

# THE BMW R1100GS

# Page 1

# Background

# The 1994-?? R1100GS

# **The Oilheads**



A new generation of boxers first appeared in 1993 with the R1100RS. Everything changed including the engine which featured oil as well as air cooling. Although previous models also had both air and oil cooling they are called **airheads**. The new generation relies more on oil cooling and has smaller cylinder fins. For this reason these new generation boxers are often referred to as **oilheads**.

The oilheads introduced new high-tech features including:

- four-valve cylinder heads (engine type 259)
- fuel injection and engine management
- <u>telelever</u> front end.

They also had refinements to previously incorporated features e.g.

- single-sided paralever (shaft drive) rear end
- ABS II brakes.

# **Telelever and Paralever**



The oilheads (except the R1100S) have no real frame but use the engine and gearbox as stressed members. At the front they feature Telelever suspension and at the rear paralever. Click the image on the left of the very similar R11RS to see it enlarged.

Telelever is BMW's very successful patented front suspension. It separates steering and braking forces and virtually eliminates "brake dive". You have to look closely to see that it is not conventional telescopic forks. Pivoting on the front of the engine is a triangular subframe. This is attached to the steering and front suspension (single shock absorber). Take a look at the <u>telelever drawing</u> of an R1100RS.

The rear suspension uses <u>paralever as on previous models</u> but with the shock centrally mounted between the rear wheel and the engine. Bolted on to (and pivoting on) the gearbox is a rear subframe which attaches to the rear suspension and seat assembly. The rear wheel remains fixed by 4 lugnuts.

# R1100GS

The R11GS was the second oilhead, launched in 1994. It:

- is a fine all rounder able to ride twisties or tour all day
- has superb on-road handling
- has its own unique looks (some say they are weird, others that they are an acquired taste)
- has a torquey engine
- has a comfortable upright riding position which gives a commanding view ahead
- is heavy but well balanced and maneuverable
- is great solo or two up
- is not only fun but also practical
- has variable rider's seat height 33.1 or 33.9 inches (840 or 860mm)
- has a removable rear seat which exposes the complete rack underneath
- has offroad ability
- is a BMW so is <u>quirky</u> (ie has real character but is sometimes annoying)
- is capable of <u>high mileages</u>.

The features that distinguish the R11GS from other oilheads are:

- retuned engine (more mid-range punch)
- <u>spoked wheels</u> (with patented cross-spoke design to allow tubeless tires)
- <u>dual-purpose tires (although road-biased)</u>

- bash plate
- adjustable small windshield (transparent in US, smoke everywhere else)
- rack under the (removable) rear seat
- black plastic inner mudguards (front and rear)
- wide rotatable handlebars
- switchable ABS

#### [Beam me up Scotty!]

# **Specifications**

Engine	
Type: Displacement: Bore x stroke: Cylinder head: Crankcase: Crankshaft: Lubrication:	Horizontally opposed twin with four valves per cylinder 1085 cm <sup>3</sup> 99mm x 70.5mm (3.9 x 2.8 inches) Chain driven high cam/pushrod, screw gapping One piece aluminum casting, separate gearbox One piece forged steel, two plain main bearings, split shell big ends Wet sump, high pressure, cartridge filter, oil cooler, splash feed gearbox
Power: Torque: Red line: Rev limiter: Compression: Cooling: Engine management: Catalyst:	80 bhp (60 kW) DIN at 6750 rpm 71.6 lb.ft (97 Nm) at 5250 rpm 7500 rpm 8000 rpm 10.3:1 Air and oil Bosch Motronic 2.2 with fuel cutoff when coasting Standard or optional (depending on country)

# Transmission

Gearbox:	5 speeds • First 4.16 • Second 2.91 • Third 2.13 • Fourth 1.74 • Top 1.45
Clutch: Drive: Final drive: Final drive ratio:	180mm dry single plate with diaphram spring Enclosed shaft with two universal joints and integral torsional damper Spiral bevel gears 3.0:1 (33:11) Electrics
Battery: Alternator: Charging system: Headlamp:	12V, 19Amp/h 700W 14 V, 50 Amp Single H4 55/60W quartz bulb <b>Dimensions</b>
Capacity: <u>metal tank</u> <u>plastic tank</u> Capacity when warning light illuminates: Fuel:	<ul> <li>6.3 US gallons (24 liters/5.3 Imp gallons)</li> <li>6.6 US gallons (25 liters/5.5 Imp gallons)</li> <li>1.2 US gallons (4.7 liters/1 Imp gallon)</li> <li>95 ROZ (85 MOZ)</li> </ul>
Length: Overall Width: Wheelbase (unladen): pre-96 96 onwards Ground Clearance (unladen):	85.4 inches (2189mm) 35.9 inches (920mm) (over mirrors) 59 inches (1499mm) 59.4 inches (1509mm) 7.8 inches (200mm)
Weight distribution: Unladen weight (dry):	50:50 495lb (225kg) 536lb (243kg)
Unladen weight (wet): Gross weight limit:	992lb (442kg)

Frame:	Three piece (front and rear sections with load- bearing engine)
	Suspension
	BMW Telelever
	Single gas-filled shock absorber with progressive
Front:	coil spring
	7.5 inches (190mm) travel Preload adjustment (five steps)
	BMW Paralever (single-sided swinging arm)
	Single gas-filled shock absorber with coil spring 7.9 inches (200mm) travel
Rear:	Preload adjustment (continuously adjustable by
	handwheel)
	Rebound damping (continuously adjustable by
	screw)
	Brakes
	Resistant to fading in wet
Brake pads:	FAG ABSII - standard or optional (depending on
ABS:	country) with ability to turn off for offroad usage
	Twin 12 inch (305mm) floating discs
Front brakes:	Twin four-piston Brembo calipers with angular
	pad wear compensation
Rear brakes:	Single 10.9 inch (200mm) disc
Real blakes.	Single two-piston Bremo floating caliper
	Tires and wheels
Front wheel	2.5 x 19 inch patented cross spoke
Front <u>tire</u> :	110/80-19 (tubeless)
Rear <u>wheel</u> :	4 x 17 inch patented cross spoke

# **Ergonomic adjustments**

- Front cowling: continuously adjustable within 13 degrees
- Front brake lever: four positions adjusted by handwheel
- Handlebar: adjustable for angle

• Height of rider's seat: two positions 33.1 or 33.9 inches (840 or 860mm)

# **Standard fittings \***

- main and side stands
- bash plate
- black plastic cylinder protectors
- hazard flashers
- warning lights for:
  - o low fuel
  - o high beam
  - o low oil pressure
  - o low battery voltage
  - o right indicator
  - o left indicator
  - ABS (if fitted)
- electrical output socket (fused)
- removable passenger seat
- helmet lock
- toolkit including puncture repair outfit
- lockable tool compartment under passenger seat
- removable grab rail

#### [Beam me up Scotty!]

# Performance

#### Performance

121mph (195km/h) 114mph (184km/h)

Top speed (solo):
Top speed (two up):
50-74mph in third (80-120kph):
50-74mph in fourth (80-120kph):
50-74mph in fifth (80-120kph):
37-87mph in fifth (60-140kph):

# **Fuel consumption**

Constant 56mph (90km/h):	51 US mpg (61.3 Imperial mpg/4.6 l/100km)
Constant 75mph (120km/h):	39.8 US mpg (47.8 Imperial mpg/5.9 l/100km)

2.9 s 3.8 s 5.2 s 10.4 s



#### [Beam me up Scotty!]

# **R850 GS**

For model year 1999 BMW released its GS model fitted with the 850cc engine.

This was mainly to address the needs of novice riders in Europe. Restrictors can be fitted to limit power to the new European limit for some novices of 33bhp. However, some of those who have ridden the 850cc GS prefer its smoother, freer-reving engine.

Visually the R850GS is distinguishable from the R11GS only by the tank decals. The official specs and performance for the full-power 850cc and 1100cc bikes are identical (including weight) except for:

	Specification	
Capacity: Bore/stroke: Power: Torque: Final drive ratio:	848 cm <sup>3</sup> (11GS - 1085 cm <sup>3</sup> ) 87.5mm x 70.5mm (11GS - 99mm x 70.5mm) 70 bhp @ 7,500rpm (11GS - 80 at 6,750) 77Nm @ 5,000rpm (11GS - 97 @ 5,250) 3.2:1 (11GS - 3.0:1)	
Top speed (solo):	Performance           185kph (11GS - 195kph)	
Fuel consumption:	5.71/100km @ 120kph (11GS - 5.9)	

#### [Beam me up Scotty!]

# **BMW Accessories**



The image on the left shows an R11GS fitted with many of the BMW accessories. Click on it to see the bigger picture. (Note that what is an accessory and what is a standard feature varies from country to country).

The following order came from the **Owner Survey**, favorite first.

- 1. Heated handlebar grips
- 2. <u>Black plastic saddlebags</u>, 25 liters on exhaust side, 31 on other side (1)
- 3. ABS (2)
- 4. <u>Multivario tank bag</u>, up to 27 liters (1)
- 5. Black plastic hand guards
- 6. Rider's Information Display (RID) (2)
  - comprising four digital displays:
    - o clock
    - o gear indicator
    - o oil temperature
    - o fuel level
- 7. Topcase, as K-series, 35 liters (1)
- 8. Catalyst
- 9. Metal engine bars (3).
- 10. Foam grips
- 11. BMW alarm (4)

#### Notes:

- 1. For further details of luggage and some alternatives see customizing, luggage.
- 2. ABS and RID are extremely popular most owners have them. However in the survey they were treated as features not accessories.
- BMW engine bars must be removed to change the oil and filter! However they do not use the potentially weak area around the footpegs like a few <u>aftermarket</u> <u>alternatives</u>. (Some of which have to be removed to check the valve clearances).
- 4. The BMW alarm was withdrawn for unspecified technical reasons during model year 97. It could be a coincidence but the few owners that had them reported several problems.
- 5. The survey also has a list of least favorite accessories. Some accessories score quite highly on both the lists! For example for some owners BMW saddlebags are neat and good looking while others find them small and odd-shaped internally.

[Beam me up Scotty!]

# Model History

BMW slowly evolves models during their life, the R11GS is no exception. Some of the major changes are listed by model year.(1)

# The first bikes

appeared at the beginning of 1994 available in:





Marakesh red

Avus black



Alpine white

and had yellow seats (with black as an optional alternative).

There is also a no cost **black option** - black front wishbone and engine covers. The <u>red</u> model has the black option, the others do not. Look under the tank for the black suspension strut and black engine (except cylinders). The picture of a 97 model offroad (by coincidence also red) shows the <u>black option</u>.

# **Changes during model year 94**

- lower black front mudguard extended
- new cylinder head gasket (to stop leaks)
- smaller cut-down bash plate
- some changes to the oil system (supposedly to make oil run back to sump faster when the engine is turned off so checking oil level is easier)
- new maintenance-free poly V (alternator) belt with increased service life
- after VIN number 311168 improved transmission fitted
- recall to fix problems found when riding offroad aggressively:
  - 1. Apply a stronger adhesive to the right-hand bearing pin in the swingarm
  - 2. Replace the lower flange nut on the front strut with one that self-tightens

# Changes during model year 95

- front suspension geometry revised; wheelbase increased 10mm (to stop ABS cutting in early)
- original Akront chrome plated wheels changed to polished (but not lacquered) aluminum made by another supplier
- low friction throttle cable with smoother action (especially at small openings)

# Changes during model year 96





#### Avus black



- white color bikes replaced by Kalahari yellow
- original white/yellow tank decals replaced by black on red and yellow color tank and red on black color tanks
- seat color changed from yellow to black with black color bikes having red seats (with option of black)
- plastic fuel tank replaced by metal due to problems with mountings and tank decals. Shape and size slightly altered (official capacity down from 25 to 24 liters)
- rear subframe attached to gearbox and its bolts beefed up (supposedly to stop frame breaking in extreme off road conditions)
- quieter 80db exhaust
- inlet and exhaust valves reduced by 2mm and stems by 1mm (to reduce surging or increase low end grunt?). No change in published performance specs.

# Changes during model year 97

- revised gearbox
- simplified throttle and choke cable arrangement (only two cables connected to throttle body)
- final drive housing breather bore increased

Also a new oil control valve installed from black engine number 41956271 and silver engine number 41959303. It was an attempt to make oil level more consistent but at best only a partial success. Best advice to put on sidestand immediately after engine switch off and leave overnight before checking still applies to all R11GS models.

# **Changes during model year 98**

- revised tank decals
  - new sidestand with larger foot
  - improved sidestand switch
  - aluminum wheels are now anodized
  - revised piston design to reduce oil consumption

# 1998: The 75th anniversary edition



To mark the 75th anniversary of the first BMW bike, the R32, limited editions are available of all oilheads.

As you can see from the picture, (click on it to see a bigger version) the R11GS 75th Anniversary model is Marakesh red with Alpine white stripes. Included in the price were:

- ABS
- Heated handlebar grips
- Bags rack
- a "sumptuous" Anniversary folder containing:
  - o an authenticity certificate
  - a valuable photo album of the BMW bike story (with pictures of the
    - Anniversary-model and a place for a photo of the owner's actual bike)
  - o a leather key-holder
  - o a "75 years" pin

# Changes during model year 99



- R850GS launched. Very few changes in <u>official specifications</u> from the R11GS.
- In Europe colors red, black and Kalahari yellow.
- In US, Kalahari yellow replaced by <u>white (as image on left)</u>.
- Final limited production two tone paint job available at extra cost <u>silver</u> <u>metallic/Dakar yellow</u> (as image on left).
- New tank decals.
- Gearbox revised (again).
- ABS II updated to reduce initialization problems especially in cold weather.
- Front right brake caliper fitted with black allen headed bleed nipple. (It is part of the pressure bleed system used at the factory to pressure fill the

brake system from the bottom. Dealers are supposed to remove it and install the standard bleeder. If not, see your dealer.)

In August 1999 the final R11GS rolled off the production line in Spandau, Berlin. It had been the most successful model of the GS models with 39,104 examples produced since September 1993. The R850GS continued unchanged.

# R1150GS

In September 1999 (i.e. the start of Production year 2000) the <u>R1150GS</u> began its production run. It is a major revision of the R11GS and features the following differences.

- Engine revised including:
  - bore increased from 99 to 101mm with same 70.5mm stroke raises capacity 45cm<sup>3</sup> to 1130cm<sup>3</sup>
  - new magnesium head covers
  - Motronic 2.4 engine management
  - $_{\odot}$  5bhp more power and flatter torque curve.
- New slicker-shifting 6 speed gearbox from R11S
- (1st higher, 3rd-6th closer and 6th (aka "E" for Economy) is an overdrive).

Gear	Speed at 1,000rpm	
	<b>R1100GS</b>	<b>R1150GS</b>
1st	6.0 mph	6.9 mph
2nd	8.7 mph	8.9 mph
3rd	12.3 mph	11.1 mph
4th	15.3 mph	13.6 mph
5th	18.0 mph	15.7 mph
6th	-	20.3 mph

- Revised front end featuring:
  - o lighter Telelever with R11S style forks and improved shock absorber
  - twin asymmetric ("raised eyebrow") projector headlights (similar but different to the R11S)
  - larger oilcooler from the R11RT
  - redesigned upper front fender (2" shorter at front, 3/4" wider)
  - new wider and higher windshield (removeable) with flip-up top edge
  - new turn signal mounts that are more flexible so harder to damage and also easier to remove (can be retro fitted to the R11GS).

- o new black inner mudguard and bash plate.
- New handlebars/controls featuring:
  - 13mm wider handlebars
  - new switchgear from R11S with all controls handlebar mounted including ABS switch, flashers, heated grips and warm up lever (choke)
  - o instrument layout redesigned
  - hydraulic clutch (both clutch and brake reservoirs are very well integrated into the handlebars)
  - new hand guards attached to bars inboard and to bar ends outboard with good coverage and a strong backbone.
- Revised rear end featuring:
  - new exhaust pipe smaller, lighter better tucked in but still requires a cutout pannier
  - new gearbox mountings including altered bracing for the Paralever pivots on the side above the footpeg
  - o shorter, lighter paralever from R11S to deal with longer gearbox housing
  - o new foot peg mounts
  - o new longer gear shift lever.
- Smaller 14Ah battery and 600W alternator (R11GS 700W alternator available as cost option)
- Revised sidestand switch that allows you to start the engine in neutral with the sidestand down. It only kills engine if you shift into gear before raising the sidestand.
- Overall 13 lbs heavier.
- Price increased slightly.
- New colors: black, mandarin yellow, metallic silver.

The following parts are shared by the R1100GS and R1150GS and so are interchangeable:

- brakes
- wheels
- tank
- seat
- the rider and passenger foot pegs (but not the rider mounts)
- a lot of the the rear e.g. rack, bag mounts plate holder and black inner mudguard
- bags (all aftermarket R11GS bags e.g. Jesse, Givi are transferrable).

Impressions of R11GS owners when test riding the R1150GS:

- looks cooler
- a bit faster
- a bit better handling
- smoother engine

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- headlights significantly better
- much better shifting
- overdrive (6th or "E") is great for touring.

All in all, a nice evolution of the R11GS. You can jump off the old one and feel straight at home on the new one.

#### **Country variations**

All US 49 State R11GS have as standard both catalytic converter and carbon canister. They meet the strictest emissions guidelines BMW expect any time during the current engine's production life. This includes new regulations to come from California's Air Resources Board.

The specifications for other countries vary.

#### **Production Year Notes**

1. Production for the new model year starts after the annual works holiday in August. The production model year runs from September to August e.g. model year 98 runs from September 97 to August 98.

However there is always a delay between production and registration. So not all bikes registered during that period are from that model year. For example some 98 models were registered during October 98 which falls within model year 99.

2. Individual changes are sometimes introduced piecemeal during a model year. This means that a particular bike may not necessarily have all the changes listed for its model year.

3. An individual bike may have pieces from a following production year retro-fitted by a dealer or owner.

[Beam me up Scotty!]

# **Offroad Ability**

is:

The R11GS is not as agile offroad as previous GS models. Compared to them the R11GS

**CONs** 

**PROs** 

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- more powerful
- fitted with Telelever
- fitted with more durable shaft drive
- fitted with improved electrics
- better braked

- heavier
- fitted with a smaller (19 inch) front wheel
- more road-oriented
- more sophisticated
- more expensive

Also, the R11GS "frame" can break when used **very extensively and heavily** off-road. However, only a tiny number of failures have occurred, mostly in Australia. For more information, see <u>Frame reinforcing kit</u> and also <u>David Loone's R1100GS page</u>. However, don't get too worried, in the unlikely event that you do break your frame BMW will replace it.



Despite this, the R11GS retains real offroad ability. Many owners take their R11GSs way offroad without problems and really enjoy doing so.

The ABS fitted to the R11GS can be switched off when offroad. However on certain surfaces some owners prefer to keep it on.

[Beam me up Scotty!]

# **Rivals**

# **BMW R1100RT**

An alternative bike many potential R11GS owners consider is the BMW R1100RT. They are mechanically very similar and both make excellent long-distance tourers solo or two up. S. Cary Littell Jr hosts the definitive <u>R1100RT webpage</u>.

Based on many posts from owners who own or have ridden both, here is a comparison of the two.

**R11GS the triathelete:** 

**R11RT the sports tourer:** 

<ol> <li>620lb (282kg) wet</li> <li>More expensive</li> <li>Softer suspension</li> <li>Better on long flat out straights</li> <li>Accelerates better above 100mph</li> <li>More powerful engine (more top end)</li> </ol>
<ol> <li>Longer range (more fuel efficient + tank 2l bigger)</li> <li>More relaxed when cruising (gearing)</li> <li>Quieter</li> <li>Seat height 780, 800 or 820mm</li> <li>Stock seat slightly more comfortable</li> <li>Passengers tend to prefer RT</li> <li>BMW saddlebags standard (2 x 311)</li> </ol>
<ol> <li>Large vibration free mirrors</li> <li>Easier to clean (panels)</li> <li>Wheels can warp (keeping correct tire pressure essential)</li> <li>Lane splitting difficult even without saddlebags (can't see corners)</li> <li>Better in cold weather (fairing and heating)</li> <li>Legs more restricted</li> <li>Wider footrests</li> </ol>
<ul> <li>Standard:</li> <li>Electric screen adjustable on move</li> <li>Fairing pocket</li> <li>Warm air diffuser from radiator</li> <li>Thermostat</li> <li>Radio option (stock not recommended)</li> </ul>

Some have suggested that an R11GS with large fairing (Aeroflow or Parabellum) is more fun and more flexible than an R11RT unless you just want to tour. The fairing can be easily removed for twisties and when going offroad.

