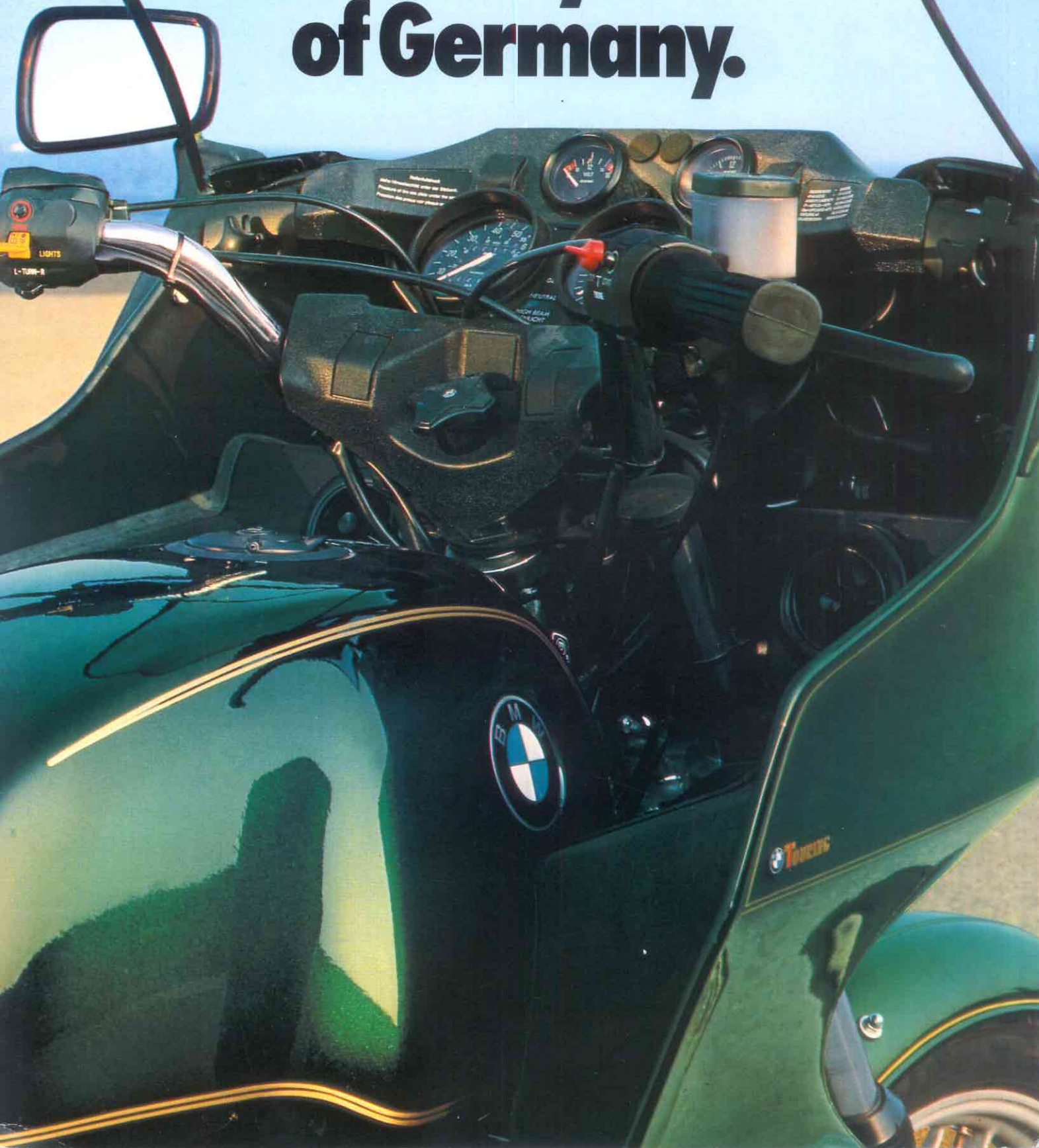


The Legendary Motorcycles of Germany.



If ever there's a time
you can appreciate German engineering,
it's on two wheels.



In no means of transportation is the relationship between man and machine more crucial than in the motorcycle.

