PORSCHE

914 1.8/2.0

TECHNICAL DATA

MODEL '74

Engine	1,8	2.0
Number of cylinders	4	4
Bore	3.66 in. (93 mm)	3.70 in. (94 mm)
Stroke	2.598 in. (66 mm)	2.79 in. (71 mm)
Displacement	109.53 cu. in. (1795 cm³)	120.27 cu. in. (1971 cm³)
Compression ratio	8.6 : 1	8.0 : 1
Horsepower rating (SAE J 245 Net-Power)	61.5 (81 KW) at 5000 rpm	95 HP (71 KW) at 5000 rpm
Horsepower rating (DIN 70020)	85 HP (63 KW) at 5000 rpm	100 HP (73,5 KW) at 5000 rpm
Maximum torque (SAE J 245 Net-Torque)	96 lb. ft. (133 Nm) at 3400 rpm	112 lb. ft. (152 Nm) at 3200–4000 rpm
valve clearance intake	0.15 mm } with cold engine	0.15 mm } with cold engine
exhaust	0.20 mm }	0.20 mm }

Design of Engine

Layout		4 cylinders, horizontally opposed	
Operating cycle		4-stroke gasoline engine	
Cooling		Air cooled	
Lubrication		Pressure oil circulation	
Cylinders		Gray cast iron	
Cylinder heads		Light alloy	
Valve operation		Pushrods and central camshaft	
Camshaft drive		By 2 gear pinions	
Crankshaft		Forged, 4 main bearings	
Big end bearings		Plain, three layer	
Fuel supply		1 electric fuel pump	
Fuel injection	**1.8**	2 carburetors	**2.0** Electronic

Electrical System

Operating voltage	12 volts
Battery capacity	45 Ah
Alternator output	50 amps at 14 volts AC, 700 watts capacity
Ignition type	Battery
Firing order	1–4–3–2
Ignition timing	**Type 1.8** 7.5° BTC 850 ± 50 (vacuum control disconnected) **Type 2.0** 27° BCD 3500 rpm (vacuum control disconnected)
Spark plugs	Beru 175/14/3, Bosch W 175 T 2, Bosch W 225 T 2*, - or equivalent *To be used in vehicles driven at high speed for long periods in areas where the average temperature is above 77 degree F (25 degree C).
Spark plug gap	0.028 in. (0,7 mm)

Power Train (5-speed-transmission)

Clutch	Single plate dry disc
Transmission	Porsche, servo – lock synchronization
Number gears	5 forward, 1 reverse
Gearshift location	Floor-mounted, central
Final-drive	Spiral bevel pinion and differential
Drive ratio	7 : 31, (4.429)
Rear axle drive	Over double joint half axles
Gear ratios	Refer to transmission diagram (page 82)

Climbing Ability (5-speed-transmission)

Vehicle curb weight according to DIN with half load capacity 2392 lbs. (1085 kg).

	1.8	2.0
1st gear, max. gradient:	50 %	70,5%
2nd gear, max. gradient:	30 %	36,0%
3rd gear, max. gradient:	18 %	21,5%
4th gear, max. gradient:	12 %	14,0%
5th gear, max. gradient:	8 %	9,5%

Chassis, Suspension

Frame	Welded pressed steel box section frame, welded to body
Front suspension	Independent, suspension struts and track control arm
Front springs	Round section longitudinal torsion bar for each wheel
Rear suspension	Independent, semi-trailing arms
Rear springs	Coil spring, double acting telescopic shock absorber and progressive rate hollow rubber spring for each wheel
Foot brake	Dual circuit, operating hydraulically on all four wheels; disc brakes at all wheels, pressure regulator in rear wheel circuit
Hand brake	Operates mechanically on rear pads of foot brake system
Effective brake disc diameter	Front 9.13 in. (232 mm), rear 9.45 in. (240 mm).
Total effective friction area	27.9 sq.in. (180 cm²)

	Type 914 1.8	**Type 914 2.0**
Rims	5 1/2 J × 15 (steel or light alloy)	5 1/2 J × 15 (steel or light alloy)
Tires	165 SR 15	165 HR 15

Steering	Rack and pinion	
Steering reduction ratio (in center)	1 : 17,78	
Front axle: Camber angle	0° ± 20′	DIN curb weight + front axle pressed by 15 kp
Toe – in	+20′ ± 10′	
Caster angle	6° ± 30′	
Rear axle: Camber angle	—30′ ± 20′	DIN curb weight
Toe – in	0° + 15′	

