

Manufacturers Reference No. for Application

K.J.1.



F.I.A. Recognition No.

67

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

Model..... A.C. ACE 2.6 LITRE..... Year of Manufacture..... 1961

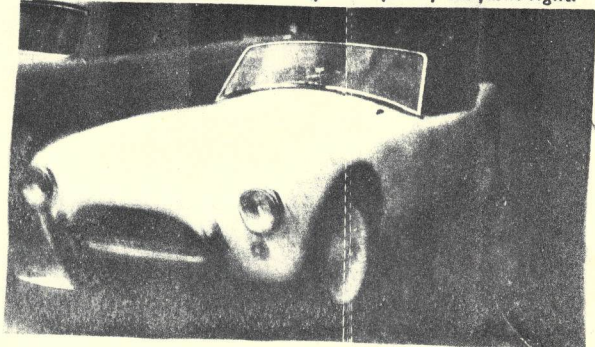
Serial No. of Chassis..... 5000 RS OR RSX.....

Engine..... SERIES STARTS S.....

Type of Coachwork..... OPEN SPORTS CAR WITH TWO SEATS.....

Recognition is valid from..... 13 JUL 1962..... In category..... GT.....

Photograph to be affixed here  $\frac{3}{4}$  view of car from front right.



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

*Handwritten signature and circular stamp.*

General description of car:

Specify here material/s of chassis/body construction

CHASSIS AND BODY FRAMING OF TUBULAR STEEL CONSTRUCTION WELDED JOINTS. BODY PANELLED IN ALUMINIUM.

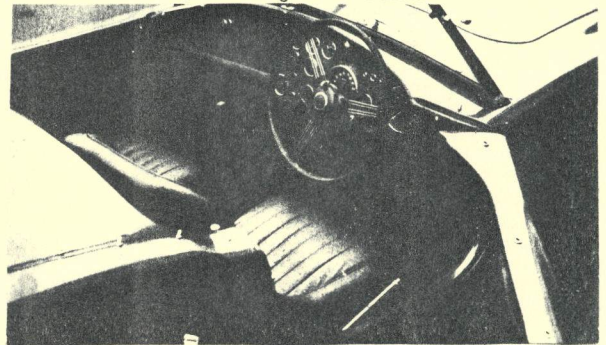
*Handwritten signature*  
REGISTRATION  
AUTOMOBILE  
NAME

Photographs to be affixed below.

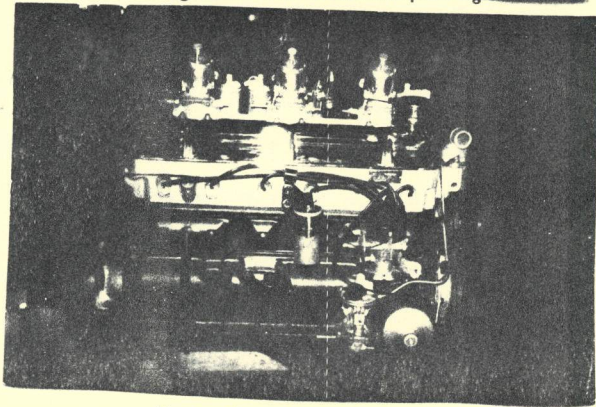
view of car from rear left.



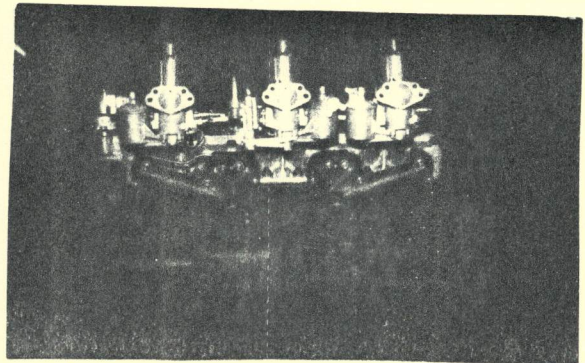
Interior view of car through driver's door.



Engine unit with accessories from left.

