

# DATA AND SPECIFICATIONS

Porsche Types 356 B/1600, 1600 S, 1600 S-90

Engine Type .....	1600	1600 S	1600 S-90
<b>Engine</b>			
Type .....	air-cooled four-stroke gasoline engine, integral unit with clutch, transmission and rear axle, and fitted at rear of vehicle		
No. of cylinders .....	4		
Cylinder arrangement .....	in pairs, horizontally opposed (flat four)		
Bore, mm (in.) .....	82,5 (3.25)	82,5 (3.25)	82,5 (3.25)
Stroke, mm (in.) .....	74,0 (2.91)	74,0 (2.91)	74,0 (2.91)
Displacement, c. c. (cu. in.) .....	1582 (96.5)	1582 (96.5)	1582 (96.5)
Compression ratio .....	7,5 : 1	8,5 : 1	9 : 1
Total weight (dry), kg, (lbs) approx. ....	110 (242,5)	110 (242,5)	110 (242,5)
Crankcase .....	light alloy, three-part		
Cylinders .....	Separate cylinders		
Cylinder material .....	grey cast	light alloy	light alloy
Cylinder liner .....	—	hard-chromed	Ferral liner
Cylinder head .....	one to each pair of cylinders, light alloy cylinder head		
Valve seat .....	shrunk in place		
Valve guide .....	shrunk in place, special bronze		
Spark plug seat .....	Heli-Coil insert		
Crankshaft .....	forged		
Crankshaft bearings .....	4 plain bearings		
No. 1, 3, and 4 main bearings .....	one-piece bearing bushings, light alloy		
No. 2 main bearing .....	light alloy shells		
No. 1, 2, and 3 main bearings .....			
No. 4 main bearing .....	split, three-layer bearings one-piece, light-alloy bearing bushing, lead-coated		
Connecting rods .....	forged-steel H-section shank		
Big-end bearings .....	three-layer bearings		
Small-end bearings .....	pressed-in bronze bushings		
Pistons .....	light alloy		
Piston rings .....	3 compression rings, 1 oil scraper ring		
Valve timing .....	2 compression rings, 1 oil scraper ring		
Camshaft .....	3 compression rings, 1 oil scraper ring		
Camshaft drive .....	1 camshaft mounted underneath crankshaft, operation through push rods and rocker arms cast, 3 plain bearings directly in crankcase		
Valve arrangement .....	2 helical spur gears		
Valve springs .....	OHV		
Valve clearance, adjust while engine is cold	1 coil spring for each valve		
intake mm (in.)	0,10 (.00394)	0,15 (.0059)	0,15 (.0059)
exhaust mm (in.)	0,15 (.0059)	0,10 (.00394)	0,10 (.00394)
<b>Valve timing with 1mm (0.040 in.) valve clearance</b>			
Intake opens before TDC	7°	17°	17°
Intake closes after BDC	45°	53°	53°
Exhaust opens before BDC	44°	50°	50°
Exhaust closes after TDC	6°	14°	14°