Automotive Technical DATA BOOK

Click on one of the buttons above to view data for this car. To return to this screen and make another choice, click anywhere on the data screen.

MENU HELP

Engine and cooling system — 911 Carrera & Speedster — 1983 to 1989

Type		930/20
Capacity (cm³) / number of cylinders		3164 / 6
Compression ratio / pressure	bar	10.3 / _
Oil pressure	bar	[3.5]
Oil temperature	ºC	90
Valve clearance - inlet	mm	0.10
Valve clearance - exhaust	mm	0.10
Firing order		1-6-2-4-3-5
No 1 cylinder position		PEL
Thermostat opening temperature	ºC	_
Radiator cap pressure	bar	_

Fuel system — 911 Carrera & Speedster — 1983 to 1989

Idle speed - manual [auto]	rpm	800±20
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	1.0 to 1.5
HC @ idle speed [3000 rpm] - see page VI	ppm	≤1200
CO2 @ idle speed [3000 rpm] - see page VI	%	_
O2 @ idle speed [3000 rpm] - see page VI	%	_
Carburettor / fuel injection		Bosch
Type / ref		DME Motronic
Main jet / needle		_
Injection pressure	bar	_
Pump pressure	bar	2.5±0.2
Octane rating	RON	98[L]

Ignition system — 911 Carrera & Speedster — 1983 to 1989

Type		DME Motronic
Ignition coil		Bosch 022 118 322
Primary resistance	ohms	0.4 to 0.7
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		Bosch
Points gap (air gap)	mm	_
Dwell angle	º (%)	_
Condenser capacity	µF	_
Rotation		_
Ignition timing - basic [static	º Crankshaft @ rpm	3±3 ATDC @ 800±40
V = Vacuum NV = No Vacuum		_
Total ignition advance	º Crankshaft @ rpm	26±2 BTDC @ 3000
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Centrifugal check.	º Crankshaft @ rpm	Computer control
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Vacuum range check	mbar	Computer control
Maximum vacuum advance	º Crankshaft	_
Spark plugs		Bosch/Champion
Type		WR4CC / RN3G
Electrode gap	mm	0.70

Electrical system — 911 Carrera & Speedster — 1983 to 1989

Battery	V / CC / RC	12 / 300 / 110 or 420 / 130
Alternator voltage / full load current / engine rpm		14.0 / _ / 3000
Starter motor current / voltage - cranking	A / V	_
- locked	A / V	_

Running gear — 911 Carrera & Speedster — 1983 to 1989

Brakes -		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	2.0
Tyres		
Saloon	Size	185/70x15: 215/60x15[1]
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	2.0 / 2.5[2]
- Estate / Van	bar	_
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	+1.5±1.5
Camber		0±10’
Castor		+6°5’±15’
King pin inclination		+10°55’±15’
Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	+2.0±2.0
Camber		-1° [Turbo-look: -30’]±10’

Torque wrench settings — 911 Carrera & Speedster — 1983 to 1989

Cylinder head - stage 1	Nm	32
- stage 2	Nm	_
Cylinder head - stage 3	Nm	_
- stage 4	Nm	_
Big-end bearings	Nm	50 to 55
Main bearings	Nm	Crankcase: 35
Clutch cover	Nm	20 to 25
Flywheel [driveplate]	Nm	90
Front hubs	Nm	WSM
Rear hubs	Nm	Castle nut: 310[3]
Wheel nuts / bolts	Nm	130
Spark plugs	Nm	25 to 30

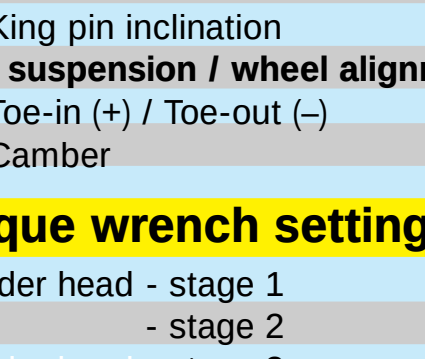
Capacities — 911 Carrera & Speedster — 1983 to 1989

Engine oil & filter	litres	10.0[4]
Gearbox - 4-speed [5-speed]	litres	3.1
Automatic transmission - refill	litres	_
Final drive	litres	WT
Cooling system	litres	_
Fuel tank	litres	80. 85 ▶: 85

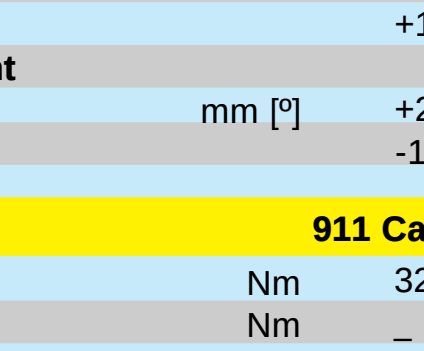
Notes and Illustrations

[1]**Turbo-look & 1989 MY: 205/55x16: 225/50x16**
[2]**Turbo-look & 1989 MY: 2.0 / 3.0**
[3]**Self-locking nut: 460**
[4]**13.0 with cooler**

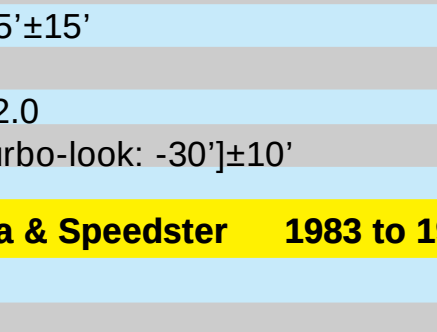
1: Idle speed 2: CO / Mixture



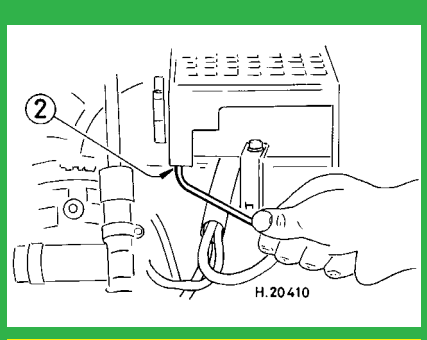
3164 cm³



3164 cm³, not CAT



DME Motronic, 911



DME Motronic, 911