

# Phil Hawksley's BM Bikes

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## BMW R100GS Specifications

|                            |                  |
|----------------------------|------------------|
| <b>Start of Production</b> | <b>1986</b>      |
| <b>End of Production</b>   | <b>1996</b>      |
| <b>Numbers Produced</b>    | <b>34,007</b>    |
| <b>Price</b>               | <b>12,990 DM</b> |



### Engine

|                           |                                                                          |
|---------------------------|--------------------------------------------------------------------------|
| Motor Type                | Four-stroke two cylinder horizontally opposed "Boxer" engine, air cooled |
| Bore x Stroke             | 94 x 70.6 mm (3.70 x 2.78 in)                                            |
| Displacement              | 980 cc                                                                   |
| Max Power                 | 60 hp (44 KW) at 6,500 rpm                                               |
| Max Torque                | 76 Nm at 3,750 rpm                                                       |
| Compression Ratio         | 8.5 : 1                                                                  |
| Valves Per Cylinder       | 2                                                                        |
| Valve Control             | OHV, using push rod and rocker arm                                       |
| Carburation System        | 2 constant depression carburetors, Bing 94/40/123 - 94/40/124            |
| 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 : 3.09                                |
| Bevel/Crownwheel | 11 / 34 teeth                           |

### Electrical System

|                 |                                            |
|-----------------|--------------------------------------------|
| Ignition System | Contact free electronic ignition (Bosch)   |
| Alternator      | Bosch 280 W                                |
| Starter         | Bosch 0.7 Kw                               |
| Spark Plugs     | Bosch W 7 DC / Beru 14-7DU / Champion N9YC |

### Chassis

|               |                                             |
|---------------|---------------------------------------------|
| Type of Frame | Double loop tubular frame with bolt on rear |
|---------------|---------------------------------------------|

|                                       |                                                                                        |
|---------------------------------------|----------------------------------------------------------------------------------------|
| Front wheel suspension                | section<br>Telescopic fork with hydraulic shock absorber                               |
| Rear wheel suspension                 | BMW Paralever swinging arm                                                             |
| Spring Travel Front/Rear              | 225 / 180 mm (8.85 / 7.08 in)                                                          |
| Wheel Rims, Front                     | 1.85 - 21 MTH 2                                                                        |
| Wheel Rims, Rear                      | 2.50 - 17 MTH 2                                                                        |
| Tyres, Front                          | 90/90 21 T                                                                             |
| Tyres, Rear                           | 130/80 17 T                                                                            |
| Brakes, Front                         | Single disc brake 285 mm / 11.22 in diameter. Brembo 2 piston caliper                  |
| Brakes, Rear                          | Simplex drum brake 200 mm / 7.87 in diameter                                           |
| <b>Dimensions/Weights</b>             |                                                                                        |
| Length x Width x Height               | 2290 x 1000 x 1165 mm (90.15 x 39.37 x 45.86 in)                                       |
| Wheel Base                            | 1514 mm / 59.60 in                                                                     |
| Fuel Tank Capacity                    | 24 litres / 5.27 gal / 6.34 gal US (Paris - Dakar: 35 litres / 8.07 gal / 9.24 gal US) |
| Unladen Weight with Full Tank         | 210 Kg / 462 lb (Paris - Dakar: 236 Kg / 519 lb)                                       |
| Max. Permissible Weight               | 420 Kg / 925 lb                                                                        |
| Ground Clearance                      | 200 mm / 7.87 in                                                                       |
| Seat Height (Unladen)                 | 850 mm (33.5 inches)                                                                   |
| Fuel Consumption (at constant 90 Kph) | 4.9 litres 100 Km / 57 mpg / 48 mpg US                                                 |
| Top Speed                             | 181 Kph / 112 mph (Paris - Dakar 180 Kph / 111 mph)                                    |
| Acceleration 0 - 100 Kph / 62 mph     | 4.8 seconds                                                                            |