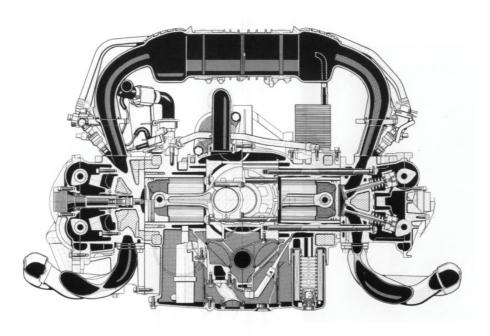


996 Carrera Technical File

Compiled by: Richard Hamilton & Rodney Naghar

for PCGB Members

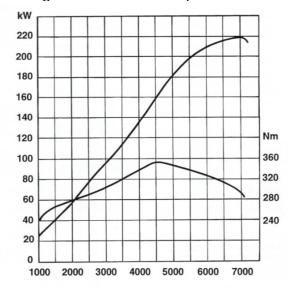


M96.01 3.4 Litre Engine Cross-section



M96.03 3.6 Litre Engine Cutaway

3.4 Litre Engine Power and Torque Curves



The most important engine data at a glance:

Displacement 3,387 cm (stroke 78 mm, bore 96 mm)

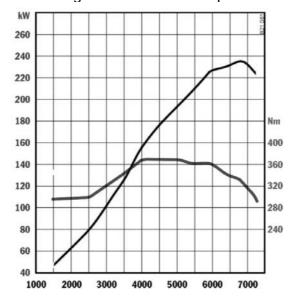
Power output 221 kW (296 hp) at engine speed 6,800 rpm

Max. torque 350 Nm at engine speed 4,600 rpm

Compression ratio 11.3:1

Fuel grade 93 CLC, Premium unleaded

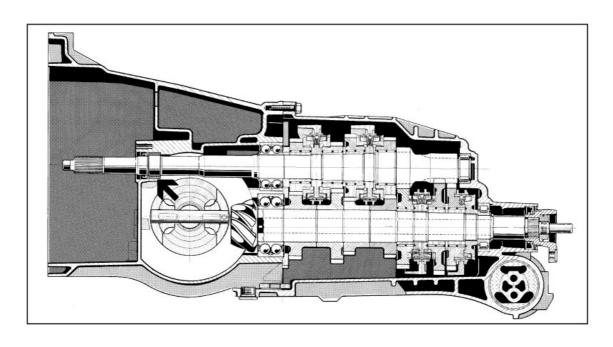
3.6 Litre Engine Power and Torque Curves



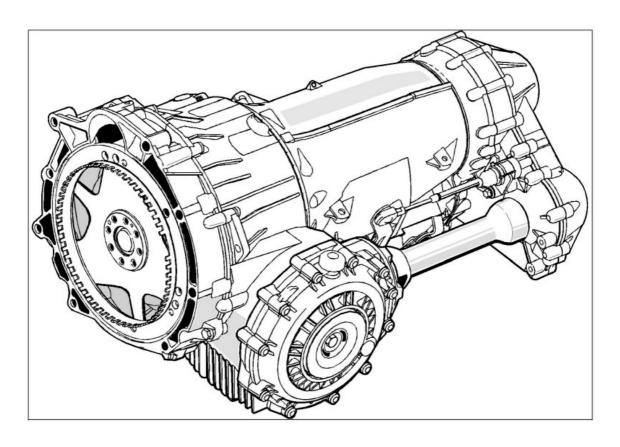
Most important data at a glance:

 Max. torque 370 Nm at engine speed 4250 rpm Compression ratio 11.3 : 1 Governed speed 7300 rpm Fuel grade 98 RON/8

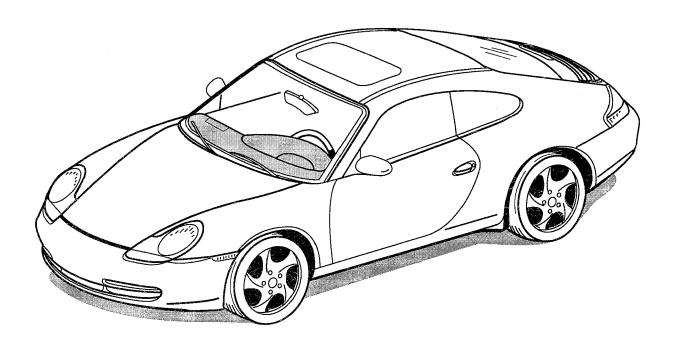
4250 rpm 11.3 : 1 7300 rpm 98 RON/88 MON (unleaded premium plus)



G96.01 6-speed Manual Transmission Cross-section



A96.50 5-speed Tiptronic Transmission



Model Year 1998-2001

O Technical data

Engine

Engine type: M 96/01

Number of cylinders 6

Bore mm (in.) 96 (3.78)

Stroke mm (in.) 78 (3.07)

Displacement cm³ (cu. in.) 3387 (206.67)

