



SPECIFICATIONS

Homologation valid as from **MARCH 2008**

A) Car seen from 3/4 front



B) Car seen from 3/4 rear



1. GENERAL

101. Manufacturer **L G SPORTS LIMITED**

102. Commercial names(s) - Model and Type **FORMULA McLARENS 1300** 

103. Cylinder capacity **1298** cm³ Corrected cylinder capacity _____ x _____ = _____ cm³

Cylinder capacity

104. a) Type

_____ separated _____ unitary construction

b) Material of chassis/ bodyshell **MILD STEEL**

105. Number of volumes **NA**

106. Number of places **NA**

Make FORMULA McLARENS Model 1300

2. DIMENSIONS, POIDS / DIMENSIONS, WEIGHT

202. Overall length 3100 mm +/- 1 %

203. Overall width 1620 mm +/- 1 %

Where measured FRONT NOSE CONE TO REAR END

204. Width of bodywork a) At front axle NA mm +/- 1 %

b) At rear axle NA mm +/- 1 %

206. Wheelbase 2230 mm +/- 1 %

209. Overhang a) Front NA mm +/- 1 % b) Rear NA mm +/- 1 %

210. Distance "G" (steering ~~vertical~~ - rear bulkhead) NA mm

Make FORMULA McLARENS

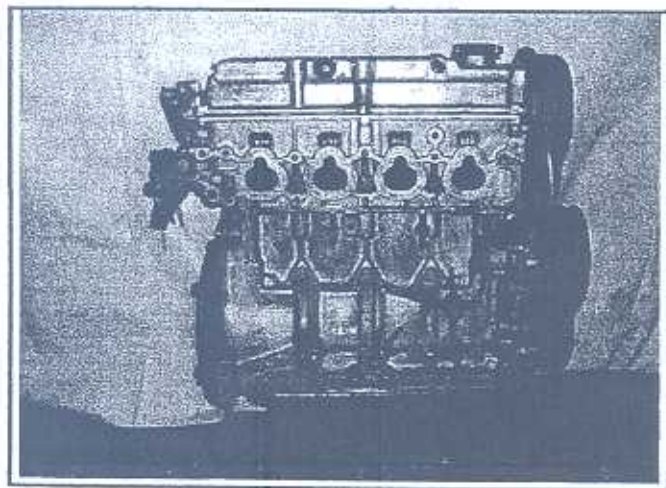
Model 1300

3. ENGINE 1300CC

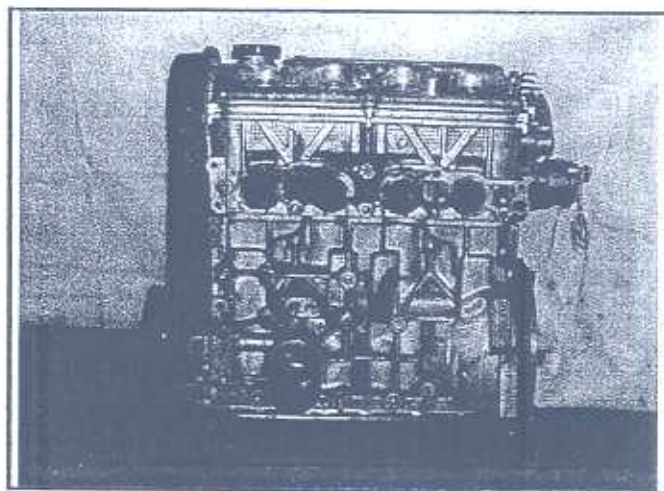
301. Location and position of the engine REAR

