Manufacturers Reference No. for Application

KJ.2.

F.I.A. Recognition No. 117

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 A.C.CARS LIMITED, HIGH STREET, THAMES DITTON, SURREY.

Model A.C. ACE BRISTOL Year of Manufacture 1963

Serial No. of Chassis BE and BEX

Engine "B" "C" "D" and "BS"

Type of Coachwork OPEN SPORTS WITH TWO SEATS

Recognition is valid from Regularisation le 9/6/63 In category G.T.

Photograph to be affixed here ¾ view of car from front right.

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

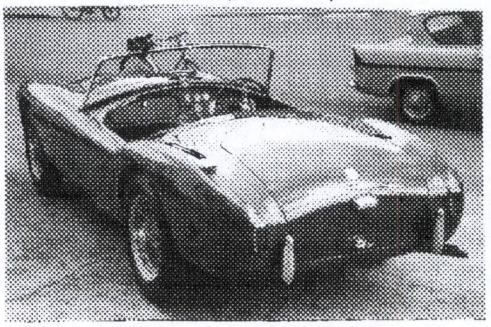
Form: R.F.I.A.

General description of car:

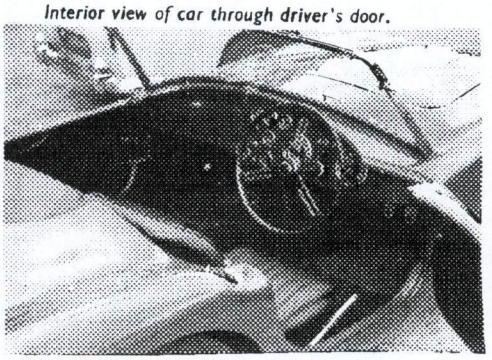
Specify here material/s of chassis/body construction

Photographs to be affixed below.

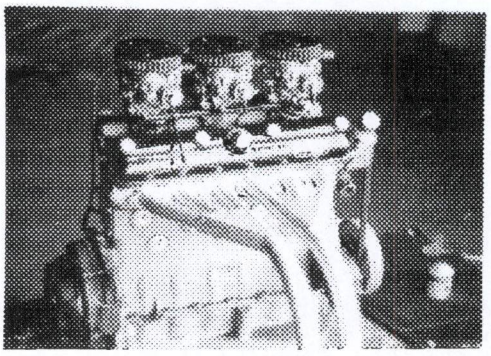
¾ view of car from rear left.



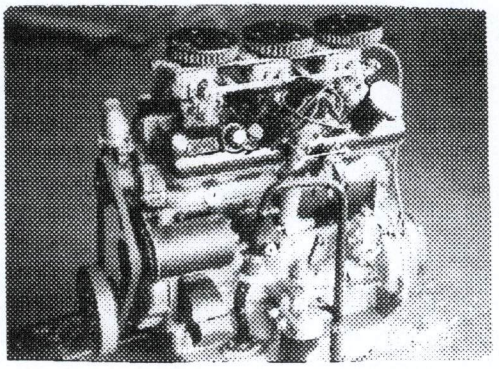
Interior view of car through driver's door.



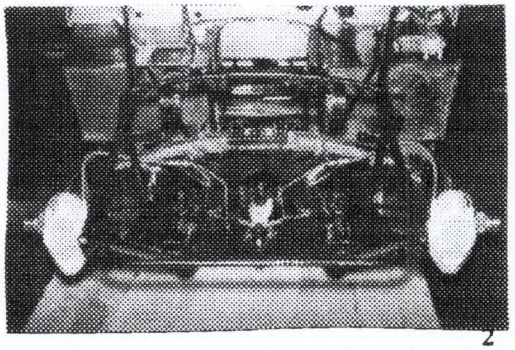
Engine unit with accessories from right.



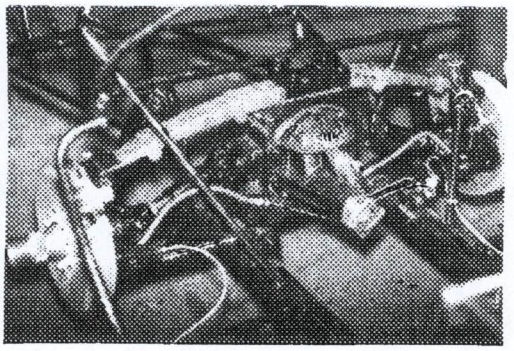
Engine unit with accessories from left.



Front axle complete (without wheels)



Rear axle complete (without wheels).



ENGINE

in line IN LINE

No. of cylinders SIX in V -

opposed -

Cycle FOUR Firing order 1-5-3-6-2-4

Capacity 1971 c.c. Bore 2.59" 66 m.m. Stroke 3.78" 96 m.m.

Maximum rebore Re line to standard Resultant capacity 1971 c.c.

Material of cylinder block CAST IRON Material of sleeves, if fitted BRIVADIUM DRY

Distance from crankshaft centre line to top face of block at centre line of cylinders 255.27 m.m.

Material of cylinder head ALUMINIUM Volume of one combustion chamber 68 c.c.

