

Manufacturers Reference No. for Application

1100



F.I.A. Recognition No.

120

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

TURNER SPORTS CARS (LTD) LTD

Model

CUMAX. 1100.

Year of Manufacture

1960 - 1961

Serial No. of

Chassis

60/

Engine

FWA 400

Type of Coachwork

2 seater with or without Hardtop

Recognition is valid from

9/5/63

In category

GT. or Prod. Sport.

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.



Form: R.F.I.A.

General description of car:

Specify here material/s of
chassis/body construction

*Chassis. 3rd Tubular Steel.
Body. Steel Linn Frame
Fibreglass. Shell.*

Photographs to be affixed below.

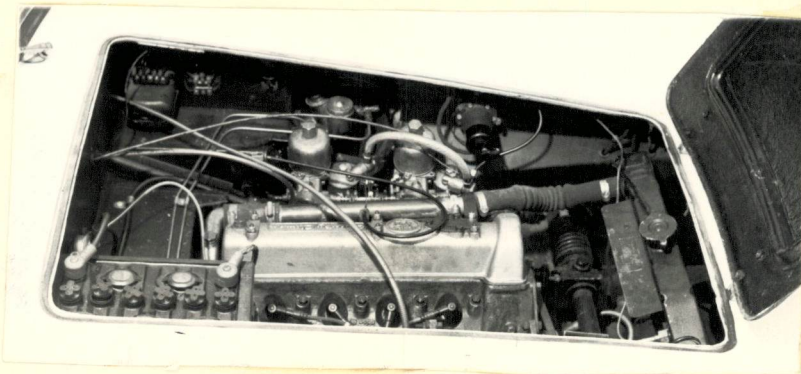
$\frac{3}{4}$ view of car from rear left.



Interior view of car through driver's door.

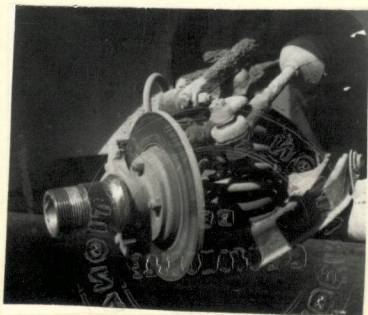


Engine unit with accessories from right.

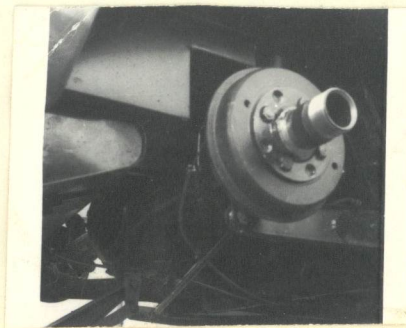


Engine unit with accessories from left.

Front axle complete (without wheels).



Rear axle complete (without wheels).



ENGINE

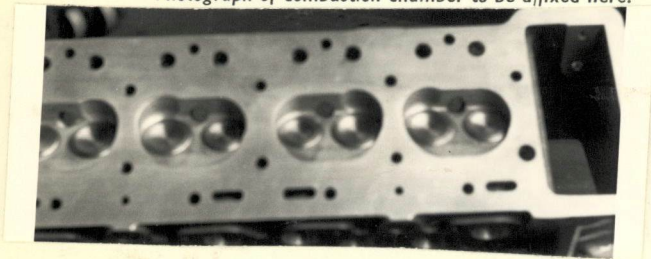
in line YES.
 No. of cylinders 4 in V —
 opposed —
 Cycle 4 Firing order 1 3 4 2.
 Capacity 1098 c.c. Bore 2.85" m.m. Stroke 2.625" m.m.
 Maximum rebore — Resultant capacity — c.c.
 Material of cylinder block ALUM. Material of sleeves, if fitted CAST. IRON.
 Distance from crankshaft centre line to top face of block at centre line of cylinders 190.5 m.m.
 Material of cylinder head ALUM. Volume of one combustion chamber 28.8 c.c.
 Compression ratio 10-1.
 Material of piston ALUM. No. of piston rings 2 comp. / scraper.
 Distance from gudgeon pin centre line to highest point of piston crown — m.m.
 Bearings { Crankshaft main bearings: Type SHELL Dia. 53.975 m.m.
 Connecting rod big end: Type SHELL Dia. 47.62 m.m.
 Weights { Flywheel 8.618. kg.
 Crankshaft 11.567. kg.
 Connecting rod .461. kg.
 Piston with rings .320. kg.
 Gudgeon pin .099. kg.
 No. of valves per cylinder 2 Method of valve operation DIRECT.
 No. of camshafts 1 Location of camshafts O.H.C.
 Type of camshaft drive Duplex Chain.
 Diameter of valves: Inlet 34.29 m.m. Exhaust 30.48 m.m.
 Diameter of port at valve seat: Inlet 28.575 m.m. Exhaust 26.67 m.m.
 Tappet clearance for checking timing: Inlet 0.254 m.m. Exhaust 0.254 m.m.
 Valves open: Inlet 30° Exhaust 60°
 Valves close: Inlet 60° Exhaust 30°
 Maximum valve lift: Inlet 8.89 m.m. Exhaust 8.89 m.m.
 Degrees of crankshaft rotation from zero to—
 Maximum lift: Inlet 135° Exhaust 135°.
 $\frac{3}{4}$ Maximum lift: Inlet 75°. Exhaust 75°
 Valve springs: Inlet Coil Exhaust Coil.
 Type Coil
 No. per valve 2
 Carburettor: Type HORIZONTAL No. fitted 2.
 (up or down draft, horizontal)
 Make SU. Model H4
 Flange hole diameter 1 1/2" m.m. Choke diameter — m.m.
 Main jet identification No. —

Air filter: Type..... No. fitted.....