303. Cycle 4 STROKE

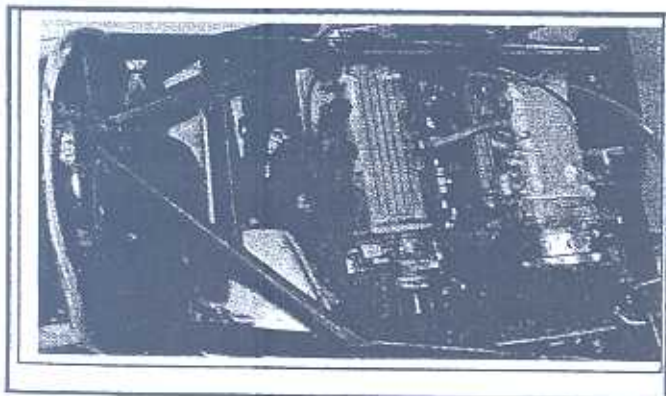
C) Right hand view of dismantled engine



D) Left hand of dismantled engine



E) Engine in its compartment



304. Supercharging

☐	☒
yes	no

Type and number of compressors NA

305. Number and layout of cylinders 4

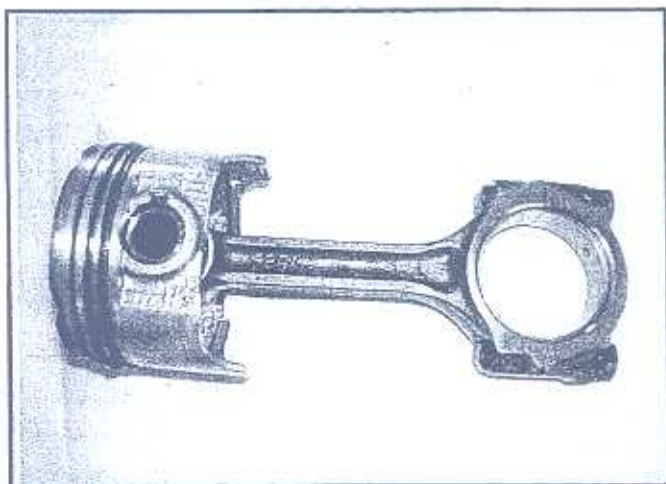
306. Type of cooling LIQUID

Make Formula McLarenModel 1300307. Cylinder capacity a) Unitary 324.5 cm³ b) Total 1298 cm³c) Max. total allowed NA cm³312. Cylinder block material ALUMINIUM ALLOY

313. Sleeves

a) ☒ yes ☐ noc) ☐ wet ☒ dry314. Bore 74 +0/- 0.1 mm315. Maximum bore allowed NA mm316. Stroke 74.5 +0/- 0.1 mm318. Connecting rod a) Material CARBON STEEL b) Big end type ALUMINIUM ALLOYc) Interior diameter of the big end (without shell bearings) 45 mm +0.1/- 0 mmd) Length between the axes 120 +/- 0.1 mm e) Minimum weight 10400 g

E1) Connecting rod seen from 3/4 (with PISTON)



Make

FERRARIS MCLARENS

Model

1300

319.

Crankshaft

a)

Type of manufacture

1 PIECE

b)

Material

CARBON STEEL

c)

☐	☒
cast	forged

d)

Number of bearings

5

e)

Type of bearings

PLAIN

f)

Diameter of bearings

45 mm ± 0.1 mm

g)

Bearing caps material

AL ALLOY

h)

Minimum weight of bare crankshaft

10400 g

320.

Flywheel

a)

Material

CAST IRON

b)

Minimum weight with starter ring

4880 g

Automatic gearbox

NANA g

Only usable with an automatic gearbox

321.

Cylinderhead

a)

Number

1

b)

Material

AL ALLOY

e)

Angle between intake valve and vertical

16 +/- 10' deg

f)

Angle between exhaust valve and vertical

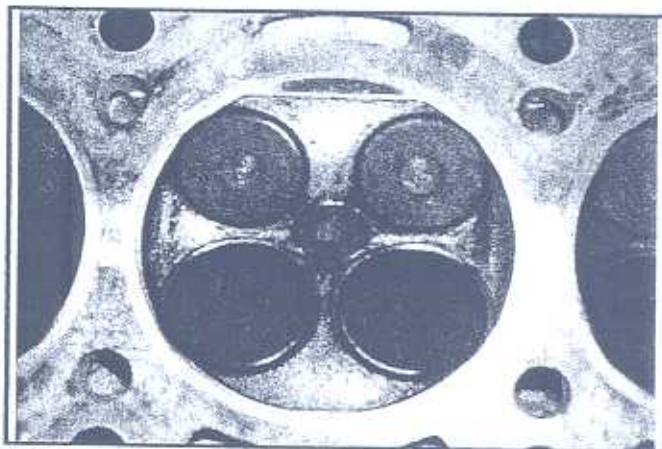
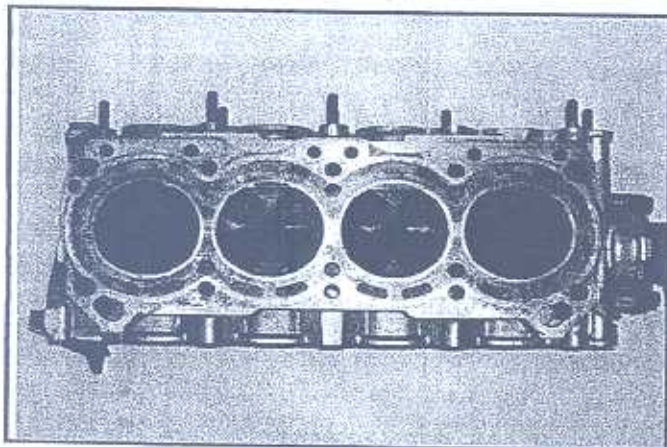
20 +/- 10' deg

F)

Bare cylinderhead

G)

Combustion chamber



323.

