

CABRIOLETS

1500 Type **118K**

1600S Type **118SB**

SPECIFICATIONS AND FEATURES
MAIN SERVICING INSTRUCTIONS

CABRIOLETS

1500 Type 118 K

1600 S Type 118 SB

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MAIN SERVICING INSTRUCTIONS

FIAT

S E R V I C E D E P A R T M E N T - T U R I N

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GENERAL INFORMATION

In this publication are outlined the main specifications and features as well as the service procedures of more current use covering 1500 and 1600 S Cabriolets.

All data and repair directions in the following pages are intended to apply to both Models whenever no specific mention of the type is made. Differing parts are dealt with separately and each of them comes with the applicable Model name.

MAIN SPECIFICATIONS - 1500 CABRIOLET

IDENTIFICATION DATA

Chassis type 118 K
 Engine type 115 C.005

ENGINE

Arrangement front
 Cycle and strokes Otto, 4 - stroke
 No. of cylinders four, in - line
 Bore 3.03" (77 mm)
 Stroke 3.13" (79.5 mm)
 Displacement 90.37 cu.in (1,481 cm³)
 Compression ratio 9 to 1
 Maximum horsepower, SAE standards 83
 at 5,400 rpm
 Taxable horsepower (Italy) 16
 Cooling water

CLUTCH

Dry, single plate type with spring cushioned hub.
 Driven plate lining O. D. 7⁷/₈" (200 mm)

TRANSMISSION

Five forward speeds and reverse.
 Gear ratios:
 First, synchromeshed 3.242 to 1
 Second, synchromeshed 1.989 to 1
 Third, synchromeshed 1.410 to 1
 Fourth, synchromeshed 1 to 1
 Fifth (O. D.), synchromeshed 0.864 to 1
 Reverse 3.340 to 1

PROPELLER SHAFT

Two-section with center pillow bearing.
 A flexible joint and two universal joints.

REAR AXLE

Hypoid final drive gear set.
 Gear ratio: 4.1 to 1 (10/41)

FRONT SUSPENSION

Independent-wheel type.
 Control arms counteracted by coil springs and hydraulic shock absorbers.

Sway eliminator bar.
 Toe-in, fully laden0394" to .1181" (1 to 3 mm)
 Camber, fully laden 0° 30' ± 20'
 Caster, fully laden 2° 10' ± 30'

REAR SUSPENSION

By semi-elliptic springs and hydraulic shock absorbers.
 Sway eliminator bar.

STEERING SYSTEM

Worm and roller steering gear.
 Gear ratio 16.4 to 1
 Turning circle 34¹/₂ ft (10.5 m)
 Steering column mounted on two ball bearings and fitted with a pair of end universal joints.
 Linkage end joints, of the «for life» type, need not be lubricated.

BRAKES

Front: disc type.
 — Disc diameter 9²⁷/₃₂" (250 mm)
 — Bore of caliper outer cylinders 1¹¹/₃₂" (33.985 mm)
 — Bore of caliper inner cylinder . 1¹⁵/₁₆" (48.132 mm)
Rear: drum type, with self-centering shoes.
 — Drum diameter 9²⁷/₃₂" (250 mm)
 — Wheel cylinder bore 3/4"
 — Master cylinder bore 7/8"
 Vacuum brake booster acting on four wheels.

WHEELS AND TIRES

Disc wheels with rim, type 3¹/₂ J
 Tire size 145 x 14"
 Tire inflation pressure:
 — front 22.8 psi (1.6 kg/cm²)
 — rear 24.2 psi (1.7 kg/cm²)

ELECTRIC SYSTEM

Voltage 12
 Battery capacity (at 20-hour discharge rate) 48 Amp/hr
 FIAT generator type D 115/12/28/4.
 FIAT generator regulator type GN 2/12/28.
 FIAT starting motor type E 100-1,5/12 Var. 1,

WEIGHTS

Curb weight (with water, oil, petrol,
spare wheel, tool kit and acces-
sories) 2,127 lbs (965 kg)
No. of seats two
Carrying capacity . . . 2 people plus 110 lbs (50 kg)

Laden weight 2,546 lbs (1,155 kg)
Distribution of laden weight:
— front axle 1,290 lbs (585 kg)
— rear axle 1,256 lbs (570 kg)

