

- 5 MAI 1960



F.I.A. Recognition No.

17

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 Co. Ltd.

Model Austin Healey ~~3000~~ 3000 Year of Manufacture 1959./60

Chassis EBN7 or BT7

Serial No. of
Engine XSP and 29D.

Type of Coachwork Two Seater Sports.

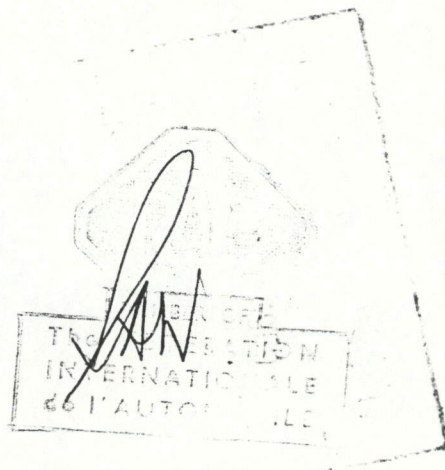
Recognition is valid from In category B
Group 3



Photograph to be affixed here - view of car from front right.



Stamp of F.I.A. to be
affixed here.



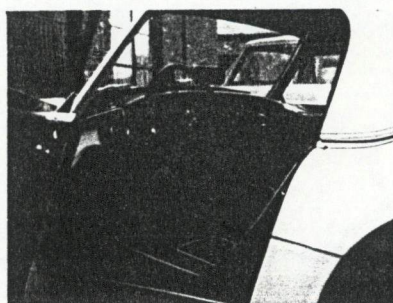
General description of car:

Photographs to be affixed below.

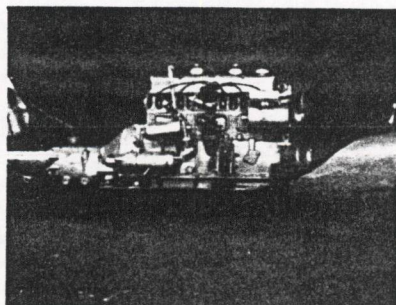
¾ view of car from rear left.



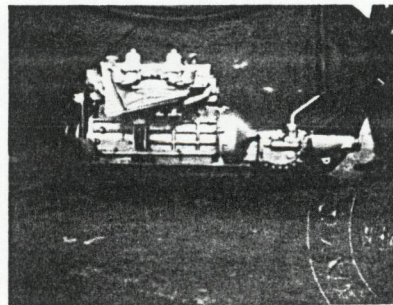
Interior view of car through driver's door.



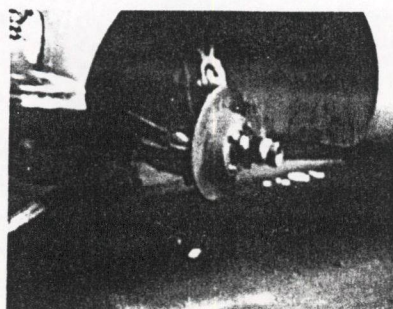
Engine unit with accessories from right.



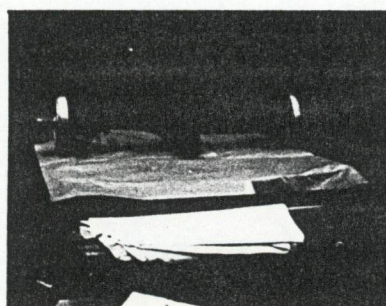
Engine unit with accessories from left.



Front axle complete (without wheels).



Rear axle complete (without wheels).



ENGINE

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

Cycle 4 stroke. Firing order 153624
 Capacity 2912.047 c.c. Bore 83.34325 m.m. Stroke 88.962 m.m.
 Maximum rebore 84.3788 Resultant capacity 2967.68 c.c.
 Material of cylinder block C.1.1452/14 Material of sleeves, if fitted None
 Distance from crankshaft centre line to top face of block at centre line of cylinders 260.35 m.m.
 Material of cylinder head C.1 Volume of one combustion chamber 52.5 c.c.
 Compression ratio 9.03 : 1
 Material of piston Alum Alloy HG.413 No. of piston rings 4
 Distance from gudgeon pin centre line to highest point of piston crown 47 : 6251 m.m.

Bearings { Crankshaft main bearings: Type Shell Dia. 60.369 m.m.
 Connecting rod big end: Type Half Bearings Dia. 50.838 m.m.

Weights { Flywheel 12.7 kg. with ring.
 Crankshaft 26.762 kg.
 Connecting rod 1.015 kg.
 Piston with rings 505 kg.
 Gudgeon pin .132 kg.