Fuel feed by carburettor

a)

Number of carburettors

ONE

b)

Type

DOWN DRAFT

c)

Make and model

UCALMIKUNI
P-26-30 DI DS

d)

Number of mixture passages per carburettor

NA

e)

Maximum diameter of the carburettor mixture exit port

NA mm

f)

Diameter of the venturi at the narrowest point

NA ± 0.25 mm

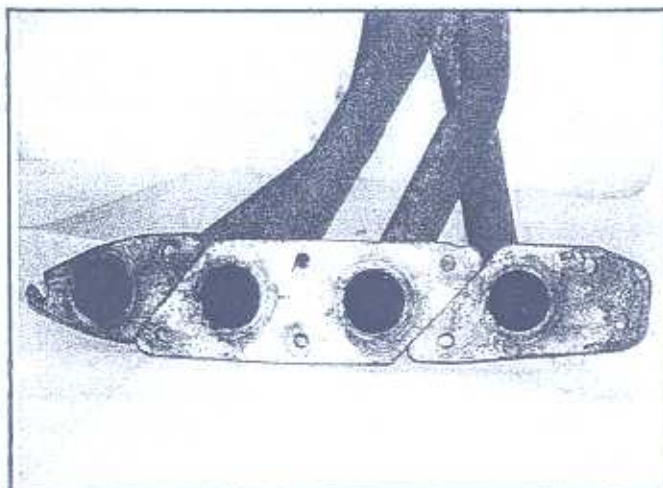
Make FORMULA McLARENS Model 1300

325. Camshaft a) Number 1 b) Location OVER HEAD
c) Drive system BELT d) Number of bearings per shaft 6
f) Type of valve operation ROCKER MECHANICAL

327. Intake a) Material of manifold ALUMINIUM
b) Number of manifold elements 1 c) Number of valves per cylinder 2
d) Maximum diameter of the valve 29.2 mm e) Diameter of the valve stem in guide 5.4 ± 0.2 mm
f) Valve length 92.3 ± 1.5 mm g) Type of valve springs COIL

328. Exhaust a) Material of manifold MS
b) Number of manifold elements 1 c) Internal dimensions of manifold exit 34 mm
d) Number of valves per cylinder 2 e) Maximum diameter of the valve 25 mm
f) Diameter of the valve stem in guide 5.4 ± 0.2 mm g) Valve length 80 ± 1.5 mm
h) Type of valve springs COIL

J) Exhaust manifold



Make FORMULA McLARENS

Model 1300

10. Ignition system

b) Number of plugs per cylinder

1

c) Number of distributors

1

33. Lubrication system

a) Type

WET SUMP
FORCED LUBRICATION

b) Number of oil pumps

1

1. FUEL CIRCUIT

401. Fuel tank

a) Number 1

b) Location

REAR

c) Material

ALUMINIUM

5. ELECTRICAL EQUIPMENT

501. Batteries

a) Number

1

b) Tension

12 volts

Make

FORMULA McLAREN

Model

1300

6. TRANSMISSION / POWER TRAIN

601.

Driven wheels

front

☐	☒
yes	no

rear

☒	☐
yes	no

602.

Clutch

b)

Control system

MECHANICAL

c)

Number of plates

1

603.

Gearbox

a)

Location

REAR

b)

"Manual" make

YES

c)

"Automatic" make

NA

d)

Type and location of control

MECHANICAL RH

e)

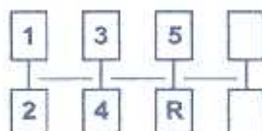
Ratios

	Manual			
	Number of teeth	Ratio	Constant	Syn-chro
1	<u>41/12</u>	<u>3.416</u>	—	<u>Y</u>
2	<u>36/19</u>	<u>1.894</u>	—	<u>Y</u>
3	<u>32/25</u>	<u>1.280</u>	—	<u>Y</u>
4	<u>32/35</u>	<u>0.914</u>	—	<u>Y</u>
5	<u>25/33</u>	<u>0.757</u>	—	<u>Y</u>
6	—	—	—	—
AR / R	<u>36/29X29/11</u>	<u>3.272</u>	—	<u>N</u>
Constant	—	—	—	—

	Automatic		
	Number of teeth	Ratio	Syn-chro
1	—	—	—
2	—	—	—
3	—	—	—
4	—	—	—
5	—	—	—
AR / R	—	—	—

f)

Gear change gate



g)

Type of lubrication

SPLASH

h)

Gearbox casing and clutch bell housing



Make FORMULA McLAREN'S Model 1500

7. SUSPENSION

701. General

a) Type of suspension

702. Helicoidal springs

703. Leaf springs

704. Torsion bars

Front	Rear
<u>UPPER & LOWER ARMS</u> ☒ yes ☐ no ☐ yes ☒ no ☐ yes ☒ no	<u>UPPER & LOWER ARMS</u> ☒ yes ☐ no ☐ yes ☒ no ☐ yes ☒ no

705. Other type of suspension

See description on additional form

707. Shock absorbers

a) Number per wheel

b) Type

c) Principle of operation

Front	Rear
<u>1</u> <u>TELESCOPIC</u> <u>HYDRAULIC</u>	<u>1</u> <u>TELESCOPIC</u> <u>HYDRAULIC</u>

T) Complete dismounted front axle

U) Complete dismounted rear axle

Make

FORMULA McLarenS

Model

1300

RUNNING GEAR

01.

