

Manufacturers Reference No. for Application



F.I.A. Recognition No. 1173

# 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..... **HUMBER LIMITED**

Model..... **SUPER SNIPE (IV)** Year of Manufacture..... **1963**

Serial No. of Chassis..... **8200001**

Engine..... **8200001**

Type of Coachwork..... **Four Door Five Seater Saloon**

Recognition is valid from..... **29th January 1963** In category..... **TOURING**

*liste générale 9  
additionnelle 19*

Photograph to be affixed here 3/4 view of car from front right.



affixed here.



General description of car:

Photographs to be affixed below.

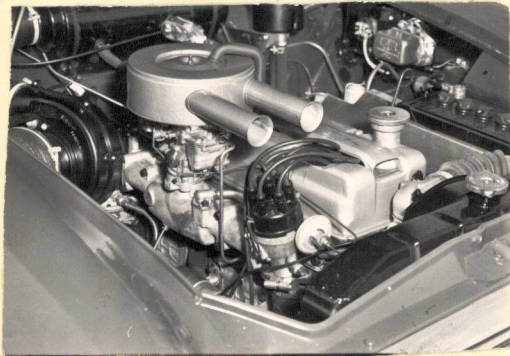
$\frac{3}{4}$  view of car from rear left.



Interior view of car through driver's door.



Engine unit with accessories from right.



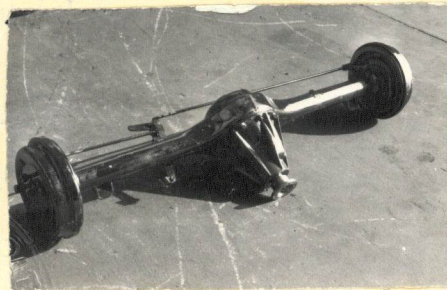
Engine unit with accessories from left.



Front axle complete (without wheels).



Rear axle complete (without wheels).



**ENGINE**

No. of cylinders..... 6 ..... in line ✓  
 Cycle..... 4 stroke ..... ~~opposed~~  
 Capacity 2.965 c.c. Bore 87.3 m.m. Stroke 82.6 m.m.  
 Maximum rebore 88.3 Dia. Resultant capacity 3,035 c.c.  
 Material of cylinder block C.I. Material of sleeves, if fitted None  
 Distance from crankshaft centre line to top face of block at centre line of cylinders 241 m.m.  
 Material of cylinder head C.I. Volume of one combustion chamber 72.9 ± 1 c.c. with valves & spark plug fitted  
 Compression ratio 8.0 : 1  
 Material of piston Aluminium No. of piston rings 3  
 Distance from gudgeon pin centre line to highest point of piston crown 52.7 m.m.  
 Bearings { Crankshaft main bearings: Type Micro-babbit Dia. 63.5 m.m.  
 Connecting rod big end: Type Micro-babbit Dia. 50.8 m.m.  
 Weights { Flywheel 13.7 kg.  
 Crankshaft 28.6 kg.  
 Connecting rod .91 kg.  
 Piston with rings .49 kg.  
 Gudgeon pin .14 kg.  
 No. of valves per cylinder 2 Method of valve operation O.H.V. Push rod  
 No. of camshafts 1 Location of camshafts in cylinder block  
 Type of camshaft drive Chain from crankshaft  
 Diameter of valves: Inlet 41.5 m.m. Exhaust 33.9 m.m.  
 Diameter of port at valve seat: Inlet 38.5 m.m. Exhaust 30.5 m.m.  
 Tappet clearance for checking timing: Inlet .355 m.m. Exhaust .355 m.m.  
 Valves open: Inlet 20° B.T.D.C. Exhaust 52° B.B.D.C.  
 Valves close: Inlet 46° A.B.D.C. Exhaust 14° A.T.D.C.  
 Maximum valve lift: Inlet 9.4 m.m. Exhaust 8.9 m.m.  
 Degrees of crankshaft rotation from zero to— valve lift  
 Maximum lift: Inlet 142 Exhaust 140  
 3/4 Maximum lift: Inlet 90 Exhaust 88  
 Valve springs: Inlet Helical coil springs Exhaust Helical coil springs  
 Type Helical coil springs Helical coil springs  
 No. per valve 2 2  
 Carburettor: Type Down draft No. fitted 1  
 (up or down draft, horizontal)  
 Make Zenith Model 42 W.I.A.  
 Flange hole diameter 42 m.m. Choke diameter 33 m.m.  
 Main jet identification No. 150