Compression ratio 9:1 or 9.5:1

Material of piston ALUMINIUM ALLOY No. of piston rings 4

Distance from gudgeon pin centre line to highest point of piston crown 9.5 to 1 60.5 58.98 9 to 1 m.m.

Bearings { Crankshaft main bearings: Type SHELL Dia 53.9624 m.m.
Connecting rod big end: Type SHELL Dia 44.9851 m.m.

Weights { Flywheel 7.48 kg.
Crankshaft 20.8 kg.
Connecting rod .596 kg.
Piston with rings .28349 kg. 9.5 to 1 piston
Gudgeon pin .06024 kg. 8.5 piston .31184 Kg. with rings and gudgeo pin.

No. of valves per cylinder TWO Method of valve operation PUSHRODS

No. of camshafts ONE Location of camshafts IN CYLINDER BLOCK

Type of camshaft drive CHAIN

Diameter of valves:	Inlet 1.6 40.64 m.m.		Exhaust 1.310 33.27 m.m.	
Diameter of port at valve seat:	Inlet 1.5 38.10 m.m.		Exhaust 1.180 29.72 m.m.	
Tappet clearance for checking timing:	Inlet 1.118 m.m.		Exhaust 1.118 Cold 28.40 m.m.	
Valves open:	Inlet 10° BTDC		Exhaust 50° BBDC	
Valves close:	Inlet 50° ABDC		Exhaust 10° ATDC	
Maximum valve lift:	Inlet 343" 8.79 m.m.		Exhaust 343" 8.79 m.m.	
Degrees of crankshaft rotation from zero to—				
Maximum lift:	Inlet 172°		Exhaust 172°	
¾ Maximum lift:	Inlet 113°		Exhaust 113°	

Valve springs:

	Inlet	*Exhaust*
Type	COIL SPRING	COIL SPRING
No. per valve	TWO	TWO

Carburettor: Type DOWNDRAFT (up or down draft, horizontal) No. fitted THREE

Make SOLEX Model B.32PB 1-6

Flange hole diameter 33.338 m.m. Choke diameter 28 m.m.

Main jet identification No. 125

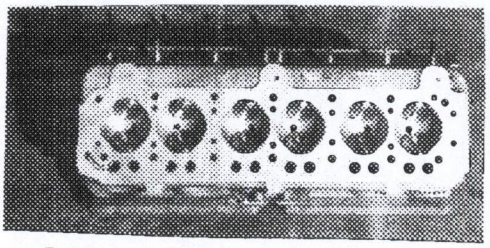
Air filter: Type DRY ELEMENT No. fitted THREE

Inlet manifold:

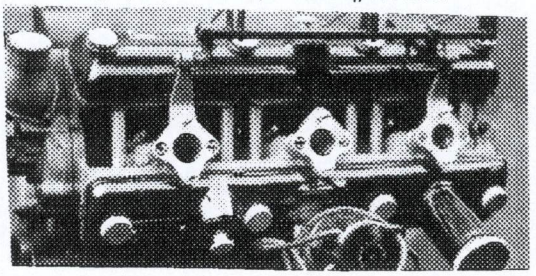
Diameter of flange hole at carburettor 31.0 m.m.

Diameter of flange hole at port 29.97 m.m.

Photograph of combustion chamber to be affixed here.



Photograph of inlet manifold to be affixed here.

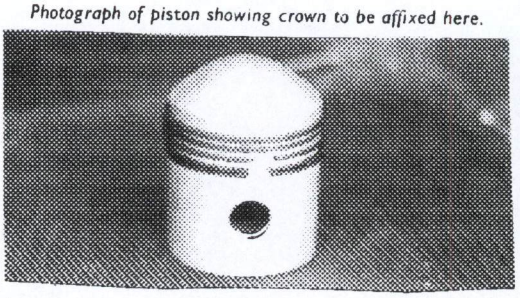


Exhaust manifold:

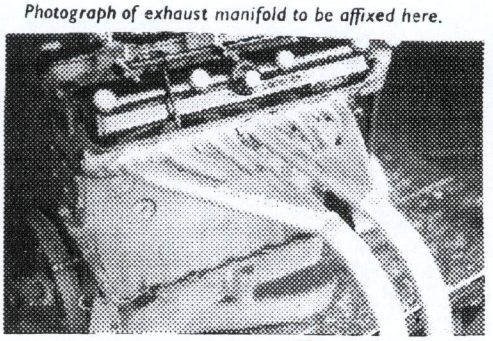
Diameter of flange hole at port 31.75 m.m.

Diameter of flange hole at connection to silencer inlet pipe 31.75 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 A.C. TYPE No. fitted ONE

Method of operation DRIVEN OFF CAMSHAFT

Type of ignition system LUCAS 12 VOLT COIL HA12 coil or magneto

Make of ignition DISTRIBUTOR LUCAS Model DXH 6A 40551A

Method of advance and retard AUTOMATIC AND MANUAL

Make of ignition coil LUCAS HA 12 Model HA 12

No. of ignition coils ONE Voltage 12 VOLT

Make of dynamo LUCAS Model C.39 PV.2

Voltage of dynamo LUCAS C39 PV-2 Maximum output 24 amps.