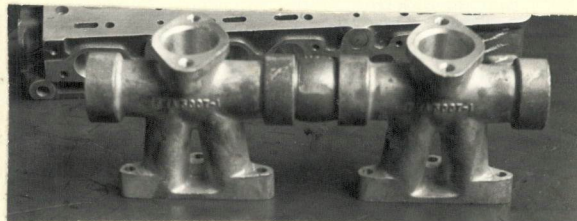
Inlet manifold:
Diameter of flange hole at carburettor..... 38.1..... m.m.

Diameter of flange hole at port..... 27.94..... m.m.

Photograph of combustion chamber to be affixed here.



Photograph of inlet manifold to be affixed here.



Exhaust manifold:

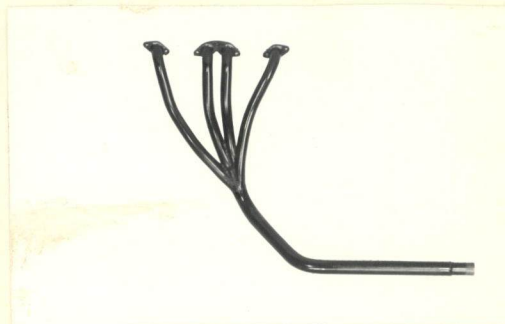
Diameter of flange hole at port..... 30..... m.m.

Diameter of flange hole at connection to silencer inlet pipe..... 1 1/2"..... 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..... 50..... No. fitted..... 1

Method of operation..... ELECTRIC.....

Type of ignition system..... BATTERY + COIL..... coil or magneto

Make of ignition..... LUCAS..... Model..... D3. AH. 4A.

Method of advance and retard..... AUTO.....

Make of ignition coil..... LUCAS..... Model..... LA12.

No. of ignition coils..... 1..... Voltage..... 12.

Make of dynamo..... LUCAS..... Model..... C39. PVR/2.

Voltage of dynamo..... 12..... Maximum output..... 25 amps.

Make of starter motor..... LUCAS..... Model..... M 35-G.

Battery: No. fitted..... 1..... Voltage..... 12..... Capacity..... 34 amp. hour

Oil Cooler (if fitted) type..... ALLOY..... Capacity..... 1 pints

Make TURNER CIMAX Model 1100 F.I.A. Recognition No.
 Manufacturers Reference No. of Application

TRANSMISSION

Make of clutch BORG + BECK Type DRY SINGLE PLATE
 Diameter of clutch plate 7 1/4 No. of plates 1
 Method of operating clutch HYDRAULIC
 Make of gearbox B.M.C. Type A Type C/R.
 No. of gearbox ratios 4 + Rev.
 Method of operating gearshift Remote Control
 Location of gearshift Central
 Is overdrive fitted? ---
 Method of controlling overdrive, if fitted ---

| | GEARBOX RATIOS | | ALTERNATIVE RATIOS | | | | | |
|----|----------------|--------------|--------------------|--------------|-------|--------------|-------|--------------|
| | Ratio | No. of Teeth | Ratio | No. of Teeth | Ratio | No. of Teeth | Ratio | No. of Teeth |
| 1. | <u>2.25-1</u> | | | | | | | |
| 2. | <u>1.67-1</u> | | | | | | | |
| 3. | <u>1.23-1</u> | | | | | | | |
| 4. | <u>1-1</u> | | | | | | | |
| 5. | | | | | | | | |

Type of final drive HYPOID
 Type of differential Z.F.
 Final drive ratio 4.55-1 Alternatives 4.2-1 4.875-1 5.125-1
 No. of teeth 9-41 5.375-1.
 Overdrive ratio, if fitted ---

WHEELS

Type MAG. ALLOY Weight --- kg.
 Method of attachment BOLT ON
 Rim diameter 15" m.m. Rim width 4" m.m.
 Type size: Front 520 x 15" Rear 520 x 15"

BRAKES

Method of operation HYDRAULIC
 Is servo assistance fitted? ---
 Type of servo, if fitted ---
 No. of hydraulic master cylinders TWIN - Bore 5/8 m.m.

| | Front | Rear |
|---|-------|------|
| No. of wheel cylinders | 2 | 1 |
| Bore of wheel cylinders | — | — |
| Inside diameter of brake drums | — | 8" |
| No. of shoes per brake | — | 2" |
| Outside diameter of brake discs | 9 | — |
| 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 | 2" | 7 ³ / ₄ " |
| Width | 1 ¹ / ₂ " | 1 ¹ / ₂ " |
| Total area per brake | 689 cm ² | 11625 cm ² |

SUSPENSION

| | Front | Rear |
|------------------------|---------------|---------------|
| Type | INDEPENDENT | TRAILING ARM |
| Type of spring | COIL | TORSION BAR |
| Is stabiliser fitted? | YES | NO |
| Type of shock absorber | LEVER | TELESCOPIC |
| No. of shock absorbers | ONE EACH SIDE | ONE EACH SIDE |

STEERING

Type of steering gear..... Rack & Pinion.

