

BMW 2009 G650 GS Review

GSTREET SHUFFLE

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PHOTOGRAPHY BY JONATHAN BECK & STEPHEN BURNS



The BMW model shuffle is starting to make sense now. F bikes became parallel twins. G bikes are singles. BMW Germany put the F650GS to rest in 2007 and planned never to bring it back. A few months later, BMW North America realized the need for this bike in the US market and pressured BMW Germany for its resurrection. Other countries are already requesting the top selling motorcycle. After eight years in production, the F650GS and Dakar sold 105,800 units; one of the best-selling BMWs of all time. That success is often attributed to the bike's appeal to first timers, riders coming back to the sport after an absence and riders switching brands.

Available in black and red, the G650GS is competitively priced at \$7,670 plus \$495 freight, and comes standard with ABS and

heated grips. The bike acts as a gateway drug, and a high percentage of 650 riders buy another, larger BMW within 18 months of initial purchase. There are currently no plans to bring back the Dakar model since they believe the new F650GS and F800GS models fill that spot.

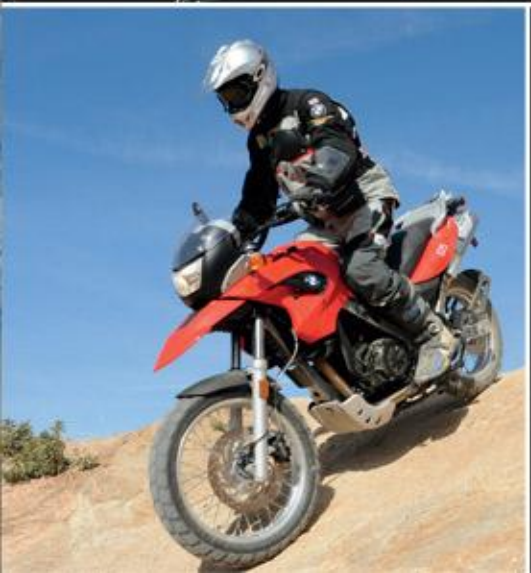
ENGINE

The updated engine is based on the old Rotax design, but is now manufactured by Loncin in China. BMW assures that the engine meets the same strict standards that all BMWs meet. According to Roy Oliemuller, Communications Manager for BMW North America, having the engine manufactured in China saves about \$1,000 in costs. However, the remainder of the chassis is assembled in Berlin. While riding I noticed the engine to be a bit more responsive and refined, with three more

horses over the old engine. It also feels smoother than the 2003 F650GS I have ridden. The 652 cc liquid cooled, single cylinder engine features dual overhead camshafts, 4 valves per cylinder and dry sump lubrication. A dip stick replaces the previous oil sight glass on the upper oil carrier. The new look of the matte black engine emphasizes an output of 53 horsepower at 7,000 rpm and a maximum torque of 44 lb/ft at 5,250 rpm. I spent most of the day in the 5,000 to 7,000 rpm powerband and on a few occasions hit the 7,500 rpm rev limiter.

GEARBOX

The transmission on the G650 GS is a constant mesh design with 5 gears. The gearbox is fully integrated into the crankcase with a multi-disc clutch in an oil bath. The final drive



LEFT:
THE NEW F650GS IS
SUITABLE FOR ON AND
OFF-ROAD RIDING.

ABOVE LEFT:
THE ATTRACTIVE NEW
CONTROLS ARE EASY
TO READ.

BELOW LEFT:
AS WITH ANY GS, THIS BIKE
LOVES TO BE OFF ROAD.

RIGHT:
A SNAIL'S EYE VIEW OF THE
EXCITEMENT THAT IS
THE NEW F650GS.



is an endless O-ring chain complimented with shock dampening in the rear wheel hub.

WHEELS AND BRAKES

The 19-inch wire spoke front wheel is held in position by a telescopic fork featuring a 41 mm fixed tube with 6.7" spring travel for increased off-road capability. For added stability, an additional stabilizer reinforces the two fork elements, ensuring optimum rigidity for off-road riding. The 17" rear wheel runs on a dual arm box-type swing arm made of steel. To provide the necessary progression in damping forces, the central spring strut is connected by a lever system on the lower fastening point with the rear wheel swing arm. The spring strut features 6.5" of travel and may be adjusted for pre-load and rebound damping. Spring preload is set hydraulically by hand with an easily accessible adjustment wheel; rebound damping is adjusted by a slotted screw. The G650GS brakes feature a single rotor (11.8" - 300 mm) with a two piston floating caliper in the front and a single rotor (10.4" - 265 mm)

with a single piston floating caliper in the rear, both with sintered metal brake pads.