In no vehicle is the operator more of an integral part of the machine itself.

Since 1929, when Ernst Henne set the first of 195 speed and endurance records thus far recorded by BMW's, the engineers at the Bavarian Motor Works have continuously sought to improve this bio-mechanical relationship.

The motorcycles before you are

then, the beneficiaries of this half-century of study.

And as such they possess attributes of handling, stability and control that, as any number of aficionados will testify, are unparalleled in the industry today.

If other motorcycles were built like BMW's, they'd be expensive too.

For each motorcycle BMW carefully builds, Suzuki cranks out 45. Yamaha turns out 68. And Honda, a startling 86.

The reason for BMW's strikingly

limited production? A passion for extraordinary engineering and hand craftsmanship that high speed assembly-line techniques simply cannot satisfy.

Each and every BMW frame, for example, is welded entirely by hand instead of machine. It is aligned and scrutinized by a single craftsman and bears his personal seal.

Onto this steady foundation are mounted some of the most precisely tooled components ever to grace a production motorcycle:

A driveshaft, for example, that is so



perfectly formed as to not require a single counterbalancing weight.

To help insure durability, each and every critical component part on a BMW is actually X-rayed to determine its stress value.

To increase maneuverability, these parts are, wherever possible, made of expensive lightweight alloys instead of steel or iron. Culminating in a motorcycle which, model for model, is the lightest in its class. (The BMW R65, for example, is not only the lightest 650 in production but lighter than virtually every 550 on the road as well.)

And to make certain that the "whole" performs as admirably as each of its expensive parts, every BMW motorcycle is individually test ridden. A final and, to us, a crucial examination which high-volume manufacturers simply do not have time to give their motorcycles.

The result? According to Cycle magazine "...high-mileage, years-old BMW's retain their taut, solid feel when lesser motorcycles have long since gotten loose and rattly."

And, according to the NADA's Used-Motorcycle Guide, even after

3 years BMW's retain the astonishing average of 77.7% of their original purchase price.

All of which provides the BMW owner with the singular satisfaction of sitting not only on a superior machine but on a superior investment as well.

BMW R100 RS.

It helps you sustain high speeds,
not merely attain them.



The engineers at BMW have taken a rather enlightened view of the wind. Treating it, not as an obstacle that should be simply whisked aside, but as a tool that can provide a motorcycle with even more stability and road grip.

Nowhere is this conversion of the wind from obstacle to ally accomplished with more flair than in the BMW R100 RS, perhaps the perfect synthesis of sports bike and touring machine.

Its integral fairing not only spares the rider from being exhaustingly buffeted, but re-directs the wind flow to coax the suspension of the motorcycle downward (1).

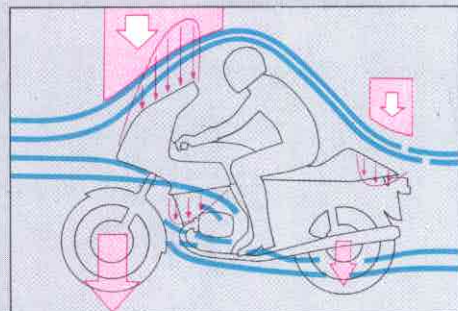
Providing gravity with a helping hand and the R100 RS with a degree of road adhesion and handling prowess virtually nonexistent in competitive touring motorcycles.

The BMW R100 RS has been engineered to perform over courses considerably more varied than mere straightaways.

And to perform over distances considerably longer than the quarter-mile.

In short, it is one of the few machines that have been designed for the real world of sport touring.

A world of twists, turns, sweepers and straightaways where, according to the motorcycle editor of *AutoWeek*, Michael Jordan, "no other bike can swallow so many miles at the speed the RS can deliver."



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The BMW R100 RS is fully equipped in every other respect with saddlebags, oil cooler (2), and a complete set of instruments, including a quartz clock, speedometer, tachometer and voltmeter.

BMW R100 RT.

Trade up to where there's no place to trade up.



The first thing you're apt to notice when you buy a BMW R100 RT is that it is an exceedingly expensive motorcycle.