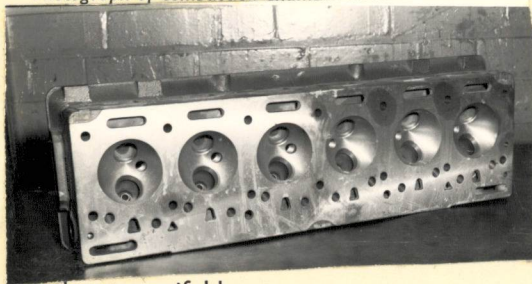
Air filter: Type A.C. Paper element No. fitted 1

Inlet manifold:  
Diameter of flange hole at carburettor 42.9 m.m.

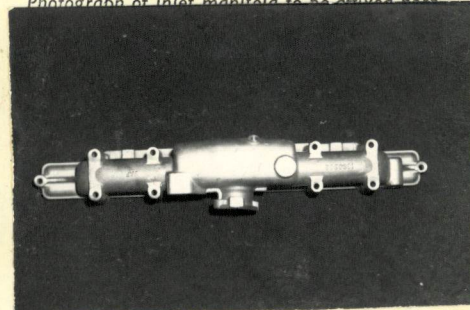
Diameter of flange hole at port Rectangular 39.4 x 25.4 m.m.

N.B. Manifold shape at joint to head consists of two large rectangular ports, each containing three separate inlet branches to internal dimensions given above.

Photograph of combustion chamber to be affixed here



Photograph of inlet manifold to be affixed here



Exhaust manifold:  
Diameter of flange hole at port Rectangular 44.5 x 25.4 m.m.

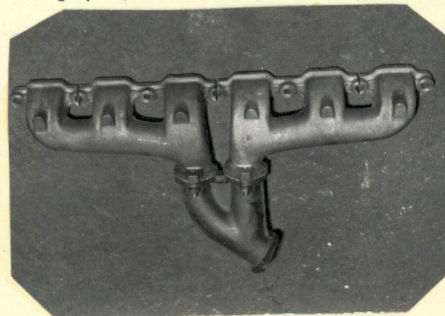
Diameter of flange hole at connection to silencer inlet pipe 2 flanges 41.3 m.m.

N.B. Two piece manifold feeding a Y-piece down pipe

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. No. fitted 1

Method of operation Mechanical from camshaft

Type of ignition system Distributor and coil or magneto

Make of ignition Lucas distributor Model 25 D. 6

Method of advance and retard Vacuum and centrifugal

Make of ignition coil Lucas Model H. A. 12

No. of ignition coils 1 Voltage 12

Make of dynamo Lucas Model C. 42

Voltage of dynamo 12 Maximum output 30 amps.

Make of starter motor Lucas Model M. 418 G

Battery: No. fitted 1 Voltage 12 Capacity 51 amp. hour

Make HUMBER Model SUPER SNIPE IV F.I.A. Recognition No. ....  
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**TRANSMISSION**

Make of clutch Borg and Beck Type Dry plate - diaphragm spring  
 Diameter of clutch plate 9 in. nominal No. of plates 1  
 Method of operating clutch Hydraulic - foot operated  
 Make of gearbox Humber Limited Type Synchromesh  
 No. of gearbox ratios 3 forward - 1 reverse  
 Method of operating gearshift Manual remote control  
 Location of gearshift Steering column  
 Is overdrive fitted? Optional extra  
 Method of controlling overdrive, if fitted Electrical

	GEARBOX RATIOS		ALTERNATIVE RATIOS					
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth
1.	2.803:1	$\frac{35}{21} \times \frac{27}{22}$						
2.	1.452:1	$\frac{35}{21} \times \frac{27}{31}$						
TOP	1.000:1	Direct						
REVERSE	3.137:1	$\frac{35 \times 19 \times 32}{21 \times 17 \times 19}$						
5.								

