Manufacturers Reference No. for Application

AH32/61

F.I.A. Recognition No. 57

ROYAL AUTOMOBILE CLUB

PALL MALL, LONDON, S.W.I.

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. Ltd.

Model Austin Healey 3000 Mk.II Year of Manufacture 1961

Serial No. of Chassis H/BN7 Mk.II or H/BT7 Mk. II

Engine 29E or XSP

Type of Coachwork 2 or 4 seater sports

Recognition is valid from - 3 MAI 1962 In category GT

Additional List n° 10
To general List n° 7

Phc ht.

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 or 4 seater sports of steel/aluminium contruction, fitted with hardtop or folding hood, powered by 6 cylinder OHV 3 carburettor engine driving rear wheels through 4 speed synchromesh gearbox incorporating O/Drive. Front suspension by independent wishbones and coil springs and semi elliptic leaf springs at rear.

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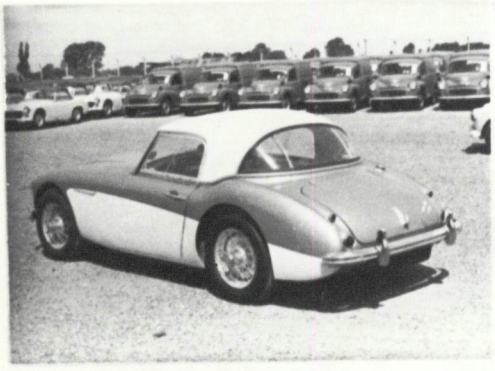
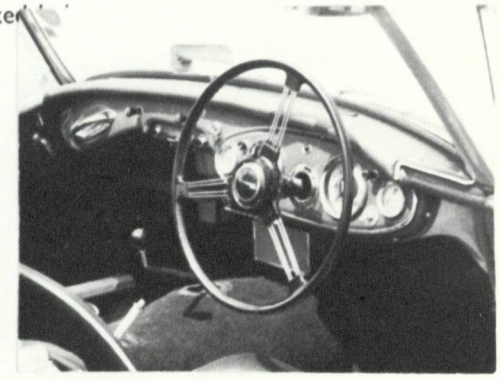
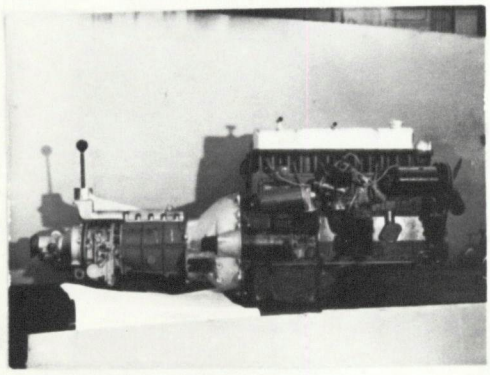
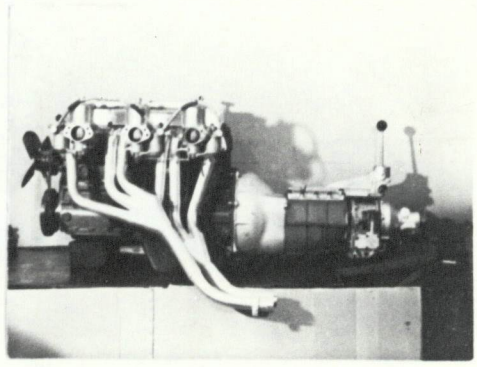
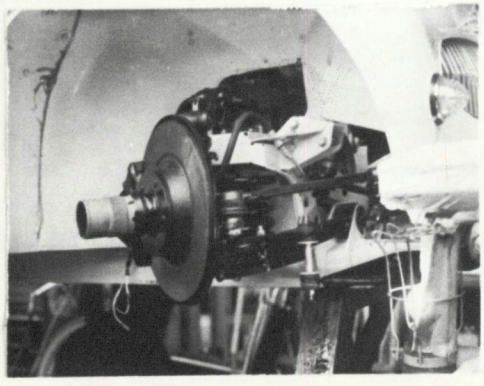
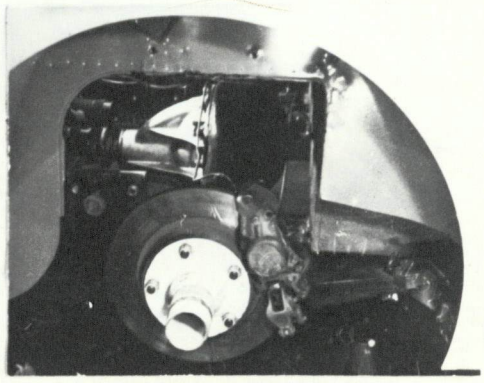












ENGINE

in line: Yes
No. of cylinders: 6 — in V: -
opposed: -

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

Capacity: 2912 c.c. — Bore: 83.34 m.m. — Stroke: 88.96 m.m.

