

F.I.A. Recognition No. 1117

# 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		ROOTES GROU	P		
Model	HILLMA	SUPER MINX I		Year of Manufacture	1961
Serial No. of	ChassisB	1200001			
	Engine B	1200001			
Type of Coacl	nwork	SALOON	5 2/1- 15'LU'-1		
Recognition is	valid from	2		In category	TOURING
1	iste d	je mi ale	327 FE	V 1962	
	4 0	iddition	rolle I		

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



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

## Photographs to be affixed below.

3 view of car from rear left.



Engine unit with accessories from right.



Front axle complete (without wheels).



Interior view of car through driver's door.



Engine unit with accessories from left.



Rear axle complete (without wheels).



GINE	in line			
No. of cylinders	4 xqxxx			
	xopposedx			
Cycle	stroke	Firing order	1-3-4-2	
Capacity 1592	c.c. Bore 81	1.5 m.m	Stroke 76.2	m.m.
Maximum rebore82	2.25 m.m.	Resultant ca	pacity1620	c.c.
Material of cylinder b	lock Cast iron	Material of sl	eeves, if fitted	
Distance from cranks face of block at ce	haft centre line to top entre line of cylinders		231.8	m.m.
Material of cylinder h	ead Cast iron Vol	ume of one con	bustion chamber 44/46	c.c.
	8.3:1			- 0
Material of piston	'Heplex'	No.	of piston rings3	
Distance from gudged	on pin centre line to highest	point of pisto	n crown 46.9	m.m.
Bearings { Cranksh	aft main bearings: Type	White metal	L lined Dia 57.13	m.m.
	ing rod big end: Type			
	9.87	0		
Cranksl	haft 15.42	kg.		
	ting rod .71		earing shells and	small en
	with rings •44	-		
	on pin14	_		
No. of valves per cylin	nder2	Method of va	lve operation Pushrod	
	1			
Type of camshaft driv	e Chaindrive			
Diameter of valves:	Inlet 36.45		chaust 29.8	
Diameter of port at valve seat:	Inlet 33.3	m.m. Ex	chaust 26.9	m.m.
Tappet clearance for	at valve	e tip	at va	Lve tip
checking timing:			chaust 5	m.m.
Valves open:	Inlet 14° B.T.D.C.		chaust 56° B.B.D.C.	
Valves close:	Inlet 52° A.B.D.C.	E>	chaust 10° A.T.D.C.	
	Inlet <b>8.13</b>	m.m. E>	chaust	m.m.
	t rotation from zero to—		7,,0	
Maximum lift:	Inlet 96°		chaust 92°	
3/4 Maximum lift:		E>		
Valve springs:	Inlet		Exhaust	
	Helical coil		Helical coil	
	per valve 2		2	
Carburettor: Type	Downdraught up or down draft, horizonta		fitted 1	
Make	7 1.1.		32 VN	
	ter 32 m.m.		meter 27	m.m.
	ion No. 87			
Tam jet identificat	OII INO.			

Air filter: Type Paper Element	No. fitted	1
Inlet manifold: Diameter of flange hole at carburettor	33	m.m.
Diameter of flange hole at port	32	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 27	.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
Type of ignition system	Coil		coil or magneto
			DM2
Method of advance and re	tard Centrifug	al and vacuum	
Make of ignition coil	Lucas	Model	HA12
			12
Make of dynamo			C40
Voltage of dynamo	12	Maximum	output 19 amps.
Make of starter motor	Lucas	Model	M35G
Battery: No. fitted	1 Voltage		38 amp. hour

				SUP	FB					
Make	H	CLLMAN	M	odel MIN	X	F.I.A. Reco	gnition No.			
				Manufacti	irers Refere	nce No. of	Application.	HILLMAN	SUPER MI	NX I
TRA	NSMISSI	ON								
	Make of cl	utch	Borg	g and Be	ck	Тур	e Sing	le dry	plate	
Diameter of clutch plate 8.0 in. No. of plates 1										
	Method of operating clutch Mechanical through hydraulic									
	Make of gearbox Rootes Type Constant.									
	No. of gearbox ratios 4 forward and 1 reverse.									
	Location of	of gearshif	t	Cent	re floor	·lever				
			No							
	Method of	controllin	g overdrive	, if fitted		-				
	`									
		GEARBO	X RATIOS		-	ALTERNAT	IVE RATIOS	1		
		Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	
	1.	3.346	29 x 30 20 x 13							
	2.		$\frac{29}{20} \times \frac{31}{21}$							
	3.		29 x 24 20 x 25							
	4.	1.0	Direct							
	Rev5.	4.239	29 x 30 20 x 13	x 19 15						
		And annual and an artist and artist and an artist and artist artist and artist artist and artist artist and artist artist artist and artist art								
	Type of di	fferential		Normal	- 2 Pir	nions an	d side g	gears.		
			4.22:1		Alternativ	es				
			9/38							
	Overdrive	ratio, if fi	tted	-		••••••••••				
WH	EELS	7 (1)								
									kg.	
									m.m.	
	Tyre size:	Front	0.00	X DJ	Rear.		0.00	و ۱		
BRA				II.	Imass 7 d a					
	Method of	operation.	••	нус	raulic					
	Is servo ass	sistance fitt	ted? No	9						

Bore.....