Compression ratio 11.3:1

Max. engine power kW (HP) 220 (300)

as per 80/1269/EWG

at engine speed rpm 6800

Max. torque Nm (ftlb.) 350 (259)

as per 80/1269/EWG

at engine speed rpm 4750

Max. litre output kW/1 (HP/1) 63.8 (86.8)

Rpm limitation

by fuel supply interruption

at rpm 7300

Idle speed rpm 700

Automatic transmission rpm 700

Engine weight as per DIN 70020 A Manual trans. Automatic transmission

kg (lbs) 190* (418.86) 179 (394.60)

^{*} including ZMS (dual-mass flywheel)

Engine design

Type 6-cylinder aluminium opposed-cylinder engine,

water cooled

Radiators Two in the front end (+ 3rd radiator in Tiptronic vehicle)

Crankcase Vertically split light alloy cylinder housing with

separate crankshaft bearing housing

Crankshaft Forged, supported by 7 bearings

Crankshaft bearings Plain bearings

Connecting rods Forged

Con-rod bearings Plain bearings

Pistons Light alloy, pressed

Cylinders Lokasil cylinder lining

Cylinder head 3-part light alloy head

Valve guide Pressed in

Valve arrangement 2 inlet valves suspended in parallel V arrangement

2 exhaust valves suspended in parallel V arrangement

Valve control Via flat-based tappets

Camshaft From the crankshaft via a double chain to the

intermediate shaft, and from there to the exhaust

camshafts via one double chain each.

Inlet camshaft coupled with exhaust camshaft via

a single chain.

Camshaft adjustment

Porsche VarioCam with 25° adjustment

Valve clearance

Hydraulic valve clearance compensation

Valve timing

with 1 mm valve travel and zero clearance

Inlet opens Inlet closes 15° after TDC

Outlet opens

59° after BDC 39° before BDC

Outlet closes

7° before TDC

Intake system

2-stage tuned-intake system (plastic)

Engine cooling

Water cooling; two radiators ahead of the front wheels.

(Additional radiator for Tiptronic vehicles)
Two electric fans, controlled in two stages

Engine lubrication

Туре

Integrated dry sump

Oil cooling

Via oil-water heat exchanger

Oil filter

On pressure side behind oil pump

Oil pressure at

n = 5000 rpm

Oil pressure indication

Approx. 0.5 bar at 90 °C

Oil pressure indicator light

Oil consumption

Approx. 1.0 I/1000 km

Exhaust system

2-pipe system with one 3-way catalytic converter per pipe, 2 rear mufflers

Emission control

Oxygen sensor closed-loop control and 3-way catalytic converter (metallic substrate)
USA - additional electrical secondary-air pump

Heating

Via water heat exchanger, closed loop-controlled on air side

Fuel system

Fuel injection

DME (Digitale - Motor - Elektronik - engine

control module ECM)

Injection valves controlled sequentially

Fuel supply

1 electrical internal gear pump

Fuel quality (RON)

98 unleaded

Electrical system

Radio interference suppression

ECE - R 10 and 72/245/EWG

Rated voltage

٧

12

Battery capacity

Ah/A

70/340

Rated generator output

W

1680 (alternator)

Ignition

DME (ECM), individual ignition coils,

knock control

Firing order

1-6-2-4-3-5

Ignition timing control

Via DME (ECM)

Spark plugs

Bosch FR-6-LDC- FGR 6 KQC

Beru 14 FR 6 LDU

Electrode gap

mm (in)

0.8 + 0.1

(0.031 + 0.004)

Power transmission

Engine and transmission bolted together to form

a power unit. Power is transferred to the rear wheels

via double-jointed drive shafts.

Clutch

Manual transmission

Single-plate dry clutch

Hydraulic actuation

Double-mass flywheel

Contact plate

GGG 60 (nodular cast iron)

Clutch plate ø

240

Automatic transmission:

Torque converter ø mm (in)

260 (11.03) Screw center point diameter

282 (11.11) Largest outer diameter,

screwed axially

Moving-off ratio Stall speed	rpm	1.92 2450
Transmission	Manual transm. Carrera 2 G 96.00	Tiptronic Carrera 2 A 96.00
Number of gears,		
forward/reverse	6/1	5/1
Internal designation Transmission ratios (i)		
1st gear	3.82	3.66
2nd gear	2.20 1.52	2.0
3rd gear 4th gear	1.22	1.41 1.0
5th gear	1.02	0.74
6th gear	0.84	
Reverse gear	3.55	4.10
Final drive:	Bevel gear whe	el
Final drive ratio (i)	3.444	3.676
Transmission weight (dry) kg (lbs)	60.5 (133.4)	106.82 (235.48) with torque converter 94.72 (208.8) without torque converter
Transmission weight (wet and ready for installation) kg (lbs)	62.9 (138.6)	115.62 (254.88) with torque converter 103.52 (228.21) without torque converter
Pody designs		Lightweight, golvenized all steel integral hadufrom

Body designs

Lightweight, galvanized all-steel integral body-frame Full-size airbag for driver and passenger Coupé: Number of seats = 2 + 2

Running gear

Front axle

Spring strut axle:

Wheels individually suspended by control arms with

trailing arms and spring struts

(McPherson type, Porsche optimized)