Filling Capacities

Engine	Approx 3.7 US qts (3.0 Imp. qts); without oil filter 3.2 US qts (2.6 Imp. qts) premium quality HD oil acc. to API specification SD or SE SAE 30 = above 32° F (0° C) SAE 20 W 20 = from + 5° F to 32° F (—15° C to 0° C) SAE 10 W = below + 5° F (—15° C)
Transmission and differential	Approx 2.6 US qts (2.1 Imp. qts) "SAE transmission oil MIL–L–2105 B or (MIL–L–2105"), SAE 90
Fuel tank	16.4 US gals (13.65 Imp. gals) including approx 1.6 US gals (1.3 Imp. gals) reserve Required octane rating: **Type 1.8** 98 octane — **Type 2.0** 95 octane (premium fuel)
Brake fluid	Approx 12 fl. oz. (0.35 liters) according to specification SAE J 1703a
Wind shield washer system	Approx 5.3 US pints (4.4 Imp. pints)

Weights

DIN curb weight **	2094 lbs	(950 kg)
Total permissible weight	2690 lbs	(1220 kg)
Maximum axle load front*	1433 lbs	(650 kg)
rear*	1433 lbs	(650 kg)

** The installation of additional equipment results into an increase of this value, consequently reducing the respective pay load.

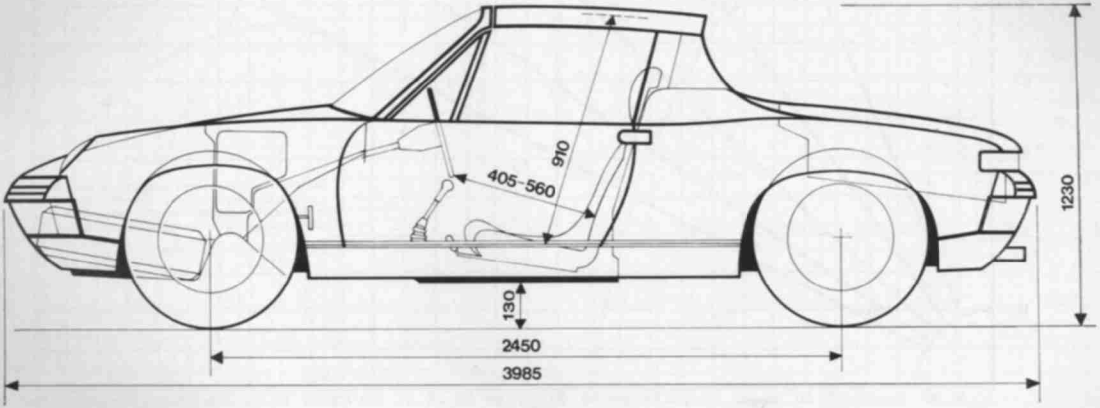
* Do not exceed total permissible weight.

Performance	**1.8**	**2.0**
Maximum speed	110.5 mph (178 km/h)	118 mph (190 km/h)
Nominal fuel consumption (DIN)	2.06 gals/62 miles	2.06 gals/62 miles
Engine oil consumption	Aprox 0.5-1.0 US qts per 600 miles (Aprox 0.4-0.8 Imp qts per 600 miles)	Approx 0.5–1.0 US qts per 600 miles (Approx 0.4-0.8 Imp. qts)

