

Manufacturers Reference No. for Application

1023.



F.I.A. Recognition No.

165

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 Standard Triumph International Ltd.,
Model Triumph Spitfire 4. (1964.) Year of Manufacture 1962 onward.
Chassis FC 1 Onwards.
Serial No. of Engine FC 1 HE Onwards.
Type of Coachwork 2 seater, 2 door, hard or soft top.
Recognition is valid from 11th April 1964 In category Grand Touring.



Hubert Schmitt

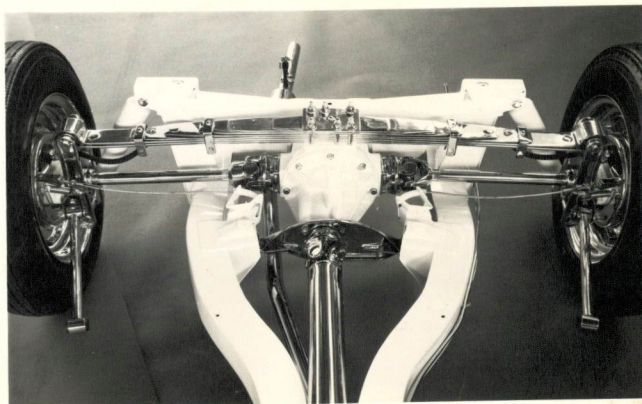
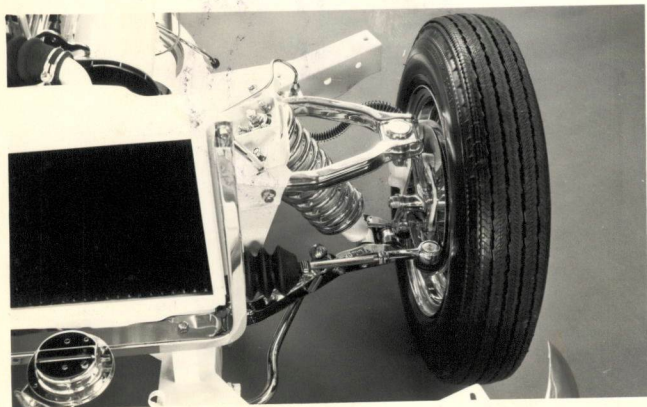
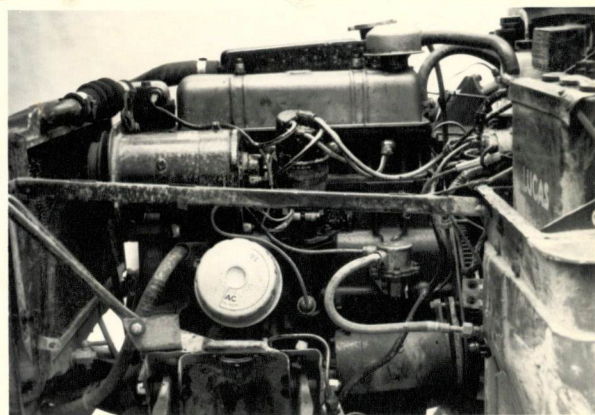
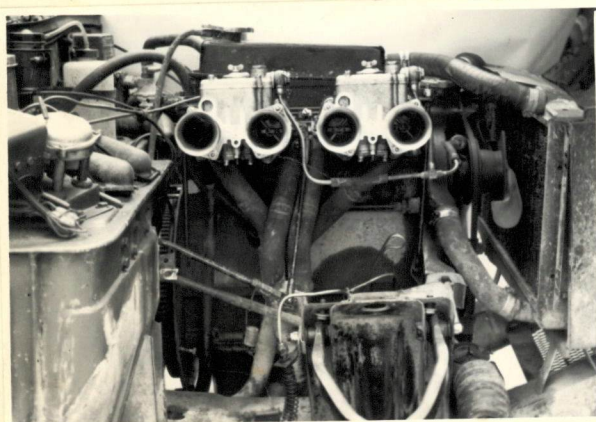
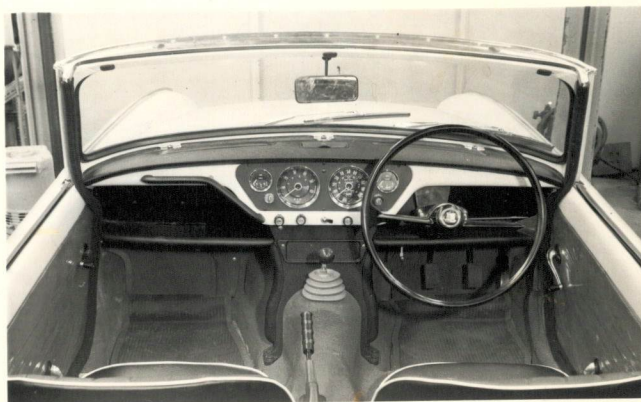
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affixed here.