#### **Other rivals**

There are several new rivals to the R11GS apart from the R1150GS and R1100RT. Here is a comparison of basic specs:

• BMW R1100GS

Fuel injected engine (1085cc air/oil-cooled boxer twin) with <u>telelever</u> and ABS. Claimed power: 80 PS (bhp) Dry weight: 209kg (460lb) Transmission: shaft Wheels: wire spokes



#### **Cagiva Grand Canyon**

Fuel injected detuned Ducati 900SS engine (904cc 90 degree air-cooled V twin) with modern styling. Claimed power: 72 PS (bhp) Dry weight: 193kg (425lb) Transmission: chain Wheels: wire spokes

- Honda Africa Twin
   742cc 52 degree V twin engine.
   Claimed power: 60 PS (bhp)
   Dry weight: 205kg (4511b)
   Transmission: chain
   Wheels: wire spokes
- Honda Varadero

Detuned Firestorm engine (996cc 90 degree V twin) in uprated Africa Twin frame. Claimed power: 94 PS (bhp) Dry weight: 220kg (484lb) Transmission: chain Wheels: three spoke alloys

Moto Guzzi Quota ES

Transversely mounted engine (1064cc 90 degree V twin). Claimed power: 68 PS (bhp) Dry weight: 245kg (540lb) Transmission: shaft Wheels: wire spokes

Triumph Tiger

Fuel injected engine (885cc triple) in a re-designed frame with new plastics and luggage options. Claimed power: 86 PS (bhp) Dry weight: 215kg (430lb) Transmission: chain Wheels: wire spokes

[Beam me up Scotty!]

Yamaha TDM850 849cc 10 valve parallel twin in Deltabox frame. Claimed power: 80 PS (bhp) Dry weight 201kg (442lb) Transmission: chain Wheels: three spoke alloys

# Magazine Articles

# American mags

- Cycle World Dec 93 p46 Introduction
- CA Bike June 94 p12 First ride
- Motorcycle Consumer News June 94 p7 First ride
- Motorcycle Consumer News Aug 94 p12 Comparison v Ducati E900 with dyno graphs
- RIDER Aug 94 p35 Test
- Cycle World Sept 94 p46 Test
- Street Bike vol 4 no 8 95 p40
   Best bike for the loneliest highway in the world? (R11GS v Highway 50)
   PIDEP Apr 05 p46
- RIDER Apr 95 p46 R11GS in Baja
- Motorcycle Consumer News Dec 95 p6 Long term Test - The Adventures of Conan the Bavarian
- Touring Rider 96 p14 Comparison v ZX-9R v GS500E v Royal Star v Electra Glide v ST1100
- RIDER Oct 96 p50
- More R11GS in Baja
- <u>Motorcycle Online</u>



- Comparison with Triumph Tiger on and offroad
- Motorcycle Consumer News Oct 98 p12 Comparison v Triumph Tiger.
- Streetbike <u>R11GS review</u>
- RIDER m/c August 99 Comparison v Tiger, both ridden through Death Valley.

# **English mags**

- BIKE June 94 p60
- Comparison v Tiger v Elefant
- BIKE Nov 96 p60
   Comparison v Honda Africa Twin v Triumph Tiger v Cagiva Elefant
- BIKE Jun 2000 R850GS test
- Performance Bikes Dec 94 p83
   Comparison v Africa Twin with dyno graphs
- SuperBike Sept 95 p30
   Comparison with Honda RC45, Triumph Speed Triple and Suzuki Bandit 1200
- SuperBike Jan 98 p38
- Comparison v Buell, Guzzi and Bandit 1200 with dyno graphs
- Motor Cycle International July 94 (110) p32 Test
- Motor Cycle International Apr 96 (131) Quick spin
- Back Street Heroes March 98 p84 Test - the gung-ho armchair
- Motorcycle News 21/6/95 Shootout - specs only
- Motorcycle News 6/4/94 Test
- Motorcycle News Oct 9 96 p12
- Comparison on and offroad with Elefant and Africa twin
- Motorcycle News 31/12/97
  - Used Bike buying guide R11GS
- RiDE Dec 98
  - Comparison v Monster 900 v Buell S1 Lightning v T509 Speed Triple
- RiDE May 99 Comparison of secondhand models y Tiger y Elefent 750 y Africa Ty
- Comparison of secondhand models v Tiger v Elefant 750 v Africa Twin
  RiDE Nov 99
  Comparison of secondhand models v ZX-7R v 900SS v CBR900RR
- RiDE Feb 2000
   R1100GS v R1150GS comparison
- BIKE Apr 99 Comparison v Tiger v Varadero v Cagiva Gran Canyon
- Motorcycle Sport & Leisure, May 99 Comparison v Honda Varadero

• Superbike July 99 John Deacon compares the R11GS with Varedero, Cagiva Gran Canyon and Tiger

#### **German mags**

• Touren-fahrer 11/12 98 p26 Comparison with Moto Guzzi Quota 1100 and Cagiva Gran Canyon • PS Nov 97 p8 Track and dyno test v Honda Blackbird v Kawasaki ZXR1100 • PS Oct 95 Comparison with Cagiva E900, Honda Africa Twin, Triumph Tiger • PS Apr 94 Test • PS Jun 94 • ENDURO Sept 98 Comparison with Moto Guzzi Quota 1100ES • ENDURO July 94 **Comparison with BMW R100GS** • Motorrad-fahre July 99 Comparison v Varadero v Tiger • Motorrad-Magazin July 99 Comparison v Varadero v Tiger • Motorrad 6 Mar 99 p12 Comparison v Tiger v Varedo • Touren-fahrer Feb 99 Comparison v Varadero • Touren-fahrer May 99 **Comparison v R850GS Awards**  Best Standard Bike 1994 Cycle World Oct 94 • Best Touring Bike 1995 **RIDER June 95** • Best two-up tourer



• Editor's choice for best bike of 1997 BIKE Dec 97 p83

• Secondhand Adventure Bikes - RiDE Best Buy RiDE May 99 p82

#### What the Press says

A few quotes from some of the above articles.

#### Image

- "BMWs have never been regarded as fun machines, but this one shatters the dull, Teutonic image"
- "the plushest, most beautifully finished trail bike ever"
- "build superb everything beautifully manufactured and put together"

#### Role

- "it's as much fun charging down country lanes as it is in and out of gaps in cities or cruising on motorways"
- "an accomplished tourer, passable trailbike and A-road scratcher par excellence"
- "it's about covering huge distances quickly in supreme comfort"
- "riding position is true armchair wide bars, wide and deeply padded seat"
- "450 miles in a day two up without trouble"
- "pillion and luggage make zero difference to comfort, handling or performance"

#### **Engine/Performance**

- "massive improvement on old two valve boxers faster, smoother and exciting"
- "quiet, low down, no messing pull"
- "crack the throttle open in first and it'll loop over backwards"
- "low down grunt is about as subtle as a smack in the face"
- "doesn't take much concentration, the ideal long-distance scratcher"

- "blisteringly fast from A to B"
- "maybe the fastest A to B bike ever"

#### **Steering/Handling**

- "steering is amazingly stable when cornering even on bumps"
- "handling is a gas. The harder I rode, the better she behaved. Yank the bars for a fast and late entry, lay her on her side, get on the gas."
- "try chicanes because feeling that huge bulk slew 90 degrees through the vertical within a couple of seconds has to be experienced to be believed"
- "leans to angles that are truly mad"
- "true sportsbike-stuffing capability"
- "out-cornered every FireBlade and Thunderace we came across" (ridden with passenger!)
- "can put up a respectable fight against a 916"

#### **Braking/Suspension**

- "ABS is excellent on road and suprisingly good on hard dirt roads"
- "huge fun slamming on (ABS II) brakes at 80mph, hearing a moment of tyre squeal then coming to a fast safe halt"
- "at the moment of wheel lock there is no more than a slight pulsing through the brake lever, unlike on the K-series (ABS I) which tend to leap into the air"
- "anti-dive Telelever works well with the GS's long travel suspension"
- "the wacky suspension means you never, ever have to slow down over bumps"
- "torque reaction from the Paralever shaft is barely noticeable"

#### **Summary**

- "the most underrated bike you can buy"
- "nobody else makes anything else like it"
- "I could spend years owning and enjoying this motorcycle"

#### **Closing Remarks**

- "overdid a roundabout, flew up a kerb at 50mph then yelped across a gravel drainage channel and an 18" deep grass ditch. Front suspension soaked up an accident that would have cartwheeled any other bike. ABS stopped me on grass without a lockup."
- "utterly brilliant"

# What Owners Say

The following are stories from owners that have appeared on the BMW-GS email list. (Some of the stories have been edited down.)

# Story 1

The R11GS is just so completely different from my previous Japanese road rockets that it takes time to adapt and appreciate it. The local BMW dealer understood this so he gave me an extended test ride.

Immediately I liked the comfortable upright riding position and the view you get ahead. I did not like its looks nor its weight and the indicator switches were a disaster. Riding it through town and then out onto the highway was easy but it somehow felt odd. Those wide bars, cylinders sticking out below you and some funny noises. Like nothing I've been used to.

When I got home at the end of the day I sat down and thought about it. "Yeah its not bad, I like it now more than I did before riding it. But still there's no way I can buy one. It's just too, well, weird."

Next day I hit the twisties. Wow, this bike really rocks! It is just so easy and relaxing to ride, leans to ridiculous angles and eats up bumps. You can ride fast without trying.

And it's practical. The large tank gives a good range and the RID instruments tell you all you need to know. And it has so many nice touches e.g. center stand, rack for solo use and full toolkit.

On top of that the ABS is so re-assuring. As I headed (fast) towards a hairpin I felt a slight pulsing from the rear end. "What's that?" I asked myself. Then I realized it's the ABS operating on the rear. "Oh" was my only reaction. I remained totally unconcerned and relaxed, completely confident that the system would slow me down enough to get round the hairpin under full control. There was none of the wide-eyed, dry throat panic and tension I would have felt if I had been on my bike in the same situation and heard the screech of the rear wheel locking up.

Then there's the BMW build quality and the way they hold their value. Hell, I was even starting to like the looks! But above all else I enjoyed riding it, it made me grin. It's a fun

#### bike.

Yes, of course I took the bike back to the dealer and jumped on the BMW bandwagon. That was well over 18 months and 30,000 happy character-filled miles ago. Never regretted it. Not once.

# Story 2

I've had the bike for 17,000 miles, put on one set of tires and brakepads at 11,000. Other than that, I have had no problem - I love it to death.

#### Story 3

The R11GS is an able offroader, grand tourer AND canyon carver. Several mags give it 'best dual purpose' but really it needs it's own category 'best all arounder'.

I like the riding position and use the original seat but many change to Russell or Corbin aftermarket replacement.

I use the stock shield even though the wind hits the average size rider in the face and upper chest. Many tourers opt for Aeroflow or Parabellum aftermarket replacements.

Too heavy to be a dirt bike of course, but I take it offroad with confidence. Really eats up speed bumps at the local mall.

Can't park it anywhere in public without attracting admiring glances and comments. The most fun "thing" I've ever bought.

Jesse bags make it a round the world tourer and perfect Baja bike. Removal of the rear seat and bar leaves plenty of storage room. Absolutely the best bike in the world for extended camping/touring.

Can't think of a better bike if you only have one. I have only been riding one year but I keep up with my friends on sport bikes on mountain roads.

I can't stop riding it - have 2 cars with dead batteries because of it!

# Story 4

I was eating breakfast alone at a cafe one Sunday morning when a nice couple off a new red R11GS came in. I told him I've been eyeing his GS. He handed me his keys and said

#### try it out. WOW!

Now that was 26,000 miles ago. I get lots of wind and it vibrates some. It eats dirt and gravel roads but loathes sandy river beds. As for the blacktop you can do it all - fun, fun fun!

Find a dealer that'll let you ride twisties for an hour or two - you gotta try one!

#### Story 5

The R11GS is tall, heavy and a bear if it gets too far off center at a stand-still. But once in motion, it's like a weeble-wobble - very stable with a comfortable center of gravity.

Without the saddles, regardless of the amount of fuel in tank, the bike literally balances on the center stand with both wheels off the ground. I personally cannot take my eyes off her whenever I wander out to the garage.

Unless you're an experienced offroader, I'd take that in VERY slowly. It handles much differently than a lighter enduro (duh!) and sudden deceleration causes skidding. But udder'n'dat, my bike seems flawless and is pure joy to ride.

#### Story 6

I have a 95 R11GS with 2,000 miles (all city!). As a former Honda owner who attempted to drive long distances while balancing on my wrists, I have found the R11GS to be quite a thrill. It's primary purpose in my life right now is as an urban assault vehicle and it works perfectly. No more worrying about Chicago potholes swallowing another wheel, and the roads are wide enough that pretty much one car and one bike can move along during rush hour.

I'd like a bit more wind protection for the quick trips in and out to good roads but other than that it

- goes well
- can haul a week's worth of groceries in the saddlebags
- can be parked almost anywhere.

#### Story 7

In the two months since I bought my R11GS I have done about 4,800 miles. I use it for commuting from the high desert where I live, to Pasadena, 80 miles away. About 60 of the

miles are freeway and the other 20 miles are street. Going home, I take the mountain route (when it is not raining or snowing) and have about 40 miles of twisties and 40 miles of desert highway. These are the best parts of my day!

The R11GS is an amazing motorcycle. You have the power and speed needed for the freeway/highway as well as cornering ability with balance. When you want to split lanes because traffic is moving intolerably slow, the bike is steady and stealthy. If you have a hankerin' for offroad, the bike is built for this also (albeit, you better have more aggressive tires than what comes with the bike). The ride is about as smooth as you are going find for a two-cylinder bike. Typically, my ride is about 1.5 to 2 hours in the morning and about 1.75 hours in the afternoon. My rear, however, does not feel like it has been on a motorcycle seat for that long!

# Story 8

After riding pure dirt bikes and pure sport bikes for years, I always kind of looked down on the GS style of bike. Finally, as I drove by Ginas BMW in Iowa, I decided to try a test ride on a R11GS.

Gina let me have her black R11GS demonstrator and said "Keep it under 4500 rpm and out of the mud."

As I threw my leg over the 'monster' it felt strange... the GS reminded me of my dirt bike, nice wide bars, good seat height and neutral balance. A two finger clutch and easy to read gauges made me feel right at home. BUT then I looked down and I saw those funky cylinder heads sticking out!

When I fired it up, I got my second big surprise. When I blipped the throttle the bike torqued SIDEWAYS.....!

I was nice to the bike for about 10 minutes. As I got more and more comfortable with it my smile got bigger and bigger. It:

- has wide enough bars to flick and steer in traffic
- has gobs of bottom end torque for when I'm in the wrong gear
- allows me to see over traffic
- absorbs potholes and expansion joints in the road with ease.

Great Urban Assault Vehicle!!! But what was it like on the open road? I headed up toward Coralville to a nice set of twisties. No Problems!! This beast could lay right down through the apex of the curve, roll the throttle on about apex exit and BLAST. It didn't even mind that there were big rolling lumps of asphalt right in the middle of the curve. The

suspension just soaked them up and kept my line.

The cruise back to Ginas' was about 30 miles of Interstate 380, a steady 75 mph and a 30 mph crosswind were taken in stride.

Gina had a Marrakesh red one on the showroom floor. I told her to get it ready. I rode it home a few days later.

I have since done some 'fire roading' with it. It has done some 2 track jeep trail camping. It has cruised 500 mile days on the interstate and I have had loads of fun with it in my daily commute to work. Sure, I've nicked the cylinder heads and I've scraped the skid plate. I expected that.

As for getting the GS serious offroad... I won't do that, I didn't spend \$14,000 US to smash it. I have a XR400 that is much cheaper, not to mention easier to pick up. As for my VFR, I traded it and have never missed it. The GS is by far the best motorcycle I have ever owned.

[ Beam me up Scotty! ]

#### **More Stories**

There are more stories and thoughts of owners on their R11GSs in the owner's survey.

# **High mileages**

The R11GS, like all BMWs, is capable of doing very high mileages. The following are stories from owners that have appeared on the BMW-GS email list. (Some of the stories have been edited down.)

# Story 1

In the 10 months since picking up my GS I have done over 24,000 miles and she just gets better and better. She is my "horse" - my every day, do everything, commute/tour/carve canyons bike. FANTASTIC!!

Sure, I have minor complaints. But there's no bike on the market today which does everything, and I mean \*EVERYTHING\*, like a GS. I fully expect to do over 300K miles on her.



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#### Story 2

The GS is a most wonderful bike. 129,000 miles with an excellent dealer, nothing but sMiles. (Warranty took care of a few small problems quickly and easily).

### Story 3

My buddy here in Colorado has taken his 95 R11GS to Alaska, Copper Canyon and everywhere in between. He's done approximately 45,000 miles on it.

Copper Canyon the second time in the mud, waterfalls and rain was done two up with his wife on the back. In Creel, Mexico, I was on an Honda XR250R and he followed me into sewers, literally. He abuses the crap out of the bike. Examples:

- 9,000 mile oil changes
- valve adjustments way beyond schedule
- three or more tipovers

Problems, well he needed to replace one of the BWM saddlebags. Went to Al Jesse bags because his riding style wasn't going to change. He just got back from 3,000 miles in one week to Corpus Chrisi. Now is this a testimonial to the R11GS or what? :-)

#### Story 4

In the 18 months since I buying my R11GS I have done 32,000 miles. Mine is:

- a great urban assault vehicle
- comfortable
- reliable on long trips
- fine for light off duty work
- ideal for daily commuting (about 80 miles of highway round trip)

My R11GS is nearly perfect. It will be perfect when I can afford to fit a replacement Aeroflow screen with lowers.

The R11GS suspension and high ground clearance make urban assaulting lots of fun! Only problem is that the saddlebags limited lane splitting. So, I mounted a Givi 50 liter top case and removed the saddlebags making the bike is nice and narrow again. And the Givi has lots of room!

The R11GS is certainly comfortable. I did one long-ish trip on it, San Francisco to

Phoenix and back as well as a couple of 800 mile days along the way. Great bike.

#### Story 5

I've done 36,000 miles in the last 17 months on my 96 R1100GS.

It's been a good ride. The only items I have had to replace on my bike, except for consumables like tires, oil, filters, fluids etc are:

- Alternator belt at 31K as it squeaked on occasion. Old belt was fine. New belt squeaks too on occasion so this was not really necessary. Cost \$10 or so for the belt (not sure on this) and about \$15 to put it on.
- Clutch cable thinking it was going bad. It wasn't. Cost \$20+ for the belt and \$25 for the dealer to put it on.
- Clutch throwout bearing died at 33K. Replaced free under warranty. If not warranty I'd guess 2 hours labor and not sure of the part cost (\$25?).

I'm still using the original brake pads at 36K. One of the rear pads is a bit thin but still fine. I do ride the bike hard on the street. It gets about 5% offroad duty.

My bike is totally stock except for the addition of a Corbin seat, Piaa lights, and a Bob's Wrist Rest. The Corbin is just the front portion with a back rest. Nice for those long days. The PIAA 910's are excellent for finding those night critters. The Wrist Rest doesn't get that much duty, but is a nice addition. Oh yeah, I tossed the stock headlight bulb at Day 2 and went to 55/100W.

I've tried both the Bridgestone and the Michelin tires. My bike came with the Bridgestone Trailwings which were okay but didn't seem to last too long. The next 3 sets of tires were Michelin T-66's. Last long, handle well, make noise. I recently put a new set of the Bridgestones on as I was on the road and the remote dealer's prices on Michelins was astronomical and the Bridgestones reasonable. I'm not as confident on the Trailwing's though.

#### Story 6

I have had my R11GS 15 months since buying her new and have done 23,000 miles. She's been dealer serviced and they have never had to do anything extra, nothing other than what's in the schedule.

I'm on my third set of Metzeler Enduro 4 tires which I like except for the front tire cupping. Tried the Michelins and Avons when I rode some other R11GSs but much prefer the feel, steering, quiet and grip of the Metzelers. I never ride offroad.

Apart from that, the only thing I've had to do is replace some bulbs (one headlight and three rears).

A great allrounder - I'm very happy with her.
[Beam me up Scotty!]
Buying secondhand

An R11GS is usually a good buy secondhand even at high mileages. They are well-built and BMW has a good warranty and recall mechanism for updates.

Previous GS models suffered from poor drive shaft life and unreliable alternators/starters. The R11GS does not.

The original R11GS models had a number of failings but in typical BMW fashion most of these have been corrected by now so they are still a good buy.