Make of starter motor LUCAS M35G/1 Model TYPE WG.3

Battery: No. fitted ONE Voltage 12 Capacity 60 amp. hour

Oil Cooler (if fitted) type GALLAY Capacity ½ APPROX. pints

Make AC Model ACE BRISTOL F.I.A. Recognition No.

Manufacturers Reference No. of Application KJ2

TRANSMISSION

Make of clutch BORG & BECK Type DRY PLATE

Diameter of clutch plate No. of plates ONE

Method of operating clutch HYDRAULIC

Make of gearbox BRISTOL Type

No. of gearbox ratios FOUR FORWARD, ONE REVERSE

Method of operating gearshift MANUAL CHANGE

Location of gearshift ON FLOOR

Is overdrive fitted? IF REQUIRED

Method of controlling overdrive, if fitted BY ELECTRIC SWITCH

	GEARBOX RATIOS		ALTERNATIVE RATIOS					
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth
1.	11.42/1	21/26	14/33					
2.	7.13/1	21/26	19/28					
3.	5.05/1	21/26	23/24					
4.	3.91/1	Direct						
5.								

Type of final drive HYPOID

Type of differential FREE

Final drive ratio 3.9 to 1 Alternatives 3.77 3.64 3.916 4.3

No. of teeth 14-51 4.55 4.88 5.11

Overdrive ratio, if fitted OPTIONAL EXTRA PROVIDING 3.2 in top

WHEELS

Type WIRE WHEELS Weight 7.48 or 7.711 kg.

Method of attachment CENTRE LOCKING

Rim diameter 406.4 or 381.0 m.m. Rim width 101.6 or 114.3 m.m.

Tyre size: Front 16 x 550 or 15 x 175 Rear 16 x 550 or 15 x 175

BRAKES

Method of operation HYDRAULIC

Is servo assistance fitted? NO

Type of servo, if fitted NONE

No. of hydraulic master cylinders ONE Bore 19.05 m.m.

	Front	Rear
No. of wheel cylinders	TWO EACH WHEEL	ONE EACH WHEEL
Bore of wheel cylinders	54.97 m.m.	22.225 m.m.
Inside diameter of brake drums	m.m.	279.4 m.m.
No. of shoes per brake	TWO PADS EACH BRAKE	TWO SHOES EACH BRAKE
Outside diameter of brake discs	295.275 m.m.	NIL m.m.
No. of pads per brake	TWO	NIL

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	90 m.m.	250.825 m.m.
	m.m.	273.00 m.m.
Width	58/61 m.m.	44.45 m.m.
Total area per brake	11100 9096.8 sq. m.m.²	23064.6 sq. 23284 m.m.²

SUSPENSION

	Front	Rear
Type	INDEPENDENT	INDEPENDENT
Type of spring	TRANSVERSE LEAF PLATE	TRANSVERSE LEAF PLATE
Is stabiliser fitted?	NO	NO
Type of shock absorber	ARMSTRONG TELESCOPIC	ARMSTRONG TELESCOPIC
No. of shock absorbers	TWO	TWO

STEERING

Type of steering gear CAM

Turning circle of car 10.363 m., approx.

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

CAPACITIES AND DIMENSIONS

Fuel tank 59.097 litres Sump 12 pints 6.81 litres

Radiator 10.226 litres

Overall length of car 384.81 cm. Overall width of car 151.13 cm.

Overall height of car, unladen (with hood up, if appropriate) 124.49 cm.

Distance from floor to top of windscreen:

Highest point 92.71 cm. Lowest point 88.90 cm.

Width of windscreen:

Maximum width 137.16 cm. Minimum width 116.8 cm.

*Interior width of car 127 cm.

No. of seats TWO

Track: Front 127 cm. Rear 127 cm.

Wheelbase 228.6 cm. Ground clearance 152.4 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 764.303 Kgs. (1.685) 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:—

Double fuel pump

Fuel tank capacity	20 Gallons		90.92 litres
Low compression Cylinder Head	Inlet Valve dia.	1.540	39.12
	Inlet Port dia.	1.125	35.56

Exhaust valves as High Compression head.

Manufacturers Reference No. for Application

X62

F.I.A. Recognition No. 117 A

ROYAL AUTOMOBILE CLUB

PALL MALL, LONDON, S.W.1.

Federation Internationale de l'Automobile.

Amendment to Form of Recognition

Manufacturer A.C. CARS LIMITED, HIGH STREET, THAMES DITTON, SURREY.

Model A.C. ACE BRISTOL (1971 cc)

Add to Optional Equipment :

Anti-roll bar, front and rear.

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

Date amendment is valid from 1st 7/64 November 6th 1963

Form: R.F.I.B.

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

A.C. - ACE BRISTOL	9/63 -	117
MARQUE ET MODELE	VALIDITE HOMOLOGATION	FICHE NR.

	GT / 2000
	GROUPE / CLASSE

EXTENSIONS	DEBUT VALIDITE	DESCRIPTION	NOTES
A	11/63	BARRE ANTIROULIS	

Autres homologations du modèle

Vérifiée le 25/10/95 par _____ visée ce jour le _____ par _____