Form: R.F.I.A.

General description of car:

Specify here material/s of
chassis/body construction

2 Seater Sports car having steel chassis and separate
steel body, with detachable hardtop (extra), independent
front and rear suspension.



ENGINE

in line In Line.
 No. of cylinders 4
 Cycle Four stroke, Firing order 1,3,4,2.
 Capacity 1147 c.c. Bore 69.3 m.m. Stroke 76 m.m.
 Maximum rebore 1 m/m Resultant capacity 1171 c.c.
 Material of cylinder block Cast Iron. Material of sleeves, if fitted Centrifugally cast iron
 Distance from crankshaft centre line to top face of block at centre line of cylinders 275.8 m.m.
 Material of cylinder head Aluminium. Volume of one combustion chamber 27.35 c.c. **CLEARANCE VOLUME**
 Compression ratio 11.50 to 1
 Material of piston Aluminium alloy No. of piston rings 3
 Distance from gudgeon pin centre line to highest point of piston crown 66.48 m.m.
 Bearings { Crankshaft main bearings: Type Shell - Lead indium Dia. 50.8 m.m.
 Connecting rod big end: Type Shell - Lead indium Dia. 41.28 m.m.
 Weights { Flywheel 6.69 kg.
 Crankshaft 10.88 kg.
 Connecting rod .61 kg.
 Piston with rings .34 kg.
 Gudgeon pin .09 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 Roller chain.
 Diameter of valves: Inlet 33.172 m.m. Exhaust 29.21 m.m.
 Diameter of port at valve seat: Inlet 30.23 m.m. Exhaust 26.16 m.m.
 Tappet clearance for checking timing: Inlet .152 m.m. Exhaust .152 m.m.
 Valves open: Inlet 52° B.T.D.C. Exhaust 76° B.B.D.C.
 Valves close: Inlet 76° A.B.D.C. Exhaust 52° A.T.D.C.
 Maximum valve lift: Inlet 10.16 m.m. Exhaust 10.16 m.m.
 Degrees of crankshaft rotation from zero to—
 Maximum lift: Inlet 154° Exhaust 154°
 3/4 Maximum lift: Inlet 86° Exhaust 86°
 Valve springs: Inlet Exhaust
 Type Coil. Coil.
 No. per valve 2 2
 Carburettor: Type Horizontal, No. fitted 2
 (up or down draft, horizontal)
 Make Weber Twin choke. Model 40 DCOE
 Flange hole diameter 40 m.m. Choke diameter 33 m.m.
 Main jet identification No. 130

Air filter: Type **None fitted.**

No. fitted **—**

Inlet manifold:

Diameter of flange hole at carburettor

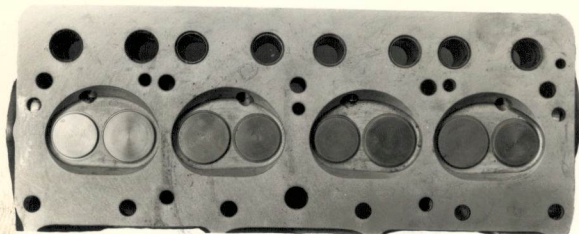
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m.m.