When you sell the RT, however, you're certain to take note of something else: it is still an exceedingly expensive motorcycle, retaining as it does an extraordinarily high percentage of its original purchase price.

A fact which you'll find immensely gratifying. But by then not altogether surprising.

For by that time you will have had the distinct and revealing experience of riding countless miles on a machine in which German engineering and exquisite hand craftsmanship have been taken to the nth degree.

A machine which, when compared to other touring motorcycles by *Rider* magazine, was rated as unequivocally "excellent" in every category of control and stability, the only motorcycle to achieve such a rating.

The reasons? No other true touring motorcycle is as light as the RT. No other tourer has a center of gravity as low. And no other machine is equipped with the "Nivomat" suspension system (1).

This remarkable self-leveling unit automatically maintains ride height at a constant setting. Whether solo or two-up, with or without luggage, on smooth or rough roads.

With the "Nivomat" it is virtually impossible for the suspension to

"bottom" when the load is heavy or the going rough. Importantly, at night even your headlight beam remains almost unchanged in angle as the load on the machine is increased.

The RT has a host of other standard features worth studying in detail, including:

- Adjustable windshield for individual protection according to rider's size and seating position (2).
- Integral air ducts supplying fresh air to the space behind the fairing when needed (left and right), with continuously variable control of airflow volume and direction (3).
- Large built-in, lockable storage boxes below the fresh-air outlets.
- High-rise handlebar with impact pad and steering damper.
- Instrument panel with quartz clock, voltmeter and ignition switch; twin horns.
- Luggage carrier and dual seat (black seat cover, thick upholstery).
- Power socket behind left battery cover.
- Saddlebags with mounts.



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The BMW R100.
Experience the joys
of weightlessness.

on the scales to measure BMW's unequalled success in this crucial area. For with a dry weight of only 441 lbs it is easily the lightest of all 1000cc

touring machines. A nimble alternative to touring motorcycles that move down the road with all the grace of touring buses.

As virtually any enthusiast will readily attest, there is no better way to increase a motorcycle's maneuverability than to simply decrease its weight.

With regard to large touring motorcycles, one need only place the R100





On winding roads the BMW R100 has the capability to put bike lengths, then city blocks between itself and other machines encumbered by their

own girth. Without exhausting itself or its rider in the process.

And with fixed-caliper disc brakes featuring semi-metallic pads (1), the

1982 R100 is capable of coming to an equally impressive halt. In fact, a 40% faster stop in wet weather since the days these brakes became standard equipment (2).

This year there are two renditions of this German classic.

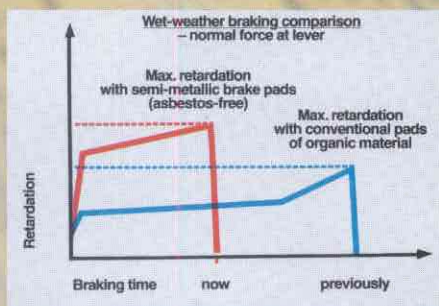
One for the sport rider, featuring sport handlebars and a sport cockpit with a voltmeter and clock.

And a second model for the touring rider, equipped accordingly with saddlebags and mounts.

Providing you with the opportunity to combine extraordinary German engineering with your own individual styling.



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BMW R80G/S.
Now when you run out of interstate
you won't run out of bike.

Stretching out beyond the reach of North America's super highways is a vast array of picturesque coastal routes, winding canyon roads and country one-laners.

All of which have traditionally provided the touring motorcyclist with a greater degree of exhaustion than exhilaration.

The remarkable machine you see here will change all that.

For while the new BMW R80G/S is in every sense a superlative touring machine, it has the singular ability to blur much more than just interstate scenery

A bike for the highways and the byways.

There is a justified sense of precariousness that one feels when venturing onto a gravel road, or even onto a winding stretch of blacktop, aboard a heavy touring motorcycle.

A sense that the machine's own inertia is much more in control of your destiny than you are.

The rider of the BMW R80G/S is gripped with no such anxiety.

Not because he is equipped with superior nerves for the task, but with a superior machine.