Dimensions

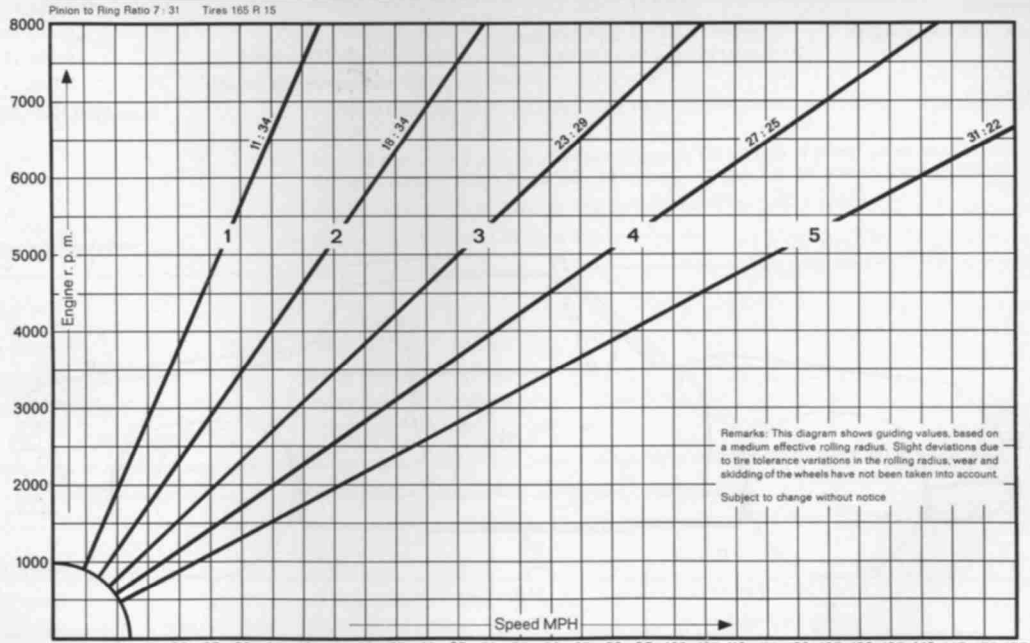
Wheelbase		96.5 in. (2450 mm)
Track (DIN curb weight)	Front	52.87 in. (1343 mm)
	Rear	54.45 in. (1383 mm)

Overall length	156.8 in. (3985 mm)
Overall width	65.0 in. (1650 mm)
Overall height (car empty)	48.4 in. (1230 mm)
Ground clearance (car loaded)	5.1 in. (130 mm)
Turning circle	Approx. 36 feet (11 m)