Diameter of flange hole at port

30.23

m.m.



Exhaust manifold:

Diameter of flange hole at port

25.4 x 26.92 m/m rectangular.

m.m.

Diameter of flange hole at connection to silencer inlet pipe

34.95

m.m.



ENGINE ACCESSORIES

Make of fuel pump

A.C.

No. fitted

1

Method of operation

Mechanical.

Type of ignition system

Coil.

coil or magneto

Make of ignition

Lucas or A.C.

Model

—

Method of advance and retard

Centrifugal automatic.

Make of ignition coil

Lucas.

Model

LA 12

No. of ignition coils

1

Voltage

12

Make of dynamo

Lucas

Model

C40

Voltage of dynamo

12

Maximum output

20

amps.

Make of starter motor

Lucas.

Model

M35C/1

Battery: No. fitted

1

Voltage

12

Capacity

38

amp. hour

Oil Cooler (if fitted) type

Air/Oil radiator

Capacity

1

pints

(Optional)

4

Make **Triumph** Model **Spitfire** F.I.A. Recognition No.
 Manufacturers Reference No. of Application **1023**

TRANSMISSION

Make of clutch **Borg and Beck.** Type **Single plate.**
 Diameter of clutch plate **6 1/2" Diaphragm** No. of plates **1**
 Method of operating clutch **Hydraulic.**
 Make of gearbox **Standard-Triumph.** Type **Synchromesh.**
 No. of gearbox ratios **Four forward and 1 reverse.**
 Method of operating gearshift **Lever in centre of car.**
 Location of gearshift **On top of gear box tunnel.**
 Is overdrive fitted? **Yes - 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.	3.746	$\frac{29}{16} \times \frac{31}{15}$	2.932	$\frac{26}{19} \times \frac{30}{14}$				
2.	2.158	$\frac{29}{16} \times \frac{25}{21}$	1.779	$\frac{26}{19} \times \frac{26}{20}$				
3.	1.594	$\frac{29}{16} \times \frac{20}{26}$	1.254	$\frac{26}{19} \times \frac{22}{24}$				
4.	DIRECT.		DIRECT.					
5.	3.746	$\frac{29}{16} \times \frac{31}{15}$	2.932	$\frac{26}{19} \times \frac{30}{14}$				

Reverse.

Type of final drive **Hypoid bevel.**
 Type of differential **Non limited slip.**
 Final drive ratio **4.11** Alternatives **3.89 4.375 4.55 4.875**
 No. of teeth **9/37** **9/35 8/35 9/41 8/39**
 Overdrive ratio, if fitted **.802 to 1.**

WHEELS

Type **Pressed steel.** Weight **5.2** kg.
 Method of attachment **Four stud fixing.**
 Rim diameter **330 (13")** m.m. Rim width **3 1/2" (89mm) or 4 1/2" (114.3mm)**
 Tyre size: Front **5.20 x 13"** Rear **5.20 x 13"**

BRAKES

Method of operation **Hydraulic.**
 Is servo assistance fitted? **Optional extra.**
 Type of servo, if fitted **Vacuum servo.**
 No. of hydraulic master cylinders **1** Bore **15.8** m.m.

	Front		Rear
No. of wheel cylinders	2 PER WHEEL.		1 PER WHEEL.
Bore of wheel cylinders	52.8 m.m.		19.08 m.m.
Inside diameter of brake drums	— m.m.		178 m.m.
No. of shoes per brake	232		2
Outside diameter of brake discs	2 m.m.		— m.m.
No. of pads per brake	—		—
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	56 m.m.		178 m.m.
	— m.m.		— m.m.
Width	38.1 m.m.		31.8 m.m.
Total area per brake	8732 m.m. ²		17735 m.m. ²

SUSPENSION

	Front		Rear
Type	Independent.		Independent.
Type of spring	Coil.		Transverse leaf.
Is stabiliser fitted?	Yes.		No.
Type of shock absorber	Telescopic.		Telescopic.
No. of shock absorbers	1 Per wheel.		1 Per wheel.