Weighing a scant 382 lbs and possessing a revolutionary suspension system – the Monolever™ single rear swing arm that provides 50% more torsional stiffness than conventional systems – the R80G/S is laden with handling virtues unheard of in large touring machines.

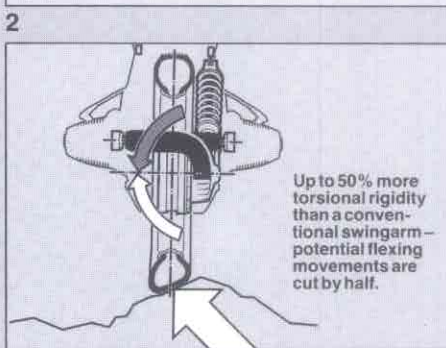
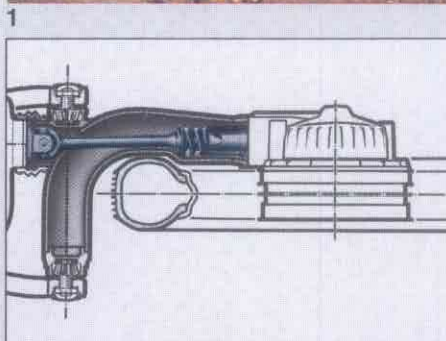
Rider magazine has proclaimed that the G/S is "ideally suited for one of the best known gravel roads: the Alaska Highway and seems destined for that trip."

For that and much more.

For, as you can well imagine, the bike's maneuverability only escalates the moment its tires touch pavement. Where, even on the most serpentine roads the G/S's incomparable litheness, enables a rider to literally flick it through turn after turn.

Indeed after riding the R80G/S from L.A. to Anchorage, and back, after encountering every kind of surface from smooth pavement to walnut-gravel, none other than the editor of Cycle Guide magazine had this to say:

"After 6,000 miles, the point was indisputable – for all-terrain touring no bike anywhere in the world compares with the R80G/S. Period."



Up to 50% more torsional rigidity than a conventional swingarm – potential flexing movements are cut by half.

3
BMW Monolever™.
 The ideal rear suspension for extreme riding situations.

Go-anywhere performance off the road, and roadgoing refinement over long distances may seem contradictory demands, but they can be met. BMW's R80G/S accepts both challenges with the Monolever™ swingarm system and a single spring-damper strut (the "monoshock"). Proved time and again in competition, this system appears here for the first time on a production model (2). Its advantages: 50% greater torsional rigidity, 2 kg less weight than a conventional swingarm and perfect spring and shock absorber rates (3).

The R80G/S will take you, quite simply, where no touring motorcycle has ever gone before.

A machine that looks as good in competition as it does on paper.

Using the same engineering features as the R80G/S, BMW's GS 80 model convincingly won just about the toughest cross-country race the world has yet seen – the 10,000 km Paris – Dakar Rally (1).



**Technical precision and progress –
for unmatched riding pleasure.**

Power Unit.

This flat twin is packed with important engineering features: "Galnikal" cylinders to save weight where it matters, improve heat dissipation, cut oil consumption and reduce wear to a minimum. Their lower mass at the machine's roll axis further improves the BMW flat twin's already exemplary handling.

The crankcase has been strengthened and better protected against accidental damage. An optimized oil circuit maintains reliable lubrication when the going is tough. The large oil sump has a protective undertray.

A plate-type air cleaner increases the intake air volume, reduces noise and makes cleaning or renewal easier.

Ignition System

Breakerless electronic ignition for low maintenance; a twin coil for improved reliability; and a micro-element regulator to help keep the battery charged to a constant voltage.

Mixture Supply

The carburetors have an additional throttle slide location for lighter action and more reliable operation. The choke lever is on the handlebar to make cold starting easier. The throttles are worked by a cable with junction block to reduce

friction, improve snap response and ensure that the two carburetors are always properly synchronized.

Clutch

The clutch is exceptionally light in action, needs minimum effort at the handlebar lever and can be fed in smoothly and progressively.

Electric Starter and Kick Starter

Effortless starting on or off the road is assured by the electric starter – a standard item. An additional kick starter, with ample leverage and the correct low gearing, permits the engine to be turned over and started with minimum effort.