Springs:

One truncated cone spring per wheel, with vibration

damper inside spring

Vibration dampers

Double-acting hydraulic twin-tube gas-filled vibration

dampers

Steering

Steering wheel ø

mm (in)

380 (14.97)

Steering ratio

16.9:1 Left-hand drive vehicle

16.9 : 1 Right-hand drive vehicle 10.6 (34.8)

Turning circle ø
Track circle ø

m (ft) m (ft)

10.2 (33.5)

Steering wheel revolutions

from lock to lock

2.98 Left-hand drive vehicle

2.98 Right-hand drive vehicle

Power steering pump

Driven via poly V-belt

Ratio i = 1 : 1.18

Rear axle

Wheel suspension

Multi-link axle

Wheels individually guided by 5 control arms

Springs

Cylindrical coil spring per wheel, with coaxial vibration

vibration damper inside spring

Vibration dampers

Double-acting hydraulic single-tube gas-filled vibration

dampers

Brakes

Operating brake Foot operated, hydraulic-mechanical boost

Dual-circuit brake system, 4-piston Al monobloc brake calipers at FA and RA, distributed per axle, internally ventilated brake discs at front and

rear axles, ABS standard, Traction Control (TC) optional with switch-over possibility to

automatic brake differential (ABD).

Vacuum brake booster

(boost factor)

3.85

Brake master cylinder ø

mm (in)

23.81/23.81 (0.94/0.94)

Brake master cylinder stroke

mm (in)

18/18 (0.71/0.71)

Pressure reducer - switching-on

pressure

55 bar

- reducing factor

0.46

Brake disc ø

mm (in)

Front 318 (12.53)

Rear 299 (11.78)

Effective brake disc ø

mm (in)

Front 261.8 (10.31)

Rear 247.6 (9.75)

Brake disc thickness

mm (in)

Front 28 (1.10)

Rear 24 (0.95)

Effective total brake

area per wheel

cm² (sq.in)

Front 127 (19.69)

Rear 98 (15.195)

Piston ø in brake caliper

mm (in)

Front 36 (1.42) and 40 (1.576)

Rear 28 (1.10) and 30 (1.182)

Parking brake

Drum-type parking brake

Brake drum ø	mm (in)	180 (7.092)
Brake shoe width	mm (in)	25 (0.985)
Lining area per wheel	cm ² (sq.in)	85 (13.08)

Wheels and tyres

Summer tyres		Rim offset (mm)
Tyre size, front – on wheel	205/50 ZR 17 - 7 J x 17	55 *
Tyre size, rear – on wheel	255/40 ZR 17 - 9 J x 17	55 *
Tyre size, front – on wheel	225/40 ZR 18 - 7.5 J x 18	50 *
Tyre size, rear – on wheel	265/35 ZR 18 - 10 J x 18	65 *
Winter tyres **		Rim offset (mm)
Tyre size, front – on wheel	205/50 R 17 89T M + S - 7 J x 17	55
Tyre size, rear – on wheel	225/45 R 17 90T M + S - 8.5 J x 17	50 ***

^{*} Only if specified make is fitted.

^{**} M + S tyres with higher load rating and/or higher speed symbols can also be mounted optionally (max. "H" = max. 210 km/h).

^{***} Snow chains approved if special chains are used.

Spare wheel

High-pressure tyre		105/95 * - R 17 * bound to I	make
Wheel		3.5 J x 17 rim offset 19	
Tyre pressure		17"	18"
front rear	bar bar	2.5 2.5	2.5 3.0
Spare wheel	bar	4.2	4.2

Dimensions

Length	mm (in)	4430 (174.54)	
Width	mm (in)	1765 (69.5)	
Height	mm (in)	1305 (51.42) at DIN empty we	eight
Wheel base	mm (in)	2350 (92.59)	
Track widths		17"	18"
Front	mm (in)	1455 (57.33)	1465 (57.72)
Rear	mm (in)	1500 (59.10)	1480 (58.31)
Ground clearance	mm (in)	100 (3.94) 65 (2.56) at max. gross weig	ght

Vehicle	in	design	position	*
ACHINIC	11.1	ucsign	position	

Ramp angle	Degrees	13.0
Overhang angle, front	Degrees	12.0
Overhang angle, rear	Degrees	14.5

* Design position according to Porsche definition:

DIN empty + driver =
$$68 \text{ kg}$$

+ passenger = 34 kg
+ luggage = 10 kg

Weights according to DIN 700 20

	Manual transmission	Tiptronic
Empty weights according to equipment kg (lbs.)		
Front	500 - 540	505 - 545
Rear	820 - 840	860 - 880
Total, Coupé	1320 - 1380 *	1365 - 1425 *
	(2909.9 - 3042.2)	(3009.1 - 3141.4)

^{*} For EU homologation plus 75 kg driver's share (35 kg at front axle, 40 kg at rear axle)

Permissible axle load

775 (1708.49) Coupé, front 775 (1708.49) 1100 (2425.06) 1100 (2425.06) rear 1765 (3791.74) 1720 (3791.74) Max. gross weight Max. trailer load **Braked** none none Unbraked none none Permissible towed weight none none Permissible drawbar load none none Permissible roof load, kg (lbs.)