Specific points to look out for:

- Check for a full service history. If at a dealer, try to speak to the previous owner. Even at high mileages, well serviced bikes tend to remain reliable.
- Check whether the tank is plastic or metal.
  - Lots of the plastic tanks were replaced with metal ones under warranty. Check plastic tanks carefully - they suffer problems with their mountings wearing and paint/decals bubbling.
  - a) Check the mountings by lifting the front of the tank. Play of more than an inch is a problem.
  - b) Examine the decals (if there are any!) for bubbling.
- Don't be put off by strangely colored exhaust headers. All shades of blue/violet/ brown are possible. It's good quality stainless steel. Only worry if there are holes!
- Early models suffered gearbox and occasionally shaft troubles although most have been sorted long ago.
- Check the spoked wheels carefully. Their unique design means the rim cannot be "pulled" left and right by spoke tension as with a normal spoked wheel. Only expert wheelbuilders can rebuild these wheels. Even spoke tightening/replacement is beyond most dealers. To check:
  - Spin each wheel to measure the run out (i.e. how "bent" the wheel is). If it is

more than 1/8 inch usually this means replacement (not cheap) or rebuild by a specialist wheelbuilder.

- Look for missing spokes. Up to three missing spokes per wheel can be replaced but this is not straight forward and sometimes the wheel needs rebuilding anyway.
- Gently strike all the spokes on both wheels. They should all "sound" the same. If not, replacement or a rebuild may be required.
- For more details see <u>wheels</u>.
- Models produced before Feb 1996 have a less robust rear rack. Examine the underside closely and look for cracks.

If it is cracked, dealers may fit the upgraded part (number 46 54 2 309 514) for free as per a service bulletin.

- On a test ride ensure ABS (if fitted) works correctly as faults are expensive to repair.
  - 1. When the ignition is turned on the two ABS warning lights should flash together.
    - (If they flash alternately, the ABS needs <u>resetting</u>).
  - 2. As soon as the bike travels a couple of yards both ABS warning lights should go out.
  - 3. When it is safe to do so, test the front and rear brakes separately to make sure the ABS works.

#### Reference

- UK's Motorcycle News 31/12/97
  - Used Bike buying guide R11GS
- UK's RiDE Dec 98
  - Comparison v Monster 900 v Buell S1 Lightning v T509 Speed Triple
- UK's RiDE May 99 Comparison of secondhand models v Tiger v Elefant 750 v Africa Twin

#### [Beam me up Scotty!]

Back to the: • GS Telelever and 4 valves engine introduction

page

• <u>G/S and GS</u> Home-page

# This page is for information only. NO COMMERCIAL CONTENT.

The BMW R1100GS page 1







# THE BMW R1100GS

# Page 2

# **Standard Bike**

# New GS? What you should know

This section is aimed particularly at those owners who have just got an R11GS. Here are a few things to be aware of.

- About BMW
- Funny noises
- Exhaust headers
- <u>Stands</u>
- Surging
- <u>Speedo</u>
- RID, Rider Information Display
  - <u>Plastic head protectors</u>
  - BMW paint
  - <u>Mudguards</u>

# About BMW

It seems that more than half of R11GS owners have never had a BMW before, so a few words about BMW may be helpful.

BMW is not like other bike manufacturers. They have a long motorcycling heritage that they are rightly very proud of and they continue to build quality motorcycles. However today, BMW is mainly a car manufacturer. It is no coincidence that their technology is usually more closely related to mainstream cars than bikes e.g. separate engine and gearbox with single plate clutch.

Another factor is that BMW is very conservative. Their approach is to stick to their tried and trusted designs i.e. **if it aint broke don't fix it.** So models evolve slowly during their life cycle (see <u>model history</u>). The greatest example of this is of course their boxer engine.

BMW do innovate but nowadays these innovations mostly come from applying technology that they have become very familiar with in car design e.g. ABS. (Telelever is a recent exception).

Possibly because of their conservatism mixed with their proud heritage, BMW designs remain traditional. They continue to supply motorcycles with basics that some other manufacturers have let slip over the years e.g. a:

- center stand
- good toolkit with puncture repair outfit
- large fuel tank that gives a decent range
- proper passenger seat with footrests that fit normal sized people.

In addition BMW likes doing things their own way. A good example of this is their unique indicator switchgear.

Together, these different elements give BMW a unique approach that until you get used to it, can seem odd. However, this approach is responsible for producing a fine range of real-world motorcycles. Each has character, an indefinable something that on occasion can be annoying but provides riding pleasure and pride of ownership that lasts.

#### **Funny noises**

Let's start with the funny noises when you switch the ignition on. The whir sound is the fuel pump (located in the tank) turning on.

There are more funny noises when you start off. There's a sighing as you let the clutch out and start to move. The grating clunk is the ABS self-testing before turning off its red flashing lights. Note the self-test kicks in periodically when riding. You notice it most after 10 or more minutes riding without stopping. Next time you stop the bike say at a junction then ride off, ABS self-tests. There are further funny noises when coasting.

One funny noise to avoid is running the bike in gear on its main stand (wheel off ground of course!). It makes all sorts of strange noises but it's

a) normal for shaft drive

b) not good for the transmission.

# **Exhaust headers**

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Brand new oilhead? Comes with nice shiny silver exhaust header pipes. But they do not stay that color very long! They soon turn all sorts of shades of brown/blue/violet.

Try idling a warm engine at night. In the dark you can see the headers glow red hot! But they are good quality stainless steel. Just one of those BMW quirks, nothing to worry about.

#### Stands

#### **Center stand**

When unladen, the bike balances on its center stand. Great for tire inspection/ wheel removal etc.

Don't let anyone (particularly owners who have had many BMWs) demonstrate their favorite trick on your R11GS. This one involves sitting astride the bike and putting it on its center stand. It is possible but the R11GS has more ground clearance than those older BMWs. Result more leverage applied to your center stand which bends it. Usually you don't notice until the next time you put the bike on its center stand by when of course the old timer is long gone.

General advice - **don't ride off the center stand**. Sometimes, it makes life easier but over time the extra leverage of the R11GS longer stand (compared to other BMWs) will bend it. Replacement center stands are not cheap.

#### Sidestand

The sidestand can be deployed while sitting on the bike. Lots of owners do this as the bike is heavy.

The balance of the bike on its sidestand can be a bit precarious especially when fully loaded with fuel and luggage. This was improved somewhat for model year 98 when a redesigned sidestand with a bigger foot was fitted.

There are several ways to improve the situation. Check out page 3 Customization, Other Parts, <u>Side stand foot.</u>

#### **Sidestand switch**

Another BMW quirk! Most bikes have sidestand switches to prevent you riding off with the sidestand down. The R11GS not only does that but it also stops you idling the bike on the sidestand because it is not neutral switched. The R11GS must be left on the center stand if you want to leave the engine idling. Note that this is not recommended in the BMW handbook. It suggests riding off shortly after starting the engine but not laboring the engine until it has reached operating temperature.

Some R11GS owners customize their electrics to make the sidestand neutral switched. Note that the R1150GS is neutral switched so can be idled on the sidestand.

While on the subject of the sidestand switch, check out simple faults.

#### Surging

Lots of R11GSs suffer from surging. This is the mild variation in speed when you hold the throttle constant, at say 3,000rpm. Later models suffer less but so far it has not been eliminated.

If it is a problem check out Rob Lentini's  $\underline{\text{Zero}} = \underline{\text{Zero}}$  tune up.

#### Speedo

The speedo reads more than the speed you are doing. Seems to vary but can be up to 10% faster.

By the way, the speedo cable bottom fitment must be correctly installed. For more details see under Simple faults, <u>Speedo cable</u>.

#### **RID, Rider Information Display**

The RID is not essential but useful and most owners tend to order it when they buy a new bike. It displays:

- time
- current gear
- oil temperature
- fuel level

#### **Oil temperature display**

When the engine is warm, oil temperature normally shows 5 bars (half way to max of 10 bars). Most displays go to 6 bars when sitting in traffic in warm weather but rarely go over 6.

However the R11GS has no thermostat (unlike the RT and R1150GS) and so the display can drop to 2 or 3 bars when riding in the rain or during cold weather. Some owners fit a simple <u>radiator blind</u> over the oil cooler to restrict the airflow when riding in cold conditions.

#### **Fuel display**

Another 10 bar display. Normally when the tank is full it takes about 60 miles (100km) before the top bar disappears. From then the display falls more quickly.
#### Around the time that one bar is shown the reserve light comes on.

#### **Plastic head protectors**

The R11GS comes with black plastic cylinder head protectors. Many owners have reported that they have saved the engine from significant damage in a fall or a crash where the bike slides. After such incidents the protectors often need to be replaced but they have done their job and are reasonably priced.

However these protectors only protect from below. If the head itself hits something or the bike rolls, they offer no protection. For some alternatives see <u>Protection parts</u>.

#### BMW paint

The BMW paint on its solid colors (e.g. Marakesh red, Avus black and Alpine white) does not have a fixing coat. This means that although it is thick and well applied it comes off when rubbed.

For this reason don't let anything rub against it e.g. a loose tank bag strap.

#### **Mudguards**

The front and the rear both have two mudguards. At the front, the top painted mudguard is really just an ornament although it is supposed to funnel air to the oil cooler. It can be removed if you wish. The lower one is the traditional mudguard although many owners think it could be longer at the back - a lot of dirt gets thrown onto the engine by the front wheel.

At the rear there is a funny little black plastic mudguard bolted to the rear hub. This is only a way to get round German law that requires the rear mudguard to have a maximum distance from the ground! It is not very effective as a mudguard but can be useful for putting badges on e.g. country identification or BMW. However, it can easily be removed.

But, as mentioned previously, don't let these things put you off. You soon get used to these little BMW idiosynchracies!

[Beam me up Scotty!]

# Oil Level

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One area that lots of owners grumble about - the oil check window. Difficult to tell what the REAL level is. The manual advises you to leave the bike for 10 minutes before checking. However, there are many horizontal oil feeds in the engine that trap oil and mean the oil level window is not a reliable indicator!

One owner had the bike on its center stand with the oil level apparently just under red dot.

- He started engine and let it warm to 5 bars on the RID, switched off and left it undisturbed on its center stand.
- He came back days later to find oil level had RISEN! As before he started engine and let it get to working temperature then switched off and left it undisturbed.
- When he came back several days later this time there were no oil leaks and NO OIL IN THE OIL CHECK WINDOW!?!

The bike was on its center stand completely undisturbed in his garage throughout the entire time. The bike was never moved, not even rebalanced from one wheel to the other. It's just one of those character-making foibles.

Apparently if you fill the bike past the red dot in the center of the oil check window, oil can overflow into the airbox. This is why there is a black plastic plug in the bottom of the airbox!

To make things worse, until <u>breaking in</u> is completed the engine can use quite large amounts of oil. **Check very carefully**.

The general advice is don't overfill or underfill the engine with oil. Difficult but VERY IMPORTANT. BMW state that should the ACTUAL level:

- rise above the top of the window (due to overfilling) or
- fall below the bottom of the window or
- cause the oil light to illuminate

THEN ENGINE HAS DAMAGE OCCURED.

GAS

Some practical rules:

- Always keep track of oil level, especially during break in.
- Judge the level based on several readings, not just one.
- If the oil level disappears always check for leaks.
- Only add small amounts e.g. 100 or 200cc at a time then re-check the level.

Some owners find the most reliable method of determining the actual level is to:

1. Put the bike on its sidestand just after you switch off.

- 2. Leave it there for a minimum 30 minutes, better overnight.
- 3. Put the bike on its center stand then check the oil level in the oil sight glass.

[Beam me up Scotty!]

# Breaking-in

Yet another quirk about these motors is their break in period. Officially everything seems like all other bike manufacturers i.e. there is a break-in period with break-in rules followed by a break-in service at 600m (1000km).

Sure you can ride them like normal after the break-in service but these engines have not yet finished their break-in!

Oil consumption on new oilheads can be high for a considerable period. They suffer what owners refer to "smokey startups" and the end of the exhaust pipe is covered in black soot. Consumption varies from bike to bike but what would severely worry an owner of a new japanese bike can be quite normal on these R259 engines.

Generally, the list wisdom is that somewhere between 12,000 to 20,000 miles (20000 to 32000km) most oilheads stop using oil and produce full power. They have finished their break-in then and not before!

#### **Type of oil**

- Mineral or semi-synthetic SG (or appropriate grade) oil from new, and all services until the engine stops using oil liberally
- Fully synthetic SG (or appropriate grade) oil afterwards

Note that oil in the R11GS engine is separate from the gearbox. As such car engine oil (of the appropriate grade) can be used.

[Beam me up Scotty!]



#### Tank capacity

Originally the tank was plastic but this suffered problems with leaks, paint and stickers. This

was replaced by a steel tank made by Behr who also manufacture the wheels. Very few bikes still have plastic tanks as most owners took advantage of the free upgrade.

The plastic tank had an official capacity of 6.6 US gallons (25 liters). However, the fuel pump is in the tank and the fuel pick up is above the bottom of the tank which reduces the useable capacity. Worse there is only one pick up and no connection between the two lobes. So, useable capacity is only around 5.8 US gallons (22 liters).

The metal tank is slightly smaller and suffers another problem. It has a 1-1.5 inch metal seam sticking up from the bottom of the tank that makes sloshing fuel from one lobe to the other difficult. Plastic tanks do have have this seam.

The capacity of the metal tank was officially 6.3 US gallons (24 liters). It's useable capacity is around 5.5 US gallons (21 liters).

(BMW eventually came clean with the R1150GS. The official capacity for the R1150GS (that has the identical metal tank to the R11GS) is 5.5 US gallons).

Note that if the pump is misaligned in the tank, for example when serviced, then the useable capacity is reduced even further.

#### Filling up

It takes quite a time to fill up completely. The last gallon or so has to go in very slowly - the opening is restrictive.

One thing to avoid when you've just filled up is leaving the bike, particularly on its sidestand particularly on hot days. If you do, you risk getting a pool of fuel underneath the bike from the overflow pipe. It's best to fill up as you are leaving if possible.

#### **Running out of fuel**

You can hear the fuel pump squealing when the fuel level gets low.

The fuel low warning light comes on around the time the RID drops to 1 bar. Mileage varies with riding but it is around 180-220 miles (290-350km).

You can run out of fuel and still have some useable fuel left in the tank! It is most common when travelling on straight roads or on long downhill sections. It's rare when riding twisties as the fuel swirls in the tank.

The problem is due to the fuel line leaving the tank quite high up at the back on the brake

pedal side. No, there is no connection between the two lobes of the tank!

So, when you are running low, make sure to swish the tank around. (Sometimes when you do this the RID bars increase). Try to avoid the engine cutting out due to insufficient fuel as it is not good for the injectors.

If you do run out, try holding the bike over towards the brake pedal to get any remaining fuel in the other lobe across before restarting.

#### Removal

The tank is held on with a single bolt underneath the black plastic sidepanel. Once this is undone, the tank can be lifted which is useful for a number of tasks e.g. removing front suspension unit. To remove completely, disconnect the two rubber tubes.

(One rubber tube is for the overflow, connected to the hole on the inside edge of the filler. The second cannot be seen without dismantling the filler. It vents on the inside of the tank. Both tubes exit through a plate on which the fuel pump is mounted).

Do not mix up the tubes when reinstalling the tank. It causes a vacuum in the tank. Plastic tanks have been known to collapse; metal tanks hold up better but it makes opening the filler cap difficult!

To simplify disconnecting the rubber tubing, fit quick release fuel-line connectors. Then you can pull them to disconnect and push them back together to connect. These are available from BMW dealers as they were standard on K-series bikes but are also obtainable from auto stores. You want 5/8 inch internal diameter.

#### **Modifications**

#### **Filler neck**

There are two modifications owners make to the filler neck.

- 1. Drill holes.
- 2. Slightly increase capacity.

1. Drill holes - Some owners take out the filler neck and drill holes in it as this speeds filling up.

2. Slightly increase capacity either by fitting the slightly shorter filler neck from the R11RT or raising the float stop.

#### Instructions

Before removing the cap assembly, make sure you have a Torq 25 bit and buy a new rubber o-ring gasket and clamps.

(If the gasket is less than three years old it can be re-used. The gasket absorbs fuel and expands so needs time to recover. After removal, leave the old gasket somewhere warm and drafty. A gasket up to one year old should be back to normal in the morning. Older gaskets can take a day or two.)

- 1. Undo the Torq bolts that hold the fuel cap assembly to the tank.
- 2. Mark the two hoses, to identify the one drain the other breather.
- 3. Carefully remove the 2 crimped clamps from the drain and breather hoses.
- 4. Drill 3 holes, 1/8 dia, in the funnel section about 1/2 inch from the top. De-burr the holes.
- 5. To slightly increase the tank useable capacity, bend the fuel float up slightly so that it just fits below the top of the tank when fitted.
- 6. Re-install the cap with the new o-ring and clamps.

Now go down to your gas station and be amazed at how quickly you can fill up the tank without any of the previous bubbling and burping!

Note that US owners should not fill the tank right up unless they have removed the charcoal canister. For more info see <u>simple faults</u>.

#### **Removing stickers**

Those annoying statutory stickers e.g. fuel grade, can be removed with care and patience using a combination of:

- hair dryer
- Goo Gone (or similar citric acid based solvent for softening various adhesives e.g. floor tiles)
- razor blade/thumbnail
- soft cloth to clean up the area afterwards.

#### **Fuel filter**

The BMW fuel filter is fitted inside the tank so that if it splits, fuel is not dropped on to the hot engine. BMW had problems with their fuel filters splitting on K-series bikes and similar problems have been reported on oilheads. Some owners recommend replacing the filter at 18,000 miles before the BMW recommended service life of 24,000 miles.

However, other owners point out that fuel filter technology is not exactly cutting edge. Most fuel injected car engines run at higher pressure with longer service intervals and do not suffer split fuel filters! They have replaced their BMW filters with commonly available car filters e.

#### g. Deutsch FF401 or Fram PH3614.

The filter can be moved to outside the tank. This not only makes replacement significantly easier and cheaper but also increases tank capacity slightly. For more details and instructions see Rob Lentini's External Fuel Filter Modification R1100 on the excellent BMW Internet Riders website.

#### [Beam me up Scotty!]

# **Toolkit**

The R11GS comes with a toolkit in its own compartment under the passenger seat. The tools are laid out in their own slots on a tooltray. BMW diehards grumble that the standard of the tools is not as high as it was on previous models. However the tools are good quality.

Some points to note:

- There is an empty slot for a small screwdriver no you didn't lose it! The original was included in previous BMW toolkits but has no use on the R11GS. (It is a yellow handled chrome vanadium 6cm stem 3mm flat head screwdriver that is still available. BMW part no 71-11-9-090-147, cost around 3USD). More usefully you could fit the similar sized BMW lighted "test" screwdriver. This has a green handle and is handy for roadside diagnosis (BMW part no 71-11-237-863, cost around 12USD).
- Look out for the small black plastic part in the toolkit. It fits neatly around the spark plug cap for simple and quick removal.
- The tooltray lid and hinge are both plastic and very easy to break. Never force the lid down if gentle hand pressure is not enough, carefully repack the tooltray contents.
- The toolkit includes a puncture repair outfit. The glue tends to dry even in its sealed tubes so replace every two years. See under Simple faults, <u>puncture repair</u> for instructions on use.

#### Riding without the rear seat

Simple **DO NOT!** At least not until you've fitted the special latch.

Without its special latch fitted, when you ride without the rear seat the flimsy plastic tooltray lid flies off as soon as you hit a bump. Then you start losing your tools, one by one!

#### To fit the special latch:

- 1. Stand on the exhaust side, insert key and remove rear seat.
- 2. Remove tooltray lid.
- 3. Examine the opposite side (i.e. shaft side) of the tooltray. Between the long C-spanner (marked R-GS) and the wheel nut wrench is a small plastic protrusion with a short metal shaft at its tip. This is the special latch.
- 4. Remove the special latch by pulling it up vertically.
- 5. Turn the tooltray lid upside down and examine its large square hole.
- 6. Fit the black plastic base of the special latch into the slots surrounding the large square hold.
- 7. Refit the tooltray lid.

#### Notes:

a) You have to remove the special latch from the tooltray lid before you can refit the rear seat.b) The tooltray lid is so flimsy that if you leave your bike unattended while out without the rear seat, anyone armed with a screwdriver can get to your tools even with the special latch fitted.

Additionally, you can fit one of the <u>aftermarket accessories</u> available that use the rear seat mounting points.