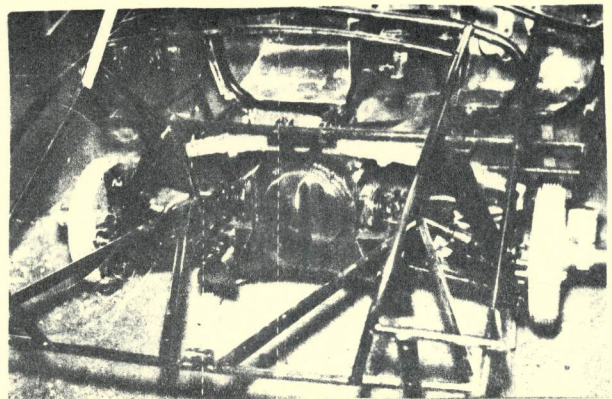
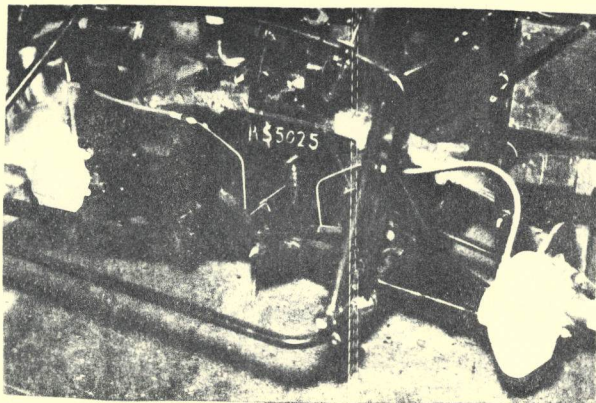


Engine unit with accessories from left.



Front axle complete (without wheels).

Rear axle complete (without wheels).



**ENGINE**

No. of cylinders SIX in line YES  
in V -  
opposed -

Cycle FOUR Firing order 1.5.3.6.2.4.

Capacity 2553 c.c. Bore 82.55 m.m. Stroke 79.5 m.m.

Maximum rebore 1.524 Resultant capacity 2648.07 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 221.487 m.m.

Material of cylinder head ALUMINIUM Volume of one combustion chamber 50.52 c.c.

Compression ratio 9.5

Material of piston ALUMINIUM ALLOY No. of piston rings FOUR

Distance from gudgeon pin centre line to highest point of piston crown 46 m.m.

Bearings { Crankshaft main bearings: Type LEAD INDIUM Dia. 60.05/45.89 m.m.  
Connecting rod big end: Type LEAD INDIUM Dia. 60.35/60.36 m.m.

Weights { Flywheel 10.25 kg.  
Crankshaft 27.18 kg.  
Connecting rod 59534 kg.  
Piston with rings .60596 kg.  
Gudgeon pin 0.125 kg.

No. of valves per cylinder TWO Method of valve operation PUSH ROD

No. of camshafts ONE Location of camshafts CYLINDER BLOCK

Type of camshaft drive CHAIN

Diameter of valves: Inlet 42 m.m. Exhaust 34.54 m.m.

Diameter of port at valve seat: Inlet 38.8 m.m. Exhaust 30 m.m.

Tappet clearance for checking timing: Inlet 0.3556 m.m. Exhaust 0.3556 m.m.

Valves open: Inlet 17° B.T.D.C. Exhaust 49° B.B.D.C.

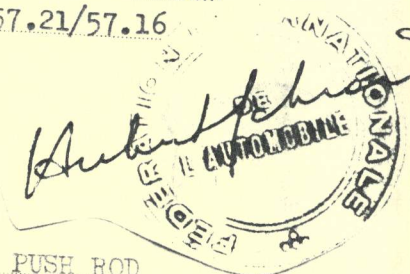
Valves close: Inlet 51° A.B.D.C. Exhaust 19° A.T.D.C.

Maximum valve lift: Inlet 8.864 m.m. Exhaust 8.864 m.m.