Headlight

The R80 G/S is the first dual-purpose motorcycle to have a headlight with H4 halogen bulb. The powerful beam makes riding safer, particularly at night, and is another factor that makes the R80 G/S an outstanding touring machine.

The Tires

Special tires are used on the BMW R80 G/S with a tread pattern equally suitable for paved roads and cross-country riding. Equally new and impressive: the ride comfort, directional stability and grip – superior to many conventional road tires yet with off-road capability.

Wheel Rims

The rims are of hardened alloy, with a profile designed to simplify quick tire changes – another advantage acquired from competition experience.

Disc Brake

The fixed-caliper front disc brake – the first time such a brake has been featured on a dual-purpose motorcycle – uses semi-metallic brake pads, as on all models in the BMW range. These pads contain no asbestos, and offer up to 40% improved wet-weather braking action, freedom from disc smear and excellent heat dissipation.

Handlebars

The handlebar pattern has been used successfully by BMW's trial riders in major competitions, but retains an element of normal touring character to make it comfortable and easy to control on the road.

Exhaust System

The two-in-one system is ideal for a twin-cylinder engine and good ground clearance.

Dualseat

Specifically developed for off-road riding, the sports seat is 600 mm (23.6 in) long and therefore perfectly suitable for even quite long two-up journeys.



R 80 G/S standard equipped with cylinder protection bars and sidestand.

BMW R65.
A motorcycle you'll appreciate even more as you weigh the alternatives.

The BMW R65 LS.
A sport bike whose beauty is BMW deep.

Because of its displacement and its price, the R65 is often regarded as the perfect entrance to the world of BMW motorcycles.

This "entrance" is so thoroughly impressive, however, that many riders consider the R65 to be a completely fulfilling end in and of itself.

For in every way – engineering, maneuverability, durability and resale value – the R65 is a classic BMW.

"Like the rest of the BMW line – and, unlike other 650's," writes Cycle Guide, "the R65 isn't just a stepping stone to a more sophisticated bike; it's a worthy end in itself."

It is, for example, not only the lightest 650 in production but, lighter than virtually every 550 on the road as well.

Which can mean the difference between motorcycle riding and motorcycle wrestling.

And since even a 3-year-old R65 retains 81.6% of its original price, this machine, like all BMW's, also means the difference between motorcycle buying and motorcycle investing.

While the fine lines and sculpted features of most sport bikes spring from the drawing tables of stylists, those of the BMW R65 LS had a different birthplace.

The drafting tables of German engineers.

As a result, they are the recipients of the same pragmatic consideration and evolutionary refinement as the legendary engine that powers this 650cc machine.

And provide, in the most literal sense, moving proof that form can follow function with consummate grace.

The bike's shapely sports fairing, for example, provides more than cosmetic appeal. It reduces front-wheel lift by 30% (1).

The sporty handlebars, meanwhile, are designed to work in perfect harmony with the seat. Providing the optimum riding position for the operator, thus, improving control (2).

The bike's slender tail, artful as it too appears, is actually the aerodynamic result of extensive wind-tunnel testing (3).

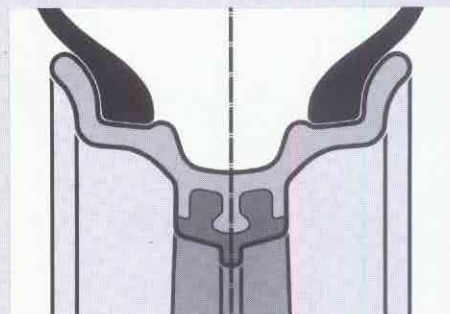
The composite wheels of the LS, meanwhile, represent a quantum leap in technology. Indeed, they may well be the most durable mag wheels ever created. The rim section is formed from a highly rigid aluminium alloy. Each hub and spoke – to avoid brittleness – is made of a far more elastic aluminium alloy. And then everything – hubs, spokes and rims – is cast as a

single unit (4).