#### [Beam me up Scotty!]

# **Servicing**

Servicing is required as follows:

- Break-in service at 600m (1,000km)
- Minor service at 6000m, 18,000m, 30,000m etc (10,000km, 30,000km, 50,000km etc)
- Major service every 12,000m, 24,000m, 36,000m etc (20,000km, 40,000km,
- 60,000km etc)
- Annual service (if no service in last 12 months).

For a breakdown of the tasks involved in each service see the  $\frac{R1100 \text{ service guide}}{R1100 \text{ service guide}}$  on the Internet BMW riders website.

[Beam me up Scotty!]

# Manuals

### **BMW Publications**

#### Service Manual R11 RS/GS/R

• English

Original version order no: 01 50 9 799 301 6/96 version order no: 01 50 9 799 421 Comprehensive but expensive at over 100 USD Note that no wiring diagrams are included, they are in a separate document.

 The BMW manual is also available (much more cheaply) on country specific microfiches e.g. 01 51 9 799 291
 GB - for country Great Britain

#### German

Original version - order no: 01 50 9 799 300 around 120DM 6/96 version - order no: 01 50 9 799 420

#### **Other BMW handbooks**

- Wiring diagrams R11 RS/GS/R 01 99 9 798 708 About half a dozen black and white pull-outs with key in many languages
- Test Instructions for Motronic (in English) 01 71 9 798 901





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#### • Test Instructions for ABS (in English) 01 71 9 798 811



Service and Repair Manual 3466 Covers the R11GS and other airheads 94-97 250 pages including many black and white pictures but color wiring diagrams. Excellent value for money. ISBN 1 85960 466 8 Also available in different languages eg German.

[Beam me up Scotty!]

# **Fusebox**

A useful inlay diagram for the R1100GS fusebox is shown on the <u>fusebox page</u>. It also applies to many other oilheads.

[Beam me up Scotty!]

# Tires

Make	Front 110/80 R19	Rear 150/70 R17	
Metzeler (OE)	Enduro 4/Tourance	Enduro 4/Tourance	_
Michelin (OE)	T 66	T 66 X	
Avon	AV-33	AV-34	-
Bridgestone	TW 101	TW 152	
Continental	TKC80	TKC80	
Dunlop	Trailmax D 604 F	Trailmax D 604	
Metzeler	Karoo Front *	Karoo *	

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#### \* uses non-standard sizes.

The following tire information represents the *overall* wisdom of R11GS riders on the BMW-GS list. However, tires are very subjective and individual owners may disagree with some of the following. Tire life too is very dependent on the rider so only general comparisons are made.

Note that most owners stick with OE fitments, Metzeler Enduro 4 and Michelin T66.

#### **Metzeler Enduro 4/Tourance**

Road-oriented OE fitment

Advantages

- excellent road grip \*
- good in the wet \*
- good rear tire life

#### Disadvantages

- problems with front cupping \*
- not great offroad
- more expensive than Michelin

In some markets Metzeler have introduced the **Tourance** as a replacement for the Enduro 4. It is an improved tire but still cups (probably like all knobbly tires).

\* The Metzeler Enduro 4/Tourance is not the cheapest but *probably* the best all-round tire. The rears give good tire life without problems.

However, the fronts cup badly (i.e. suffer from deep grooves all the way round the tire). This shortens tire life. When cupped, cornering in the wet is EXTREMELY disconcerting and, in the opinion of some, almost dangerous. (Cornering in the dry is hardly affected).

Metzeler have claimed since 1994 that they know about the problem and their latest batch of tires overcomes it. However, while improvements may have been made, front tire cupping remains a problem.

#### **Michelin T66**

Avon AV

Road-oriented OE fitment

Advantages

- excellent road grip
- cheaper than Metzeler
- good tire life

#### Disadvantages

- poor in the wet or on paint
- not great offroad





#### **Dunlop Trailmax**



Advantages

Disadvantages

• poor onroad wet grip

• poor tire life

#### **Metzeler Karoo**

An offroad tire with limited on-road performance.



Advantages



- excellent offroad grip
- particularly good in mud and hard sand
- poor tire life when used onroad
- poor onroad wet grip
- top speed on road limited to 105mph (170kph).

#### Note

Recommended sizes different to standard fitments: Front: MCE KAROO FRONT 100/90 - 19 M/C 57R M&S Rear: MCE KAROO 140/80 - 17 M/C 69R M&S

[Beam me up Scotty!]

# **Wheels**

The wheels use the BMW patented cross-spoke design that allows the fitment of radial tires. They are assembled on a very expensive CNC machine in the BMW motorcycle production plant, Spandau in Berlin. Fine tuning is carried out by a craftsman using a sophisticated diagnostic tool.

#### **Rims**

- The original rims were made by Akront in aluminum alloy.
- In 1995 Akront were replaced as supplier by Behr. They produced rims to the same design but in bare aluminum.
- From 1998 model year on, the Behr supplied aluminum rims were anodized.

#### **Spokes**

The cross-spoke design means that you cannot pull a R11GS rim left and right by adjusting spoke tension as you can with a normal spoked wheel. Further, wheels are re-buildable only by experts with previous experience of this unique design.

As explained in the handbook, spoke tension can be assessed by gently striking them with a metal object, like a screwdriver. If they all have the same tension, they sound the same (or at least similar) notes. Spokes that are tighter have a higher note; loose spokes lower.

If you find a tight/loose/missing spoke, adjustment/replacement is beyond your dealer who will normally suggest replacement (not cheap).

However, if there are less than four spokes affected you may try some home DIY as explained in the following. (Given the sophistication of the construction process, if four or

more spokes are affected a new wheel or expert rebuild is definitely required).

Tim (Bondo) Bond is a BMW-GS listmember as well as a professional wheelbuilder. Here are his instructions on spoke replacement on a R11GS cross-spoke wheel.

- 1. Get the spoke, nipple and grubscrew (setscrew).
- 2. Put it in until just tight.
- 3. Ring some of the spokes with a wrench and torque the new one until it sounds like the others.
- 4. Install the setscrew.
- 5. DO NOT TRY TO ADJUST ANY OTHER SPOKES or you'll be sending the wheel to me for a big bill. The tubeless wheels don't adjust like any other wheel so please don't try it.
- 6. Now give the wheel a spin and see how much deflection you have and maybe you'll see why the spoke is gone. Catch a twig on a trail? BTDT
- 7. If the rim is within 1/8" not too bad on the rear for stump jumping. If more you've whacked something and it needs to come apart and be relaced. Ring all the spokes with a wrench and listen to how many sing and how many are dead. Older R11GSs with Akront rims were kinda soft in the torque dept and that might have caused the spoke to pop. In that case it may need a rebuild.

[Beam me up Scotty!]

For more information and advice contact Bondo at Wire Wheels Motorcycle Service.

# Suspension

The stock R11GS suspension has the following adjustments:

- Front: preload
- Rear: preload and rebound damping
- (There is no adjustment for compression damping although it is affected by rebound damping).

Set the preload first then the rebound damping.

#### Preload

is the static tension in the spring. It affects suspension travel, seat height and speed of steering but not 'hardness' or 'softness' of the ride (unless you hit the top or bottom stop).

The following ASCII art represents your spring when it:

- 1. is uncompressed (e.g. on center stand with wheel off the ground)
- 2. has low preload
- 3. has high preload



#### Adjustment

Front: Adjust collar on bottom of shock using hook wrench and extension from the toolkit. There are 5 notches. Highest notch is LOW; Lowest notch is HIGH. Standard setting: second highest notch Suspension travel: 190mm (BMW claim) Ideal preload: 1:3 i.e. 63mm of 190mm travel

**Rear:** Set with large black knob by exhaust marked HIGH, STD, LOW. HIGHer is clockwise; LOWer is counterclockwise Standard setting: as marked STD Suspension travel: 200mm (BMW claim) Ideal preload: 1:3 i.e. 67mm of 200mm travel

# GAS

#### Set-up:

- 1. Sit on the bike wearing all your riding gear e.g. jacket, helmet etc
- 2. Adjust preload front and back so about a third of your suspension travel is used up.

(Helps if you've got someone to measure or else use a plastic tie on the suspension to see how much the shock compresses).

#### Adjust preload front and rear for:

- increased loads eg touring/pillion go HIGHer
- bumpy roads and off-road go HIGHer
- smooth roads go LOWer.

#### **Turn the adjuster:** HIGHer to:

- increase suspension travel
- raise seat height
- speed up steering.

# GAS

#### LOWer to:

- decrease suspension travel
- lower seat height
- slow down steering.

#### **Fault finding:**

- 1. Suspension tops out, bike steers too quickly ("tucks") preload too LOW so go HIGHer
- 2. Not enough ground clearance, suspension bottoms out, bike turns too slowly preload too HIGH so go LOWer

#### **Rear rebound damping**

resists spring extending. When the spring is compressed it goes to a minimum length then springs back (i.e. rebounds). Rebound damping stops your \*wheel\* from bouncing, not you. Affects traction and how the ride feels i.e. "hardness" or "softness".

Rebound damping is connected to compression damping and vice versa. This makes finding the correct settings difficult. If you make rebound damping HARDer, the ride becomes harder but also if you hit a big bump, you are less likely to bottom out (than if you had SOFTer setting) i.e. same effect as if you had increased compression damping.

#### Adjustment

The rear rebound damping adjuster is that little black screw on the exhaust side at the bottom of the shock. Adjust using the screwdriver and extension from the toolkit.

- Clockwise is HARDer
- Counterclockwise is SOFTer

Only the last few turns towards HARD seem to have any effect.

Standard setting: turn clockwise to fully HARD then undo HALF a turn

Set up:

- 1. Ensure tire pressure and tread depth are correct and preload is set.
- 2. Carefully work out original setting and write it down (for reference and so you can change it back if all else fails).
- 3. Find a bumpy road, the bumpier and the larger the range of bumps ie small to large, the better. (Riding fast around a bumpy corner is best.) A roadside observer can help as well.

Now ride up and down your bumpy road. Start with one extreme setting (say HARD) then the other (SOFT) so you feel the sort of effect rebound damping has.

Feel what the back end is doing - you want firm traction not skidding.

4. Depending on the feel you got, estimate what initial setting to try (eg half way between the two extremes or more HARD than SOFT).

Try many settings (quarter turn) then write them down with their results.

The ideal setting keeps the back wheel most consistently in contact with the road. (It is NOT the smoothest ride, that's underdamped).

#### Note

BMW shocks go off very quickly - they heat up then stop working until they cool down again. This means, they are different at the start of your bumpy ride to (say) 15 minutes into it. Give them time to cool otherwise you are wasting your time.

Adjust rebound damping for:

- increased loads eg touring/pillion go HARDer
- bumpy roads and off-road go HARDer
- smooth roads go SOFTer

To check settings for luggage/pillion, load up and try your bumpy road again.

#### **Fault finding:**

Tire won't stay in contact with ground on series of bumps - too HARD so go SOFTer
 Bike pogoes (bounces up and down excessively) - too SOFT so go HARDer or one or both shock absorbers are worn

#### Simple shock absorber test

To check the rear shock absorber:

- Start with a visual check if there is any leaking fluid replace immediately. If not, wipe clean.
- Put the bike on its center stand.
- Sit on the rear seat.
- Put both feet down on the ground and stand as high as you can.
- QUICKLY drop all your weight down onto the rear seat.
- Just as the suspension compresses most, QUICKLY stand up. (I.e. push the bike down and let the suspension push it back up).
- Watch how the seat moves.

A good shock absorber pushes it back where it was and stops.

A worn shock absorber behaves differently e.g. moves up and down several times.

Try it a couple of times to get the idea.

Apart from the visual check, testing the front shock absorber is not so easy as it is more difficult to compress. However, if the handling deteriorates, the tires and rear shock are ok then suspect the front shock and seek expert help.

Beam me up Scotty!]

# Offroad Riding



BMW have their own <u>Enduro park</u> at Hechlingen in Bavaria, Germany. They teach you how to do serious offroading on an R11GS, either your own or one you hire there. (The R11GSs at the Enduro park are fitted with a <u>Frame reinforcing kit</u>.)

To prepare your own R11GS for offroad use.



- o fairing
- mirrors (right mirror is normal thread but left is not!).
- 3. Slightly loosen both the left and right handlebar controls so that they are firmly on the bars but can be twisted with some effort. (This lessens the chance of breaking/bending a brake/clutch lever in a fall can be left all the time like this if you want).
- 4. Reduce tire pressure front and rear to 16 PSI (still handles ok on road but reflate asap when you return to tarmac. If it's a long way to an air compressor consider using compressed CO2 canisters).
- 5. Depending on preference/surface, disable the ABS.
- 6. Pray you don't have to shell out too much money for turn signals etc! (Note the R1150GS turn signal stalks are more flexible and can be retrofitted to the R11GS).

At their Enduro Park, BMW teach a technique for picking an R11GS up singlehanded when it falls over:

- 1. Turn the handlebars to full lock so that the front wheel points uphill.
- 2. Go to the side of the bike with the end of the handlebar nearest the ground.
- 3. Position yourself:
  - o facing the bike
  - so the end of the handlebar is:
    - central between your feet
    - just in front of your feet
  - feet shoulder width apart
- 4. Grab the end of the handlebar nearest to the ground with BOTH hands. (So it feels that you are going to pull the handlebar into your crotch).
- 5. Prepare yourself for lifting by bending your knees and keeping your back straight. Depending on the position of the handlebars and the layout of the ground, you may need to go into a full squat.
- 6. Lift by straightening your legs WITHOUT BENDING YOUR BACK.
- 7. Stop lifting just before the bike becomes vertical (to stop it going over on the other side!).

#### [Beam me up Scotty!]

# **Simple Faults**

Here are a few simple faults and their cures together with some useful maintenance items that owners should be aware of. They have appeared on the <u>BMW GS Mailing List</u>.

(Reading the following list it's easy to think that the R11GS is fragile. That is completely untrue. It is well built and when properly serviced and looked after is very reliable. Don't get paranoid, your bike quite possibly won't suffer any of these!).

- <u>Tightening the switchgear assembly</u>
- <u>Running out of fuel</u>
- Difficult starting/won't tick over
- <u>Stalling</u>
- <u>ABS</u>
  - ABS in cold weather
  - To disable ABS
  - o ABS reset
- <u>Rear brake failure</u>
- Speedo cable
- Defective clutch seal
- Puncture repair
- <u>Pinking</u>
- Sidestand switch
- Alternator belt
- Radiator blind
- Split fuel filter
- Sight Glass Blow Out

There is more useful info on the IBMWR website <u>R1100 Tech Articles</u>.

# Tightening the switchgear assembly (throttleside)

The handlebars are easy to rotate back but sometimes the switchgear also needs to be rotated to suit. However, the screw that holds the throttleside switchgear assembly is difficult to find.

- 1. Carefully examine the right turn signal switch. To the left of it (just to the rear of the brake hose fitting) is a recessed phillips screw. This secures the throttle/brake assembly to the handlebar.
- 2. Unscrew this screw. Rotate the switchgear to a comfortable position then tighten.

# **Running out of fuel**

As already mentioned, it's not a good idea to run out of fuel as it may damage the injectors but if you do, try this before you start walking or thumbing a ride.

Get off the bike and hold it over towards the brake pedal side. (The two lobes of the tank are not connected - the fuel leaves the tank on that side). Get back on and try starting - if you are lucky the engine will fire up and you can go another 10 or 20 miles and fill up!



#### Difficult starting/won't tick over

Especially common after the tank has been pulled back/removed then refitted. Check the throttle cable run very carefully, especially where the outer sheath ends on both injector throttle bodies.

What happens is that the cable gets pulled out of position which destroys the synchronization. The Motronic then tries every way it can in a vain attempt to re-synchronize and in doing so produces erratic engine performance.

# Stalling

Sometimes US models sputter and almost stall when the tank is filled to the very top. This is caused when the charcoal canister gets saturated with fuel from an overfilled tank.

Remedy - either don't overfill the tank or remove the canister. Gary Wasserman has details of <u>carbon canister removal</u> on the IBMWR website.

Note the charcoal canister is fitted to US models only not European ones.

#### ABS

#### **ABS in cold weather**

In cold weather, typically on first start up in the morning, ABS often does not initialize. It continues blinking while you ride. On later journeys ABS is often fine.

The problem seems to be the battery voltage is low (due to the battery being cold) when the test is performed. Low voltage prevents ABS initializing.

To overcome this, ride carefully until the battery has had a chance to warm. Then pull over, turn the ignition off and re-start. Normally ABS works then.

#### To disable ABS

When riding offroad on certain surfaces some riders prefer to disable ABS. To do so:

- 1. Turn ignition off.
- 2. Press and hold the ABS reset button.
- 3. Turn ignition on.
- 4. Release the ABS reset button.
- 5. Start the engine and ride off.
- 6. If the ABS lights continue flashing, ABS is disabled until the next time you switch on normally.

The brakes work normally so now it is possible to lock your wheels. If no lights are on (and you hear that grating clunk as you move off) then ABS is still engaged - stop and try again.

7. Press the ABS reset button to stop the annoying flashing and leave one red light permanently on. (You have to repeat this at intervals).

#### **ABS Reset**

Another situation that owners should possibly either know how to deal with or else carry a set of printed instructions for, is ABS reset.

In certain situations e.g. after an off, the ABS needs to be reset. You can see this because the red ABS warning lights flash not together as they normally do but alternately. The brakes are unaffected.

Normally a dealer has to reset the ABS. However several owners said that the last thing they wanted after coming off was to have non-functioning ABS. The following procedure can also be used. It is useful to carry a short length of wire stripped at both ends.

- 1. Turn ignition off.
- 2. Remove pillion and rider seats.
- 3. Locate the 3 wire plug by the toolkit and remove the blue termination. (It's for diagnostics so is not connected to anything).
- 4. Insert one end of wire into the \*middle\* socket.
- 5. Clip the other end firmly to ground.
- 6. Turn ignition on. Note that the two ABS lights continue flashing alternately.
- 7. Hold ABS button down for 8 seconds. The bottom ABS light should stay on, the top one off.
- 8. Release the ABS button.
  - If the reset is successful, both ABS lights come on.
  - If you didn't count to 8 or your ground is not good, then the top ABS light stays off. Start again and/or try pressing the ABS button before turning ignition on.
- 9. Turn ignition off, remove wire, reconnect plug and refit blue termination.

#### **Rear brake failure**

One owner reported riding in the mountains losing the pressure in his rear brake pedal. When checked nothing appeared to be wrong. The fluid was above the min but the caliper was very hot.

After pumping the pedal several times it built up pressure but after a short distance it lost it again. Then after a short coffee break the brakes worked fine.

The cause was boiled brake fluid due to water in the brake fluid. This was made worse by riding (downhill) in the mountains when the brakes are used more than normal. As soon as it cooled down the rear brake worked as normal.

The solution is to heed the BMW recommended annual brake fluid change.

## **Speedo Cable**

Speedo cables usually last a long time. However incorrect fitting shortens its life considerably. Most common cause of misfitting is having a new front tire fitted.

The speedo takeoff has a ridge to keep it from turning. When mounted correctly, the ridge is in front of the fork, and the cable attaches at an angle almost parallel to the ground.

When mounted incorrectly, the cable attaches to the speedo takeoff (at the front axle) such that it angles noticably downwards.

#### **Defective clutch seal**

Some bikes, particularly pre-98, suffer clutch slip. You usually notice it first during high speed roll ons in top (e.g. accelerating hard from 70 to 90mph).

This is a known problem caused by oil on the clutch plates. This is due to a seal being nicked during gearbox/engine assembly and has been reported on 94-97 models. (98 on they fixed it).

(If you are really keen you can inspect for the problem. Remove the starter cover and see if oil has bypassed the seal and coated the inside of the housing).

The bad news is that it requires the whole engine and transmission to be removed to replace the damaged seal. The good news is that normally, if you work with your dealer, he can arrange for this to be handled like a warranty claim. This holds even if your bike is out of warranty because it is a known problem.