Maximum rebore: 0.040" 1.016mm — Resultant capacity: 2967.6 c.c.

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

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: 12.7 kg.
- Crankshaft: 26.76 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: Push rod & rockers

No. of camshafts: 1 — Location of camshafts: Cylinder block

Type of camshaft drive: Roller chain

		Inlet		Exhaust	
Diameter of valves:		44.45	m.m.	39.68	m.m.
Diameter of port at valve seat:		42.068	m.m.	36.51	m.m.
Tappet clearance for checking timing:		0.46	m.m.	0.46	m.m.
Valves open:		34° B.T.D.C.		69° B.B.D.C.	
Valves close:		74° A.B.D.C.		39° A.B.D.C.	
Maximum valve lift:		11.12	m.m.	11.12	m.m.
Degrees of crankshaft rotation from zero to—					
	Maximum lift:	152°		152°	
	¾ Maximum lift:	96°		96°	

Valve springs:	Inlet	Exhaust
Type	Coil	Coil
No. per valve	2	2

Carburettor: Type: Horizontal or semi-down (up or down draft, horizontal) draught. — No. fitted: 3

Make: S.U. — Model: HD8

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

Main jet identification No.: 0.125" - UVB needle

Alternative carburettor equipment - Art.265

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

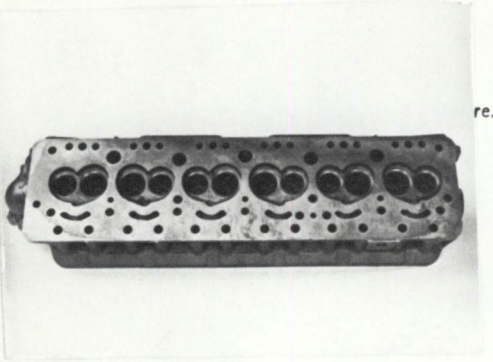
Flange hole dia. - 45mm — Choke dia. - 38mm

Air filter: Type Pancake No. fitted 3

Inlet manifold:

Diameter of flange hole at carburettor 44.45 m.m.

Diameter of flange hole at port 36.512 m.m.



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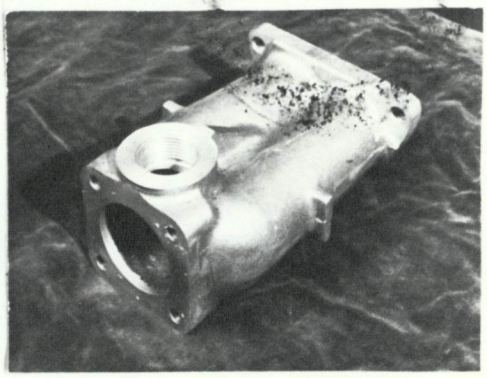
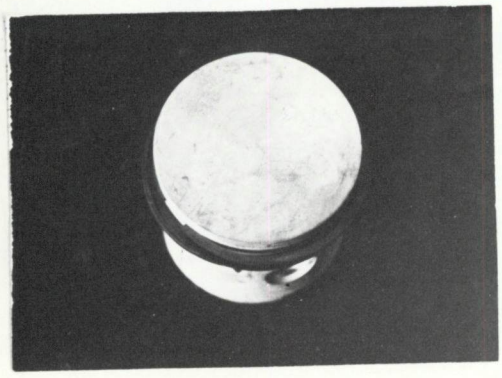
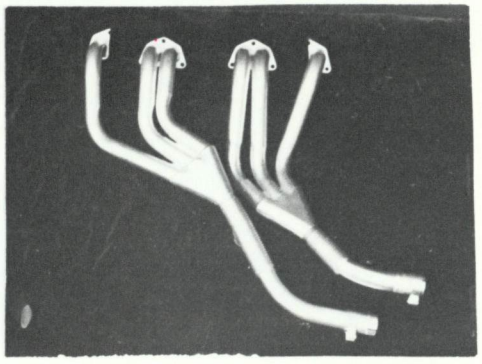


Exhaust manifold:

Diameter of flange hole at port Four 38.1dia. Two outer26.987x42.86 m.m.