The result? The advantages of hardened aluminium resilience combined with the compressive strength and lateral rigidity of the cast-alloy wheel. With, additionally, an arc-shaped spoke pattern that provides the precise, predetermined degree of elasticity.

How the BMW rider benefits:

Resistance to severe loads is much greater than on plain pressure-cast wheels, yet the compound wheel weighs as much as 20% less. This means less unsprung weight, improved spring and shock absorber response and even more superb ride and handling. Compound aluminium wheels are also superior to the riveted pattern; they cannot lose their rigidity because of gradual slackening at the rivets, and they dissipate heat from the brakes more efficiently.



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Possibly the only motorcycle company with a past worth building on.

Each year, for more years than many motorcyclists now care to remember, another wave of revolutionary motorcycles rolls into America.

Machines whose advanced engines, it is purported, will propel a rider not merely down the road but into a whole new area of motorcycling.

An era which, with increasing predictability lasts all of one model year. When yet another wave of "new era" machines rolls ashore.

There is one motorcycle company, of course, whose technology is not so transient.

The Bavarian Motor Works of Munich, Germany.

A Company not so anxious to scrap its last year's work. Or even its last decade's.

An engineering heritage that didn't begin this year.

Before a motorcycle company can have a heritage, it must first find something worth building on.

While there are any number of manufacturers still searching for this elusive building block, BMW introduced in 1923 what many aficionados consider to be the perfect mechanical foundation for a motorcycle.

The horizontally opposed twin-cylinder engine.

A springboard which placed the BMW engineers on a path of continuous refinement – as opposed to continuous revampment – ever since.

Simplicity in an age of complications.

"In typical BMW fashion," observed Cycle Guide recently, "the BMW engineers have brought their motor into the Eighties without resorting to needless complexity."

Indeed, the design of the BMW twin has grown not increasingly complex with the years but ingeniously simple – the hallmark of a brilliantly engineered machine.

It is the simple genius of the opposed-twin which makes a BMW vastly less expensive to maintain and repair than other motorcycles.

And for that matter, far less likely to need repair in the first place.

With the cost of a motorcycle mechanic now hovering at about \$ 24 an hour; with the price of a mere tune-up of certain multivalve motors upward of \$ 100, the BMW twin is becoming more appreciated by the day.

The rewards of this remarkable engine, however, are not purely financial.

The joys of being one of the few moving parts on a BMW.

Cycle Guide flatly states that "no engine configuration known to man is better at aiding the low 'cg' required in a flick-left-flick-right bike than the opposed twin."

Small wonder then that BMW's are renowned as extraordinary handling machines.

Equally important, BMW's cylin-

ders now weigh less, so the flat twin's moment of inertia around its roll axis – up to 30% better than with a transverse 4-cylinder inline – is further improved (1).

Providing its rider with a control so effortless as to inspire the motorcycle editor of AutoWeek to write of one BMW.

"Long after a clumsy Japanese hyperbike would have wrestled you into exhaustion, the R100 RS urges you to uncharted apexes; the only limit to your enthusiasm is the amount of gas in the bike's 5.8-gallon fuel tank."

1982 motorcycles that won't be dated by 1983.

There is an inescapable irony in how quickly so-called "motorcycles of the future" become things of the past.

While BMW's, machines whose basic engine design has remained unchanged for over a half-century, continue to endure.

It is this very timelessness of design, of course, that marks the difference between a motorcycle that is perceived as a classic. And one which simply is not.

And, accordingly, marks the difference between a BMW and virtually every motorcycle on the road today.

BMW's concept of careful preparation: Progress not only in individual details but in their total effect.