NEW GENERATION ABS

BMW has updated their ABS with the current F and G bike system. The new ABS system is 3 pounds lighter and more compact. The inlet valves are now controlled via analogue inputs versus digital. This new technology allows ABS to maintain a precise level of brake pressure by continuously controlling the inlet valves versus being either on or off with digital. I experienced smoother operation and less pulsation of the front brake lever and foot brake pedal whenever the ABS was activated. The anti-lock braking system can also be deactivated for off-road riding and a red flashing light informs the rider that ABS has been disengaged.

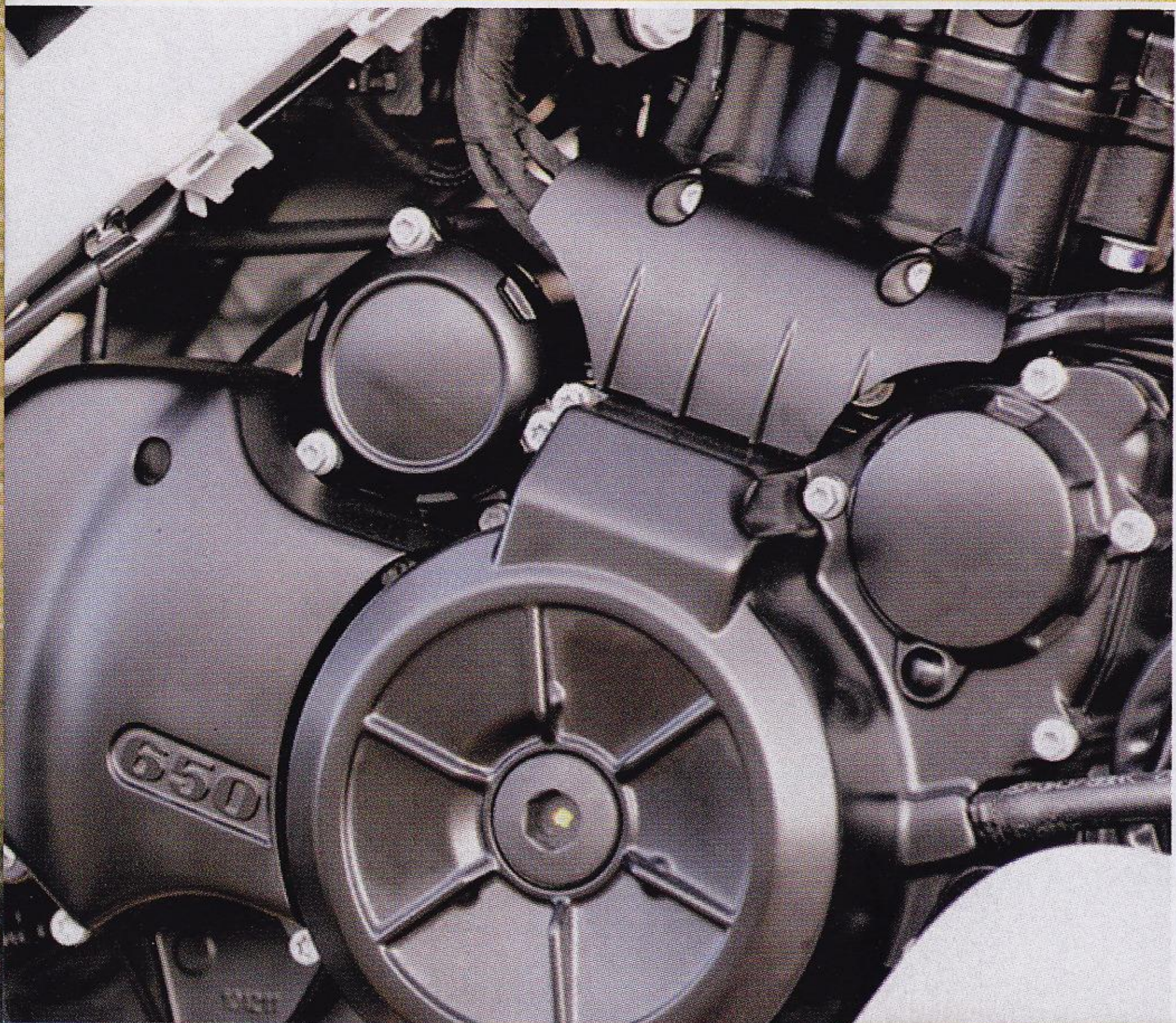
SEAT HEIGHT

With the standard seat height measuring 30.7", the G650 GS is comfortably low for a motorcycle of its kind. Additionally, a low suspension option is available for \$175