Type of final drive Hypoid bevel gear  
 Type of differential Normal 2 pinions & 2 side gears  
 Final drive ratio 4.222 : 1 Alternatives 4.778  
 No. of teeth .....  
 Overdrive ratio, if fitted 0.7776:1 (28.6 %) Overall 3.283 : 1

**WHEELS**

Type Pressed steel disc Weight 7.9 kg.  
 Method of attachment 5 x 1/2 in. U.N.F. Line Studs  
 Rim diameter 380 m.m. Rim width 114 m.m.  
 Tyre size: Front 6.70 x 15 Rear 6.70 x 15

**BRAKES**

Method of operation Girling hydraulic  
 Is servo assistance fitted? Yes  
 Type of servo, if fitted Vacuum  
 No. of hydraulic master cylinders 1 Bore 22.2 m.m.

	Front		Rear
No. of wheel cylinders	4		2
Bore of wheel cylinders	57	m.m.	19
Inside diameter of brake drums		m.m.	279
No. of shoes per brake			2
Outside diameter of brake discs	289	m.m.	
No. of pads per brake	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 40° included angle	m.m.	267
	internal radius 76	m.m.	267
	external radius 130	m.m.	57
Width		m.m.	30,300
Total area per brake	7800	m.m. <sup>2</sup>	30,300

### SUSPENSION

	Front	Rear
Type	Independent Wishbone	Live Axle
Type of spring	Helical coil spring	Semi-elliptic leaf spring
Is stabiliser fitted?	Yes	No
Type of shock absorber	Hydraulic telescopic	Hydraulic telescopic
No. of shock absorbers	2	2

### STEERING

Type of steering gear	Burman 'F. 3' Type Recirculating Ball
Turning circle of car	11.6
No. of turns of steering wheel from lock to lock	4

### CAPACITIES AND DIMENSIONS

Fuel tank	73	litres	Sump	Sump only 7.68 Including filter 8.53	litres
Radiator	Engine 14.2; with heater 14.8				
Overall length of car	469	cm.	Overall width of car	177	cm.
Overall height of car, unladen (with hood up, if appropriate)				155	cm.
Distance from floor to top of windscreen:					
Highest point	112	cm.	Lowest point	102	cm.
Width of windscreen:					
Maximum width	142	cm.	Minimum width	129	cm.
*Interior width of car	147	cm.			
No. of seats	5/6 seater; 2 bench seats; separate front seats optional extra				
Track: Front	142	cm.	Rear	141	cm.
Wheelbase	280	cm.	Ground clearance	178	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
 1491 | 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:—

1. # Borg-Warner Automatic Transmission available at extra cost for use with 4.22 axle ratio.
  2. Petrol tank shield available (Australia, Africa, and New Zealand).
  3. Electrical Petrol Pump.
  4. Large capacity long range fuel tank available (Australia, Africa and New Zealand). Capacity 100 litres.
  5. Radiator and sump protective shield available.
  6. Heavy duty suspension available with protective plate welded to front cross member, in conjunction with high rated rear springs.
  7. Oil Cooler available.
- |   |      |          |
|---|------|----------|
| # | 1st  | 2.31 : 1 |
|   | 2nd  | 1.43 : 1 |
|   | 3rd  | 1.00 : 1 |
|   | rev. | 2.09 : 1 |