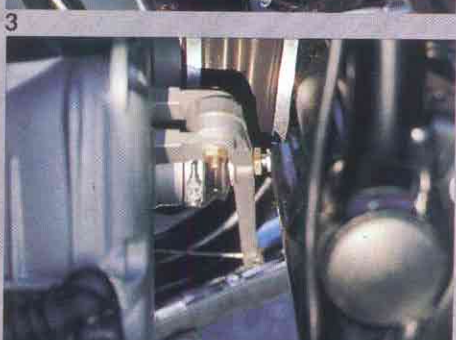
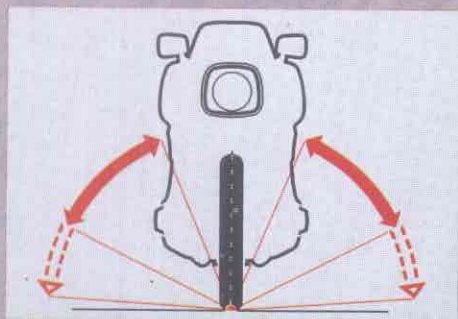
Modifications to the oil circuit to provide ample lubrication when the engine is working very hard and the enlarged oil sump on recent generations of BMW power units ensures a bigger margin of safety. A plate-type air cleaner increases the air intake volume, cuts intake noise and makes cleaning and renewal easier (2).

Transistorized electronic ignition retains its settings for the lifetime of the motorcycle and incurs virtually no wear in operation. It improves fuel economy and means less servicing as the motorcycle covers increasing distances, since there are no points to change (3).

The constant-velocity carburetors possess an additional slide location for improved reliability however tough the going. Throttle cables act via a new junction block to reduce friction and provide perfect synchronization of the two carburetors. The choke lever is conveniently located on the handlebar (4).

A second balance pipe in the exhaust system, directly under the precision-action gearbox, improves the BMW flat-twin's flow of power and torque still further and makes it impressively responsive (5).

The recently-developed clutch weighs less and lever effort is cut by 30 percent for a smoother, more easily controlled clutch engagement action (6).





BMW Motorcycles. A story of control.

It has never been the mission of BMW engineers to build unguided missiles.

Motorcycles that rocket through the quarter-mile flats only to turn into millstones in curves.

Or into jackhammers over bumps.

Rather, it is BMW's goal to engineer complete machines. Motorcycles whose suspension geometry is every bit as refined as its engine. Whose ability to hold the road corresponds with its ability to speed over it.

And so it should come as no surprise that, even after over a half-century of production, BMW continuously refines and often re-invents suspension technology that will better graft a BMW to the terrain for which it was intended.

Technology like the revolutionary Monolever[®] single rear swing arm for the BMW R80 G/S, a device that actually supplies 50% more torsional stiffness than conventional systems.

Or the "Nivomat" self-leveling

spring strut which is standard equipment on the RT, optional for other BMW's and nonexistent in competitive machines. A breakthrough that automatically adjusts the suspension and damping characteristics of the motorcycle as the load increases or decreases.

Or the recently refined fork on the RS that in a Cycle Guide test ride "simply ate the terrain like a vacuum cleaner, delivering a smooth graceful ride with no surprises."

Machines that halt as impressively as they ride.

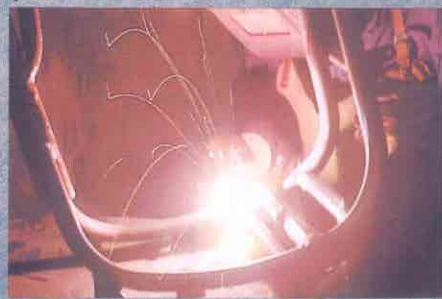
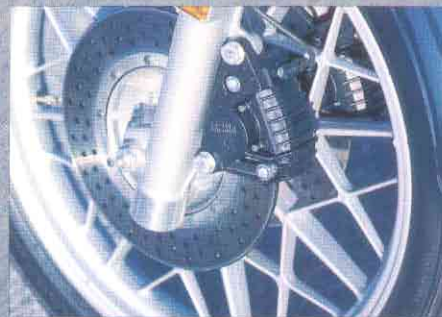
How many times have you ridden through a downpour – or even through a sizeable puddle – and felt compelled to test your brakes?

While we at BMW do not suggest that you abandon such precautionary practices, we are all for abandoning the brakes that cause such doubt.

BMW was the first manufacturer in the world to introduce on all its models a brake design using an innovative pad material that minimizes wet-weather fading and can cut braking distances in the wet by up to 40 percent.