Wheels

a) Diameter

Front	Rear
13" / ____ mm	13" / ____ mm

03.

Brakes

a)

Braking system

HYDRAULIC (DUAL)

b) Number of master cylinders

2

b1)

Bores 19 mm / 19 mm

c) Servo brakes

☐	☒
yes	no

c1)

Make and type TVS GIRLINGd) Braking regulator MECH

☒	☐
yes	no

d1)

Location FRONT

	Front	Rear
e) Number of cylinders per wheel	<u>1</u>	<u>1</u>
e1) Bore	<u>51</u> mm	<u>51</u> mm
f) Drum brakes		
f1) Internal diameter	<u>NA</u> +/- 1.5 mm	<u>NA</u> +/- 1.5 mm
f2) Number of linings per wheel	<u>NA</u>	<u>NA</u>
f3) Developed length of linings	<u>NA</u> +/- 1.5 mm	<u>NA</u> +/- 1.5 mm
f4) Width of linings	<u>NA</u> +/- 1 mm	<u>NA</u> +/- 1 mm
g) Disc brakes		
g1) Number of pads per wheel	<u>2</u>	<u>2</u>
g2) Number of calipers per wheel	<u>1</u>	<u>1</u>
g3) Caliper material	<u>CAST IRON</u>	<u>CAST IRON</u>
g4) Thickness of new disc	<u>17</u> +/- 1 mm	<u>17</u> +/- 1 mm
g5) External diameter of the disc	<u>231</u> +/- 1.5 mm	<u>231</u> +/- 1.5 mm
g6) External diameter of pads' rubbing surface	<u>227</u> +/- 1.5 mm	<u>227</u> +/- 1.5 mm
g7) Internal diameter of pads' rubbing surface	<u>151</u> +/- 1.5 mm	<u>151</u> +/- 1.5 mm
g8) Overall length of the pads	<u>105</u> +/- 1.5 mm	<u>105</u> +/- 1.5 mm
g9) Ventilated discs	☒ yes ☐ no	☒ yes ☐ no

Make FORMULA McLARENS Model 1300

h) Parking brake

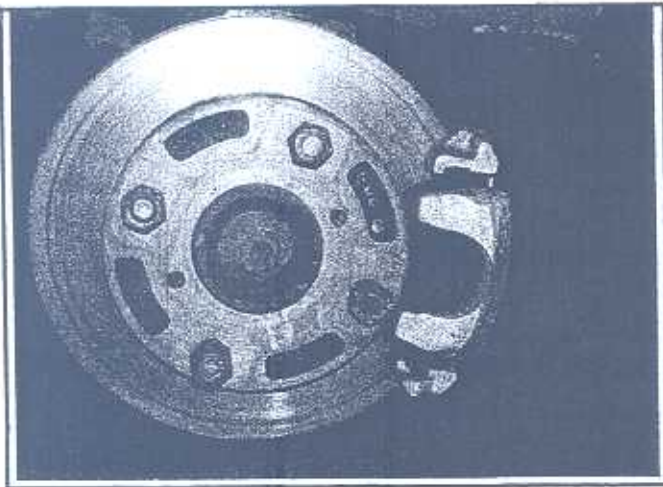
h1) Control system NA

h2) Location of lever NA

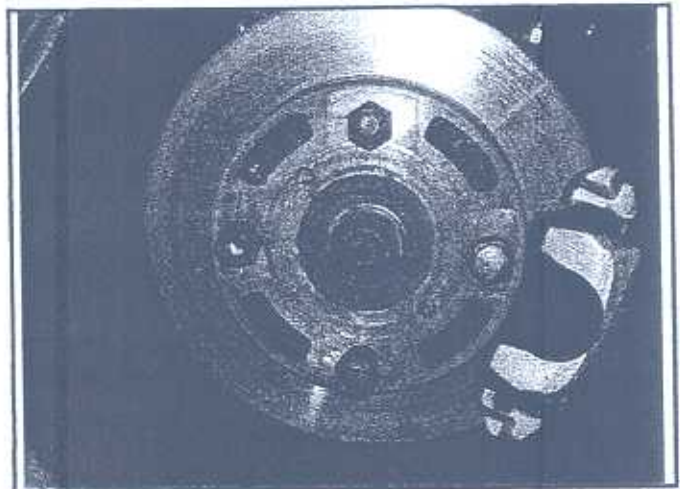
h3) On which wheels

☐	☐
Front	Rear

v) Front brake



w) Rear brake



804. Steering

a) Type

b) Power assisted

Type

Front	Rear								
<u>RACK & PINION</u>	<u>NA</u>								
<table border="1"> <tr> <td>☐</td> <td>☒</td> </tr> <tr> <td>yes</td> <td>no</td> </tr> </table>	☐	☒	yes	no	<table border="1"> <tr> <td>☐</td> <td>☒</td> </tr> <tr> <td>yes</td> <td>no</td> </tr> </table>	☐	☒	yes	no
☐	☒								
yes	no								
☐	☒								
yes	no								
<u>NA</u>	<u>NA</u>								

