

Manufacturers Reference No. for Application

HUMSCEPTRE I



F.I.A. Recognition No. ....

1203

# 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.

HUMBER LIMITED

Manufacturer.....

Model..... SCEPTRE ..... Year of Manufacture..... 1963

Serial No. of Chassis..... B3100001/OD/HSO

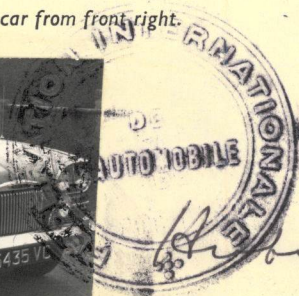
Engine..... B3100001/OD/HSO

Type of Coachwork..... Saloon

Recognition is valid from..... ~~25th April, 1963~~ ..... In category..... Touring

9/5/63

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



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

General description of car:

4 DOOR 5 SEATER SALOON CAR

Photographs to be affixed below.

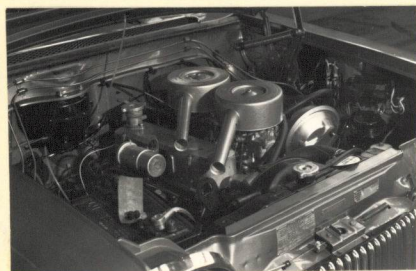
$\frac{3}{4}$  view of car from rear left.



Interior view of car through driver's door.



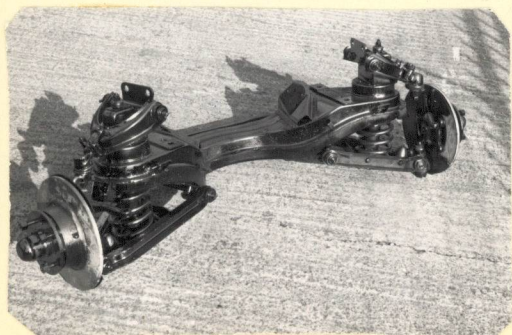
Engine unit with accessories from right.



Engine unit with accessories from left.



Front axle complete (without wheels).



Rear axle complete (without wheels).

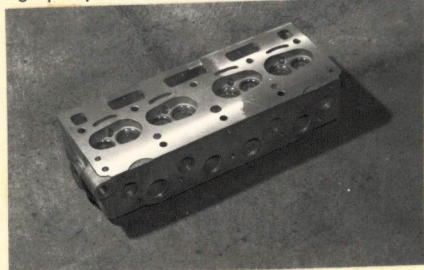


**ENGINE**

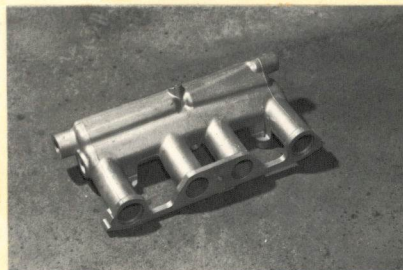
in line In Line  
 No. of cylinders 4 in V -  
 opposed -  
 Cycle 4 stroke Firing order 1.3.4.2  
 Capacity 1592 c.c. Bore 81.6 m.m. Stroke 76.2 m.m.  
 Maximum rebore 1.016 mm Resultant capacity 1630 c.c.  
 Material of cylinder block Cast Iron Material of sleeves, if fitted -  
 Distance from crankshaft centre line to top face of block at centre line of cylinders 231.8 m.m.  
 Material of cylinder head Aluminium Volume of one combustion chamber 38 c.c.  
 Compression ratio 9.1:1  
 Material of piston Heplex No. of piston rings 3 per piston  
 Distance from gudgeon pin centre line to highest point of piston crown 57.137 m.m.  
 Bearings { Crankshaft main bearings: Type White Metal Dia. 57.125 m.m.  
           { Copper Lead Indium Dia. 50.825/50.813 m.m.  
           { Connecting rod big end: Type - Dia. - m.m.  
 Weights { Flywheel 9.48 kg.  
           { Crankshaft 17.07 kg.  
           { Connecting rod 0.709 kg. C/W small end bush 8 bolts  
           { Piston with rings 0.29 kg.  
           { Gudgeon pin 0.141 kg.  
 No. of valves per cylinder 2 Method of valve operation Pushrod  
 No. of camshafts 1 Location of camshafts Cylinder Block  
 Type of camshaft drive Chain drive from Crankshaft  
 Diameter of valves: Inlet 37.48/37.38 m.m. Exhaust 29.87/29.77 m.m.  
 Diameter of port at valve seat: Inlet 34.9 m.m. Exhaust 26.9 m.m.  
 Tappet clearance for checking timing: Inlet .305 m.m. Exhaust .356 m.m.  
 Valves open: Inlet 14° BTDC Exhaust 56° BBDC  
 Valves close: Inlet 52° ABDC Exhaust 10° ATDC  
 Maximum valve lift: Inlet 9.29 m.m. Exhaust 9.24 m.m.  
 Degrees of crankshaft rotation from zero to—  
 Maximum lift: Inlet 148° Exhaust 143°  
 $\frac{3}{4}$  Maximum lift: Inlet 96° Exhaust 92°  
 Valve springs: Inlet Exhaust  
                   Type Helical Coil Helical Coil  
                   No. per valve 2 2  
 Carburettor: Type Downdraught No. fitted 2  
                   (up or down draft, horizontal)  
 Make Zenith Model 36 - W.I.A.3  
 Flange hole diameter 36 m.m. Choke diameter 29 m.m.  
 Main jet identification No. 120