PERFORMANCE

Speeds, maximum, on flat road (run-in and fully laden):

first gear 31 mph (50 km/h)
second gear 50 mph (80 km/h)
third gear 68 mph (110 km/h)
fourth gear 93 mph (150 km/h)
fifth gear (overdrive) 100 mph (160 km/h)
reverse 31 mph (50 km/h)

Gradients, maximum climbable (run-in and fully laden):

first gear 40 %
second gear 22 %
third gear 14 %
fourth gear 9 %
fifth gear (overdrive) 6.5 %
reverse 40 %

CAPACITIES

UNIT	Quantity				FILL-IN
	lt	kg	Imp. units	U.S. units	
Fuel tank	38	—	8.36 gals	10.04 gals	Gasoline: ON 92 (Research Meth) Pure water ⁽¹⁾ FIAT oil ⁽³⁾ } FIAT W 90/M oil (SAE 90 EP) } FIAT special blue label fluid } FIAT S.A.I. fluid Water and FIAT D.P./1 fluid mix- ture (concentrated solution)
Radiator, engine and heating system	6	—	1.32 gals	1.52 gals	
Oil pan (*)	3.500	3.150	3.1 qts	3.7 qts	
Transmission	1.60	1.50	1.4 qts	1.7 qts	
Rear axle	0.90	0.85	0.79 qts	0.95 qts	
Steering gear	0.16	0.15	0.14 qts	0.17 qts	
Hydraulic brake circuit	0.37	0.37	0.65 pts	0.78 pts	
Front shock absorbers, each	0.165	0.15	0.29 pts	0.35 pts	
Rear shock absorbers, each	0.185	0.165	0.33 pts	0.39 pts	
Windshield washer bag	—	(²)	(²)	(²)	

(*) Total oil capacity of pan, filter and pipings is 3.79 Imp. qts - 4.55 U.S. qts (3.900 kg). Figure specified in table refers to the amount recommended for periodical oil changes.

(¹) When temperature is close to 32° F (0° C), replace radiator water by **FIAT special anti-freezing mixture**.

(²) Pure water .66 Imp. qts - .79 U.S. qts (0.75 kg) plus .6 oz - 17 g (Summer) or 1.2 oz - 34 g (Winter) cleaner.

(³) Use the following grades of oil:

TEMPERATURE	FIAT Unigrade Oil	FIAT Multigrade Oil	TEMPERATURE	FIAT Unigrade Oil	FIAT Multigrade Oil
	Supplement 1 level oils which fill MS sequence requirements			Supplement 1 level oils which fill MS sequence requirements	
Below 5° F (—15° C) - minimum	VS 10 W (SAE 10 W)	—	Above 32° F (0° C) - minimum	VS 30 (SAE 30)	} 20 W - 40
Between 32° F (0° C) and 5° F (—15° C) - minimum	VS 20 W (SAE 20 W)	10 W - 30	Above 86° F (30° C) - average	VS 40 (SAE 40)	

CAUTION: These are detergent oils; do not top up with oils of different make or grade; when first using **detergent** oils on engines other than new, carry out an accurate **flushing** of the lubrication system.