1

17.8

.. m.m.

Type of servo, if fitted......

No. of hydraulic master cylinders...

	Front	Rear
No. of wheel cylinders	2 per wheel	1 per wheel
Bore of wheel cylinders	20.3 m.m.	19.1 m.m.
Inside diameter of brake drums		299 m.m.
No. of shoes per brake	2	4
Outside diameter of brake disc	m.m.	m.m.
No. of pads per brake	-	-
Dimensions of brake linings pe dimensions, specify each)	r shoe or pad (if all shoes or pads	in each brake are not of same
	Front	Rear
Length	219 m.m.	219 m.m.
	219 m.m.	219 m.m.
Width	44.5 m.m.	44.5 m.m.
Total area per brake	19,500 m.m. <sup>2</sup>	19,500 m.m. <sup>2</sup>
SUSPENSION	Front	Rear
Туре	Independent	Live axle
Type of spring	Coil	Semi elliptic leaf
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 ba	11
Turning circle of car	10.97	m., approx.
No of turns of steering when	I from lock to lock	3.2
No. of turns of steering whee		
CAPACITIES AND DIMENSIO	NS	3.9 sump only
	NS	
CAPACITIES AND DIMENSIO	<b>NS</b> litres Sump	3.9 sump only 4.5 inc. filter litres
Fuel tank 50 Radiator & Engine 7	<b>NS</b> litres Sump	3.9 sump only 4.5 inc. filter litres
Fuel tank 50 Radiator & Engine 7 Overall length of car 419	NS litres Sumplitres	3.9 sump only 4.5 inc. filter litres  car
Fuel tank 50 Radiator & Engine 7 Overall length of car 419	NS litres Sumplitres litres cm. Overall width of with hood up, if appropriate)	3.9 sump only 4.5 inc. filter litres  car
Fuel tank 50  Radiator & Engine 7  Overall length of car 419  Overall height of car, unladen ( Distance from floor to top of w	NS litres Sumplitres litres cm. Overall width of with hood up, if appropriate)	3.9 sump only 4.5 inc. filter litres  162 cm.  148 cm.
Fuel tank 50  Radiator Engine 7  Overall length of car 419  Overall height of car, unladen of the control of th	NS litres Sumplitres cm. Overall width of (with hood up, if appropriate) //indscreen:cm. Lowest point	3.9 sump only 4.5 inc. filter litres  162 cm. 148 cm.
Fuel tank 50 Radiator & Engine 7 Overall length of car 419 Overall height of car, unladen of the Distance from floor to top of whighest point 104 Width of windscreen: Maximum width 129	NS  litres Sump litres  cm. Overall width of (with hood up, if appropriate) cm. Lowest point cm. Lowest minum width	3.9 sump only 4.5 inc. filter litres  162 cm. 148 cm.
Fuel tank 50  Radiator Engine 7  Overall length of car 419  Overall height of car, unladen of the bound of th	litres Sump	3.9 sump only 4.5 inc. filter litres  162 cm. 148 cm.
Fuel tank 50 Radiator & Engine 7 Overall length of car 419 Overall height of car, unladen of the Distance from floor to top of whighest point 104 Width of windscreen: Maximum width 129	litres Sump	3.9 sump only 4.5 inc. filter litres  car cm. 148 cm.  101 cm.
Fuel tank 50 Radiator Engine 7 Overall length of car 419 Overall height of car, unladen of the Distance from floor to top of with Highest point. 104 Width of windscreen: Maximum width 129 *Interior width of car 129.5 Track: Front 131	litres Sump	3.9 sump only 4.5 inc. filter litres  162 cm. 148 cm.  101 cm.  119 cm.
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Addi	itional information for cars fitted with	two-cy	rcle engines	
	System of cylinder scavenging			
	Type of lubrication			
	Size of inlet port:			
	Length measured around cylinder wall			m.m.
	Heightm	ı.m.	Area	m.m.²
	Size of exhaust port:			
	Length measured around cylinder wall			m.m.
	Heightm	ı.m.	Area	m.m. <sup>2</sup>
	Size of transfer port:			
	Length measured around cylinder wall			m.m.m.
	Heightm			
	Size of piston port:			
	Length measured around piston			m m
	Height measured around piscon m			
	Method of pre-compression			
	Bore and stroke of pre-compression cylinder			
	Distance from top of cylinder block to lower			
	Distance from top of cylinder block to high			
	Distance from top of cylinder block to high			
	Drawing of	cylinder	norts	
	Drawing or	cymiaci	ports.	
Supe	ercharger, if fitted			
	Make		iel or Type No	
	Type of drive	Ra	tio of drive	100
Fuel	injection, if fitted			
uci	Make of pump		Model or Type No	
	Make of injectors		Model or Type No	
	Location of injectors			
	27.50	7		e similali

### Optional equipment affecting preceeding information:-

- 1. Petrol Tank Shield available.
- 2. Heavy duty Suspension with Aeon Rubber Assistance, available, export countries: Australia, Africa and New Zealand.
- 3. Long Range Fuel Tank available, capacity 100 litres.
- 4. Oil Cooler available.
- 5. Electrical Petrol pump available.
- 6. Light weight Competition Seats available.