

Phil Hawksley's BM Bikes

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BMW R45 Specifications

Start of Production	1978
End of Production	1985
Numbers Produced	28,158
Price	5,880 DM



Engine

Motor Type	Four-stroke two cylinder horizontally opposed "Boxer" engine, air cooled
Bore x Stroke	70 x 61.5 mm / 2.75 x 2.42 in
Displacement	473.4 cc
Max Power	35 hp (26 Kw) at 7,250 rpm or 27 hp (20 Kw) at 6,500 rpm
Max Torque	37.5 Nm at 5,500 rpm or 31.3 Nm at 5000 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 64/28/303 - 64/28/304 or 64/26/303 - 64/326304
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 : 1
Rear Wheel Ratio	1: 3.89 or 1 : 4.25
Bevel/Crownwheel	9 / 35 teeth or 8 / 34 teeth

Electrical System

Ignition System	Battery ignition. From 1981 model: Contact free electronic ignition
Alternator	Bosch 280 W
Starter	Bosch 0.7 Kw
Spark Plugs	Bosch W 5 D / Beru 14-5D / Champion N 6 Y or Bosch W 7 D / Beru 14-7D /

Champion N 10 Y

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	175 / 110 mm
Wheel Rims, Front	1.85 B 18
Wheel Rims, Rear	2.50 B 18
Tyres, Front	3.25 S 18
Tyres, Rear	4.00 S 18
Brakes, Front	Single disc brake 260 mm / 10.23 in diameter. ATE 2 piston caliper to 1979. 1979 on models Brembo 2 piston caliper
Brakes, Rear	Simplex drum brake 200 mm / 7.87 in diameter

Dimensions/Weights

Length x Width x Height	2110 x 688 x 1080 mm (83.07 x 27.08 x 42.51 in)
Wheel Base	1390 mm / 54.72 in to 1980. 1981 on 1400 mm / 55.11 in
Fuel Tank Capacity	22 litres / 4.83 gal / 5.81 gal US
Unladen Weight with Full Tank	205 Kg / 451 lb
Max. Permissible Weight	398 Kg / 876 lb
Ground Clearance	130 mm / 5.11 in
Seat Height (Unladen) Up to 1980	770 mm (30.3 inches)
Seat Height (Unladen) 1981 On	810 mm (31.9 inches)
Fuel Consumption	5.5 litres/ or 5.0 litres per 100 Km (at constant 90 Kph) /51 mpg / 42 mpg US or 56 mpg / 47 mpg US
Top Speed	160 Kph 100 mph or 145 Kph / 90 mph
Acceleration 0 - 100 Kph / 62 mph	7.4 seconds or 8.5 seconds