No. of valves per cylinder Two Method of valve operation Push rods from side camshaft.
 No. of camshafts One Location of camshafts in block.
 Type of camshaft drive Endless Roller Chain.

Diameter of valves: Inlet 44.45 m.m. Exhaust 39.68 m.m.
 Diameter of port at valve seat: Inlet 42.068 m.m. Exhaust 36.51 m.m.
 Tappet clearance for checking timing: Inlet .61 m.m. Exhaust .61 m.m.
 Valves open: Inlet 5° BTDC. Exhaust 40° BBDC.
 Valves close: Inlet 45° ABDC. Exhaust 10° ATDC.
 Maximum valve lift: Inlet 7.972 m.m. Exhaust 7.972 m.m.

Degrees of crankshaft rotation from zero to—
 Maximum lift: Inlet 157° Exhaust 157°
 $\frac{3}{4}$ Maximum lift: Inlet 108° Exhaust 108°

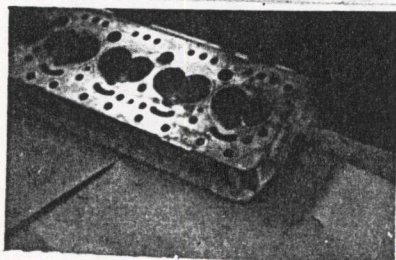
Valve springs: Inlet Exhaust
 Type Helical. Helical
 No. per valve Two. Two.

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

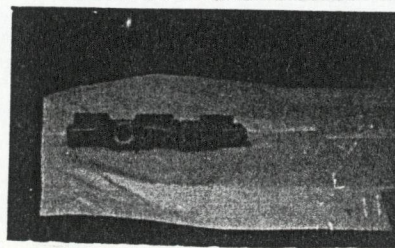
Make S.U. Model HD.6
 Flange diameter 44.45 m.m. Choke diameter 41.275 m.m.
 Main jet identification No. .100" (CV Needle)

Air filter: Type Oil Wetted Element. No. fitted Two.
 Inlet manifold:
 Diameter of flange at carburettor 44.45 m.m.
 Diameter of flange at port 36.512 m.m.

Photograph of combustion chamber to be affixed here.



Photograph of inlet manifold to be affixed here.

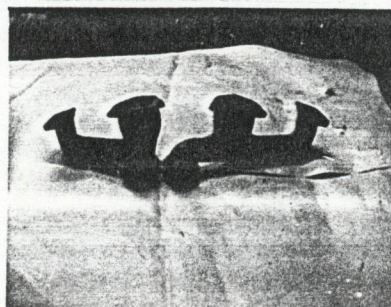


Exhaust manifold: Rectangular.
 Diameter of flange at port (4) 38.1 (2) 26.987 x 42.862 m.m.
 Diameter of flange at connection to silencer inlet pipe 44.45 m.m.

Photograph of piston showing crown to be affixed here.



Photograph of exhaust manifold to be affixed here.



ENGINE ACCESSORIES

Make of fuel pump	<u>S.U.</u>	No. fitted	<u>One.</u>
Method of operation	<u>Electrical.</u>		
Type of ignition system	<u>Coil</u>		<u>coil or magneto</u>
Make of ignition	<u>Lucas</u>	Model	<u>DM 6A</u>
Method of advance and retard	<u>Centrifugal and vacuum.</u>		
Make of ignition coil	<u>Lucas</u>	Model	<u>HA 12</u>
No. of ignition coils	<u>One</u>	Voltage	<u>12</u>
Make of dynamo	<u>Lucas</u>	Model	<u>C45PV6</u>
Voltage of dynamo	<u>12</u>	Maximum output	<u>25</u> amps.
Make of starter motor	<u>Lucas.</u>	Model	<u>M 418 G</u>
Battery: No. fitted	<u>One or Two</u>	Voltage	<u>12 6</u>
		Capacity	<u>57</u> amp. hour

Make Austin Healey Model BN7-BT7 F.I.A. Recognition No. 13000

TRANSMISSION

Make of clutch Borg & Beck Type 10A6 - G. SDP
Diameter of clutch plate 10" No. of plates Single
Method of operating clutch Hydraulic
Make of gearbox B.H.C. Type 4 speed Synchronesh.
No. of gearbox ratios 4 forward and one reverse.
Method of operating gearshift Manual
Location of gearshift Centre on floor.
Is overdrive fitted? Yes - Optional
Method of controlling overdrive, if fitted Manual Switch.