STEERING

Type of steering gear..... Rack and Pinion.

Turning circle of car..... 7.3 m., approx.

No. of turns of steering wheel from lock to lock..... $\frac{3}{4}$

CAPACITIES AND DIMENSIONS

Fuel tank..... 41 litres Sump..... 4.4 and 6.4 litres

Radiator..... 5.4 litres

Overall length of car..... 368.5 cm. Overall width of car..... 145 cm.

Overall height of car, unladen (with hood up, if appropriate)..... 120.5 cm.

Distance from floor to top of windscreen:

Highest point..... 108 cm. Lowest point..... 104 cm.

Width of windscreen:

Maximum width..... 115.6 cm. Minimum width..... 103.5 cm.

*Interior width of car..... 111.8 cm.

No. of seats..... 2

Track: Front..... 124.5 cm. Rear..... 122 cm.

Wheelbase..... 211 cm. Ground clearance..... 125 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..... 675 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:—

Body can be delivered in Hardtop form - hardtop can be detachable.

Sump skid shield kit available. Part Number 306142.

Optional Fuel tank - Capacity 85 litres - 18½ imperial gallons. Part No 402307

Light alloy road wheels - 4½" rim (114.1 mm) x 13" - weight 3.6 kgs.

Article 265 - Alternative Carburation for the car :-

One Solex Compound type 34PALA Carburettor, Downdraught model.

Choke Sizes - Primary 25 mm

Secondary 27 mm

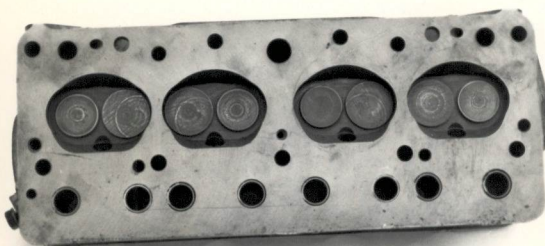
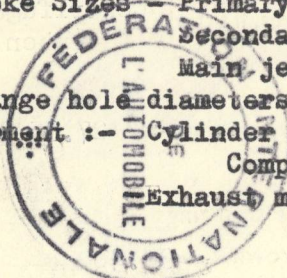
Main jet number 125 primary 135 secondary.

Flange hole diameters

Touring equipment :- Cylinder head - cast iron Part Number 211289

Compression ratio :- 10.6 to 1.

Exhaust manifold for this head has Port flange hole of 31.75 mm dia.



Alternative cylinder head 211289.

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/A/V

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Amendment to Form of Recognition

Manufacturer.....Standard Triumph International Limited.....

Model.....Triumph Spitfire (1964).....

Optional equipment :-

Part No. 212541

Limited slip axle assembly.



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Date amendment is valid from

16 Nov. 1964

Form: R.F.I.B.

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Amendment to Form of Recognition

Manufacturer.....Standard Triumph International Ltd......

Model.....Triumph Spitfire (1964.).....

Production change. Cylinder head material :- Cast Iron.



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Date amendment is valid from.....

Form: R.F.I.B.

Manufacturers Reference No. for Application

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F.I.A. Recognition No.

165/18/11

ROYAL AUTOMOBILE CLUB

PALL MALL, LONDON, S.W.1.

Federation Internationale de l'Automobile.

Amendment to Form of Recognition

Manufacturer.....STANDARD TRIUMPH INTERNATIONAL LIMITED.....

Model.....TRIUMPH SPITFIRE (1964).....

Optional Equipment

5½J road wheels - rim width 139.7 mm. (5½")

Part number : 307400



Stamp of F.I.A./R.A.C. to be
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Date amendment is valid from

1st February 1965

Form: R.F.I.B.