Make FORMULA McLARENS

Model 1300

9. BODYWORK

901. Interior a) Ventilation ☐ yes ☒ no b) Heating ☐ yes ☒ no

f) Optional sun roof ☐ yes ☒ no

f1) Type NA f2) Control system NA

g) Opening system for side windows

Front	Rear
<u>NA</u>	<u>NA</u>

x) Dashboard

y) Sunroof

NA

NA

902. Exterior a) Number of doors NA

b) Tailgate ☐ out yes ☐ non no

c) Door material

Front	Rear
<u>NA</u>	<u>NA</u>

d) Front bonnet material NA

e) Rear bonnet / tailgate material NA

f) Bodywork material FIBER GLASS PLASTICS

h) Rear window material NA

i) Rear quarter window material NA

k) Side window material

l) Material of bumper

Front	Rear
<u>NA</u>	<u>NA</u>
<u>NA</u>	<u>NA</u>

Make

FORMULA McLARENS

Model

1300

XIII) NON METALLIC PARTS OF THE BODY

Number	Part	Material
001	FRONT NOSE	FIBER GLASS PLASTICS
002	MAIN BODY	FIBER GLASS PLASTICS
003	RIGHT SIDE COVER	FIBER GLASS PLASTICS
004	LEFT SIDE COVER	FIBER GLASS PLASTICS
005	REAR COVER	FIBER GLASS PLASTICS

DRAWING

Make

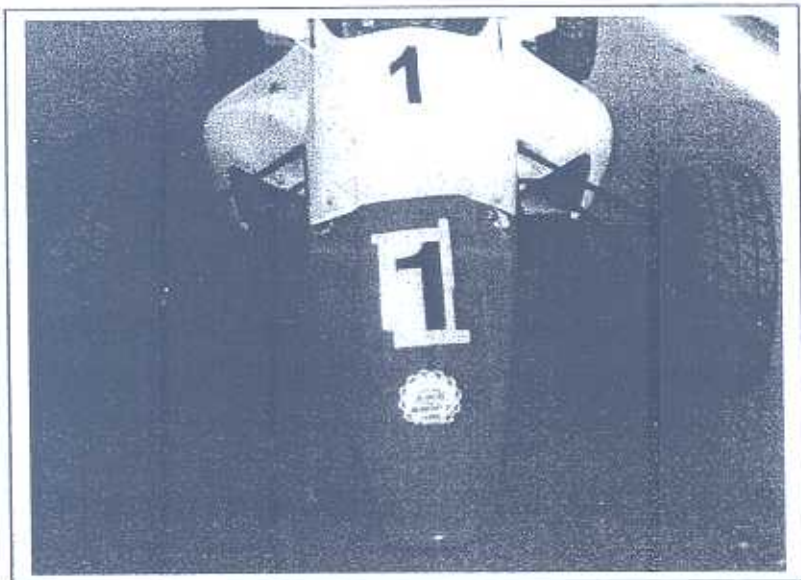
FORMULA McLARENS

Model

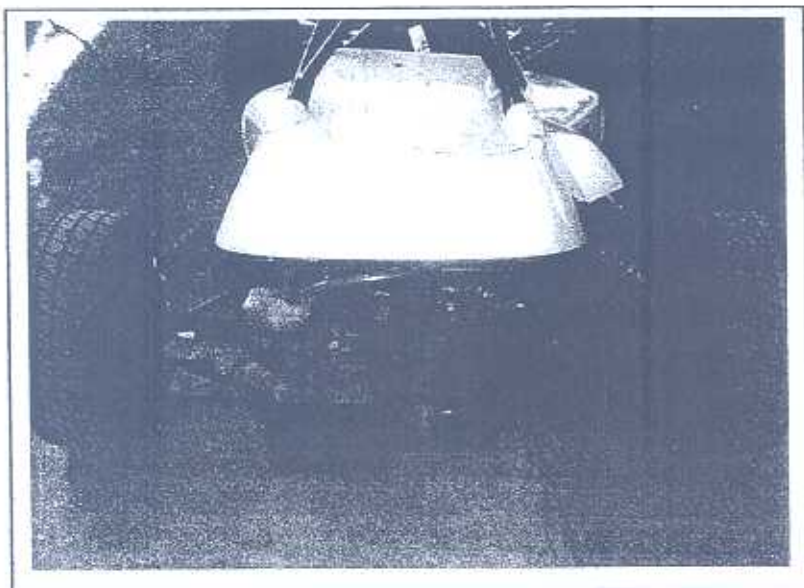
1300

COMPLEMENTARY INFORMATION

FRONT SUSPENSION



REAR SUSPENSION



Vehicle: Manufacturer

FORMULA McLARENS

Model and type

1300

Homologation valid as from

MARCH 2008**IMPORTANT :**

This form includes all the additional information to the basic Group A homologation form for the participation of the vehicle in Group N. In the case of contradictory information, only the information appearing on the present form is to be taken into consideration for Group N.