reducing seat height from 30.7" to 29.5". This reduction in height is achieved by modifying the suspension with revised shock and fork to maintain original riding dynamics with a shorter center and side stand. At 6'1" tall, I'm a bit big for this bike and the seat pushed me forward into the faux gas tank. After 200 miles of riding in the San Diego area my knees were quite sore. Riders of smaller stature in the group fit perfectly on the bike and had no complaints about comfort.

Owners will benefit from a wide availability of compatible accessories from the previous F650 GS model, both OEM and aftermarket.

Overall, the new G650GS handles well and is nimble and easy to maneuver even in tight parking lot turns. The seat is the lowest in this class, which will appeal to many riders. It offers off-road capabilities, yet suits just fine as a daily commuter. This affordably priced GS will be sure to give riders a bang for their buck and put a smile on their face at the same time. ☺



LEFT:

THE NEW LOOK OF THE MATTE BLACK ENGINE WILL APPEAL TO MANY RIDERS.

ABOVE LEFT:

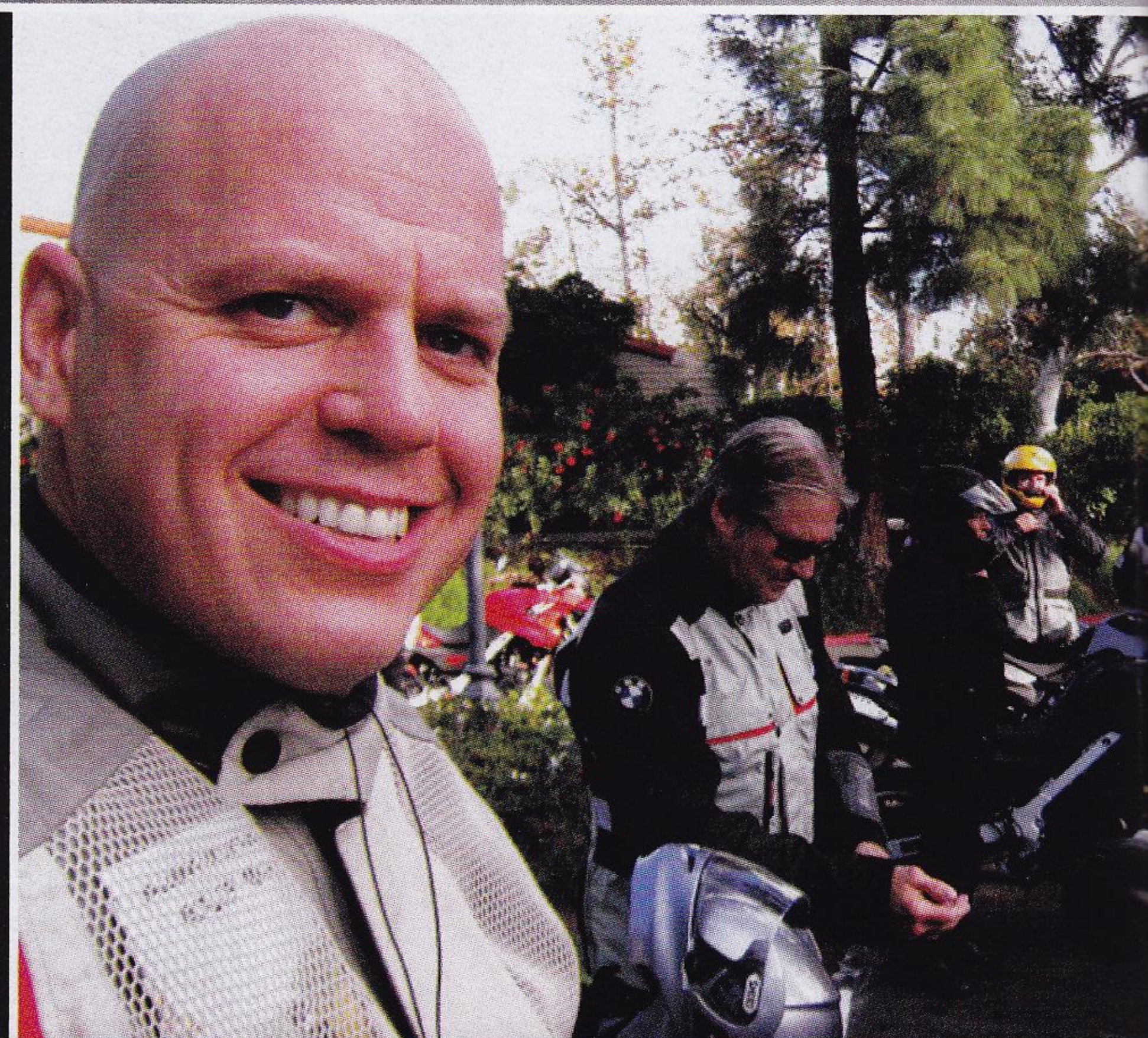
SUCH AN EXCITING BIKE DESERVES THE SPOTLIGHT.