Turning circle of car..... 32 ft. m., approx.

No. of turns of steering wheel from lock to lock..... 2¹/₄

CAPACITIES AND DIMENSIONS

Fuel tank..... 10 gal. litres Sump..... 1 gal. litres

Radiator..... 1¹/₂ gal. litres

Overall length of car..... 11'-6" cm. Overall width of car..... 4'-6" cm.

Overall height of car, unladen (with hood up, if appropriate)..... 48" cm.

Distance from floor to top of windscreen:

Highest point..... 35" cm. Lowest point..... 34" cm.

Width of windscreen:

Maximum width..... 49" cm. Minimum width..... 42" cm.

*Interior width of car..... 47¹/₂" cm.

No. of seats..... 2

Track: Front..... 31-9¹/₂" cm. Rear..... 31-8³/₄" cm.

Wheelbase..... 61-10" cm. Ground clearance..... 5" 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..... 10 cent. 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.²

Size of exhaust port:

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

Height..... m.m. Area..... m.m.²

Size of transfer port:

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

Height..... m.m. Area..... m.m.²

Size of piston port:

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

Height..... m.m. Area..... m.m.²

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:—

13" wire wheels + knock on hubs.

560 x 13" Tyres.

WEBER. ~~38~~ - 40 - ~~48~~ DCOE CARS.

PENDEFORD AIRPORT
WOLVERHAMPTON
ENGLAND



TELEPHONE
FORDHOUSES
3 2 2 3

TURNER SPORTS CARS (Wolverhampton) LTD.

Directors :
J. H. TURNER (Managing)
J. H. WEBB

SPORTS CAR MANUFACTURERS

Your Ref.

Our Ref.

Name of Manufacturer *TURNER SPORTS CARS (WOL) LTD*
Name of Model *CHIMAX 1100*
Manufacturer's Reference
No. of Application *1100*

We certify that in excess of 100 cars identical with the basic specification stated in this application were completed in a twelve month period.

Chassis Nos. *60/ ——— 61/ ———*
Engine nos. *FWA 400 ———*

Signature *J. H. Turner*

Official designation *Managing Director*

Atkoe.
Works Foreman.

/JMI/9048

30th July, 1963.

J.H. Turner Esq.,
Turner Sports Cars Ltd.,
Pendeford Airport,
WILVERHAMPTON

Dear Mr. Turner,

Turner Ford 1600 - No. 102
Turner Climax 1100 - No. 120

Further to my letter dated the 22nd May we have met with considerable trouble in trying to obtain an original stamped copy of the form of recognition from the C.S.I. and it now appears that these must have been lost in the recent postal strike in France.

The position is, therefore, that we have one original copy on our files from which we can take copies for competitors and have no alternative but to enclose herewith a photostat copy signed by Monsieur Schroeder for the C.S.I. which should be kept on your records.

Yours sincerely,

Secretary to Mr. D. H. Delamont
Manager, Competitions Department

no actual stamp

/JMH/7855

22nd May, 1963.

J.H. Turner Esq.,
Turner Sports Cars Ltd.,
Pendeford Airport,
WOLVERHAMPTON

Dear Mr. Turner,

I enclose herewith the stamped master copy of the form of recognition for the Turner 950. This should be placed on your files in safe-keeping.

For some unknown reason the C.S.I. have ~~only~~ sent one stamped copy of the forms for the Turner Ford 1600 and the Turner Climax 1100. I have written to ask them for another one and will be sending these to you as soon as they are to hand. Should anyone require a copy of course we will be able to supply them with one.

Yours sincerely,

Secretary to Mr. J. H. Delamont
Manager, Competitions Department

/DHD/JMH/7714

13th May, 1963.

J. H. Turner Esq.,
Turner Sports Cars Ltd.,
Pendeford Airport,
WOLVERHAMPTON

Dear Mr. Turner,

At the meeting of the C.S.I. Homologation Committee on the 9th May your cars were accepted with the following reservations:-

Turner 950: O.K. but the Alexander Head deleted from the options. If homologation of this is to be continued a separate application must be made with a complete set of forms.

Turner Climax 1100: O.K. but only Weber 40 carburettor accepted as alternative and 38 and 45 deleted from optional equipment.

Turner 1600: O.K. but alternative 1498 engine deleted from optional equipment. Again a separate homologation is required for this engine.

The next date for a meeting of the C.S.I. homologation committee is early September and the deadline for acceptance of applications by this Department is the 1st September.

A master form bearing the F.I.A. stamp will be sent to you as soon as they are received from Paris.

Yours sincerely,

D. H. DELAMONT
Manager, Competitions Department