With original Porsche Roof

Transport System

75 (165)

75 (165)

Filling capacities:

Measurement of the engine oil level by

instrument or oil dipstick.

The Driver's Manual is definitive.

Engine specification

Approved:

Europe -

According to ACEA Specification

A4 - 96 and special Porsche requirements (refer to Techn. Info bulletin about engine oils)

USA, RoW -

According to API SG and SHn Specifications and

special Porsche requirements

(refer to Techn. Info bulletin about engine oils)

Engine oil quantity	l (imp. gal.)	Approx. 10.25 (2.22) Change quantity 8.25 (1.79)	
Manual transmission with differentia	al I (imp. gal.)	2.7 (0.59)	
Automatic transmission with torque converter	l (imp. gal.)	Approx. 9.5 (2.06)	
Differential	l (imp. gal.)	0.8 (0.17)	
Transmission oil specification		Manual transmission	Tiptronic
		SAE 90 GL5	
Specification for differential transmission oil (Tiptronic)			GL5 SAE 75 W 90 or GL5 SAE 90
Fuel tank	l (imp. gal.)	Approx. 65 (14.1) actual volur 10 (2.2) reserve	me
		Approx. 64.0 (13.87) refill volu	ume
Coolant:	l (imp. gal.)	22.5 (4.88)	
Brake fluid reservoir	l (imp. gal.)	Approx. 0.45 (0.097)	
Tank for windscreen washer and headlight cleaning system	l (imp. gal.)	Approx. 2.5/6.5 (0.54/1.41)	

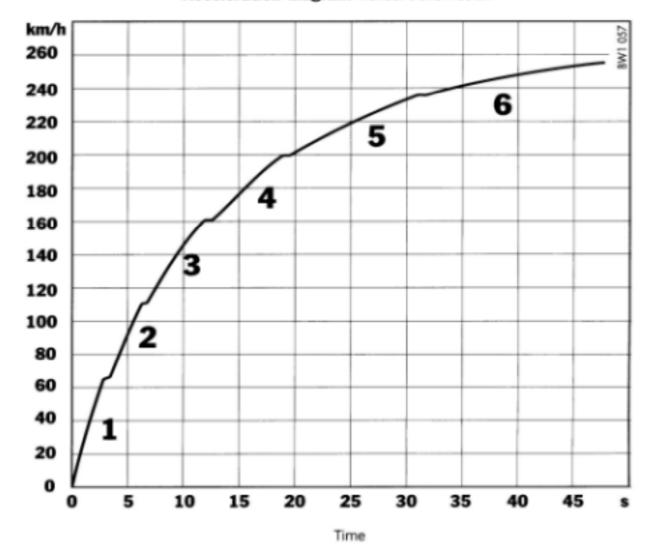
I (imp. gal.) 1.27 (0.28) Pentosin CHF 11 S

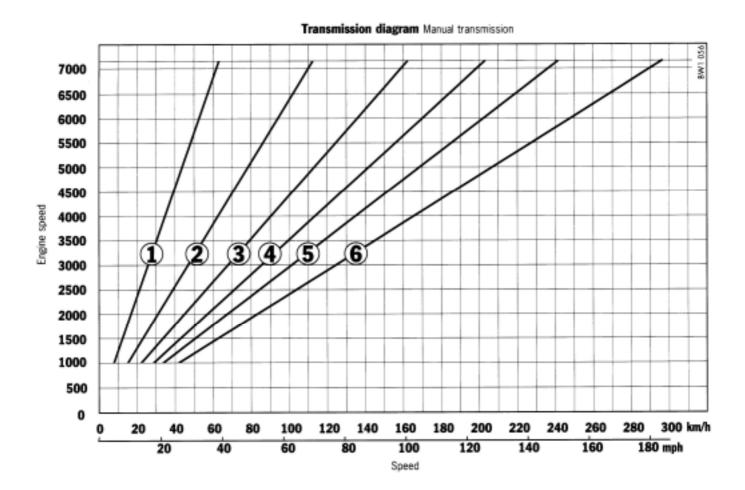
Power-assisted steering

Performance data

Top speed	km/h mph	Manual transmission 280 173.9	Tiptronic 275 170.8
Acceleration	0 - 100 km/h	5.2 s	6.0 s
Acceleration	0 - 160 km/h	11.5 s	13.0 s
Acceleration	0 - 200 km/h	18.3 s	20.4 s
Kilometre from standing start		24.2 s	25.3 s
1/4 mile from standing start		13.5 s	
Elasticity			
80 - 120 km/h	5th gear 6th gear	7.1 s 8.9 s	6.9 s 9.7 s
100 - 200 km/h	5th gear 6th gear	17.3 s 23.4 s	18.3 s 28.5 s
Climbing performance		1st gear 2nd gear 3rd gear 4th gear 5th gear 6th gear	
Specific power	kg/kW kg/HP	6.0 6.3 4.4 4.6	6.2 6.5 4.6 4.8