#### **Puncture repair**

- 1. Put bike on center stand. Place rocks around wheel without puncture to stop bike rolling off stand. Retrieve the puncture repair kit that is stored with the tools.
- 2. Find cause of puncture e.g. nail. Carefully mark its position (so you can find the hole later) and remove cause.
- 3. With the tool from the puncture repair kit, **vigorously** ream the hole to make it large and smooth enough for a plug (i.e. a couple of millimeters across). Try wearing a

- glove to pad your hand from the thin tool.
- 4. Hook one of the plugs onto the tool. It should be angled so that it extends back toward the handle.
- 5. Apply glue to the end of the plug, the outside edges and to the inside edges as well.
- 6. Apply glue to the hole and its edges with the end of the tool.
- Push the tip of the tool into the hole, then push the plug halfway in. This is extremely hard to do. It's easy to break several plugs before it goes halfway in. DON'T ROTATE the tool and plug, just push it straight in.
  - It helps to:
    - squeeze the tire from the sides. This makes the hole larger and keeps it from deforming towards the rim.
    - if an attempt fails, use the other end of the plug for another try.
- 8. When the plug is halfway in, pull the tool smoothly back out. It should come out and leave the plug in place.
- 9. Use the small cutter from the kit to cut off the part of the plug that sticks out beyond the tread.
- 10. Attach the adaptor from the kit to the tire valve.
- Put on gloves (as CO2 cylinders freeze instantly when pierced!). Push the CO2 cylinder into the valve adaptor to inflate the tire. Each cylinder is worth around 6-7 psi.
- 12. Check the seal by dripping a little water on the plug. (If it leaks slightly, it might still seal when ridden).
- 13. If the tire holds the pressure, ride home more carefully and slowly than normal. If you experience any unusual handling, stop and re-check. If possible, stop at a garage and reflate to correct pressure.
- 14. This is a temporary repair only. As soon as possible take to a tire depot to have it properly fixed or replaced.

# Pinking

Some higher mileage engines sometimes pink (or pre-detonate) when accelerating hard in top gear even when using quality fuel. This is often caused by carbon build-up. The solution is to use a fuel injector cleaner. BMW market Techron but the commonly available car injection cleaners, like Red Line SI-1, are also perfectly suitable.

Be sure to follow the manufacturer's instructions. One recommendation is to add the cleaner immediately before filling up and going on a trip that uses up most of the fuel in the tank.

# Sidestand switch

Several owners reported that their sidestand switch failed for no obvious reason (usually miles from anywhere!). They had to trace the wiring and short the switch.

BMW evolve models during their life but they don't fix what aint broke. So the fact that BMW fitted a re-designed switch for model year 98 indicates pre-98 models do have a potential problem.

So it's probably a good idea for owners of pre-98 models to either learn how to short the switch or to keep the printed instructions with them, just in case.

#### Symptoms

When ignition switched on:

- no warning lights come on
- no fuel pump whir
- blank RID (if fitted).

First get right down and examine the switch carefully for trapped stones/other debris. If you find something, remove it and try the ignition again. If it still won't work, short the sidestand switch:

- 1. On the gearchange side under the front seat there is a plastic connector.
- 2. Pull the connector apart.
- 3. Short the green/red and green/yellow wires.
- 4. Re-assemble the connector.

#### **Alternator belt**

A screeching noise from front of the engine is usually caused by the alternator belt.

To check the alternator belt remove the black plastic cover in front of the engine and see if the belt is correctly tensioned and in good condition e.g. not frayed.

#### **Radiator blind**

If the engine does not reach 5 bars on the RID in cold weather try a radiator blind. Cardboard is easiest to use but perspex is more durable and less visible.

Small perspex off-cuts are available at most DIY shops very cheaply. 2mm (3/16") thick is ideal. Approx 200mm length (7 7/8"). Indent along bottom edge keeps perspex from damaging paint on mudguard. Rough ASCII art:

Length 200mm (7 7/8")



Various sizes can be made up e.g. 20, 30 and 40mm deep. The colder the weather, the bigger the perspex piece required to let engine reach working temp.

Alternatively you can buy a neater radiator blind.

#### **Split Fuel Filter**

Symptoms:

- engine runs fine then problem suddenly arises
- engine idles correctly
- engine coughs and/or dies when you try to rev it or ride off.

The cause is a split BMW fuel filter, often due to water in the fuel. The fuel filter is in the tank and replacement is fiddly. Best to take to BMW dealer.

Alternatively, see Rob Lentini's <u>External Fuel Filter Modification R1100</u> on the BMW Internet Riders website.

#### **Sight Glass Blow Out**

It has been known for the engine oil sight glass to blow out. Seems to be on higher mileage bikes (over 50k) particularly those with cannisters still fitted. Happens mostly on engine start up although some sight glasses slowly leak over time.

(To know what a blown sight glass sounds like, start the engine and briefly remove the oil filler cap - same sound.)

The sight glass is actually plastic, inexpensive and easy to replace yourself. It's simply a friction fit with flat sides - it's amazing that it stays in place at all!

#### To replace an old/leaking sight glass

1. Make sure the oil level is below the bottom of the sight glass e.g. drain some oil out

- or securely tilt bike.
- 2. Drill a small hole in the plastic.
- 3. Insert a small sheet metal screw (self-taping) into the hole.
- 4. Use a claw hammer or similar to pull the sight glass out.
- 5. Clean the surface.
- 6. Smear a thin film of high temp engine sealant over surface.
- 7. Find a suitable object that is the same diameter as the sight glass. For example, a large socket or one inch length of PVC pipe.
- 8. Carefully use the object to tap the new sight glass into position.
- 9. Top up oil level.
- 10. If possible leave overnight before starting engine.

On journeys to remote parts some owners carry a spare oil sight glass and suitable object to mount it. Just in case.

[ Beam me up Scotty! ]

Back to the: • GS Telelever and 4 valves engine introduction

page

• <u>G/S and GS</u> Home-page

This page is for information only. NO COMMERCIAL CONTENT.

Go to <u>MicaPeak home page</u>. For contact and questions : <u>Hari Ahluwalia (eurhia@eur.sas.com)</u> or <u>jmoxhet@netscape.net</u> Updated the 03 January 2001



# THE BMW R1100GS

# Page 3

# Customizing

# **About Customizing**

The R11GS is an expensive motorcycle however that does not stop many owners customizing theirs for individual requirements. This page explains about some of the common customizations.

Other useful sources of info.

- There are many pictures of some of the parts available on the <u>GS Optional parts</u> <u>page</u>.
- Details of aftermarket suppliers are on the <u>GS address page</u>.
- Be sure to check out H.Marc Lewis's <u>R1100GS registry</u> where you can see exactly what customizations owners have done to their machines and what they think of them.
- On the <u>owner survey page</u> there is further information about how owners have customized their bikes.

[Beam me up Scotty!]



As the image on the left shows, the BMW luggage available includes:

- Black plastic saddlebags (25 liters on exhaust side, 31 on other).
- Topcase (35 liter as K-series).
- <u>Multivario tank bag (up to 27 liters)</u>.

## **Saddlebags or Panniers**

#### Stock

The stock BMW saddlebags are generally good for touring although a little small. The exhaust side bag is smaller than the other (25 liters compared with 31 liters) due to a cutout for the exhaust. (The exhaust side bag also gets hot). Owners like the looks although they are expensive. They are reasonably waterproof (unless overfilled so the lids bulge) and are surprisingly tough. Several owners have reported major spills at high speed on and offroad where the bags stayed in place thereby protecting the bike and suffering only scratching and dents).

The stock saddlebags increase the width of the rear to 38.5 inches (98cm). As this is even wider than the cylinder heads (around 29 inches or 74cm) lane splitting is more difficult.

BMW offer one way to improve lane-splitting with replacement lids for the stock saddlebags. These are the lids fitted to Police R1100RT bikes, also known as City cases. They:

- reduce the width from 38.5 inches to approximately 30 inches (76cm)
- use the same locks as the stock saddlebags but require additional emblems and reflectors
- can be ordered through any BMW dealer BMW part number left: 46 54 2 337 019 BMW part number right: 46 54 2 337 020

However, they obviously reduce capacity. Jim Patton supplied some <u>pictures of his city</u> <u>cases</u>.

For 2001 BMW now offer a wider lids that will carry a full face helmet. (They can be bought as complete units as well). They are about 6cm wider and increase capacity by approximately 6 liters.

#### Givi

<u>Givi</u> topcases are the most common alternative to the stock bags. They:

- are cheaper than the BMW saddlebags and topcase
- are widely available throughout Europe and the States
- are available in a range of styles and sizes (35 to 50 liters)
- all use the same plate and allow one handed operation
- all have modern styling and are waterproof
- the bigger ones take two XXL full-face helmets
- can mostly be used interchangeably as saddlebags or topcase
- options include:
  - o passenger backrest
  - o colored top
  - o on 35 and 46 liter topcases, a high-level brake light.

However, not surprisingly a pair of Givi 50 liter bags is even wider than the BMW bags (44" or 112cm).

#### Hepco & Becker

<u>Hepco & Becker</u> offer several sizes of saddlebags available in tough black plastic and also two thicknesses of aluminum. They are available through sources like **Hein Gericke** or <u>Wunderlich</u>.



#### Aluminum

There are also other <u>aluminum saddlebags</u> available which are particularly useful for offroad or extended touring use. These include <u>Jesse</u>, <u>Touratech</u> (available with or without exhaust cutout section, a version with cutout section is also available to be used with the BMW eom mounting system) and <u>Wudo</u>.

The Jesse bags are 32.5 inches (82cm) wide, the same width as 2 x 35 liter Touratech bags. Touratech 2 x 41 liter bags are 35.5 inches (90cm) wide.

#### Advantages of aluminum luggage:

- Extremely strong and well engineered.
- Available in different sizes, most are no wider than the cylinder heads and less wide than the BMW panniers.
- Waterproof.
- Come with lids that are handy as trays while cooking, camping working on bike etc.

Disadvantages:

- They load through a narrow lid at the top that makes packing and unloading more difficult than with side loading.
- Mounting system is obtrusive when the bags are off.
- Expensive.
- Being aluminum the exhaust side bag gets hot. (Try sticking some special tape on the outside of the bag in the exhaust cutout section. It has insulating material on one side and thick aluminum foil on the other. Available from stores that sell motocross equipment).

#### Topcases

#### Stock

The stock 35 liter black BMW topcase (as per the pre-Telelever K-series) is fine but expensive. However, it should not be overloaded as its mountings are not strong. In addition the pre-97 racks can crack unless they have been updated with the newer version.

A BMW backrest (including two speakers) fits onto the stock topcase. Several aftermarket seat manufacturers (e.g. Corbin and Russell) also offer a backrest (without speakers).

#### Givi

As mentioned under saddlebags, Givi are the most popular alternative to stock. Available in most countries, they come in various colors and sizes e.g. 36 and 50 liters. A Givi topcase and fittings are also cheaper than the same from BMW.

For use as a topcase be sure to get the Givi specific R11GS adapter plate E-184 not the universal adapter. The E-184 fits properly and allows a Givi topcase to be used with BMW bags without a problem.

To mount a Givi topcase on a R11GS

- 1. Remove the grab handle behind the rear seat.
- 2. Install adapter plate E-184 using the 4 fasteners provided.

When riding without the topcase, the plate stays on and provides a larger rack than stock. However you have lost the passenger grab handle with the fittings provided. You can either get some longer bolts and then refit the grab handle and/or add an optional passenger backrest to any of the Givi topcases.

As with any topcase, be careful not to overload it.

Hepco & Becker



Hepco & Becker offer several sizes of topcase available in tough black plastic and also two thicknesses of aluminum. They are available through <u>Wunderlich</u>.

Touratech also have a 35 liter aluminum topcase to match their saddlebags.

# Tankbag

According to the <u>owner survey</u>, many owners like the <u>BMW Multivario tank bag</u> but others find it small and expensive. It has its own base plate and is expandable up to 27 liters, more than enough for one full-face helmet.

It has a feature a lot of tank bag owners do not realize - when filling up you do not have to remove it.

- Just pull forward on the front hook thereby unhooking it from the front of the tank (its strap is elastic).
- Flip the bag back onto the seat leaving it zipped.
- After fueling reverse the process.

Alternatives can be hard to fit due the size/shape of the R11GS tank. They include RKA, Roadmaster, POLO Enduro and Bagster. In addition, <u>Touratech</u> have a black tankbag with a 25 liter capacity that comes with two separate sidebags of 10 liters each. Cost: 279DM.

#### Soft luggage

BMW had two sizes of tough waterproof nylon luggage roll that can fit either on the rear rack or over the toolkit. The small one takes up to 25 liters; the large one up to 60 liters. Not sure whether this is still in the BMW catalog however similar rolls are certainly obtainable.

Other soft luggage can be fitted but make sure that when fitted it does not touch the exhaust otherwise eventually it will burn through. One very practical set of soft luggage that overcomes this and has fittings for the R11GS is the Gearsack system.

#### **Toolkit cover**

Zweckdesign has a beautiful aluminum rack that sits over the toolkit cover and conveniently incorporates several holes for bungee hooks. It considerably improves security for the toolkit when riding without the passenger seat. The rack is also available through <u>Wunderlich</u> and comes in four colors (silver, black, red and gold).

Wunderlich also have a black metal basket type cover on top of which you can fit their leather topcase.

Corbin have a large stylish top box for solo use only, <u>the Smuggler</u>. It fits on top of the toolkit cover and the rear rack and unlike the other topcases is not much wider than the rack. The topcase comes color coordinated and is well made but expensive at around 700 USD.

<u>Wudo</u> also have a small business paper sized brief case with its own bungee hooks that fits over the toolkit cover. In addition they have a black metal rack that uses the passenger seat mounting points and sits over both the toolkit cover and stock rear rack.

#### Rack

Wudo has a black metal rack that sits on top of the stock rear rack and makes it wider.

[Beam me up Scotty!]

# **Windshields**

One of the most common customizations is the fitting of an aftermarket windshield.

BMW developed the stock windshield in their wind tunnel. The result was a small but effective windshield that can be adjusted through a range of 14 degrees. Before buying an aftermarket windshield try the windshield throughout its entire range. Yes, even the fully forward position!

The air flow around the front of the bike is complicated and results in:

- turbulence which for example shakes your head
- noise
- drag which tires you after a long ride.

In extreme cases this can result in double vision at speed. Others report headaches after long rides for which two causes have been identified. First looking through the (optically imperfect) windscreen or air flow from below coming up across the tank. This air flow cab be reduced by fitting something like Aeroflow's Aeroguards or <u>Aerostich's Tank</u> Panniers.

You are looking to find the best compromise that suits you (and we are all different).

Sitting height Someone on the BMW-GS list came up with: Sitting height = height - inseam e.g.

6 foot 3 inch - 32 inches = 43 inch sitting height

It approximately works out how "tall" you are above the seat. This is far more useful basis of comparison than some of the manufacturers' statements like

"our tall screen is for riders over 6 foot 3 inches".

We all have different body lengths. For example two 6 foot 3 inch tall guys can have inseams of 30 inches an 36 inches respectively. That is 6 inches difference in sitting height which can make a big difference to how they are affected by a particular screen. So in posts about windshield heights, try to state not just your height but also your inseam and even whether you use the high or low seat position.

Ok, we'll start with the cheapest customization...

# Simple stock screen adjustment

For some owners the stock screen does not go down low enough. However, it can be made to go back over an inch further with a simple and cheap modification.

As standard the plastic knobs on the inside of the screen-adjustment screws are oval, to keep them from turning. Remove them both and grind one side of each down approximately the same amount. Here's some ascii-art of the mod:

```
Before ( o )
After (o )
```

Notice that only one side has to be ground down, the other side is enough to keep the knob from turning.

# **Removing the stock windshield**

You may find it useful to ride down a quiet road where you can stand on the footpegs. At some point you will rise above the noisy turbulence created by the screen. This gives you an idea of how quiet it would be if you remove the screen altogether. The downside is that it is tougher on your neck muscles.



#### Post 1

I removed the stock fairing. For me (6'0", 32" inseam), the stock fairing creates lots of turbulence at helmet level, and this is NOISY, even with ear plugs. No fairing means smoother airflow at my helmet. I don't want to get a bigger fairing, either, because I like the wind (especially when it's hot). I'll trim my stock screen so it's just as tall as the instrument pod.

#### Post 2

I'm 6'0" with 30" inseam and, regardless of mounting angle, the stock shield pushed wind right onto my helmet and caused lots of noise. I removed my stock shield and it was much better (95 R11GS). The unfaired bike really smoothed the airflow around my helmet, making it much quieter.

#### Post 3

I removed my screen about a year ago and I find this solution better than stock on my 95 R11GS.

However, it does make an already ugly bike even uglier, if you can believe it's possible.

With the stock shield I get the airflow at highway speeds right onto my helmet's faceshield (I'm 6'0", 32" inseam, Corbin seat mounted on high setting).

I am probably going to buy Givi and since it's a little longer than stock I anticipate it'll provide a better solution but not the ideal one. Parabellum is not an option for me since I don't care for its looks, and Aeroflow with lowers would just make my bike an R11GS/ RT, which I don't want. Now, I hope a tinted Givi with tank panniers will provide better wind/weather protection.

#### Post 4

I modified my stock screen. Then I bought a Givi and tried that. Tried modifying the Givi. Finally gave up as it was still too noisy.

I tried a set of tank panniers as it seems that a lot of the turbulence comes from below. The combination of no-screen and tank panniers gives me a very quiet ride.

#### Post 5

I am not very tall (5'-7"/30 inseam) so I don't need a higher shield. In fact, what I was looking for was a lower shield.

Last summer, I rode with the shield removed altogether for a 5000 km trip in nice warm weather. This was great because the bike is a lot quieter without the shield and I like driving with no visual obstruction.

But when you drive at higher speeds (+110 kmh/65 mph), the wind pressure gets pretty strong (and even worse for the passenger). In wet weather, you also loose the protection of the shield.

So I thought the ideal situation would be to have an adjustable windshield that offers more play that the actual adjustment range. As the stock screen is actually quite cheap (around 110 USD) I didn't mind if something went badly wrong.

I cut the shield in half horizontally and drilled slots so that the upper part can now slide up and down almost 5 inches. This way, when the shield is down, it is just slightly higher than the instrument cluster: it's almost like having no shield at all. Then, if I want more protection, I slide it upwards and it sits about 1-1/2 inch lower than originally (which makes for almost full protection for someone my height if you adjust the angle to its most upright position).

I use screws with wingnuts so the height can be adjusted in seconds.

Plus, if you want to remove the shield altogether while traveling, you can easily store it in your luggage because it gets a lot more compact when you slide it down.

All in all, for me this was a great improvement. I get the advantages of good protection for high speeds/bad weather plus the advantages of a cooler, quieter drive in the nice summer days. Riding with no shield feels more like the good old basic driving fun.

Directions

Cut the windshield horizontally, 8 inches (20 cm) from the top. Let's call the top part Part A and the bottom part Part B.

To cut the plexiglass, I simply used a metal saw with fine teeth. To keep a straight line, mark the plexi deeply with a screwdriver or utility knife. All cuts in plexi should be rounded slightly and sanded smooth, not only for aesthetics but because it makes the material less prone to cracking.

After cutting, reinstall Part B on the bike and try to make Part A slide down. As you see, there is a problemm because of the "wings" of Part A. Indeed, you have to make a vertical cut at the bottom of each side of Part A to cut those wings and allow Part A to slide down smoothly into part B.

Now, Part B can travel up and down on more than 6 inches (15 cm).

We now have to create a system to fix Part A and B together. To do this, take your time
and go step by step. First, position Part A in its UP position inside of Part B. I left an overlap of about 1-1/2 inch (4 cm) between the two parts. Hold the parts in place (use vise grips with cloth in the claws) and drill 2 holes through both parts at the same time. The holes should be about 3/4 inch from the top of Part B and 3/4 inch from the bottom of Part A. Sideways, they should be about 5-1/2 inches (14 cm) apart.

Then, position Part A in its DOWN position. Drill again using the same procedure. The vertical distance between the holes should be 2-1/4 to 2-1/2 inch. The holes should be about 1/4 inch (0,6 cm) in diameter, and the screws a bit smaller.

Now that you have yous UP and DOWN positions secured, all you have to do is to connect the holes so that the parts can slide. This is the part that takes some patience. To dig the groove between the holes, I made numerous holes in between and then hand filed the groove until smooth if I remember. I guess a Dremmel or small jigsaw would have made the job faster and easier... Then put screws with wing nuts to the outside and try your adjustable windshield !

Ok, we are almost done. You might wonder if Part A will be able to resist the wind in its UP position since the overlap is only 1-1/2 inch. I was worried, too, so I took no chances. What I did is add 2 extra holes on the lateral section of the shield and use wing nuts there too. These holes give a lot of extra stegnth - they are used only when the shield is its uppermost position.

Sounds a bit complicated on paper. But it's fairly easy for anybody with some experience with tools. All you have to buy is 4 screws and 4 wingnuts and check if you have nice blades for your saw. The work itself can easily be done in one afternoon, taking your time and checking after each step to make sure you are on the right way.

## Cutting down the stock windshield

This gives an edge which is frequently better than stock.