Degrees of crankshaft rotation from zero to—  
Maximum lift: Inlet 124° Exhaust 124°  
 $\frac{3}{4}$  Maximum lift: Inlet 68° Exhaust 68°

Valve springs: Inlet COIL Exhaust COIL  
Type COIL  
No. per valve TWO

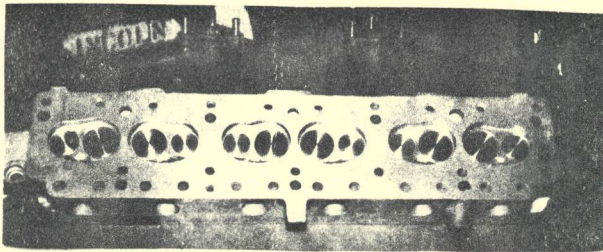
Carburettor: Type SEMI DOWNDRAFT 33° (up or down draft, horizontal) No. fitted 3 S.U. OR 3 DOUBLE CHOKE WEBER  
WEBER 40DCOE2 S.U.H.61 1.3/4"  
Make S.U. AND WEBER HORIZONTAL Model THREE S.U. OR THREE DOUBLE CHOKE WEBER  
40 m.m. WEBER 30 m.m. WEBER  
Flange hole diameter 44.4 S.U. Choke diameter 41.2 S.U. m.m.  
WEBER 110 Main jet identification No. S.U. TA. NEEDLE



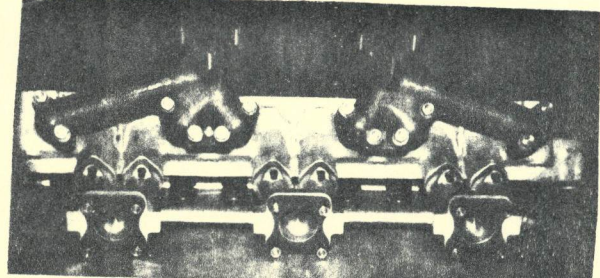
Air filter: Type A.C. DELCO No. fitted THREE

Inlet manifold:  
 Diameter of flange hole at carburettor 44.5 S.U. WEBER 39 m.m.  
 Diameter of flange hole at port 31.5 S.U. WEBER 35.2 m.m.

Photograph of combustion chamber to be affixed here.

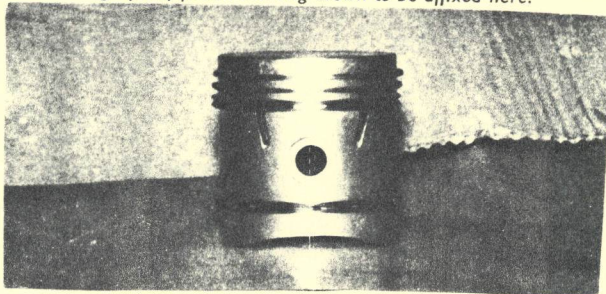


Photograph of inlet manifold to be affixed here.

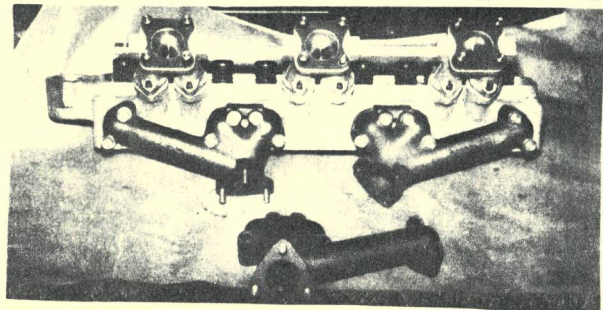


Exhaust manifold:  
 Diameter of flange hole at port 28/29.97 m.m.  
 Diameter of flange hole at connection to silencer inlet pipe 40/41 m.m.

Photograph of piston showing crown to be affixed here.

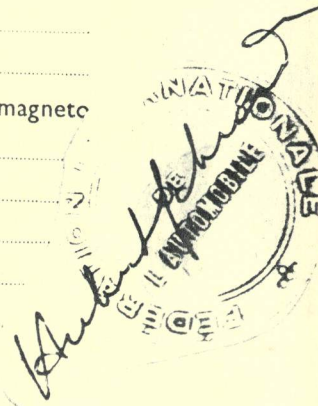


Photograph of exhaust manifold to be affixed here.