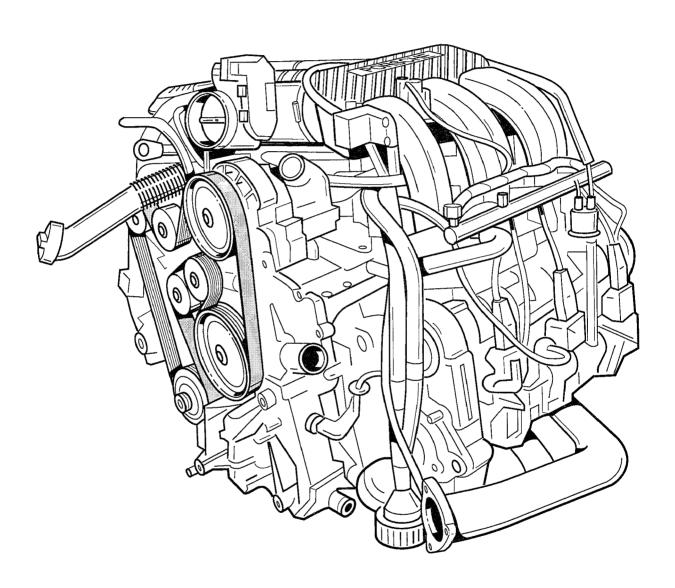
Acceleration diagram Manual transmission





Power unit (as of model year 02)

Engine M96/03



Engine

Engine

<u> </u>		
Engine type	M96/03	
No. of cylinders	6	
Bore	96 (3.78)	mm (in.)
Stroke	82.8 (3.26)	mm (in.)
Cubic capacity	3596 (219.3)	cm ³ (cu. in.)
Compression ratio	11.3:1	
Max. engine power as per 80/1269/EEC	235 (320)	kW (HP)
Net power as per SAE J1349	320	HP
At engine speed	6800	rpm
Max. torque as per 80/1269/EEC	370 (37.7)	Nm (kpm)
Net torque as per SAE J1349	273	ftlb.
At engine speed	4250	rpm
Max. litre output	65.4 (89) 89	kW/1 (HP/1) HP/1
Rpm limitation by fuel cutoff and E-gas at	7300	rpm
idle speed	670 ± 40	rpm without air-conditioning
·		
Engine weight as per DIN 70020 A, kg	Manual transmission 203.7 (449.06)	Automatic transmission 194 (427.67)

^{*} including ZMS (double-mass flywheel)

Engine design

Engine design

Туре	6-cylinder aluminium opposed-cylinder engine, water cooled
Crankcase	Vertically split light alloy cylinder housing with separate crankshaft bearing housing
Crankshaft	Forged, supported by 7 bearings
Crankshaft bearings	Plain bearings, Ø 63 mm, sub groove
Connecting rods	Forged, I = 142 mm
Con-rod bearings	Plain bearings

Engine design

Piston Pressed light alloy

Cylinder Lokasil oil running surface

Cylinder head 3-part light alloy head

Valve arrangement 2 inlet valves suspended in parallel V arrangement

2 exhaust valves suspended in parallel V arrangement

Valve diameter Inlet 40.2

Oulet 34.5

Valve travel Inlet 11.0 mm (large valve lift)

3.6 mm (smaller valve lift)

Outlet 11.0 mm

Valve control Inlet: via switchable flat-base tappets

Outlet: via flat-base tappets

Camshaft From the crankshaft via a tooth-type chain to the intermediate shaft, and

from there to the inlet and exhaust camshafts via one roller-type chain

each.

Camshaft adjustment Porsche VarioCam Plus with 42° adjustment

(vane adjuster and valve travel adjustment)

Valve clearance Hydraulic valve clearance compensation

Valve timing in late position

with 1 mm valve travel and zero

clearance

large valve travel

Valve timing in late position with 1 mm valve travel and zero

clearance

small valve travel

Inlet opens at 9° after TDC

Inlet closes at 61° after BDC Outlet opens at 50° before BDC

Outlet closes at 4° before TDC Inlet opens at 39° after TDC

Inlet closes at 19° after BDC Outlet opens at 50° before BDC

Outlet closes at 4° before TDC

Intake system 2-stage tuned-intake system (plastic)

Shifting rpm 2700/5100

Engine cooling

Engine cooling

Water cooling; 2 radiators ahead of the front wheels.