- 1. Choose a suitable saw for example:
  - a) a bandsaw with a fine tooth blade
  - b) the finest tooth blade hand saw e.g. 6" blade Stanley
  - c) a coping saw.
  - Avoid sabre saws.
- 2. Find a warm place to do the cutting eg in direct sunlight. Keeping the plastic warm tends to reduce the likelihood of cracks.
- 3. Cut slowly and carefully. Avoid back and forth motion which tends to start cracks.

- 4. To smooth the edge, use woodworker's files, first medium course then fine. and/or two grades of sandpaper on a sanding block.
- 5. Finally use some steel wool.

#### Quicker alternative

- 1. Use a Dremel tool with their all material cutting wheel to cut. It melts the edge while it cuts so avoids cracking.
- 2. Use the grinding wheels or sandpaper on a block.
- 3. Finish with a polishing wheel.

### Aftermarket windshields

#### Givi

- Not that much bigger than the stock windshield.
- Adjustable in the same way as stock (i.e. through 14 degrees).
- Better than stock for drag but no quieter.
- Relatively cheap and was the most popular replacement in the owner survey.
- Available in most markets.

#### Ermax

- Not that much bigger than the stock windshield.
- Better than stock for drag but no quieter.
- Adjustable in the same way as stock (i.e. through 14 degrees).
- Relatively cheap.
- Full or half tint options.
- Available through European aftermarket suppliers. Made in France and available at <u>Wunderlich</u>.

Wudo



- Medium size.
- Uses stock mountings.
- Much more protective than stock for drag but no quieter.
- Not adjustable for position.
- Only windshield with color coordinated option.
- Expensive especially when color coordinated but is a quality product.
- Available from <u>Wudo</u>.

### **MPS**

- Made in two sizes:
  - 1. Standard.
  - 2. Slightly bigger than the Ermax and Givi windshields.
- Both are available in clear, tint or in a wide range of colors:
  - 1. Solid (i.e. non-transparent) black.
  - 2. Transparent red.
  - 3. Transparent blue.
  - 4. Transparent violet.
  - 5. Transparent yellow.
  - 6. Transparent orange.
  - 7. Transparent metallic red.
  - 8. Transparent metallic blue.
  - 9. Transparent silver.
  - 10. Transparent gold.
  - 11. Transparent fluoresent green.
  - 12. Transparent flourescent pink!
- Similar price to Ermax and Givi (around 70 pounds sterling).

Available from: MPS Daneheath Business Park Heathfield Newton Abbot TQ12 6TL England Tel: +44 1392 455065 (24 hour operator) Fax: +44 1626 836666

## Aeroflow

- Much bigger than the stock windshield.
- Available in:
  - 1. Standard or tall screens.
  - 2. Custom sizes (cutdowns of the standard and tall screens).
  - 3. Aeroguards (or lowers that fit on tank and reduce drag especially on legs).
  - 4. Smoke or clear body (no extra cost).
- With Aeroguards provides best coverage of this group. Many owners report that protection is similar to the R1100RT.
- Well made.
- Riding without Aeroguards at speed can cause excessive turbulence.
- Interferes with standard BMW handguards.
- Ugly check out these <u>images</u>.
- Expensive.
- Brackets can be welded to its mountings e.g. to hold a radar detector or aux lights etc.
- Is brittle and shatters if hit by blunt objects.
- Available from <u>Aeroflow</u>.

As regards size of screen the rules seem to be:

- 1. The best fit is just being able to see over the screen.
- 2. If your sitting height is above 40" you should be able to see over the tall screen.
- 3. Between 37-40" you could try a tall screen then cut off a bit if necessary.
- (Aeroflow offer a custom service for both screens).
- 4. Below 37" you probably need a standard screen.

## Parabellum

- Much bigger than the stock windshield.
- Available in standard or tall.
- Ugly.
- Flexes at speed.
- Interferes with standard BMW handguards
- Expensive.
- Available from <u>Parabellum</u>.

Parabellum screens tend to be thinner than the other aftermarket screens. This makes them both lighter but also more fragile. Some owners have reported problems with cracks appearing around fixing holes. Several have even reported fractures. Two suggestions

- 1. Never overtighten the fittings.
- 2. Use additional foam or rubber between the fitting and the screen.

## **Fine tuning**

To fine tune the turbulence/drag/noise at various speed try:

- changing your riding position e.g. higher/lower seat, re-position handlebars
- adjusting the shape/size/position of the screen
- Saeng edging.

## **BMW Handguards**

The Aeroflow and Parabellum windshields interfere with the BMW handguards on about the last inch or so of lock on both sides. However, there is some give so you can almost get to full lock. If it is a problem you can:

- 1. Rotate the handlebars back (which also reduces the lean forward). (Not too far, else the left handgrip control mount hits the tank on full lock).
- 2. Adjust the controls to suit again.
- 3. If still a problem, make smooth (i.e. curved) cutouts on the Aeroflow where the handguards still contact.

[Beam me up Scotty!]

## **Seats**

One of the things that is often praised in the Press is the R11GS's seat. For short periods it is fine, wide and supportive. But some owners find that when living with it for a while the comfort fades after an hour or two.

The best advice is try:

- 1. Living with the stock seat
- 2. <u>A simple fix</u>
- 3. <u>Customized seats</u>

## 1) Living with the stock seat

Some owners do get on with the stock seat (or learn to put up with it) as these posts explain...

#### Post 1

"It's a shame that people don't spend at least 6 months and/or several thousand miles on the stock seat to find out how well it actually works."

"A friend has over 100,000 miles on his 95 R11GS and still uses his stock seat. (A couple of his rides were coast to coast in under 40 hours. That's around 2,400 miles at a time)."

"My own GS is 4 months old and done around 6,000 miles. I did 1,484 miles on the stock seat last weekend without any problem. The stock seat is now extremely comfortable for me (although it certainly was not even a month ago)."

#### Post 2

"Awhile back someone wrote that the seat breaks-in after several thousand miles. At that point I'd done about 2500 miles and I was sceptical. It began to break in towards the end of a 2500 mile tour (or perhaps it was my butt!)."

"By 6,000 miles, however, I noticed a substantial improvement. The convex rounded back of the seat now seems to have more give and my butt can settle in. More comfort, less sliding. I'll stick with the stock seat too."

However, these owners do not speak for all and many find the stock seat is uncomfortable. But if you try yours out first you'll find out if it's ok for you. If you find it uncomfortable try working out what hurts e.g. underside of thighs. It makes doing something about it easier.

## 2) A simple fix

If, after trying the stock seat out you find you can't live with it, the next thing to try is this simple cheap fix.

For some owners the main problem is that the seat slopes forward. To overcome this try fitting some washers under the front mountings with longer screws. This flattens the contact area and for some this turns the seat into something they are happy to live with.

The spacing required is entirely up to you. Experiment and find what best suits you - spacers from 1/8 - 5/8 inches (3 - 16mm) have been suggested. (Put spacers under all the mountings if you want to try increasing seat height).

The disadvantage of this is that it opens up a gap between the seat and the rubber strip at the back of the tank - try filling it with black weatherstripping.

Some owners are happy with inflatable air cushions with or without sheepskin covers. For example **Therm-A-Rest** seat cushion size, 12 inches wide by 17 inches long and is typically available from sporting goods stores. This is cheap but takes some getting used to, especially getting on and off.

The more time you spend experimenting, the better you will understand your problems with the seat. This makes fixing it easier.

## 3) Customized seats

If you have tried the stock seat and the simple fix, by now you'll know what your problems are with the seat! For most owners they are:

- seat slopes forward so you tend to slide forwards and end up pushing yourself back
- area you sit on is convex so you sit ON it not IN it
- seat has "shoulders" towards the front which rub on the bottom of your thighs. (The taller the rider or the further back you sit from the tank, the worse this is).

Sorting these problems out means customizing a seat.

The easiest solution is to find a local company that recovers motorcycle seats. Most are able to customize the seat if you tell them what your problems are. Take your seat along or get a spare from a motorcycle breaker.

Other than that there are a three Californian companies that specialize in customizing seats particularly, but not exclusively, BMW.

## a) Corbin



Probably the biggest and best known, Corbin produce a replacement seat for the R11GS with a large flat area or bowl. The image on the left shows an R11GS with accessories from Wunderlich including Corbin seats in black with red piping. Click on it to see the bigger picture.

#### Advantages:

- comfortable for most owners
- lots of outlets including outside US e.g. Wunderlich
- lots of options e.g. leather, piping, backrest etc
- has a one-day "ride in" service for individual customization
- you keep the original seat they sell you another.



#### **Disadvantages:**

- some owners complain about fit
- some owners complain about service
- increased width reduces reach to ground
- passenger seat backrest not useable with BMW topcase
- usually most expensive of the three companies here.

## b) Russell

Customize your seat using butterfly springs under "wings" which stretch further out on both sides. Require photos of you on your bike. Contact to agree date for work and carrier required.

#### **Advantages:**

- comfortable for most owners
- lots of options e.g. leather, quilting, raincovers etc
- has a one-day "ride in" service for individual customization
- usually cheaper than equivalent Corbin.

#### **Disadvantages:**

- you have to send your original seat to be recovered
- looks (they refer to them as "butt ugly" themselves).

## c) Travelcade

Adventure traveler Helge Pedersen ( "10 years on two wheels") gives a <u>review of his Travelcade Gel seat</u>.

"A heated seat that actually gets HOT " says Marco



Wunderlich now offer sculpted alternatives to stock including:

- rider (original thickness)
- rider (lower than stock)





The BMW R1100GS page 3

#### • passenger (original thickness)

All are available either as exchange or replacement.

## e) Sargent

"Sargent redid my 96GS seats with an "atomic" foam upgrade, which is listed on their website as for the R1100RT only, new vinyl Grip Tex (you can get smooth or "diamond plate" texture), for \$334 + UPS...for both seats. A nice company to deal with, and their quality is much better, as are their prices, than the Corbin I ordered for my sport bike which neither was finished properly, nor fit my bike, and cost over \$500. I like the look of the Sargent. It uses your seat pans, which you send to them, then they sculpt the seat area to accept their special foam, and recover all. They will further customize any reat and have a good website." <u>www.sargentcycle.com</u>

## f) Mayer

The original founder of Day Long saddles, Bill Mayer sold to Russell. Later he decided to make seats again using another design under his name. They were very high quality products worthy of his title, Saddlemeister. Unfortunately production stopped when Bill died.

#### Beam me up Scotty!

## Footpegs/Kneepads

### Footpegs

For onroad touring the third best way to improve your comfort range (after seat and screen) is to replace the stock pegs with wider and preferably sprung items. (More like the stock passenger pegs). Other BMW pegs use the same mounting points so are easy to interchange.

#### Notes

- 1. Usually accessing the brake lever and gear shifter is still ok but try to test this out beforehand as everyone is different.
- 2. Installation of the springs can be tricky.
- 3. If the footpeg is lowered, ground clearance is reduced.

#### **BMW pegs**

Many BMW pegs fit directly or can be made to fit with slight adjustment or by fitting simple spacers/brackets. For example:

- **R100GS** drops the footpegs down around an inch and slightly forward. Two types:
  - 1. Offroad type similar to stock R11GS with serrated top and rubber insert 2x Rubber outer 46 71 1 242 109
    - 1x Footpeg 46 71 1 242 017
    - 1x Footpeg 46 71 1 242 018
  - 2. Onroad touring type larger flatter rubber covered footrests 2x Rubber outer 46 71 1 454 887
    - 2x Flat washer 46 71 1 454 388
    - 1x Footpeg 46 71 1 454 535
    - 1x Footpeg 46 71 1 454 536
- **K 1985** cheap alternative for onroad riding. The tip must be ground down to make the peg level.

Available quite cheaply from BMW dealers.

#### Non BMW pegs



The <u>WüDo</u> lower pegs for the R11GS use the stock rubbers but

are more expensive than alternative BMW ones.

Marco Prozzo says "Absolutely great. Notice a difference right away. Used to have to stretch my legs much more frequently than now. Moves the foot position down and forward approximately 1 inch in both directions. Big foot beware as this reduces the space between peg and shifter.... At first glance you cannot distinguish them from stock pegs. The strong springs detered me from doing this installation. My dealer took 20 minutes to do it."



The <u>MV</u> lowering pegs kit for the R11GS.

#### **Repositioning the footrests**

Verholen have good quality but expensive mountings that lower the footpegs approximately 2 inches. They can be used in addition to any of the non-stock footpegs to further lower the footpegs.

Obviously lowering the footpegs reduces ground clearance.

<u>Wunderlich</u> have a kit that lowers the stock passenger footpegs (40mm lower, 10mm forward).

## **Kneepads**

The stock tank has no knee pads. Some owners find they wear the paint away with their knees.

The knee pads from the K1100LT fit perfectly on the R11GS tank although some find them a bit thick.

Alternatives are available from <u>Wudo</u>.

[Beam me up Scotty!]

## **Electrical Accessories**

The electrical system of the R11GS is robust and has a generous output (700W), unlike previous GS models. This means additional electrical accessories can be added without much worry of overloading the system/flattening the battery.

## **Accessory socket**

The R11GS comes with the same electrical socket for accessories e.g. heated jackets, that is used on the K-series. Note that this circuit is:

- not switched off with the ignition so is ideal for battery charging
- fused but the indicators are on the same circuit!

The plug is available from BMW dealers and several other sources. One is John Deere series 50 farm tractor accessories, the:

- male plug is John Deere part no RE11344, around 8USD
- female socket is John Deere part no AL25073, around 4USD.

If you want to attach an additional socket for light loads that is controlled by the ignition, use the parking light lead in the headlight assembly and fuse it separately.

## Headlight bulb

The stock headlight has a single 55/60W H4 bulb. This can be replaced very easily with larger wattages e.g. 55/80, 90/130.

For bulbs of more than 80W electrical power fit a relay, usually under the tank. (Sure you can fit the bulb and it will work but after some time your headlight switch will burn out and need replacing).

There are several replacement bulbs that take the same 55/60W electrical power and claim to offer increased light output. These bulbs do not require a relay and are commonly available from auto accessory stores but they are more expensive than stock and tend to have a shorter life. However, many listers now dispute manufactuers claims of increased light output. Examples include:

- Philips Premium H4 55/60W bulb (light output approximately equivalent to conventional 80/85W halogen bulb).
- Stanley Raybrig H4 55/60W "Super Beam Halogen Bulb" (light output approximately equivalent to conventional 125/130W halogen bulb).

## **Additional Lighting**

Michael Roeder has documented how he added auxiliary lights to his R1100GS with photos, a wiring diagram and instructions. Check out <u>http://www.infernosoft.com/</u> timberwoof/motorcycle/headlights/

## Horn(s)

The stock horn is a single thin unit that can hardly be heard at realistic speeds. Previous BMWs had twin Fiamm type horns. Similar horns are available quite cheaply from most auto accessory stores and are quite easy to fit.

A single Fiamm horn can be fitted as a direct replacement (although the bracket provided may have to be twisted). Simply:

- 1. Disconnect the stock horn wiring.
- 2. Undo the single nut that holds the stock horn to the bike.
- 3. Remove the single nut that holds the stock horn to the bracket.
- 4. Work out which bracket is best for the replacement horn (stock or one that comes with the replacement horn).
- 5. Fit the bracket to the horn, then horn to bike and reconnect.

6. Ensure the horns/brackets/wiring is positioned in such a way that it does not interfere with anything else. Check by turning the steering from lock to lock.

Twin Fiamm horns can be fitted almost as easily.

Note that a relay is not required since the horn circuit already has one as standard.

[Beam me up Scotty!]

## Touring

Owners whose main interest is touring might find the following posts useful.

#### Post 1

Any bike takes time and effort to get right. Here's what my 11GS took:

- 1. New seat (mine's Corbin but not basket weave, gets to you when it's hot).
- 2. Larger windshield (mine's Parabellum).
- 3. When you've got these two you start getting shoulder and neck cramps cause your butt's in a pocket and there's no air to hold up your torso. Rotating the handlebars and/or backbars are required to make you comfortable again.
- 4. Now the air comes up your knees and torso, under your helmet and tickles your nose. To stop that try Tank panniers by Aerostich. Also gives you a place to stash stuff.
- 5. Throttle rest for relaxed cruising eg Throttlemiester.

#### Post 2

I fitted an Aeroflow windscreen and a Corbin seat then rotated the handlebars back to reduce the lean forward. Just be careful that the handlebar controls don't touch the tank at full lock.

## Post 3

Stock 95 R11GSA. My tailbone ached at the 100 mile mark. One 700 mile day had me wondering about my sanity!

First, a Corbin. Went on a 600 mile run to check it out. WoW. Pain gone and the seat got

better with more miles.

Next, I was taking a beating from wind trying to pull my helmet off my head. Cured that with a Parabellum with the short shield. However I didn't like the way the highway lines changed when looking from thru to over the shield. So cut it down about 1.5 inches and all was ok.

Now, the handguards hit the shield. Dremble tool, files and sandpaper fixed that allowing full lock.

Without the wind I got neck and shoulders cramps from the forward lean. Bar backs fixed that problem (and increased clearance between the windshield and hand protectors). The bars hit the tank bag on full lock but I can live with that.

The wind curling up from under the shield was being rerouted by the tank shape and coming up over my knees, up my chest, under my hat and tickling my nose. So, I bought Aeroflow lowers. The mounting sucked. Tried all different velcros and they did okay but if you happen to tap down on the guard, the whole thing pops off. I was thinking about making some metal brackets when I lost one on a gravel road. I removed its twin. But they did take care of the air flow problem.

Finally Aerostich tank panniers. Took care of the air flow problems (and improved storage on my trips).

Now I have a comfortable bike (for me) that I can ride hard for a long time without getting too tired.

[Beam me up Scotty!]

## Suspension

**Ohlins** 

Some owners find that the standard BMW suspension units (made by Showa) have a short life and that the performance drops off significantly after say 15 minutes riding twisties. Also the units offer only <u>basic adjustment</u> and are "non-rebuildable".

Among owners who change their shock absorbers, another common comment is that the standard springs are too soft so fitting harder ones helps

Aftermarket replacements include:

Possibly the best, certainly one of the most expensive on this list (around 1800USD with fitting). Improves ride quality and grip significantly. They offer longer life than the standard units and are rebuildable. The Ohlins model for the R11GS has all the same adjustments as the standard units plus 25 click rebound adjustment front and rear, as well as retaining the rear remote preload adjustment knob. They are available through <u>Touratech</u> and <u>Wunderlich</u>.

#### White Power

The front damper is a "Bleed Adjuster" with integral nitrogen-charged oil reservoir, compression and rebound damping adjustment, and spring preload.

The rear "Super Adjuster" model has a remote nitrogen-charged oil reservoir, compression and rebound adjustments, and available remote spring preload adjuster.

Retail prices (May 98) are front \$525.11, rear \$740.57 which probably includes the remote spring adjuster, but I'm not certain. There may be a lead time for orders, since these are low-production items. Dampers are rebuildable and are distributed in the U.S. by White Brothers (no relation) in California, and sold through dealers. Also available in Europe through <u>Wudo</u>.

#### Technoflex

Another manufacturer of expensive but high quality suspension units. Several models are available to fit the R11GS. All are serviceable and rebuildable. Available through <u>Wudo</u>.

#### Penske

Have their own website and offer a custom service. Prices start around 700 USD.

#### Fournales

Fournales are French-made air suspension units that cannot bottom out. They:

- offer good performance and should last longer than standard
- are deceptively simple looking and are half the weight of the standard shock
- have no spring but a unique, very-high-pressure, air-spring system which delivers true rising-rate suspension with little or no inertia
- have no damping adjustment (none needed). Dead simple.
- are serviceable by dealers only

However, they are not currently imported into the US and if they fail they leave you without any suspension.

## Lowering the bike

## Post 1 Lowering the seat height

I am 5'7" on a good day and weigh 150 pounds so I had to lower seat height.

Get a local seat upholsterer to cut down the seat and narrow the front. Consider fitting backbars if the handlebars are too far away.

I put a Paralever torque rod from an R1100RS on my '95 R1100GS and my seat height went down by well over an inch. I also set the preload on my front shock to its lowest setting to level the bike. I'm gonna try an RS centerstand to compensate for the lowered suspension.

Apparently some owners put the shorter RT stock shocks on the GS. This reduces ride height but also suspension travel. If you do this, check the spring rates (the RT is 20+kg heavier than the GS).

## Post 2 Lowering the ride height

"At 5'5" I could barely keep my GS upright unless it was moving. I had my Corbin seat cut to lower me but that just made for an uncomfortable ride. After dropping my bike "one too many" times, and not wanting to replace the entire bike with one which would "fit me," I successfully lowered my GS with Ohlins shocks".