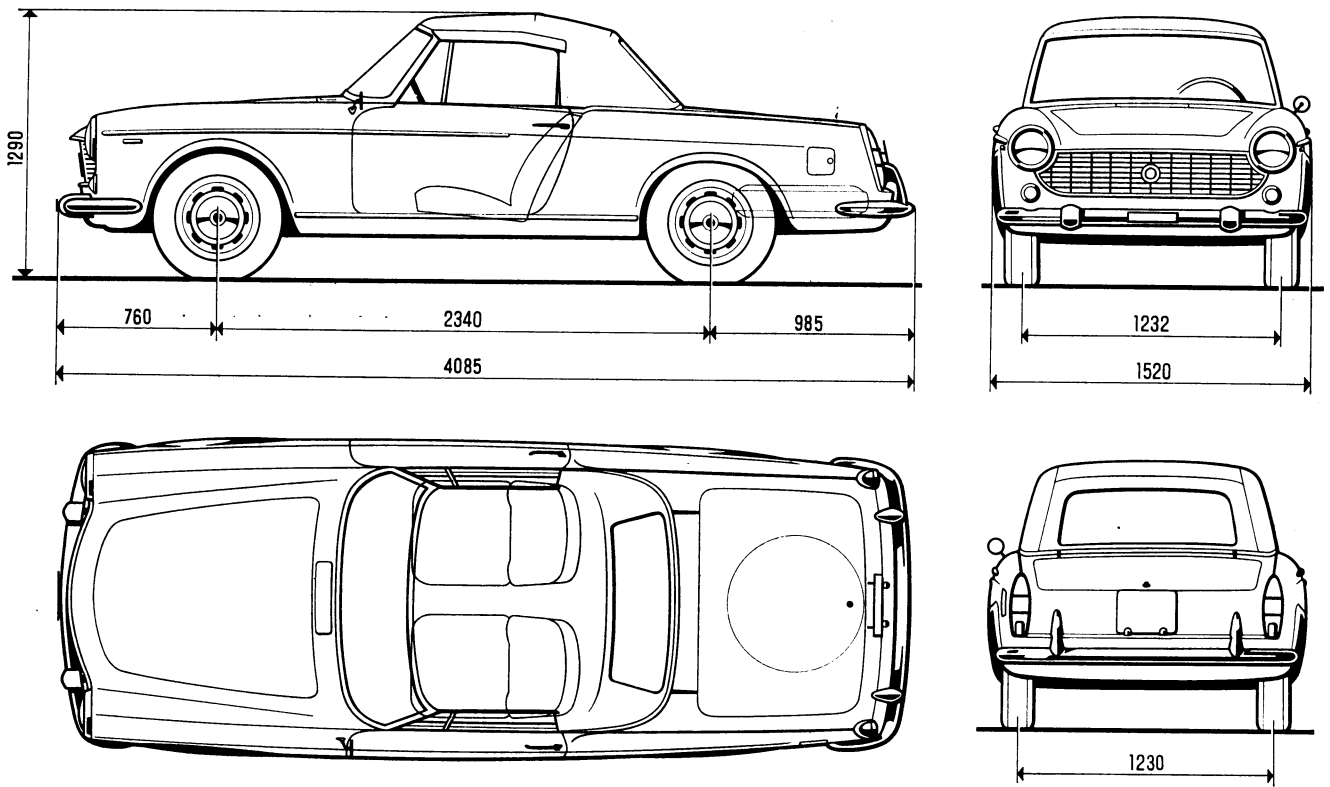
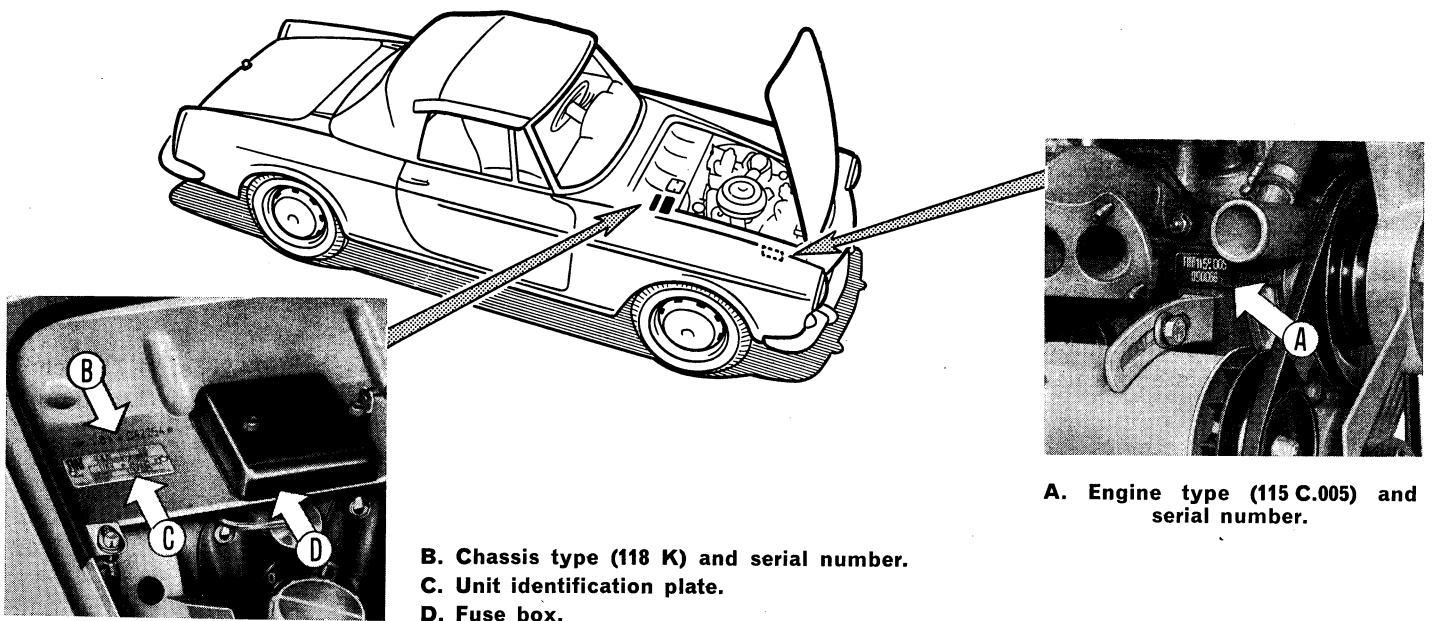