(Additional radiator for Tiptronic vehicles)
Two electric fans, controlled in two stages

Engine Iubrication

Engine lubrication

Type Integrated dry sump lubrication

Oil cooling Via oil-water heat exchanger

Oil filter On pressure side behind oil pump

Oil pressure

at n = 5000 rpm Approx. $6.5 \text{ bar at } 90^{\circ} \text{ C}$

Oil consumption Max. 0.5/1000km

Engine control

Engine control

Engine control module Bosch ME 7.8

Ignition DME, individual spark coils, knock control

Firing order 1-6-2-4-3-5

Ignition timing control Via DME (ECM)

Spark plugs Bosch FGR 6 KQC

Beru 14 - FGR 6 KQU

Electrode gap

mm (in) $1.6 \pm 0.2 (0.06 \pm 0.008)$

E-gas Electronic throttle actuator control via DME

European version Euro-III-On Board Diagnosis (EOBD)

USA version On-Board Diagnosis II (OBDII)

Electrical system

Electrical system

Nominal voltage

V 12

Battery capacity

Ah/A 80/380

Starting motor

KW 1,7

Rated generator output

W 1680

Exhaust system

Exhaust system/Emission control system

Exhaust system	2-pipe, 3-way catalytic converter exhaust system 2 rear mufflers
EURO II	Oxygen sensor closed-loop control with 2 pre-catalytic converter probes 3-way catalytic converter sytem each with a catalytic converter left + right. (RoW)
EURO III	Additional secondary air system and post catalytic control (4 probes) EOBD
USA LEV	Oxygen sensor closed-loop control + post catalytic converter control 3-way catalytic converter system, each with 1 cascade catalytic converter - left + right. (with two metal substrates) Secondary air system OBD II + ORVR

Model Year 2002 on

Engine Data

Engine type M 96/03

Type Horizontally opposed engine, water-cooled

Number of cylinders 6 Bore 96 mm (3.78 in.)

 Stroke
 82.8 mm (3.26 in.)

 Cubic capacity
 3596 cm³ (219.5 cu.in.)

Compression ratio 11.3:1

Engine output as per EU 235 kW (320 HP) at crankshaft speed 6800 rpm

Torque as per EU 370 Nm (274 ftlb.)

at crankshaft speed 4250 rpm

Engine oil consumption up to 1.5 I/1000 km

 Maximum permitted engine speed
 7300 rpm

 Generator
 1680 W/120 A

 Firing order
 1 - 6 - 2 - 4 - 3 - 5

Engine control Stationary high-voltage distribution, sequential fuel injection,

cylinder-selective knock control, stereo oxygen sensing, diagnostic system,

4 overhead camshafts, Porsche VarioCam Plus, hydraulic valve clearance compensation

Transmission

Gear ratios	Manual transmission	Tiptronic S
1st gear	3.82:1	3.60:1
2nd gear	2.20:1	2.19:1
3rd gear	1.52:1	1.41:1
4th gear	1.22:1	1.00:1
5th gear	1.02:1	0.83:1
6th gear	0.84:1	
Reverse gear 1st gear 2nd gear	3.55 : 1	3,17 : 1 1,93 : 1
Final drive ratio	3.44:1	3.37:1

Fuel Consumption

determined according to the new Directive 93/116/EU

En	gine type	City	Highway	Total	Target value CO ₂
		(l/100 km)	(l/100 km)	(I/100 km)	(g/km)
911 Carrera manual transmission	M 96/03	16.1	8.1	11.1	269
911 Carrera Tiptronic S	M 96/03	16.9	8.1	11,3	274
911 Carrera 4 manual transmission	M 96/03	16.3	8.3	11.3	274
911 Carrera 4 Tiptronic S	M 96/03	18.1	8.7	11.9	289

Tyres, Rims, Tracks

		Tyres	Rim	Rim offset	Track
Summer tyres	Front	205/50 ZR 17	7 J x 17 H2	50 mm	1465 mm
	Rear	255/40 ZR 17	9 J x 17 H2	55 mm	1500 mm
or	Front	225/40 ZR 18	8 J x 18 H2	50/52 mm	1465/1461 mm
	Rear	285/30 ZR 18	10 J x 18 H2	65 mm	1480 mm
Winter tyres	Front	205/50 R 17 89 T M+S	7 J x 17 H2	50 mm	1455 mm
	Rear	255/40 R 17 94 T M+S ¹³	9 J x 17 H2	55 mm	1500 mm
or	Front Rear	225/40 R 18 88 H M+S 225/40 R 18 88 H M+S 265/35 R 18 93 H M+S ¹¹	7.5 J x 18 H2 8 J x 18 H2 10 J x 18 H2	50 mm 50/52 mm 65 mm	1465 mm 1465/1461 mm 1480 mm

The load capacity coefficient (e.g. "89") and maximum speed code letter (e.g. "T") for permitted top speed

are minimum requirements.

When fitting new tyres or changing tyres, always observe the instructions in the chapter "Tyres and tyre care".

Tyre and rim sizes The authorisation of tyre and rim sizes is granted on the basis of extensive testing.

Your Official Porsche Centre will be pleased to advise you about the current authorisation status. Refitting with sizes not authorised by Porsche may have a dangerous effect on driving stability.

Snow chains Snow chain clearance can be guaranteed only with the tyre + rim combination marked 1).

Can be mounted only on the rear wheels; maximum speed 50 km/h (30 mph).

Use only Porsche authorised fine-link cross-type or edge chains.

Spare wheel

911 Carrera High-pressure tyre T 105/95 R 17 on 3.5 J x 17 rim.

911 Carrera 4 Collapsible spare tyre 165/70 R 16 92 P on 5.5 J x 16 rim.

Maximum speed 80 km/h (50 mph).