Air filter: Type Paper Element No. fitted 2  
 Inlet manifold:  
 Diameter of flange hole at carburettor 50.04 m.m.  
 Diameter of flange hole at port 50.8 m.m.

Photograph of combustion chamber to be affixed here.



Photograph of inlet manifold to be affixed here.

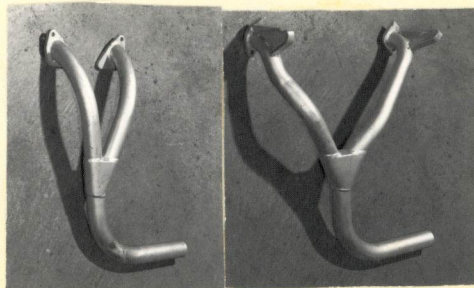


Exhaust manifold:  
 Diameter of flange hole at port 28.4 m.m.  
 Diameter of flange hole at connection to silencer inlet pipe 45.7 m.m.

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. No. fitted 1  
 Method of operation Mechanical  
 Type of ignition system Coil and Distributor coil or magneto  
 Make of ignition Lucas Model 25 D4  
 Method of advance and retard Centrifugal and Vacuum  
 Make of ignition coil Lucas Model HA 12  
 No. of ignition coils One Voltage 12 V  
 Make of dynamo Lucas Model C 40 L  
 Voltage of dynamo 12 V Maximum output 25 amps.  
 Make of starter motor Lucas Model M 35 G  
 Battery: No. fitted 1 Voltage 12 Capacity 38 amp. hour

Make HUMBER Model SCEPTRE F.I.A. Recognition No. ....

Manufacturers Reference No. of Application HUMSCEPTRE I

**TRANSMISSION**

Make of clutch Borg & Beck Type Single Dry Plate  
 Diameter of clutch plate 8 inch No. of plates 1  
 Method of operating clutch Hydraulic - Foot Operated  
 Make of gearbox Rootes Type Synchromesh  
 No. of gearbox ratios 4 forward and reverse  
 Method of operating gearshift Manual remote control  
 Location of gearshift Central floor change  
 Is overdrive fitted? Yes  
 Method of controlling overdrive, if fitted Electric switch- driver control

	GEARBOX RATIOS		ALTERNATIVE RATIOS					
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth
1.	3.346	$\frac{29 \times 30}{20 \times 13}$			3.32	$\frac{21 \times 31}{27 \times 12}$	2.97	$\frac{21 \times 30}{27 \times 13}$
2.	2.141	$\frac{29 \times 31}{20 \times 21}$			1.9	$\frac{21 \times 31}{27 \times 21}$	1.9	$\frac{21 \times 31}{27 \times 21}$
3.	1.392	$\frac{29 \times 24}{20 \times 25}$			1.24	$\frac{21 \times 24}{27 \times 25}$	1.24	$\frac{21 \times 24}{27 \times 25}$
4.	1.000	Direct						
<b>K</b> Rev	4.239	$\frac{29 \times 30 \times 19}{20 \times 13 \times 15}$						

Type of final drive Hypoid  
 Type of differential Normal - 2 pinions and side gears  
 Final drive ratio 4.22:1 Alternatives 4.86:1 4.44:1 3.70:1 3.89:1  
 No. of teeth 9/38 34/7 40/9 37/10 35/9  
 Overdrive ratio, if fitted 24.56% (.803:1)

**WHEELS**

Type Pressed Steel Disc Weight 5.76. kg.  
 Method of attachment 4 - 7/16" UNF Studs  
 Rim diameter 330.2 m.m. Rim width 116.5 m.m.  
 Tyre size: Front 6.00 x 13 Rear 6.00 x 13

**BRAKES**

Method of operation Hydraulic  
 Is servo assistance fitted? Yes  
 Type of servo, if fitted Lockheed  
 No. of hydraulic master cylinders 1 Bore 19.05 m.m.