1. GENERAL

103.

Cylinder capacity 1298 cm³Corrected cylinder capacity _____ x _____ = _____ cm³**2. DIMENSIONS, WEIGHT**

201.

Minimum weight 450 kg

205.

Minimum height center hub / Wheel arch opening

a)

Front NA mm

b)

Rear NA mm

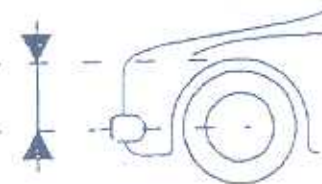
207.

Maximum track

a)

Front 1420 mm

b)

Rear 1415 mm

Make FORMULA McLARENS Model 7300

3. ENGINE

302. Number of supports 4 308. Total minimum volume of a combustion chamber 39.60 cm³

309. Minimum volume of a combustion chamber in the cylinder head 25.5 cm³

310. Maximum compression ratio (in relation with the unit) 9.2 : 1

311. Minimum height of the cylinder block 236.8 mm according to drawing



313. Sleeves b) Material CAST IRON

317. Piston a) Material ALUMINIUM b) Number of rings 3

c) Minimum weight 274 g d) Distance from gudgeon pin center line to highest point of piston crown 29.05 +/- 0.1 mm

e) Distance (+/-) between the top of the piston at TDC and the gasket plane of the cylinder block - .20 +/- 0.15 mm

f) Piston groove volume 9.0 +/- 0.5 cm³

AA) Piston



319. Crankshaft i) Maximum diameter of crank pins 42 mm

321. Cylinderhead c) Minimum height 139.8 mm d) Where measured TOPFACE TO BOTTOM FACE

322. Thickness of tightened cylinderhead gasket 1.1 +/- 0.2 mm

Make

FORMULA McLARENS

Model

1300

325.

Camshaft

a)

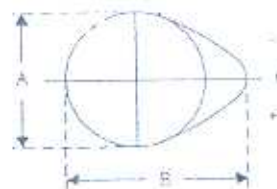
Diameter of bearings

mm

g)

Cam dimensions

Intake	A =	31.00	+/- 0.1 mm
Intake	B =	36.00	+/- 0.1 mm
Exhaust	A =	31.00	+/- 0.1 mm
Exhaust	B =	36.00	+/- 0.1 mm



Note

The tolerances must be used with the same sign for A and B

326.

Timing :

a)

Theoretical clearance for valve timing

Intake

15 mm

Exhaust

30 mm

d)

Cam lift in mm (dismounted camshaft)

(dessin / drawing Art. 325)

INTAKE				EXHAUST			
Rotation angle in degrees	Lift in mm (+/- 0.1 mm)	Rotation angle in degrees	Lift in mm (+/- 0.1 mm)	Rotation angle in degrees	Lift in mm (+/- 0.1 mm)	Rotation angle in degrees	Lift in mm (+/- 0.1 mm)
0	5.35		5.35	0	5.04		5.04
- 5	5.26	+ 5	5.33	- 5	4.93	+ 5	4.95
- 10	4.75	+ 10	5.16	- 10	4.66	+ 10	4.69
- 15	3.78	+ 15	4.84	- 15	4.26	+ 15	4.18
- 30	1.56	+ 30	3.09	- 30	2.52	+ 30	1.72
- 45	0.51	+ 45	1.15	- 45	0.92	+ 45	0.56
- 60	0.28	+ 60	0.28	- 60	0.35	+ 60	0.27
- 75	0.12	+ 75	0.12	- 75	0.20	+ 75	0.05
- 90	0.00	+ 90	0.00	- 90	0.04	+ 90	0.00
- 105		+ 105		- 105		+ 105	
- 120		+ 120		- 120		+ 120	
- 135		+ 135		- 135		+ 135	
- 150		+ 150		- 150		+ 150	

A shift of +/- 2 degrees of the whole measurement is accepted.

e)

Maximum valve lift

	Maximum valve lift
Intake	8.40 +/- 0.2 mm
Exhaust	7.10 +/- 0.2 mm

with clearance according to Art. 326a

Make

FORMULA McLarenS

Model

12,00

327.

h)

Intake

Number of springs per valve

1

i)

Spring characteristics

Under a load of

30NM

kg, the max. length of the spring is

31.5 mm

k)

External diameter of the springs

23.35 +/- 0.2 mm

l)

Number of spring coils

7

m)

Diameter of spring wire

3.1 +/- 0.1 mm

n)

Max. free length of the springs

36.8 mm

328.

i)

Exhaust

Number of springs per valve

1

k)

Spring characteristics

Under a load of

30NM

kg, the max. length of the spring is

31.5 mm

l)

External diameter of the springs

23.35 +/- 0.2 mm

m)