Always observe the instructions in the chapter "Spare wheel".

Tyre Filling Pressure for Cold Tyres

Summer and winter tyres

Front 17-inch wheels 2.5 bar (36 psi)

18-inch wheels 2.5 bar (36 psi)

Rear 17-inch wheels 2.5 bar (36 psi)

18-inch wheels 3.0 bar (44 psi)

Spare wheel of 911 Carrera

Front and rear 4.2 bar (60 psi)

Collapsible spare wheel of 911 Carrera 4

Front and rear 2.5 bar (36 psi)

These tyre filling pressures apply only to the tyre makes and types approved by Porsche. Please always observe the instructions in the chapter "Tyres and tyre care".

Capacities

Use only fluids and fuels authorised by Porsche. Your Official Porsche Centre will be pleased to advise you. Your Porsche has been designed so that it is not necessary to mix any additives with oils or fuels.

Engine Oil change quantity without oil filter approx. 8.50 litres Oil change quantity with oil filter approx. 8.75 litres

Reference indication is the level on the oil dipstick.

Also refer to the chapter "Engine oils"

Coolant Approx. 22.5 litres

Manual transmission and differential Approx. 2.7 litres

Tiptronic S Approx. 9 litres ATF

Differential with Tiptronic S Approx. 1.25 litres

Fuel tank Refill volume approx. 64 litres, including approx. 10 litres reserve

Fuel quality The engine is designed to provide optimum performance and fuel

consumption if unleaded premium fuel with 98 RON/88 MON is used. If unleaded premium fuels with octane numbers of at least 95 RON / 85 MON are used, the engine's knock control automatically adapts the ignition timing.

Power steering Approx. 1.27 litres hydraulic fluid Pentosin CHF 11 S

Brake fluid Approx. 0.45 litre; use only Original Porsche brake fluid

Windscreen washer Approx. 3 litres without headlight washer Approx. 5.7 litres with headlight washer

Weights - 911 Carrera

.

Coupé	Manual transmission	Tiptronic S
Empty weight (depending on equipment)		
per DIN 70020	1345 kg to 1480 kg	1400 kg to 1535 kg
per 70/156/EEC 1)	1420 kg to 1555 kg	1475 kg to 1610 kg
Maximum gross weight	1790 kg	1845 kg
Maximum axle load, front 2)	775 kg	775 kg
Maximum axle load, rear 2)	1180 kg	1180 kg
Maximum useful load, Roof Transport System 3)	75 kg	75 kg

Cabriolet	Manual transmission	Tiptronic S
Empty weight (depending on equipment)		
per DIN 70020	1425 kg to 1540 kg	1480 kg to 1595 kg
per 70/156/EEC 1)	1500 kg to 1615 kg	1555 kg to 1670 kg
Maximum gross weight	1855 kg	1910 kg
Maximum axle load, front 2)	775 kg	775 kg
Maximum axle load, rear 2)	1180 kg	1180 kg
Maximum useful load, Roof Transport System 30	75 kg	75 kg

¹⁾ Empty weight includes 75 kg driver and baggage share.

The maximum gross weight must not be exceeded.
Note: If additional accessories are installed, the useful load will be correspondingly less.

3) Use only Original Porsche Roof Transport System.

Weights - 911 Targa

	Manual transmission	Tiptronic S
Empty weight (depending on equipment)		
per DIN 70020	1415 kg to 1530 kg	1470 kg to 1585 kg
per 70/156/EEC 13	1490 kg to 1605 kg	1545 kg to 1660 kg
Maximum gross weight	1845 kg	1900 kg
Maximum axle load, front 21	775 kg	775 kg
Maximum axle load, rear ²¹	1180 kg	1180 kg
Maximum useful load, Roof Transport System 31	75 kg	75 kg

Weights - 911 Carrera 4

Coupé	Manual transmission	Tiptronic S
Empty weight (depending on equipment)		
per DIN 70020	1405 kg to 1540 kg	1460 kg to 1595 kg
per 70/156/EEC 1)	1480 kg to 1615 kg	1535 kg to 1670 kg
Maximum gross weight	1850 kg	1905 kg
Maximum axle load, front 2)	825 kg	825 kg
Maximum axle load, rear 2)	1180 kg	1180 kg
Maximum useful load, Roof Transport System 3)	75 kg	75 kg
Cabriolet	Manual transmission	Tiptronic S
Empty weight (depending on equipment)		
per DIN 70020	1485 kg to 1600 kg	1540 kg to 1655 kg
per 70/156/EEC 11	1560 kg to 1675 kg	1615 kg to 1730 kg
Maximum gross weight	1915 kg	1970 kg
Maximum axle load, front 21	825 kg	825 kg
Maximum axle load, rear 2)	1180 kg	1180 kg
Maximum useful load, Roof Transport System 31	75 kg	75 kg

Empty weight includes 75 kg driver and baggage share.
 The maximum gross weight must not be exceeded.
 Note: If additional accessories are installed, the useful load will be correspondingly less.

 Use only Original Porsche Roof Transport System.