(Most aftermarket shocks can be used to reduce ride height. Usually you have to buy both front and rear. However, check before purchase with the dealer/manufacturer that your individual requirements can be accommodated).

"The Ohlins have an adjustable stop which was set to achieve a 2" reduction in height. Additionally, I took 2" off the center stand, but only 1.5" off the side stand, which was too short already (so the bikes sits up higher now)".

"In retrospect, I should have had the GS lowered 1-1.5 inches, because the shocks have now settled some. (I have 40,000 miles on the bike, about 30,000 on the shocks)".

"After getting the Ohlins, I went back to Corbin and had the seat "re-padded" some, and could probably use a little more, again because of how much the bike has "settled" over time".

"Getting the Ohlins w/ installation cost me about \$1800. I can hear gasps, but I look at it this way: Selling the GS and buying a new bike (if I could find one that I liked as well) would have cost me MUCH more than \$1800. I already had my GS custom painted, had

the Corbin, had accessories, etc. For me getting a new bike is just part of the costs, as I like to outfit it to my preferences and tastes. I have never once regretted spending the extra \$ to set up a bike I love so that it is safe, comfortable and easier for me to handle".

## **Riders with big feet**

My dealer relocated the hose from my rear brake reservoir so that it is now INSIDE the frame member in that region. Now when I slide my size 14s back so that I can rest the ball of my foot on the pegs, I don't "snag" the brake hose with my heel.

It's something that other "bigfoots" out there might want to consider.

[Beam me up Scotty!]

## **Performance parts**

## K & N air filters

K & N air filters are commonly available and give a small power gain as they are less restrictive than the stock filter. There is a K & N filter that fits the R11GS (and it also fits the R11RS).

Note these filters are generally fine for onroad use. However as they are less restrictive than the stock filter, they are not a good idea in dusty conditions e.g. offroad. In dusty conditions the small performance gain is probably not worth the likelihood of increased engine wear.

### **Exhausts**

Touratech offer replacements for the two chrome plates that fit on the end of the standard exhaust. They are carbon fiber, save 0.6kg in weight, and cost 249DM.

#### **Gissel and Schneider**

The German company <u>Gissel and Schneider</u> make exhaust modifications to the stock R11GS exhaust. The modification can't be seen by looking at the exhaust and does not change the engine characteristics. The bike no longer sounds like a washing machine but like a slightly louder version of the old boxers. They provide a wav sound file on their web page. It costs about 280 USD (420DM).

#### **BMP (Baxter Metal Products)**

have a low pipe system for the R11GS that is very well made (all stainless except for an aluminum wrap on the canister). This means you can fit the stock exhaust-side saddlebag from other oilheads e.g. R1100RT which is larger.

The pipe is lighter than stock and has a mellow sound that is not objectionable to most people. It is around 600USD. Marco Prozzo has a pic of one on his <u>R11GS page</u>.

Available through <u>Bob's BMW</u> or Baxter Metal Products 6341 Ridgeway Dr. #A Pollock Pines CA 95726 U.S.A. Ph.# 1-530-647-0103 or 1-530-677-2109



#### D+D

make two kinds of muffler, one a "straight- through" pipe that is supposed to be REALLY LOUD, and one made for European use that is much quieter. This has a Ducati-like attitude when on the throttle, yet at idle it's quiet enough to sneak around without upsetting people.

The D+D is much lighter than stock and uses the O2 sensor. It is also low enough that a larger size saddlebag can be fitted.

#### Gianelli

have two racing versions of their neat looking GIANT4 exhaust end can that fit the R11GS.

- Racing Acciaio in stainless steel
- Racing Carbonio in carbon fiber

Check out the English version of their website <u>www.giannelli.it</u> or contact them at Giannelli Silencers S.R.L. Via Gonzaga 12/14 06017 Selci (PG) Italy Email: gianne23@interbusiness.it

#### Laser

Laser exhausts are made by a dutch company "Jama". The exhaust consists of one can only (instead of the 2 pot stock system) so saves weight and apparently sounds better than

#### stock.

Jama also sells a chip that changes the mapping of the EPI. Together with the exhaust system, Laser claims a 10% gain in performance.

#### Remus

have two models for the R11GS, the **Grand Prix** and **Viper**. Both come in polished aluminum with street legal and racing versions. They also make catalyst versions. Remus exhausts are available from <u>Wunderlich</u>.

#### Staintune

are an established exhaust manufacturer from Australia with a reputation for quality exhausts that are not cheap. The Staintune for the R11GS and R850GS costs over 1100USD.

Staintune exhausts are available from <u>BMWCAL</u>. They also list <u>Staintune dealers in the</u> <u>US</u>.

#### Sebring

exhausts are available from <u>Touratech</u> and <u>Wunderlich</u>. This is a polished stainless steel system that saves about 3kg over the standard item and Sebring claims it sounds better. A catalyst version is an option.

#### **Two Brothers**

have high and low exhausts for the R11GS. The pipes look great, are light, and show a positive power addition above 3500rpm for both torque and HP on the manufacturer's own dyno graphs (not verified).

#### Chips

Wunderlich sells an exchange replacement chip. They claim it gives 5 to 6 extra bhp between 3000 and 6000 rpm. Cost: 548 DM.

[Beam me up Scotty!]

## Protection parts

## **Engine bars**



The BMW model shown (part no. 146 71 2 317 043) does not attach to the weak area around the gearbox. However it must be removed to change the oil and filter!

(The BMW hand-guards (part no. 71 60 2 340 208) are also shown).



Hepco & Becker (available from <u>Wunderlich</u>) have two parts for the

the <u>engine protection bar</u> (chrome at 259 DM or black at 228 DM) and the <u>tank/front light protection bar</u> (chrome at 229 DM or black at 219 DM). They also have similar parts for the R 850/1100 R (chrome or black) and R1100RT (chrome only).



The Jama R11GS model (made in Holland) is available in black. For more nice pics check out <u>Marco Prozzo's R11GS page</u>.



The Zweckdesign bars for the R11GS are available in 4 colors (silver, black, red or gold). They do not attach to the weak area near the gearbox but unlike the BMW ones, don't need to be removed to change the oil and filter. A tank/front light protection bar is also available in the same 4 colors.

## Hand guards

#### Stock

The handguards available from BMW are:

- quite cheap
- black plastic
- wide
- attached to the bike at one end only (inboard)
- fine for touring use as they protect the hands well from the wind
- ok for occasional offroading.

However, they do not offer real protection for offroad riding.



#### Touratech

<u>Touratech</u> supply shaped Acerbis Rally handguards with the correct fittings to bolt straight on to an R11GS. These offer full offroad protection and are neat but expensive.

#### Acerbis

The original Acerbis Rally Guards are available in a number of colors from most offroad suppliers. They are more expensive than the BMW handguards but offer more protection from object strikes as they are attached at both ends and have metal reinforcement. They are substantially cheaper than the Touratech ones. However some work is required to get them to fit the R11GS.

To make Acerbis Rally handguards fit a R11GS

- Left side use a longer bolt through the bar-end weight.
- Right side trim the plastic to allow the removal of the brake reservoir lid.
- Both sides start by mounting the inner attachment point first.

H. Marc Lewis has pictures of his '95 R11GS fitted with <u>modified Acerbis Rally</u> <u>handguards</u>.

### **Mudguard Extension**

There is an extension for the R1100RS front mudguard. It is not an exact fit but it can be mounted on the R11GS lower front mudguard without much difficulty. This keeps the front of the engine (above the bash plate) much cleaner.

As an alternative, cut a perspex sheet to fit over the same part of the engine. Drill appropriate holes in it and mount using the stock bolt holes fitted with longer bolts and appropriate spacers. Being perspex it's not obviously seen.

## **Feet protectors**

<u>Wudo</u> has black rubber flaps that fit the R11GS to keep your feet warm. Compared to older boxers the cylinders are positioned higher (for improved ground clearance) so your feet do not benefit from the warm air coming off the cylinders. Nice in cold rain.

## Frame reinforcing kit

The R11GS "frame" can break when used **very extensively and heavily** off-road. (The gearbox mountings fail around the footpeg brackets). However, only a tiny number of failures have occurred, mostly in Australia. For more information, see <u>David Loone's</u>

#### R11GS page.

BMW has an Adventure kit that they supply to owners in Australia (also available under request in Canada) or those who break their frames.

- It consists of a new steel bracket on both sides located between the footpeg plate and the gearbox casting. They are "C" shaped to curve around the swingarm bolt and are bolted through the 3 footpeg plate mounts and the subframe bolt. Both brackets are black.
- On the left, a new footpeg plate is used to allow enough space for the bracket and the bracket itself is shaped at the top so that it bolts to the outside surface of the subframe mount. Their are spacers inside the subframe where the bolt head used to be and the bolt head is now on the outside of the bracket.
- On the right, the original footpeg plate is retained. The bracket is much like the one on the left but is shaped at the top so that the bracket bears against the rear of the subframe mount. Spacers once again fill the original mounting bolt hole and the head of the bolt is now bearing onto the bracket so the head of the bolt is exposed where it used to be hidden inside the subframe mount.

Parts	Numbers
<ul> <li>1 Right side reinforcement plate</li> <li>1 Left side reinforcement plate</li> <li>1 Large cast piece for left side</li> <li>2 Round spacers up to 10/95</li> <li>after 10/95</li> <li>1 Pkge w/2 bolts (M8X45)</li> <li>1 Pkge w/ 1 bolt (M8X60)</li> <li>1 Pkge w 2 bolts (zylinderflan)</li> </ul>	46 51 2 325 860         46 51 2 325 946         46 51 2 325 946         46 51 2 325         911         46 51 2 351         640         46 51 2 325 938         07 11 9 901 033         07 11 9 920 152         07 11 9 900         018

#### • The Adventure Kit is composed of the following parts.

Touratech also sells two "reinforcing" Yellow Line Hard-Parts for the R11GS.

#### 1. Gearbox mountings

Consists of a yellow plate between the cast foot peg mounts and the transmission that provides a second support point for the left and right sub frame mounting bolts. Simple to install and looks very trick. 2. **Steering stop** (a version for the 1150GS is available)

This yellow plate mounts on the front steering triangle and is often misrepresented as a front frame brace. It is not, it is purely a steering stop, to avoid snapping off the fairly weak cast steering stops on the upper triple clamp. Again simple to install.

If you ride a lot offroad the steering stop is probably more important than the gearbox mountings. In a fall, it stops damage to the triple clamp and brake reservoir.

[Beam me up Scotty!]

## **Other Parts**

### **Radiator blind**

Wunderlich have a neat but expensive radiator blind. It is manually controlled by a cable operated handle that fits on the handlebar.

## Side stand foot

Wunderlich offer two different wider foots, one for pre 98 models and the other for post 98 R11GSs. (In 1998 the stock side stand was redesigned). Both bolt to the original stand.

<u>Schneider</u> do a larger foot, the fatfoot, for the R11GS that bolts on.

However some owners have reported that these bolted on items fall off (even when glued on). An alternative is to cut a flat piece of iron to shape, weld it on to sidestand and paint it black.

### **Stainless brake lines**

Stainless brake lines improve the feel of the brakes not overall braking performance. Be aware that the brake fluid should be changed regularly (annually recommended). When the fluid needs changing the brakes feel spongy. Fitting stainless brakes lines improves feel further.

Five lines should be replaced.

- 1. Front brake hydraulic cylinder down to the metal bike line.
- 2. ABS return line to the Y fitting near the front lower fender.
- 3. From the Y connection near the front lower fender down to the front brake calipers (left).
- 4. From the Y connection near the front lower fender down to the front brake calipers (right).
- 5. Rear ABS return line back to the rear caliper.

Complete kits are available from Galfer (part number FK003D184) and Wunderlich.

(There have been some false stories that somehow BMW's ABS II does not work properly with stainless brake lines. This is completely untrue. The Wunderlich kit has full certification from the TuV, the very strict German approval authorities.)

#### [Beam me up Scotty!]

## **Sidecar conversion**



A company called MOBEC in Germany specialize in sidecar conversions for BMW motorcycles. Naturally they have one for the R11GS! Click the small image on the left to see two of their many options.

MOBEC modify the suspension and brakes and fit different tires. They also offer a two wheel drive option, Duodrive. MOBEC build to a high standard and have a range of sidecars available in different shapes, sizes and colors.

For further information contact: MOBEC Stuttgarter Str 139 73066 Uhingen Germany Tel: +49 (0) 71 61 3 21 41 Fax: +49 (0) 71 61 3 80 81

Another German company that makes sidecars is <u>Armec</u>. They offer a range of sidecars including the Sidewinder free-leaning model and have an office for North America. They have a picture of a <u>red R11GS</u> with sidecar attached.

[Beam me up Scotty!]



4

# THE BMW R GS





## The Telelever and 4 valves engine generation

## The 1994-1999 R1100GS and 1998-2000 R850GS

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<ul> <li>Specifications</li> <li>Performance</li> <li>The 1998-2000 R850 GS</li> <li>BMW Accessories</li> <li>Model History</li> <li>Offroad Ability</li> <li>Rivals</li> <li>Magazine Articles</li> <li>What Owners Say</li> <li>High Mileages</li> <li>Buying Secondhand</li> </ul>	<ul> <li>you should know</li> <li>Oil Level</li> <li>Breaking in</li> <li>Tank</li> <li>Toolkit</li> <li>Servicing</li> <li>Manuals</li> <li>Fusebox</li> <li>Tires</li> <li>Wheels</li> <li>Suspension</li> <li>Offroad Riding</li> <li>Simple faults</li> </ul>	<ul> <li><u>About customizing</u></li> <li><u>Luggage</u></li> <li><u>Windshields</u></li> <li><u>Seats</u></li> <li><u>Footpegs/Kneepads</u></li> <li><u>Electrical accessories</u></li> <li><u>Touring</u></li> <li><u>Suspension</u></li> <li><u>Protection parts</u></li> <li><u>Performance parts</u></li> <li><u>Frame reinforcing kit</u></li> <li><u>Sidecar conversion</u></li> </ul>
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#### **Results from survey of 70 R11GS owners worldwide**

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page
• <u>G/S and GS</u> Home-page

## This page is for information only. NO COMMERCIAL CONTENT.

Go to <u>MicaPeak home page</u>. For contact and questions : <u>Hari Ahluwalia (eurhia@eur.sas.com)</u> or <u>jmoxhet@netscape.net</u> Updated the 03 January 2001













file:///Users/admin/Documents/BMW/gs\_tel3.html (34 of 34)10/6/2011 3:11:17 AM

A TRUE WORK OF ART; FORM AND FUNCTION PERFECTED. IF MICHAELANGELO WERE ALIVE TODAY, DAVID WOULD BE SITTING ATOP A WHITE CARRERA 75TH ANNIVERSARY EDITION...AND NO ONE WOULD NOTICE THAT HE WAS NAKED...

Butt ugly/Work of art (something so ugly has to be celebrated. To misquote tibor kallman (head of M & Co.) "it does not look good, but it accepts its homliness")

Muscularly statuesque Much better since I removed the top front fender Funky, grasshopper in red

Function more important than looks and influences how I think a machine looks. My GS - looks great.

Bad to the bone

It's so ugly it's good looking. Like Mick Jaegger.

Macho

Not butt ugly but not cute either

In a class by itself - weird

Good (in a hooligan way)

AWESOMELY UGLY

OK but damn close to butt ugly!

Butt ugly but thats why I bought it

Strangely beautiful- insect, terminator looking

A bold fashion statement

[Back to Survey Index]





## Survey of BMW R1100GS Owners

In March 1998 a survey of R11GS owners was carried out on the <u>BMW GS Mailing List</u>; here are the summarized results from the 70 owners worldwide who responded.

## **Survey Index**

- <u>Preamble</u>
- <u>About the Owners</u>
- What made you buy one?
- About your R11GS
- What do you think of the looks?
- ABS and tires

- Favorite/Least Favorite Features
- <u>BMW Accessories</u>
- Aftermarket non-BMW Accessories
- Dealers and Problems
- Assessment of your R11GS
- <u>Stories/thoughts on your R11GS</u>
- Return to the <u>GS Telelever and 4 valves engine</u>
- Go to the <u>R G/S and GS home page</u>
- Go to the MicaPeak home page

## Preamble

## **Highlights**

- Most owners who responded are in their 30s or 40s. The oldest owner is "over 65" but can pick up his R11GS singlehanded. An inspiration to the rest of us!
- Over half the owners who responded said their R11GS is their first BMW.
- All sorts of reasons for buying one but a test ride is popular. One guy said
- *I MADE THE MISTAKE OF RIDING ONE.* Another (lucky) owner got his R11GS as a gift!
- Almost 40% of owners responding never go offroad. No one does more than a quarter of their mileage offroad. I only asked for a range e.g. 0-25% but many did give a percentage. In the 0-25% range almost half stated 5% or lower.
- Similarly almost 40% of owners responding never ride with a passenger. Just under half in the 0-25% stated a percentage of 5% or lower.
- Owners tend to like the looks and no less than 9 replied that their R11GS is a "butt



## **Total replies: 70**

## **Country:**

Australia 3



teens/twenties/thirties/forties/fifties/sixties/older
0 / 5 / 29 / 24 / 11 / 1 / 0

[Back to Survey Index]

## What made you buy one?

test ride/good deal/looks/friend has one/other 21/ 5 / 2 / 1 / 42

### Other

LOOKS, SIZE (BEING OVER 6'3", THIS BIKE FITS ME), TEST RIDE, BMW REPUTATION FOR LONG LIFE AND DEPENDABILITY, ACCESS TO DEALER, MODERN TECHNOLOGY.

I had always wanted another bike for street riding. I had thought that a BMW would be a poor choice. Then one day I rode a friends R100GSPD off-road and on road. WOW, I had to have one.

test ride/friend has one/looks

You'll laugh, but I wanted a bike to hang some Jesse bags on... (really, that was only a small bit. I wanted a bigger bike for commuting, and I wanted shaft drive)

My other bike was getting worn out

Mag article

Reliability, longevity

Dreamed of it for years

Sick of my R100GSPD breaking

Always thought Beemers were cool and especially liked the off-road aspects of the GS

Erm, wanted a all round bike e.g. good for touring and scratching and something that I can pop into town on etc

It was a gift

Spec sheet, good looks, long tour and high speed characteristics

An old desert rat that was a friend of my mother had an r80g/s, he loved the thing and I always wanted one. I live in Utah and it is an ideal place for a GS. I never owned another moto. You should have seen my dealer when I drove off after asking him you shift it! I just wanted to try it.

Rave reviews on the internet mailing lists

Test ride and fell in love with it!

BMW's reputation, no other bike available at the time with cat, abs, shaft-drive

Taking trip to Alaska this summer, wanted peace of mind regarding reliability.

Best bike for adventure touring/commuting/twisties/some off-road

bike style / all round performance / technology

Reliable Engineering/Looks Good/Always wanted one

General concept

Its unique purpose

**BMW** reputation

FUNCTION, TEST RIDE, LOOKS, GOOD DEAL

Reliability/flexibility

Reputation, reliability, looks

#### PD/OFFROAD STYLING; BMW RELIABILITY

It was time to buy a replacement for my R100RT, didn't like the looks of the prospective R11RT, always heard GS's were the best all-around bike...

Looks/reputation

Looks/deal

TEST RIDE + LIKE BMWS + GOOD DEAL

Best Giant Trail bike available (various sources)

I rode a GS in Europe on an Edelweiss tour and liked it so much I had to buy one.

needed something that would go off road when required

Friend has one, was impressed with handling.

I MADE THE MISTAKE OF RIDING ONE.

Review in Brit magazine "BIKE", other reviews, BMW reputation

Own BMW cars, ABS, Telelever, Multi Use, Large/tall

They make no more Yamaha FJ1200. I wanted tourer capable of of anything between earth and sky.

test ride/friend has one/looks

I have always enjoyed the bizarre looks of the 11gs and found a good deal on a second





hand (almost new) one. I also do alot of touring 2-up and needed the extra horsepower and torque for gravel-dirt road travel.

test ride, spectacular handling, always wanted a BMW

Incredible ride and ABS

Had huge tank slapper on my R90 when I hit a cat. Fortunately no injuries or damage (except that the cat is now slightly used), but decided a stronger front end (telelever) was necessary.