ABOVE RIGHT:

I SPENT MOST OF THE DAY IN THE 5,000 TO 7,000 RPM RANGE.

RIGHT:

THE AUTHOR TAKES A BREAK FROM RIDING IN THE CALIFORNIA SUNSHINE.



SPECIFICATIONS

2009 BMW G 650 GS

ENGINE

Type	Water cooled single cylinder 4 stroke
Bore x Stroke	100mm x 83mm
Displacement	652 cc
Horsepower	53 bhp @ 7000 rpm
Torque	44 lb/ft @ 5250 rpm
Compression Ratio	11.5 :1
Valve Gear	DOHC, chain-driven with bucket tappets
Valves	2 x 36mm intake / 2 x 31mm exhaust
Valves/Cylinders	4
Engine Oil Capacity	2.4 quarts
Engine Management	BMW Motor Controller (BMS-C II)
Emission Control	Closed loop 3 way catalytic converter
Fuel Requirement	Premium Unleaded
Fuel Tank	HDPE, internal pump and internal filter
Fuel Capacity	4.0 US gallons including 1.0 gallon reserve
Charging System	400 watts @ 14 volts
Battery	12 volts 12 amps/hour
Cooling System	50/50 water/anti-freeze mix, single radiator

DRIVETRAIN

Primary Drive	1.94
Clutch	Wet multi plate
1st Gear Ratio	2.75
2nd Gear Ratio	1.31
3rd Gear Ratio	1.38
4th Gear Ratio	1.05
5th Gear Ratio	0.84
6th Gear Ratio	N/A
Final Drive System	Chain
Final Drive Ratio	2.93

FRAME & SUSPENSION

Frame and Suspension	Bridge type with bolted on rear subframe
Front Suspension	41mm telescopic fork
Front Travel	6.7 inches
Rear Suspension	Monoshock with progressive linkage
Rear Travel	6.5 inches

BRAKES

Brake System	Single front disc with ABS
ABS	BMW Motorrad ABS (can be switched off)
Front Brakes	One 2 piston floating caliper
Front Rotor	11.8 inch fixed rotor
Rear Brake	One single piston floating caliper
Rear Rotor	9.5 inch fixed rotor
Actuation Method	Hydraulic, DOT 4 Fluid

WHEELS & TIRES

Front Wheel	2.50 x 19 wire spoked
Rear Wheel	3.00 x 17 wire spoked
Front Tire	100/90 x 19 tube type
Rear Tire	130/80 x 17 tube type

DIMENSIONS

Overall Length	85.6 inches
Overall Width	35.8 inches
Wheelbase	58.2 inches
Ground Clearance	5.1 inches
Seat Height	30.7 inches
Steering Angle	60.8 degrees
Front Wheel Trail	4.5 inches
Weight - Dry	387 lbs excluding options and accessories
Weight - Wet	423 lbs excluding options and accessories
Maximum Load	837 lbs GVWR
Payload	414 lbs (with standard equipment)

STANDARD COLORS

Code	Price	Description
715	N/C	Deep Black
761	N/C	Red

STANDARD EQUIPMENT

Code	Price	Description
519	N/C	Heated Grips
524	N/C	ABS

AVAILABLE EQUIPMENT

Code	Price	Description
499	\$175	29.5 inch Low Suspension
636	\$150	Center Stand

*Actual Price determined by dealer. Price excludes taxes, license, options and handling charge. Prices and specifications subject to change without notice.