Fig. 1. - Leading dimensions of FIAT 1500 Cabriolet (in mm).

Overall height applies to an unladen vehicle.

UNIT IDENTIFICATION DATA

Fig. 2. - Location of FIAT 1500 Cabriolet identification data.



A. Engine type (115 C.005) and serial number.

**B. Chassis type (118 K) and serial number.
C. Unit identification plate.
D. Fuse box.**

MAIN SPECIFICATIONS - 1600 S CABRIOLET

IDENTIFICATION DATA

Chassis type	118 SB
Engine type	118 B.000

ENGINE

Arrangement	front
Cycle and strokes	Otto, four - stroke
No. of cylinders	four, in - line
Bore	3.15" (80 mm)
Stroke	3.07" (78 mm)
Displacement	95.69 cu.in (1,568 cm ³)
Compression ratio	8.6 to 1
Maximum horsepower, SAE standards	100
at	6,000 rpm
Taxable horsepower (Italy)	17
Cooling	water

CLUTCH

Dry, single-plate type.	
Driven plate lining O. D.	8 1/2" (216 mm)
Hydraulic control of clutch.	

TRANSMISSION

Five forward speeds and reverse.	
Gear ratios:	
First, synchromeshed	3.242 to 1
Second, synchromeshed	1.989 to 1
Third, synchromeshed	1.410 to 1
Fourth, synchromeshed	1 to 1
Fifth (O. D.), synchromeshed	0.864 to 1
Reverse	3.340 to 1

PROPELLER SHAFT

Two-section with center pillow bearing.
Two universal joints and a flexible joint.

REAR AXLE

Hypoid final drive gear set.	
Gear ratio:	4.4 to 1 (9/40)

FRONT SUSPENSION

Independent-wheel type.
Control arms counteracted by coil springs and oleo-pneumatic shock absorbers; sway eliminator bar.

Toe-in, fully laden0394" to .1181" (1 to 3 mm)
Camber, fully laden	0° 30' ± 20'
Caster, fully laden	1° ± 30'

REAR SUSPENSION

By semi-elliptic springs and oleo-pneumatic shock absorbers; sway eliminator bar.

STEERING SYSTEM

Worm and roller steering gear.	
Gear ratio	16.4 to 1
Turning circle	34 1/2 ft (10.5 m)
Steering column mounted on two ball bearings and fitted with a pair of end universal joints.	
Linkage end joints, of the « for life » type, need not be lubricated.	

BRAKES

Disc type throughout.	
Disc diameter	10 5/8" (270 mm)
Master cylinder bore	7/8"
Bore of front caliper outer cylinders	1 1/2" (38.195 mm)
Bore of front caliper inner cylinder	2 1/8" (54 mm)
Bore of rear caliper outer cylinders	1 3/16" (30.251 mm)
Bore of rear caliper inner cylinder	1 11/16" (42.874 mm)
Pressure regulator controlling front circuit.	
Vacuum brake booster acting on four wheels.	

WHEELS AND TIRES

Disc wheels with rim, type	4 1/2 J
Tire size	155 x 15"

Tire inflation pressure:

— low speed, front and rear	24.2 psi (1.7 kg/cm ²)
— high speed, front and rear	27 psi (1.9 kg/cm ²)

ELECTRIC SYSTEM

Voltage	12
Battery capacity (at 20-hour discharge rate)	48 Amp/hr
FIAT generator type D 115/12/28/4 C.	
FIAT generator regulator type GN 2/12/28.	
FIAT starting motor type E 100-1,5/12 Var. 1.	