Number of spring coils

7

n)

Diameter of spring wire

3.1 +/- 0.1 mm

o)

Max. free length of the springs

36.88 mm

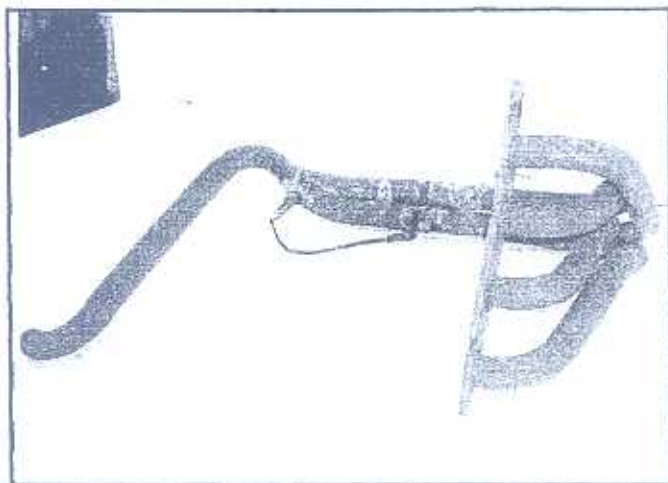
p)

Diameter of pipe between manifold and first silencer

NA mm +/- 5%

BB)

Complete exhaust system



329.

Anti-pollution system

a)

☐

yes

☒

no

b)

Description

330.

Ignition system

a)

Type

TRANSISTORIZED

d)

Number of coils

1

Make FORCULA MOLARENS Model 1300

331 Cooling system Capacity 0 l

332 Cooling fan
a) Number NA
b) Diameter of the screw NA (mm)
c) Material of the screw NA
d) Number of blades NA
e) Type of drive NA
f) Automatic exit in

☐	☐
yes	no

333 Lubrication system
Total capacity 3.5 l
d) Oil cooler(s)

☐	☒
yes	no

 Number NA
e) Location of the cooler(s) NA
f) Type of the cooler(s) NA

4. FUEL CIRCUIT

401 Fuel tank
d) Total capacity 18 l
e) Filler hose locations: _____

402 Fuel pump(s)
a)

☒	☐
Electrical	Mechanical

 b) Number 1
c) Make and type DENSO
d) Location _____
e) Maximum flow 1.333 l/min at 12 V

5. ELECTRICAL EQUIPMENT

501 Battery(s)
c) Location 1

502 Generator(s)
a) Number 1
b) Type DENSO
c) Drive system V BELT
d) Nominal power 720 W

503 Retractable rear lights:
a)

☐	☒
yes	no

 b) Control system _____

Make FORMULA McLARENS

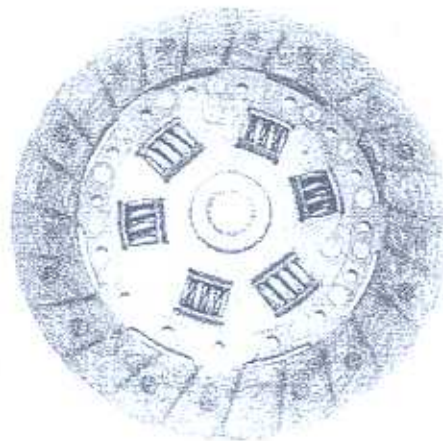
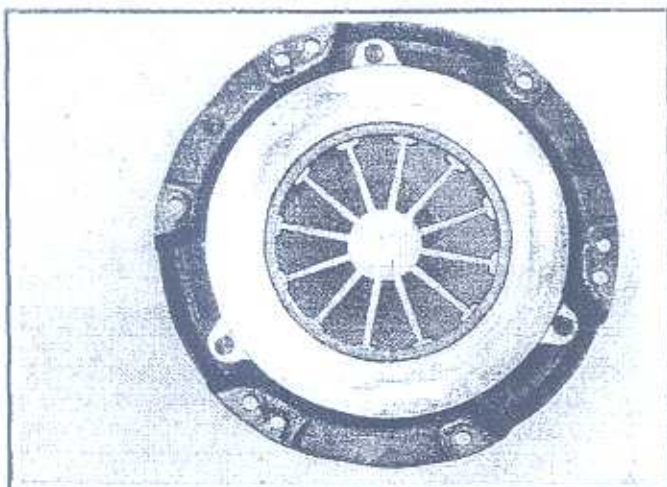
Model 1300