[Back to Survey Index]



Percentage of annual mileage with passenger:

```
0/25/50/75/100%
26/34/ 5/ 3/ 1
```

#### **Bike mostly used for:**

touring/twisties/commuting/offroading
56% / 20% / 21% / 3%

## Comments

MY OWN VERSION OF MOUNTAIN TWISTIES "SPORT BIKE RIDING," MENTAL HEALTH..

mostly riding on sat or evenings

Adventure touring

Sport touring (x 2)

touring/commuting/bicycle race officiating and support

**Touring and Rallies** 

TOURING AND WEEKEND RIDES

Twisties & Touring into Thailand

[Back to Survey Index]

## What do you think of the looks?

Butt ugly/OK/Not bad/Handsome/Work of art 8 / 9/ 8 / 13 / 22

Butt ugly work of art 9

## Comments

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Survey of BMW R1100GS Owners

## ABS and tires

#### Have you ever triggered the ABS when braking?

YES/NO/HAVEN'T GOT 60/ 4/ 5

#### **Favourite tires:**

OE: Michelin T66/Metzeler Enduro 4 21 / 17

Avon/Bridgstone/Dunlop/Continental/No favorite/Other 15 / 9 / 1 / 2 / 4 / 0

[Back to Survey Index]

## **Favorite/Least Favorite Features**

Absolute Favorite Feature		
Allround ability	• 38	
• Handling (on road)	• 12	
• Touring ability	• 5	
• Pulling power (torque)	• 4	
Riding position	• 3	
• Character	• 3	
• Reliability	• 2	
• Comfort	• 0	
• Build quality	• 0	
• Offroad ability	• 0	
• Instrumentation	• 0	
• ABS	• 0	
• Fuel consumption	• 0	
• Looks	• 0	
• Everything on this list	• 1	


[Back to Survey Index]

## **BMW Accessories**

Favorite BMW Accessory		
<ul> <li>Heated grips</li> <li>Saddlebags</li> <li>None</li> <li>ABS</li> <li>Multivario tank bag</li> <li>Handprotectors</li> <li>Rider Information Display</li> <li>Topcase</li> <li>Catalyst</li> <li>K12 rims</li> <li>BMW helmet</li> <li>BMW boots</li> <li>Throttle grip</li> <li>BMW alarm</li> <li>BMW engine bars</li> </ul>	<ul> <li>31</li> <li>10</li> <li>6</li> <li>4</li> <li>4</li> <li>3</li> <li>3</li> <li>2</li> <li>1</li> <li>1</li> <li>1</li> <li>1</li> <li>1</li> <li>1</li> <li>0</li> <li>0</li> </ul>	

## Least Favorite BMW Accessory

• None	• 26
<ul><li>Saddlebags (small and awkward shape)</li></ul>	• 10
<ul> <li>Catalyst</li> </ul>	• 7
<ul> <li>Multivario tank bag (small and expensive)</li> </ul>	• 5
• BMW engine bars	• 4
• Handprotectors	• 4
• Heated grips (good idea but don't work well on the R11GS - no good below 30 F)	• 3
Rider Information Display	• 1
• Top case	• 1
Saddle bag latch	• 1
• Flashers	• 1
Puncture repair kit (difficult to use)	• 1
• High-beam indicator (too bright)	• 1
BMW alarm	• 0

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## Aftermarket non-BMW Accessories

Screens Seats Comfort Hard luggage Tank bags Electrical Performance Miscellaneous



GIVI topcase	• 6
• GIVI saddlebags	• 4
• Al Jesse Panniers	• 5
Touratech Panniers	• 2
• non BMW topcase	1
-	• 1
large left bag	• 1
RKA tank bag	• 2
Roadmaster tankbag	• 1
POLO Enduro tank bag	• 1
• Chase-Harper full tank cover	• 2
• tank panniers	• 1
Bagster tank bag	• 2
<ul> <li>U-Bag (for 2-up camping)</li> </ul>	• 1
<ul> <li>Gearsack soft luggage</li> </ul>	• 1
	• 1
• Lockhart-Phillips 1/2 tank bra	• 1
• large 'fanny pack' with two water bottle holders wrapped around the tank bag	• 1
- DIAA lights	• 12
PIAA lights	
Hyper lights     Desch muning lights	• 3
Bosch running lights	• 2
• Driving lights	
• Touratech dual headlight with wig wag alternating flasher	• 1
Motolites	• 1
• Buddylites	• 1
• GPS	• 7
Fiamm horns	• 5
• Alarm	• 4
• Intercom	• 2
• CB radio	• 2
• Disconnect sidestand switch	• 1
Unifilter air cleaner	• 1
• K&N air filter	• 1
• D&D low pipe	• 1
• BMP exhaust	• 1
Staintune exhaust	• 1
RS cat/muffler	
<ul> <li>Ohlins rear</li> </ul>	• 1
	• 1
• Progressive shocks	• 1

Touratech 41 liter tank	• 1
Engine bars	• 6
ICO Enduro speedo/odometer	• 1
Bicycle computer	• 3
Acerbis road book	• 1
Top-of-the-Line Rack	• 3
Rear tray	• 1
Larger rear rack	• 1
• Top-of-the-line exhaust guard	• 1
Top-of-the-line headlight/oilcooler guard	
• Lockable oil filler	• 1
Bobs filler plug	• 1
• PD plastic headlight guard mounted to 5 Star crash bar	• 1
IBMWR license plate	• 1
Back to Survey Index ]	<u> </u>
Dealers and Problems	
How do you rate your normal BMW dealer:	

Ш

Poor/Average/Great 2 / 26 / 40

Don't have a dealer: 1

#### Does your bike have a full service history:

YES/NO 62/ 8

#### **Serious problems:**

None: 29

Question left unanswered: 12

94 model

- replaced gearbox 22000 km

- electric conection to ignitionlock?! broke 65000 km

- Cylinderhead gasket started leaking 70000 km

```
94 model
What's serious? This is all that's
ever gone wrong with the bike from new apart from
normal maintainance items:
     1. Camchain tensioner broke off and dropped to
        bottom of crankcase without causing further
        damage. Bike off road for about 1 week.
     2. Sender unit for gear display on RID failed,
        replaced in a day.
     3. Oil seal on final drive failed, resulting
        in gear oil dripping onto wheel and tyre.
        Replaced in a day.
94 model
     Problem 1 Hard to shift
     Solution: clutch replace
     Problem 2: leaking valve cover gaskets
     Solution: replaced 3 times including one valve
               cover.
     Problem 3: Shaky Mirror
     Solution: replaced handlebars (updated version)
Clutch is wearing (7000 km, some serious off-road riding)
95 model
Oil leak at the engine/tranny junction.
It was fixed by ONE drop Loctite and 7000 BEF (190 USD)
No warranty extension by BMW Belgium -: (
95 model
Surging, poor starting, no idle when cold, vibration
95 model
Leaking front master cylinder, bike out of warr,
they traded me a new one for old, I installed.
95 model - BLOWS HEAD GASKETS EVERY 10K
95 model - Gear slipping in 3rd - Mod fitted - came
back 2 months later - new g/box fitted under warranty
```

95 model - long-term problem with pinging. Replacing catcode plug with euro version helped.

95 model - ABS went south at 11K miles. Replaced under warranty.

95 model - The bike has been fine, but I got squashed by a truck last summer and it took the dealer four weeks to fix it, and then he couldn't fix the ABS. Another dealer found a broken wire in about 20 minutes.

95 model - cat became clogged after riding in Mexico and had to be replaced. I opted for a staintune rather than the stock exhaust since I continue to travel in Mexico

95 model Lots of little niggly things: bad paint, faulty relay, broken muffler mount kept it at the dealer a total of 3 months in the first three years

96 model - Surging / BMP pipe (non-cat)

96 model - Knackered Clutch - Same day Warranty Fix - Knackered Gearbox/Shaft (Booked in next week)

96 model - Rear main Seal failure in the transmission resulting in complete transmission meltdown.

96 model - Out of sync throttle cables once due to me bumping right side cable while removing battery. Bike would barely run.

Fixed it with help via phone from dealer.

96 model - Oil leak, dealer fix under warranty, 1 day.

96 model - blown head gaskets (2 right side, warranty)
 - speedo cable twice (warranty)

96 model oil leak from transmission onto clutch at ~15kkm, clutch and main seal replaced under warranty, 8 days.

Leaked again at ~20kkm. Clutch and every single seal / o-ring replaced under warranty but had to pay for the o-rings (not warranted by BMW, but at least had nothing to pay for the labour). 6 days. No problems since.

(sometimes) stuck starter pinion at ~38kkm. Cleaned, lubed by the dealer at no cost at 40kkm service. No problems since.

broken speedo cable at ~ 45kkm, replaced. Work costs more than the cable assembly. 1 hour.

97 model

Engine knock, required several repair attempts by dealer, could not be resolved even after new barrels, pistons, timing chain etc. BMW eventually supplied brand new complete engine. Total downtime of just over 3 months in the 9 months since purchased new.

97 model - Surging and stalling. Stalling was fixed with proper tunning.

97 model - Surging and stalling (e.g. injection fine tuning too sensitive)

97 model - Leaky head gaskets replaced under warranty by dealer in one day.

97 model - It is my second one because my first one was very unreliable and spent many weeks in the garage being fixed for one reason or another. I will list the problems for you.

Petrol leaking from the fuel tank. Easily solved at 600 mile service, damaged 'O' ring.

Alarm would not de-activate. Had to take train home. Fine the next day when warmer. Did the same thing on Christmas Eve. Alarm replaced with a Spyball. Would not operate in the cold. Replaced and sited differently moved from in-between the tank and the engine (just in

front of the air intake) to under the tank somewhere, out of the range of crap thrown up by the tyres etc. No more problems.

Fuel consumption increased from 43 mpg to 25 mpg and accompanied by frequent and almost deafening backfires. Returned to garage for about a week, but no change. Returned again and wiring replaced. No change. Finally help sort from BMW and they suggested injector problems. Injectors replaced and problem solved. In total the garage had the bike for over a month with this problem.

Clutch cable broke. Replaced. Broke again after 2 weeks. Replaced. Broke again after week and a half. Replaced. Broke again after another two weeks. Replaced. Broke again in a week.

This was the final straw as I had lost all confidence in the bike being able to get me from A to B and back to A without breaking down.

In the end BMW suggested that I have a new bike, but that I should pay for it. After about a month of negotiation I got a new bike.

I used to have a Honda NX650 Dominator prior to the BM and the finish was superior. Cleaning the bike during winter was very easy and came up looking like new. The R11GS does not winter so well. The wheels soon look pitted as do various other exposed parts. This I find disappointing. The problem about not being able to fill the tank to capacity or risk it being syphoned out are annoying.

97 model - Rear shock failed and replaced

98 model - SURGING - at dealer now (1200 miles). STALLING - these things are damned dangerous unless BMW fixes the stalling problem. LOTS of folks on the list have mentioned this. The surging is just a pain in the ass - the stalling is a safety defect. If it weren't for these two problems, I have damn near the perfect

#### bike. Until they are fixed - it's a piece of shit!

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### Assessment of your R11GS

#### **Ratings from 1 (poor) to 10 (wonderful) Average of responses:**

- 1 Handling
- 2 Braking
- 3 Touring
- 4 Performance
- 5 Build quality
- 6 Town riding
- 7 Ease of maintenance 7.4

Average rating

8.4

9.2

9.0

8.9

8.5

8.3

7.6

#### Is this the best bike you have ever owned?

YES/NO 64/ 5

- No, my R80 G/SPD is
- Yes, by far (x2)
- Yes, tied with my ST1100
- YES only bike ever owned

If your R11GS was stolen would you buy another?

YES/NO 62/7

#### If you had to buy another bike but couldn't buy an R11GS which would you buy?

8

Triumph Tiger BMW F650









## Stories/thoughts on your R11GS

THIS IS MY SECOND R11GS, THE FIRST BEING TOTALLED IN AN ACCIDENT. BIKE NOW OWNED BY MY DEALER WHO REPAIRED THE EXPENSIVE BITS AT A FRACTION OF THE INSURANCE REPAIR COST (READ AS NO LABOR CHARGES...).

#### I LOVE THIS BIKE AND PLAN TO RIDE HER FOR MANY, MANY YEARS.

When I was laying out the course for the Reno 200 Dual Sport Ride I found myself at the foot of a jeep trail that would make an experienced dirt bike rider smile in anticipation. On the other hand I was on my R11GS. The trail was very narrow and steep so there was no turning back. I stood up and applied constant throttle and used the bike's mass to keep momentum when climbing over helmet sized rocks and small logs. The bike also kept going through mud and running water. The climb was so rough and steep that I lost all of the contents from my partially open tank bag (eg my clear glasses and maps). My concentration at keeping forward momentum and picking the best path was such that I did not see the tank bag contents jump out. Through all that was there the GS kept walking over and up the trail to the top.

96 model - The only problem I have had with this bike is the seals on the transmission. Other than that it has been problem free.

98 model - As mentioned above -- this is one great motorcycle, EXCEPT for the fact that it surges like a buckin bronco at certain rpms. Some call it character - I say it's poor design. The stalling problem has caused many folks to lose confidence in this bike -- you just never know if it is going to stall or not! My K bike had its shortcomings, but I never questioned its safety or reliability. I do with the oilhead. I have three years on the warranty. If they can get things fixed - I'll keep it. If not - it's history. Otherwise, it's a great bike.

Second R11GS, I totaled a 1995 with 20,000 miles on it in May. The only problems I had with that bike were a burned out tail light. I have 10,000 on this one, and love it.

We use the R11GS in our rental fleet. Just purchased another one. They are popular and have been reliable. They get dropped often due to tall seat and weight.

94 model - this is my 9th beemer and 20th motorcycle. With over 70,000 miles in the last year on the r11 with many offroad, it's truly a remarkable machine. I have alway admired the durability of the beemers, although the 60,000 miles I put on my r100gspd left serious questions about bmw and lack of reliablility. The r1100gs now confirms that these mistakes are now water under the bridge. I can't wait for the next

generation of gs. I'd buy one now but i want more, faster, better and all i could get is same thing for more money.

I think that this is about the best allround machine available today and I really love it's goofy styling.

brilliant all round bike, as I'm a short arse I wish the seat was slightly lower (2cm) the after sales service as good as the bike (mixture of Coopers of Reading or Heathrow BMW). I'm off to France tomorrow so this will be my first trip abroad on it so looking forward to it!

It feels like I am dancing with it in the twisties. The suspension is so wonderful it makes me smile when I turn corners.

I love my big GS. I just hate how big heavy and ungainly it is to haul around town or off-road. Still, it does get the job done and on the open road it really shines. It is FUN on the open road. As I say my first ride was pretty funny. The GS is my first motorcycle, and when I bought mine I had not ridden a bike since a friends dirt bike in Sixth Grade. So I was more than a little nervous. My dealer told me to head for the freeway. He was right. By the time I got home I felt OK. Hell of an imposing to bike to learn on!!

Great bike! Superb handling and brakes. Some minor warranty issues, but none so bad that I wouldn't buy a BMW. I never took it offroad, that is why I am replacing my dear departed GS with a Roadster. Same powertrain, similar handling, etc...

First Oilhead bike - long time airhead owner and reluctant to change to something more expensive and less user mainteance / repair friendly. After traveling several thousand miles with a friend riding a GS and reading the praise of other owners on the internet I was convinced I needed to give them (GSs) a try. I may be a convert - time will tell.

has no oil thermostat for the oil cooler at low temperatures, which prevents the motor warming in resonable time. Solution: piece of card in front of oil cooler to prevent air flow.
beware tiny spiders getting into the instruments (they build webs and may stick the needles). Instruments can not be opened nondestructively.

The R1100GS is the grown-up hooligan's bike.

I've only had my R11GS for three months, so our relationship is still growing. I wish it was better off-road when carrying luggage. It does better than expected off-road when unloaded.

I believe that BMW got it exactly right with the R80G/S... and has been making it heavier and more complex ever since.

Best all-around bike I know of. Improve the gearbox and it would be perfect.

I was going to buy one of these in the UK but felt the weather protection for the wet weather in the UK was not sufficient. (Then moved to Long Island, USA) Here on Long Island the GS/Weather are a perfect combination. I ride all year round.....

This is a wonderful, wonderful bike. It opens up a whole new world.

The surging is a real fly in the ointment of an otherwise outstanding motorcycle. I tried for four months and many warranty hours to solve the problem via by-the-book BMWNA standards. It did not happen. I am very happy to have solved it through eliminating the restrictive exhaust and cat. On the current models I have heard there is a stalling problem, which would really annoy me. This has not happened to my bike at 16K miles.

Also, the Achilles Heal of the bikes offroad capabilities seems to be, not only the bulk and weight of the bike, but the subframe mounting at the transmission case, which you may already know, has been known to break under heavy load (offroading). I bought my bike for road use only, so it does not worry me as much. But this is a major flaw in the design. It is outrageous that BMW has not corrected it. In spite of all this, my R11GS is the best all-around, smile-inducing mount I've owned. It is very confidence inspiring in the handling department. I would likely hesitate to get another, mostly for the reasons I've listed but would probably go for it anyway.

too heavy for off-road, not comfortable for high milege touring but love my 11GS - 50,000 miles/3 years

I WAS HOPING TO FIND A CHEAPER OR USED BMW THAT I LIKED, BUT I TEST DROVE THE GS AND THAT WAS IT... NOTHING ELSE COULD STAND UP TO IT. IT SEEMED TO FIT ME LIKE A GLOVE.

Love this bike. Great looks IMHO; if you can own three bikes you might be better off with something different for off-road, touring and scratching. If you can own only one, this is the one.

I purchased this bike because of it's performance, handling and ergonomics. It seemed to be a big standard. I replaced the stock rims with rims from a K12RS in order to be able to mount sport bike tires. Having completed this project, this is the best handling bike I've owned in over 33 years of riding. I've owned Ducati motorcylces in the recent past, so I know what good handling is.

My R11GS is about 90 pounds lighter than my RT, handles better and I'm not constantly concerned about scratching its beautiful fairing. Also, I can pick it up unaided (once in a parking garage). (Owner aged "over 65"!)

I had a R100g/s in 1992. It was a great bike. Then I bought a 1994 R1100GS in April 1995. The ride, power, handling and comfort were excellent.

I am now getting out of BMW and I have bought a Honda XR650l from my BMW/HONDA dealer. My dealer has lost his BMW status since BMW has been restructuring in Canada. I have been from New

Brunswick to Texas, to California and to Colorado. I always travelled alone and this bike has been exceptionally reliable. My worst problems on those trips were leaky valve cover gaskets and speedometer cables breaking. I love the bike. If I would have kept it, I would have considered changing the seat and the wind screen. I tried an "Aero Screen" but it was terrible. The accessories were very well manufactured. I don't think the aftermarket accessories available are better than the product supplied by BMW.

BMW NOT SUPPORTED WELL IN THE AFTERMARKET PARTS HERE IN THE U.S. OVERSEAS THERE IS MUCH MORE AVAILABLE. BIKE IS A BIT PRICEY AND IF BMW HADN'T OFFERED A 2.9% FINANCE W/ \$1000 DISCOUNT I WOULD HAVE STUCK WITH ONLY BUYING IN THE USED BIKE MARKET.

As the miles progress, I molded my bike to fit me, to become one with each other. I have succeeded in making her the best handling/touring/road friend I've had in approximately 20 bikes that proceeded her in the 39 yrs I've been riding. Yes, it's love.

# LOVE THE BIKE; IT IS DIFFERENT, UNLIKE JAP CLONES; POOREST FEATURE IS LOW SPEED MANOUVREABILITY, AND COST OF PURCHASE.

My previous bike was a BMW F650. Handling equally good, rest was less.

Generally a fantastic bike. Mine has started to rust a little after one winter (I have not yet complained to my dealer, but I will be doing so).

At first was intimidated by size and weight, but got used to it. You can pack incredible amounts of gear on the bike, making two-up camping possible. Excellent handling, I can outperform most street bikes on the pavement. Off road abilities are adequate, as long as you recognize limitations . Previous bike was R100RT, which now seems like a Model T when compared to the ride and performance of the GS

Too soon to comment, only had bike a week. Did 250 miles yesterday, comfy, good handling, will have a good idea at the end of the summer.

Second R11GS. First is declared total-loss, but is currently being rebuilt (into a rat-R11GS)

Although I love the bike, it is my second one. First was replaced due to unreliability. People tried to warn me about the cost of running a BM, but I have found the opposite. Service intervals are longer and costs cheaper. Depreciation is a little disappointing in the early years, but not in the long run. On the whole I would not swap my bike, but I would make improvements.

First bike from passing test. Now taken & passed advanced test also. Its a big imposing bike that looks a lot meaner than it really is. The surging problems (on early models) lets it down but its a small price to pay for putting a F\*\*k\*\*g big smile on you face every morning