted

Make of pump..... Model or Type No.....

Make of injectors ..... Model or Type No.....

Location of injectors.....

Optional equipment affecting preceeding information:—

Cylinder Head - (Cast Iron) - Part No. AEC.1355.

Rear Drum Brakes 11" x 2¼"

Fuel Tank - 90.9 litres.

Fuel Tank - 130.0 litres.

The Royal Automobile Club

Pall Mall, London, S.W.1

Please address all Communications to
THE SECRETARY
Quoting the following Reference:
C

Telegrams: AUTOMOBILE LONDON
Telephone: WHITEHALL 2345 (26 lines)

1st April 1964

AUSTIN HEALEY 3000 MK III

MANUFACTURERS REFERENCE NO: OF APPLICATION FOR HOMOLOGATION

A.H.3/64

I certify that the necessary production of this car has been achieved to enable recognition as a Grand Touring Car.

D. H. Delamont
Manager, Competitions Department