Diameter of flange hole at connection to silencer inlet pipe 44.45 m.m.





ENGINE ACCESSORIES

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

Method of operation Electrical

Type of ignition system Coil coil or magneto

Make of ignition Lucas Model DM6A

Method of advance and retard Centrifugal & vacuum

Make of ignition coil Lucas Model HA12

No. of ignition coils One Voltage 12

Make of dynamo Lucas Model C45PV6

Voltage of dynamo 12 Maximum output 25 amps.

Make of starter motor Lucas Model M418G

Battery: No. fitted One or Two Voltage 12 or 6 (2) Capacity 57 amp. hour

Oil Cooler (if fitted) type - Capacity - pints

Make Austin Healey Model 3000 Mk. II F.I.A. Recognition No.

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TRANSMISSION

Make of clutch Borg & Beck Type Diaphragm

Diameter of clutch plate 9" No. of plates One

Method of operating clutch Hydraulic

Make of gearbox B.M.C. Type Synchromesh 2nd, 3rd, top

No. of gearbox ratios 4 forward, 1 reverse

Method of operating gearshift Manual

Location of gearshift Central on gearbox tunnel

Is overdrive fitted? Yes

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.	2.88:1	$\frac{25}{20} \times \frac{30}{13}$	2.64:1	$\frac{24}{21} \times \frac{30}{13}$				
2.	2.06:1	$\frac{25}{20} \times \frac{28}{17}$	1.88:1	$\frac{24}{21} \times \frac{28}{17}$				
3.	1.31:1	$\frac{25}{20} \times \frac{23}{22}$	1.43:1	$\frac{24}{21} \times \frac{25}{20}$				
4.	1.0:1		1.0:1					
R	3.72:1	$\frac{25}{20} \times \frac{18}{13} \times \frac{30}{14}$	3.391:1	$\frac{24}{21} \times \frac{18}{13} \times \frac{30}{14}$				

Type of final drive Hypoid or limited slip

Type of differential Bevel

Final drive ratio 3.9:1 Alternatives 4.3:1, 4.8:1, 3.54:1, 4.1:1

No. of teeth 11/43

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

WHEELS

Type Wire Weight 6.92 kg.

Method of attachment Centre lock hub cap

Rim diameter 381.0 m.m. Rim width 114.3 m.m.

Tyre size: From 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 One or Tandem 5 Bore 15.875 m.m.

	Front		Rear	
No. of wheel cylinders	Four		Four	
Bore of wheel cylinders	48.085	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	70.0	m.m.	58.8	m.m.
		47.5	m.m.	38.1	m.m.
Width		45.0	m.m.	38.1	m.m.
Total area per brake		5462.5	m.m.²	3574.3	m.m.²

SUSPENSION

	Front	Rear
Type	Parallel wishbone	Semi elliptic spring
Type of spring	Coil	Leaf
Is stabiliser fitted?	Yes	No
Type of shock absorber	Lever arm	Lever arm
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 90.90 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) 124.46 cm.

Distance from floor to top of windscreen:

Highest point 93.98 cm. Lowest point 91.44 cm.

Width of windscreen:

Maximum width 119.38 cm. Minimum width 105.41 cm.

*Interior width of car 124.46 cm.

No. of seats 2

Track: Front 123.82 cm. Rear 127.0 cm.

Wheelbase 232.96 cm. Ground clearance 117.4 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 1032.85 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:—

Touring Equipment.

Cylinder head - cast iron Part No. AEC.1355
Exhaust manifold - Part No. AEC.1377 & AEC.1378
Rear drum brakes 11" x $2\frac{1}{4}$
Clutch - Type 10A6G
Camshaft AEC.2029 - Inlet opens - 5° BTDC Exhaust opens 51° BBDC
Inlet closes - 45° ABDC Exhaust closes 21° ATDC
Max. lift - 9.2mm

Fuel tank 113.64 litres