	Front		Rear
No. of wheel cylinders	Two per wheel		One per wheel
Bore of wheel cylinders	54	m.m.	19.1 m.m.
Inside diameter of brake drums	-	m.m.	228.6 m.m.
No. of shoes per brake	-		2
Outside diameter of brake discs	247.5	m.m.	- 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)			

	Available Volume <sup>Front</sup>		Rear	
Length	29.6	cm <sup>3</sup>	219	m.m.
	29.6	cm <sup>3</sup>	2.19	m.m.
Width	-	m.m.	44.5	m.m.
Total area per brake	6,260	m.m. <sup>2</sup>	19,500	m.m. <sup>2</sup>

### SUSPENSION

	Front	Rear
Type	Independant Wishbone coil	Live Axle semi-elliptic leaf spring
Type of 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 recirculating ball	
Turning circle of car	10.97	m., approx.
No. of turns of steering wheel from lock to lock	3 $\frac{1}{4}$	

### CAPACITIES AND DIMENSIONS

Fuel tank	47.73	litres	Sump	4.5	inc oil filter	litres
Radiator	engine & 6.90					
Overall length of car	420.3	cm.	Overall width of car	160.7	cm.	
Overall height of car, unladen (with hood up, if appropriate) 144.8 cm.						
Distance from floor to top of windscreen:						
Highest point	107	cm.	Lowest point	104	cm.	
Width of windscreen:						
Maximum width	127	cm.	Minimum width	110	cm.	
*Interior width of car	130 cm.					
No. of seats	4/5					
Track: Front	131	cm.	Rear	123	cm.	
Wheelbase	256.5	cm.	Ground clearance	165	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 1039 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. Separate Air Filters available
2. Oil Cooler
3. Long range fuel tank (capacity 100 litres)
4. Power Lock differential available
5. Lightweight seats available.



Manufacturers Reference No. for Application



F.I.A. Recognition No. 1203 *A*

# ROYAL AUTOMOBILE CLUB

PALL MALL, LONDON, S.W.1.

## Federation Internationale de l'Automobile.

Amendment to Form of Recognition

Manufacturer HUMBER LTD.

Model SCYTHRE

Add to Optional Equipment .

Carburettor with manifold to suit

1 Solex 32 P.I.A.I.

Flange Holes Dia = 33 mm.

Choke Dia. = Primary 24 mm.

Secondary 26 mm.

Jets = Primary 117.5

Secondary 130



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

Date amendment is valid from *last 9/24 November 4th 1963*

Form: R.F.I.B.

*Robert Brown*

Manufacturers Reference No. for Application

HUMSCEPTRE I.



F.I.A. Recognition No.

1203

1/ET

# ROYAL AUTOMOBILE CLUB

PALL MALL, LONDON, S.W.1.

## Federation Internationale de l'Automobile.

*Amendment to Form of Recognition*

Manufacturer Humber Ltd.

Model Sceptre.

All synchromesh gearbox now fitted to  
this model as standard equipment.

Part No. 5220878.



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

Date amendment is valid from

1st February 1965

Form: R.F.I.B.

Manufacturers Reference No. for Application

Humsceptre I.



F.I.A. Recognition No.

1203.

1B/V

# ROYAL AUTOMOBILE CLUB

PALL MALL, LONDON, S.W.1.

## Federation Internationale de l'Automobile.

Amendment to Form of Recognition

Manufacturer..... HUMBER LTD.

Model..... SCEPTRE.

Alternative Single Carburettor now fitted Part No. 1800503, on  
Manifold Part No. 5220807.

Type Solex 3Z PAIA (Compound).

Flange Hole diameter. 33 MM.

Choke diameters. Primary 24 MM.

Secondary 26 MM.

Main Jets. Primary. 117.5

Secondary 130

This change of carburettion has no effect on performance 15 inch  
wheels part no. 1214943 available for certain export territories. No  
change in wheelbase or track.



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

Date amendment is valid from

16 Nov. 1964

Form: R.F.I.B.