**ENGINE ACCESSORIES**

Make of fuel pump A.C. DELCO No. fitted ONE  
 Method of operation MECHANICAL DIAPHRAGM TYPE  
 Type of ignition system COIL coil or magneto  
 Make of ignition LUCAS Model H.A.12  
 Method of advance and retard VACUUM/MECHANICAL  
 Make of ignition coil LUCAS Model L.A.12  
 No. of ignition coils ONE Voltage 12 VOLT  
 Make of dynamo LUCAS Model C40  
 Voltage of dynamo TWELVE Maximum output  
 Make of starter motor LUCAS Model M.350  
 Battery: No. fitted ONE Voltage \_\_\_\_\_ Capacity 51/10/57/20 amp. hour  
 Oil Cooler (if fitted) type GALLERY Capacity App. 1/2 pints



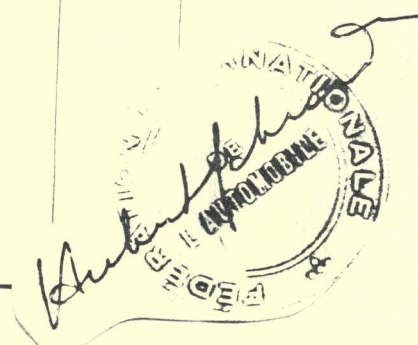
Make A.C. Model ACE 2.6 F.I.A. Recognition No. \_\_\_\_\_

Manufacturers Reference No. of Application K.J.L.

**TRANSMISSION**

Make of clutch BORG & BECK Type DRY PLATE  
 Diameter of clutch plate 8 1/2 ins No. of plates ONE  
 Method of operating clutch HYDRAULIC  
 Make of gearbox MOSS & FORD Type MECHANICAL  
 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.	3.163	31	2.97	36				
2.	2.214	23	1.745	37				
3.	1.412	18	1.205	31				
4.	1 to 1	15	1 to 1	28				
Reverse								
5.	4.667	14	2.97	16 in Pinion				



Type of final drive HYPLOID  
 Type of differential FREE  
 Final drive ratio 3.64 Alternatives 3.91 4.3  
 No. of teeth 14 - 51  
 Overdrive ratio, if fitted 22% 3.3

**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 NO SERVO  
 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.
			273.00 m.m.
Width	58/61 m.m.		44.45 m.m.
Total area per brake	11100 9096.9 sq. m.m. <sup>2</sup>		23064.6 sq. 23284 m.m. <sup>2</sup>

### 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 3.98 litres

Radiator.....10.226 litres

Overall length of car 387.39 cm. Overall width of car 151.13 cm.

Overall height of car, unladen (with hood up, if appropriate) 124.46 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 cm.

\*(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.....762.04 1700 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.<sup>2</sup>

Size of exhaust port:

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

Height.....m.m. Area.....m.m.<sup>2</sup>

Size of transfer port:

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

Height.....m.m. Area.....m.m.<sup>2</sup>

Size of piston port:

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

Height.....m.m. Area.....m.m.<sup>2</sup>

Method of pre-compression.....

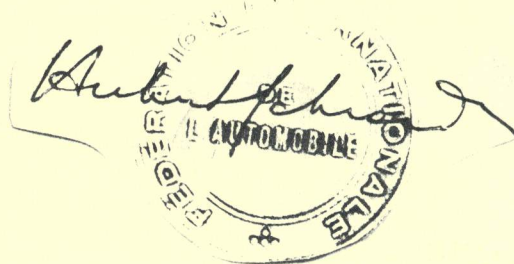
Bore and stroke of pre-compression cylinder, if fitted.....m.m.

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.....

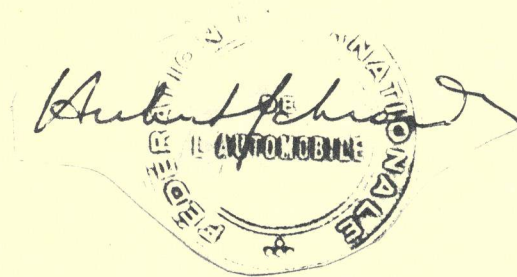
Optional equipment affecting preceding information:—

ECONOMY MODEL : -

CAST IRON CYLINDER HEAD.

Electric Petrol Pump Part No. AA. 50

FEDERATION  
INTERNATIONALE  
de l'AUTOMOBILE







A.C.

ACE 2.6 litre

7/62

67

MARQUE ET MODELE

VALIDITE HOMOLOGATION

FICHE NR.

GT/3000

GROUPE / CLASSE

EXTENSIONS	DEBUT VALIDITE	DESCRIPTION	NOTES

Autres homologations du modèle

Vérifiée le 25/10/95 par [Signature] visée ce jour le \_\_\_\_\_ par \_\_\_\_\_