	GEARBOX RATIOS		ALTERNATIVE RATIOS					
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth
1.	2.93:1	$\frac{26}{19} \times \frac{14}{30}$	2.875	$\frac{25}{20} \times \frac{13}{30}$				
2.	2.053:1	$\frac{26}{19} \times \frac{18}{27}$	2.06	$\frac{25}{20} \times \frac{17}{28}$				
3.	1.309:1	$\frac{26}{19} \times \frac{23}{22}$	1.31	$\frac{25}{20} \times \frac{22}{23}$				
4.	1.0 :1	0 - 0	1:1					
Reverse	3.78:1							

Type of final drive Hypoid (Live Axle)
Type of differential Bevel
Final drive ratio 3.547:1 Alternatives 3.909:1 4.1:1
No. of teeth 11/39 11/43 10/41
Overdrive ratio, if fitted .822:1 or .778:1

WHEELS

Type Wire Weight 6.92 kg.
Method of attachment Hub Cap (Centre Lock)
Rim diameter 381.0 m.m. Rim width 101.6 m.m.
Tyre size: Front 5.90 x 15 Rear 5.90 x 15

BRAKES

Method of operation Hydraulic (Front) Disc (Rear) Drum
Is servo assistance fitted? No.
Type of servo, if fitted Not applicable.
No. of hydraulic master cylinders one Bore 15.875 m.m.

	Front		Rear
No. of wheel cylinders	Four		Two
Bore of wheel cylinders	48.086	m.m.	19.05
Inside diameter of brake drums	Disc.	m.m.	279.4
No. of shoes per brake (per wheel)			Two
Outside diameter of brake discs	285.75	m.m.	
No. of pads per brake (per wheel)	Two		
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	m.m.	267.46
(Shape)	47.5/47.5	m.m.	
Width (approx)	45	m.m.	57.15
Total area per brake (per wheel)	5462.5	m.m. ²	30.645

SUSPENSION

	Front		Rear
Type	Parallel Wishbone		Leaf
Type of spring	Coil		Semi-elliptic
Is stabiliser fitted (Anti-roll bar)	Yes		No
Type of shock absorber	8. 3/16" lever arm.		6" lever Arm.
No. of shock absorbers	Two		Two

STEERING

Type of steering gear Cam and peg.

Turning circle of car 10.72. m., approx.

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

CAPACITIES AND DIMENSIONS

Fuel tank 57.96 litres Sump 5.824. litres

Radiator 10.2285 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 124.46. cm.

No. of seats Two

Track: Front 123.825. cm. Rear 127.0 cm.

Wheelbase 232.96562. cm. Ground clearance 11.9475 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 1092 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:—

REAR BRAKES (DISC) H.8462.

Number of Wheel Cylinders.	2 per brake (per wheel)
Bore of Wheel Cylinders.	38.14 m/m
Outside diameter of Disc.	279.4 m/m
Number of Pads per Brake (per Wheel)	2
Pad height.	38.1 m/m
Pad width.	55.88 / 38.1 m/m
(Segmental)	
Pad area - 2 Pads (per wheel)	3574.3 m/m ²

Handbrakes - Number of Pads (per wheel) 2
 Pad area - 2 Pads (per wheel) 2710 m/m²
 Pad width 44.45 m/m
 Lucas Lightweight Racing Battery.
 Fuel Tanks. 15 galls. (67.5 litres) 20 galls. (90 litres)
 14 Leaf Rear Springs are used for the above tanks EX213/5
 Wheels. 4J x 15 centre lock 4J x 15 centre lock 4J x 15 disc.
 S.U. Carburettors HD8 2" throat.

CAMSHAFT - AEC 865

Valves open	Inlet 16° BTDC	Exhaust 51° BBDC
Valves close	Inlet 56° ABDC	Exhaust 21° ATDC
Maximum valve lift	Inlet 9.04 m/m	Exhaust 9.04 m/m
Degrees crankshaft rotations from zero to		
Maximum lift.	Inlet 126°	Exhaust 126°
2 Maximum lift	Inlet 90°	Exhaust 90°

CAMSHAFT - 600/1223

Valves open	Inlet 5° BTDC	Exhaust 51° BBDC
Valves close.	Inlet 45° ABDC	Exhaust 21° ATDC.
Maximum valve lift	Inlet 9.04 m/m	Exhaust 9.04 m/m.
Degrees crankshaft rotations from Zero to.		
Maximum Lift	Inlet 145°	Exhaust 139°
2 Maximum lift	Inlet 96°	Exhaust 86°
Large Sump. 13.5 litres with stone guard.		
Clutch 10" Competition type.		
Current Regulator RB310		
Front Coil Springs High rate L.H.4055 and H8422.		
Twin SU Fuel Pumps.		
Valve Springs Inner	L.H.723	
Outer	L.G.2887.	