WEIGHTS

Curb weight (with water, oil, petrol, spare wheel, tool kit and accessories)	2,315 lbs (1,050 kg)	Laden weight	2,734 lbs (1,240 kg)
No. of seats	two	Distribution of laden weight:	
Carrying capacity	2 people plus 110 lbs (50 kg)	— front axle	1,400 lbs (635 kg)
		— rear axle	1,334 lbs (605 kg)

PERFORMANCE

Speeds , maximum, on flat road (run-in and fully laden):		Gradients , maximum climbable (run-in and fully laden):	
first gear	31 mph (50 km/h)	first gear	43 %
second gear	50 mph (80 km/h)	second gear	24 %
third gear	75 mph (120 km/h)	third gear	14.5 %
fourth gear	106 mph (170 km/h)	fourth gear	10 %
fifth gear (overdrive)	109 mph (175 km/h)	fifth gear (overdrive)	7 %
reverse	31 mph (50 km/h)	reverse	43 %

CAPACITIES

UNIT	Quantity				FILL-IN
	lt	kg	Imp. units	U.S. units	
Fuel tank	45	—	10 gals	12 gals	Premium gasoline: ON 98 (Research Method) Pure water ⁽¹⁾ FIAT oil ⁽⁴⁾ FIAT W 90/M oil (SAE 90 EP) FIAT special blue label fluid Water and FIAT D.P./1 fluid mixture (concentrated solution)
Radiator, engine and heating system	6	—	1.32 gals	1.52 gals	
Oil pan ⁽³⁾	6	5.4	5.3 qts	6.3 qts	
Transmission	1.6	1.50	1.4 qts	1.7 qts	
Rear axle	0.90	0.85	0.79 qts	0.95 qts	
Steering gear	0.16	0.15	0.14 qts	0.17 qts	
Hydraulic brake circuit	0.42	0.42	0.74 pts	0.88 pts	
Hydraulic clutch control circuit	0.17	0.17	0.30 pts	0.36 pts	
Windshield washer bag	—	⁽²⁾	⁽²⁾	⁽²⁾	

⁽¹⁾ When temperature is close to 32° F (0° C), replace radiator water by **FIAT special anti-freezing mixture**.
⁽²⁾ Pure water .66 Imp. qts - .79 U.S. qts (0.75 kg) plus .6 oz - 17 g (Summer) or 1.2 oz - 34 g (Winter) cleaner.
⁽³⁾ Total oil capacity of pan, filter and pipings is 5.9 Imp. qts - 7.1 U.S. qts (6.00 kg). Figure specified in table refers to the amount recommended for periodical oil changes.
⁽⁴⁾ Use the following grades of oil:

TEMPERATURE	FIAT Unigrade Oil	FIAT Multigrade Oil	TEMPERATURE	FIAT Unigrade Oil	FIAT Multigrade Oil
	Supplement 1 level oils which fill MS sequence requirements			Supplement 1 level oils which fill MS sequence requirements	
Below 5° F (—15° C) - minimum	VS 10 W (SAE 10 W)	—	Above 32° F (0° C) - minimum	VS 30 (SAE 30)	} 20 W - 40
Between 32° F (0° C) and 5° F (—15° C) - minimum	VS 20 W (SAE 20 W)	10 W - 30	Above 86° F (30° C) - average	VS 40 (SAE 40)	

CAUTION!: These are detergent oils; do not top up with oils of different make or grade; when first using **detergent** oils on engines other than new, carry out an accurate **flushing** of the lubrication system.

