

Phil Hawksley's BM Bikes

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BMW R80/7 Specifications

Start of Production	1977
End of Production	1984
Numbers Produced	18,522
Price	7,990 DM



Engine

Motor Type	Four-stroke two cylinder horizontally opposed "Boxer" engine, air cooled
Bore x Stroke	84.8 x 70.6 mm (3.33 x 2.77 in)
Displacement	797.5 cc
Max Power	55 hp (40 KW) at 7,000 rpm or 50 hp (37 Kw) at 7,250 rpm
Max Torque	64 Nm / 47 ft lb at 5,500 rpm or 58 Nm / 42 ft lb at 5,500 rpm
Compression Ratio	9.2 : 1 or 8.2 : 1
Valves Per Cylinder	2
Valve Control	OHV, using push rod and rocker arm
Carburation System	2 constant depression carburetors, Bing 64/32/201 - 64/32/202
Engine Lubricating System	Wet sump

Power Transmission

Clutch	Dry single plate, with diaphragm spring
Number of Gears	5
Gear Selection	Dog type gearbox (ratchet foot lever)
Gearbox Ratios	4.4 / 2.86 / 2.07 / 1.67 / 1.50 (optional sport version: 3.38 / 2.43 / 1.93 / 1.67 / 1.50)
Rear Wheel Ratio	1 : 3.20 or 1 : 3.36
Bevel/Crownwheel	10 / 32 or 11 / 37 teeth

Electrical System

Ignition System	Battery ignition. From 1981 model: Contact free electronic ignition
Alternator	Bosch 12 V/280 W
Starter	Bosch 0.7 Kw
Spark Plugs	Bosch W 175 T 30 / Beru 175/14/3 A / Champion N10Y

Chassis

Type of Frame	Double loop tubular frame with bolt on rear section
Front wheel suspension	Telescopic fork with hydraulic shock absorber
Rear wheel suspension	Long swinging arm with adjustable strut
Spring Travel Front/Rear	200 / 125 mm (7.87 x 4.92 in)
Wheel Rims, Front	1.85 B 19
Wheel Rims, Rear	2.50 B 18
Tyres, Front	3.25 H 19
Tyres, Rear	4.00 H 18
Brakes, Front	Dual disc brake 260 mm / 10.23 in diameter. ATE 1 piston caliper
Brakes, Rear	Simplex drum brake 200 mm / 7.87 in diameter

Dimensions/Weights

Length x Width x Height	2180 (from 1978: 2210) x 746 x 1080 mm (85.82 (87.00) x 29.37 x 42.51 in)
Wheel Base	1465 mm / 57.67 in
Fuel Tank Capacity	24 litres / 5.27 gal / 6.34 gal US
Unladen Weight with Full Tank	215 Kg / 473 lb
Max. Permissible Weight	398 Kg / 876 lb
Ground Clearance	165 mm / 6.49 in
Seat Height (Unladen)	810 mm (31.9 inches)
Fuel Consumption	4.75 litres or 5.0 litres/100Km (at constant 90 Kph) / 59 mpg / 47 mpg US or 56 mpg / 47 mpg US
Top Speed	180 Kph / 111 mph or 170 Kph / 105 mph
Acceleration 0 - 100 Kph / 62 mph	5.9 seconds or 6.4 seconds