6. TRANSMISSION / POWER TRAIN

602. Clutch Type DRY

d) Diameter of the plate(s) 190 +/- 2 mm

CC) Clutch



503. Gearbox

h) Oil cooler

☐ yes	☒ No
------------------------------	--

Type MANUAL

504. Transfer box / central differential

e) Torque distribution e1) Front NA % Rear NA % e2) Number of teeth NA

f) Type of central differential limitation NA

505. Final drive

d) Type of differential limitation

f) Oil cooler

Type

Front	Rear
<u>NA</u>	<u>HELICAL</u>
☐ Yes ☒ no	☐ yes ☒ no
<u>NA</u>	<u>NA</u>

Make

Formula McLaren

Model

1369

7. SUSPENSION

702.	Helical springs	Front	Rear
a)	Material	<u>SPRING STEEL</u>	<u>SPRING STEEL</u>

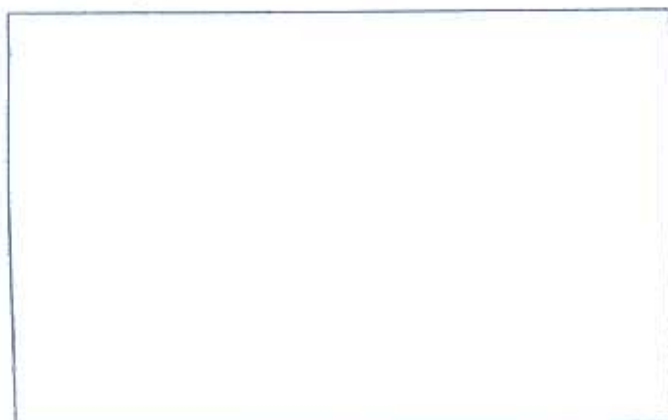
703.	Leaf springs	Front	Rear
a)	Material of main leaf	<u>NA</u>	<u>NA</u>
	Material of 2nd leaf	<u>NA</u>	<u>NA</u>
	Material of 3rd leaf	<u>NA</u>	<u>NA</u>
	Material of 4th leaf	<u>NA</u>	<u>NA</u>
	Material of 5th leaf	<u>NA</u>	<u>NA</u>
	Material of auxiliary leaf	<u>NA</u>	<u>NA</u>

704.	Torsion bars	Front	Rear
c)	Material	<u>NO</u>	<u>NO</u>

705.	Stabiliser	Front	Rear
a)	Effective length	<u>NA</u> mm $\pm 1\%$	<u>NA</u> mm $\pm 1\%$
b)	Effective diameter	<u>NA</u> mm	<u>NA</u> mm
c)	Material	<u>NA</u>	<u>NA</u>

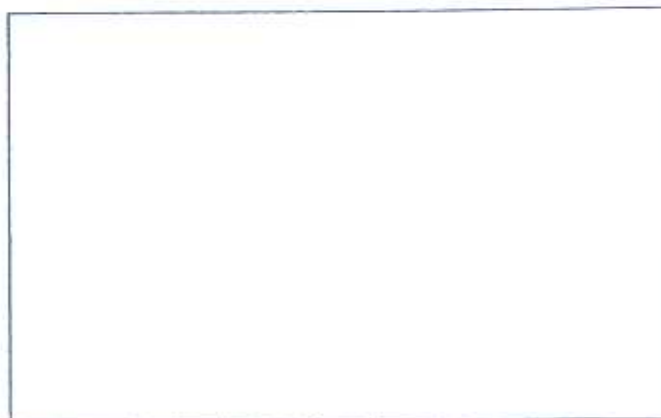
(X)

Drawing or photo of front stabiliser



(X)

Drawing or photo of rear stabiliser



Make

FORMULA McLaren

Model

V300

8. RUNNING GEAR

801. Wheels

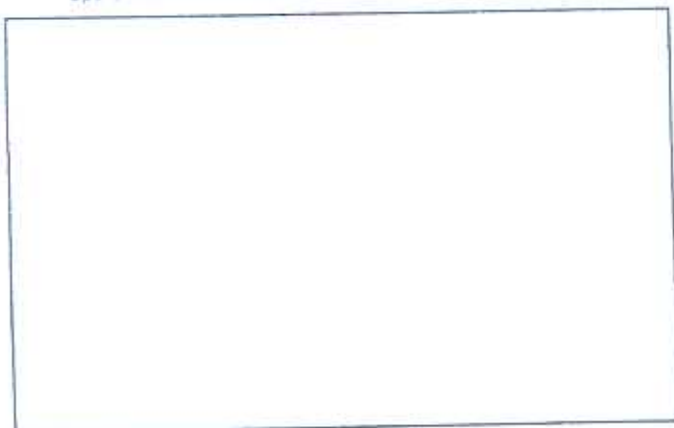
a) Diameter

Front	Rear	Spare
13"	13"	NA
mm	mm	mm
5.5"	5.5"	NA
mm	mm	mm

b) Width

802. Location of the spare wheel

EE) Spare wheel in its location



9. BODYWORK

901. Interior

c) Air conditioning

☐	☒
yes	no

d) Seats

d1) Type of rear seats

NA

d2) Headrest

Front	Rear
☐ yes ☒ no	☐ yes ☒ no

d4) Rear seat can be folded

☐	☒
yes	no

e) Rear ledge

☐	☒
yes	no

e1) Material

NA

902. Exterior

n) Rear wiper

☐	☒
yes	no