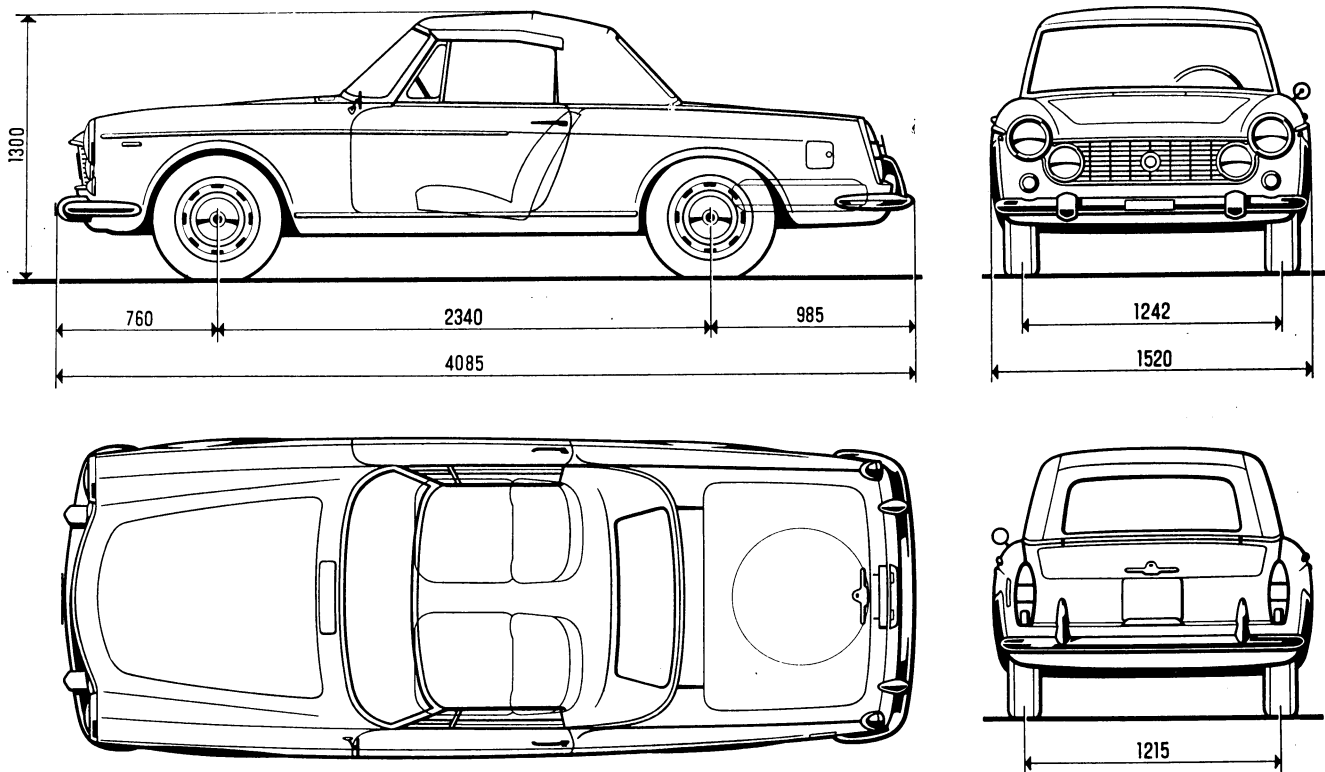
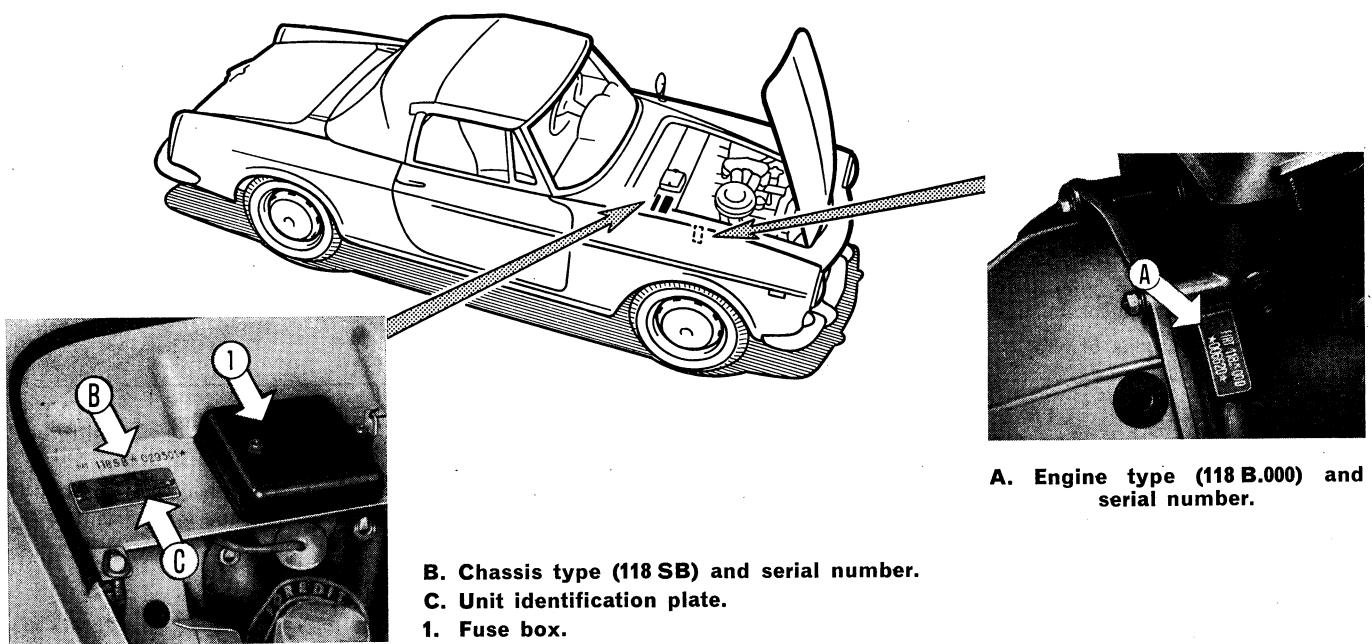