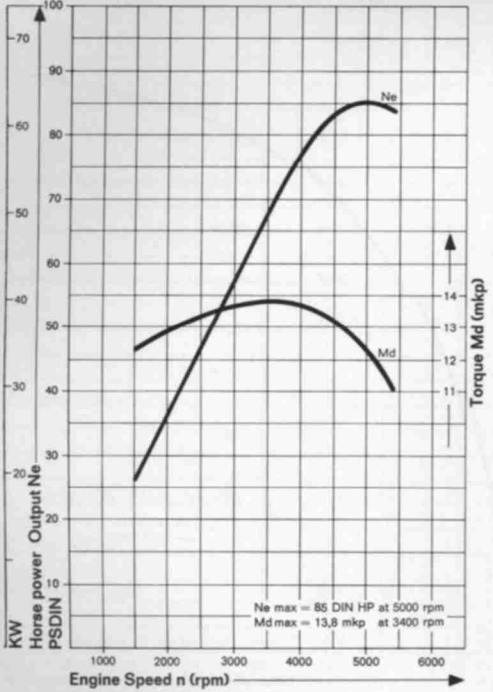


Transmission Diagram

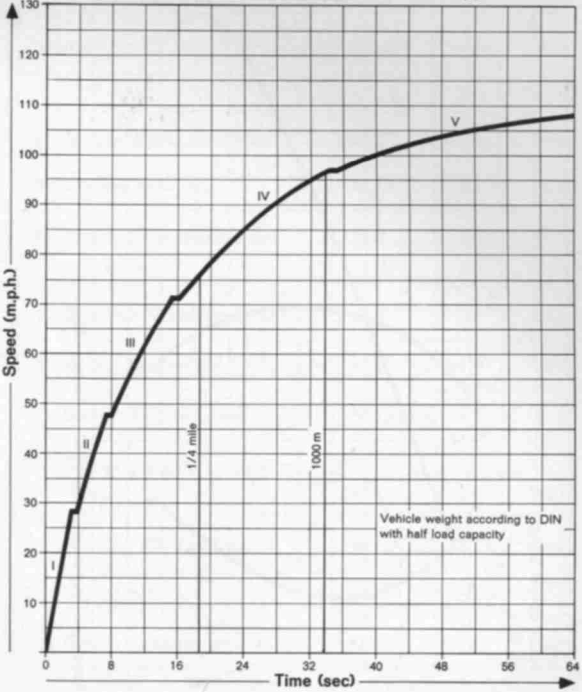
914 — 1.8/2.0



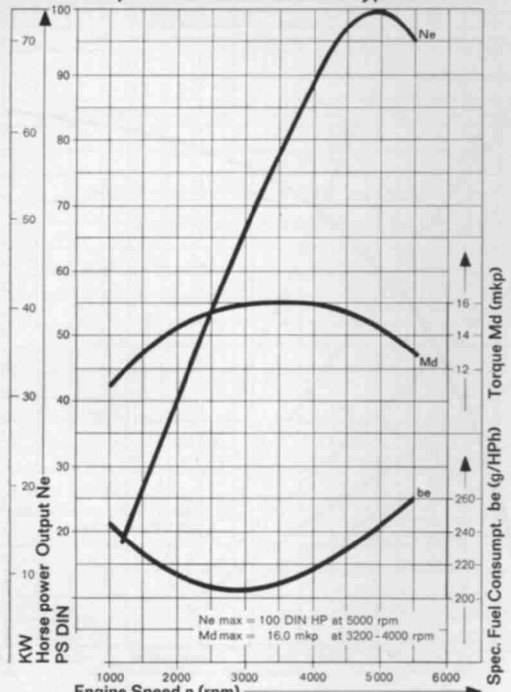
Full-power Performance Type 914 - 1.8



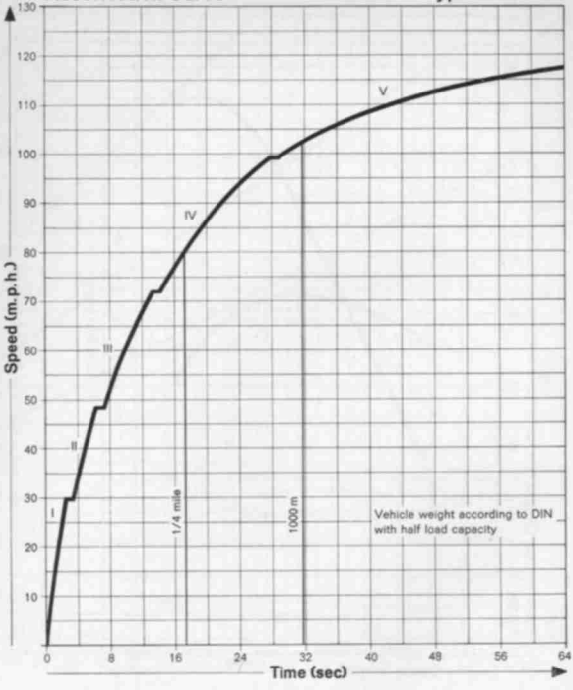
Acceleration Curve Type 914 - 1.8



Full-power Performance Type 914 - 2.0



Acceleration Curve Type 914 - 2.0



Tightening torques

Designation	Threads	mkg	ft.lbs.
1 – Screws for universal shaft	M 8×1.25	4.5	32.5
2 – Nuts for transmission support	M 8	2.0	14.5
3 – Nuts for engine support (body)	M 10	3.0	21.7
4 – Screws for torque converter	M 8	3.0	21.7
5 – Nuts for engine attachment to transmission	M 10	3.0	21.7
6 – Spark plugs	M 14×1.25	3.5	25.3
7 – Nut for small pulley	M 14×1.5	6.0	43.4
8 – Screws for blower impeller	M 8	2.0	14.5
9 – Nuts for oil pump	M 8	2.0	14.5
10 – Oil drain plug	M 12×1.5	2.2	15.9
11 – Closing nut for oil strainer cover	M 8	1.3	9.4
12 – Nuts for rocker arm shaft	M 7	1.4	10.1
13 – Cylinder head nuts	M 10	3.2[1]	23.1
14 – Screws for engine support (crankcase)	M 8	3.0	21.7
15 – Screw for blower wheel hub	M 8	3.2	23.1
16 – Screws for flywheel	M 12×1.5	11.0	79.6
17 – Screws for carrier plate	M 12×1.5	8.5	61.5
18 – Screws and nuts for crankcase halves	M 8	2.0	14.5
19 – Nuts for crankcase halves	M 10×1.25	3.3[3]	23.9
20 – Conrod nuts	M 9×1	3.3[2]	23.9
21 – Screws for clutch	M 7	2.0	14.5

[1]) For tightening sequence refer to 5.1–2/2

[2]) Replace, contact surface oiled

[3]) Sealing ring outwards