Empty weight includes 75 kg driver and baggage share.
 The maximum gross weight must not be exceeded.
 Note: If additional accessories are installed, the useful load will be correspondingly less.
 Use only Original Porsche Roof Transport System.

Driving Performance 1)

Coupe	Manual transmission	Tiptronic S
Coupe	manual transmission	Hibtroffic 3

Top speed	285 km/h (177 mph)	280 km/h (174 mph)
Acceleration 0 – 100 klm/h (62 mph)	5.0 seconds	5.5 seconds

Cabriolet, Targa Manual transmission Tiptronic S

Top speed	285 km/h (177 mph)	280 km/h (174 mph)
Acceleration 0 - 100 km/h (62 mph)	5.2 seconds	5.7 seconds

¹⁾ At DIN empty weight and half load, without performance-inhibiting extra equipment (e.g. special tyres)

Dimensions

Length		4430 mm
Width		1770 mm
Height		1305 mm
Wheelbase		2350 mm
Ground clearance		100 mm
Turning circle		10.6 m
Overhang angle	front	12.0°
	rear	14.5°
Ramp angle		13.0°

Sport-type running gear 10 mm lower

Ground clearance		90 mm
Overhang angle	front	11.0°
	rear	14.0°
Ramp angle		12.0°

Diagrams

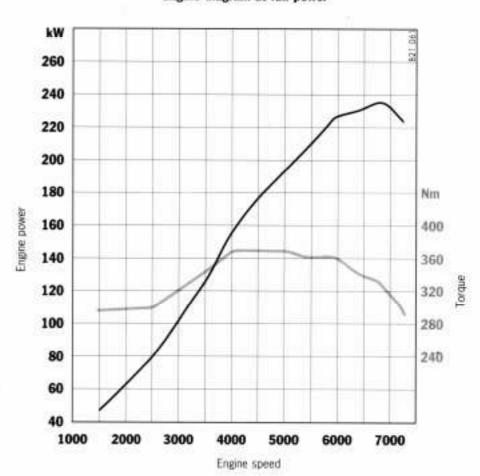
Acceleration diagram

Values have been determined at DIN empty weight and with a 50 % load without additional equipment.

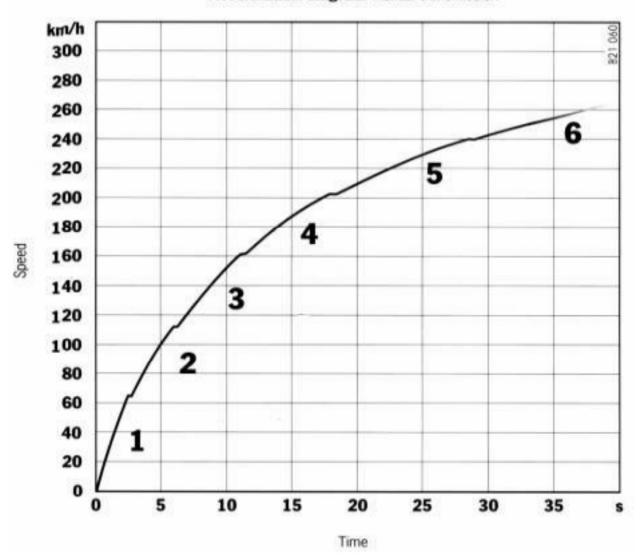
Transmission diagram

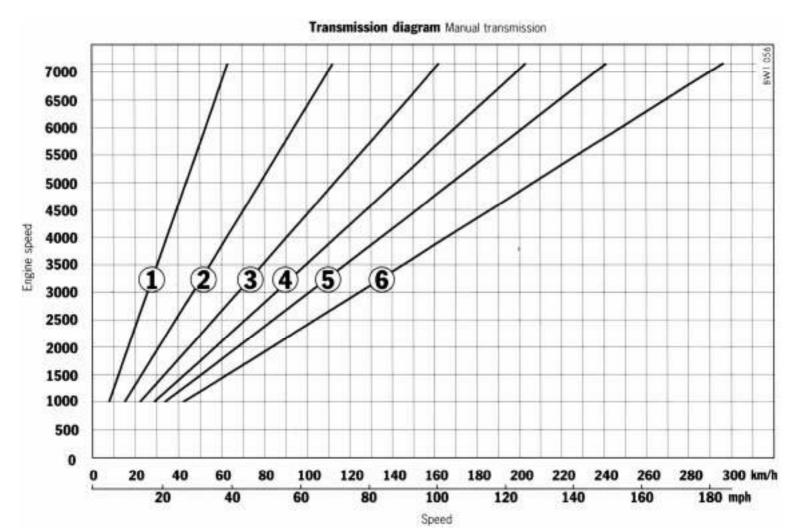
The transmission diagram is based on standard values on the basis of a mean effective scrub radius. Changes of the scrub radius, the tyre tolerance, wear and tear, deviating country equipment and tyre slip have not been taken into account.

Engine diagram at full power



Acceleration diagram Manual transmission





Acknowledgement

All images, data and logos courtesy of Porsche AG Porsche®, Carrera and Targa are trademarks of Porsche AG