Fig. 3. - Leading dimensions of FIAT 1600 S Cabriolet (in mm).

UNIT IDENTIFICATION DATA

Fig. 4. - Location of FIAT 1600 S Cabriolet identification data.



A. Engine type (118 B.000) and serial number.

B. Chassis type (118 SB) and serial number.

C. Unit identification plate.

1. Fuse box.

MAIN FEATURES

Engine

ENGINE 115 C.005

The four-stroke gasoline engine is arranged at the front of the car.

The principal characteristics of engine 115 C.005 are tabulated on foot of this page.

Cylinder block and crankcase in one iron casting. Aluminum alloy **pistons** of the steel-belted type.

Pistons fitted with three **piston rings**: a compression ring (first), an oil ring (second) and a radial-slotted oil scraper ring (third).

The piston pin hole is .079" (2 mm) offset.

On assembly, the offset piston should be positioned to the left in respect of cylinder axis, viewing from the valve gear end.

Aluminum **cylinder head** with cast iron valve seat inserts.

Crankshaft working on three supports; babbitt-lined thin-wall type **main bearings**; four half thrust rings fitted on center bearing shoulders.

Connecting rods steel forged with babbitt-lined thin-wall type **bearings**.

VALVE GEAR

Overhead valves operated through tappets, push rods and rockers off the camshaft in crankcase. Camshaft chain-driven by crankshaft.

Valve tappet clearance to check timing0177" (0.45 mm)
Intake	opens	25° B.T.D.C.
	closes	51° A.B.D.C.
Exhaust	opens	64° B.B.D.C.
	closes	12° A.T.D.C.

Valve tappet clearance for engine operation, cold :		
— intake0079" (0.20 mm)
— exhaust0098" (0.25 mm)
Valve head diameter	intake	1.378" (35 mm)
	exhaust	1.240" (31.5 mm)
Valve face angle		45° 30' ± 5'
Valve seat angle		45° ± 5'

LUBRICATION

Pressure metered flow system activated by a gear pump.

Centrifugal oil filter and by-pass supplementary filter with pleated paper cartridge.

MAIN SPECIFICATIONS OF ENGINE

Type	115 C.005
Cycle and strokes	Otto, four-stroke
No. of cylinders, lin line	4
Bore	3.03" (77 mm)
Stroke	3.13" (79.5 mm)
Displacement	90.37" cu.in (1.481 cm ³)
Compression ratio	9 to 1
Maximum horsepower (DIN)	75
Maximum horsepower (SAE)	83
at	5,400 rpm
Maximum torque (DIN)	85.35 ft.lbs (11.8 kgm)
Maximum torque (SAE)	88.97 ft.lbs (12.3 kgm)
at	3,200 rpm
Taxable horsepower (Italy)	16
Timing	overhead valves
Dual-barrel carburetor {	Weber, type
	Solex, type
	34 DCHD
	C 34 PAIA 2