The pad material is semi-metallic. Lightweight aluminium pistons in the

brake calipers enhance this improved braking performance still further (1+2). The fluid reservoir is now on the handlebar, and the brakes have increased "feel" so that the rider can control the point of application more accurately (3).





helps the BMW rider to enjoy the surging power of his large-capacity machine without jerking, erratic progress and lack of refinement. The rider of a BMW never has to worry about correct chain tensioning, adequate lubrication, replacement of worn chains or re-alignment of the rear wheel (4).

BMW motorcycles use a closed double-loop frame welded from special grade steel tube by the inert gas process. At critical points, the tubes are of oval-drawn section. The backbone tube is strengthened by a round-section inner tube. Strength and good appearance down to the last weld seam are traditional BMW features, together with comprehensive corrosion-proofing treatment (5).

The steering head contains high-quality taper roller bearings for the safety and efficiency that go with the elimination of all unnecessary play. The BMW telescopic forks are rated for the most severe loads, with a total travel, depending on the nature of the model, of up to 200 mm (7.9 in), excellent damping and smooth response to all road surface irregularities. The shock absorbers are filled with a top-quality oil that retains its properties even if temperatures vary widely.

Rear suspension travel too is exceptionally generous for a standard production machine. There are three adjustment settings on the standard spring/damper struts, to allow for varying loads. The "Nivomat" self-leveling device is an optional extra (standard equipment on the R100 RT) (6).

The rear swingarm is a broad-based design

fabricated from round-section tube to resist twisting and bending stresses. It also pivots on adjustable taper roller bearings – they may cost more initially, but BMW prefers to fit the best from the start.

Strong, attractively styled light alloy wheels (the R80 G/S has special lightweight spoked wheels) keep unsprung weight down for improved ride and safer handling. Should a tire go flat, the safety rim profile prevents the tire bead from slipping down into the rim well.

The cast alloy wheels, are given several coats of lacquer to resist road salt and make them easy to clean. Each wheel, without exception, is fully X-rayed and checked for runout.

The R65 LS features BMW's new, patented 'compound' aluminium wheels. A special process involving advanced technologies combines a tough wheel rim of hardened aluminium with the pressure-cast aluminium wheel center. This means reduced weight and lower moment of inertia around the steering axis, yet much higher shock and impact resistance, with none of the strength problems that can beset riveted pressed-steel wheels, such as loosening of the rivets. The compound wheel dissipates braking heat far better as a result of its uniform, one-piece structure. (7).

Optimized footrest mountings reduce the amount of vibration transmitted (for instance on poor road surfaces) (8).

It would be so easy for BMW to cut corners in detail design quality, but traditional standards of roadholding and safety must be upheld in the interest of the BMW rider – so only the best will do.

Perfection in detail.

Refinement is a process which never ceases to be applied to details of the BMW driveline. The integral torsional vibration damper, for instance, introduces an additional damping element into the power flow from the crankshaft to the rear wheel. It increases troublefree operating life, makes smooth, quiet gear shifts easier and



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**Accessories that are
designed in,
not tacked on.**



In comparing the accessories of major touring motorcycles, *Rider* magazine recently summed up those of a BMW as "... a joy to the touring rider," and quite simply "the best" of all considered.

You see, the special equipment and accessories for a BMW are regarded not as trivial details but as integral parts of the machine. And, as such, are designed to allow one to express individuality without diminishing one's stability or control over the motorcycle in the least. To such an extent, in fact, that even clothing for the journey is tailored to allow the rider optimum maneuverability.

Wind-tunnel tested cockpit fairing for BMW R65: the fiberglass reinforced polyester cockpit fairing for the R65 was developed in the wind tunnel. It is a perfect match for this model, and available in all standard colors or in primer for do-it-yourself painting with the BMW paint set. The fairing has a smooth safety border all around and can be quickly installed. It shields the rider from road dirt and spray, and is an impressive visual feature. The cockpit fairing provides space for additional instruments too(1).



"Touring International" windshield: easy to install, impact-resistant and weatherproof. For the R65 or R100 (2).

Electrically heated handlebar grips: for cold-weather riding.

BMW touring cases: made from high-quality plastic, suitable for painting in any color. Anodized aluminium frame with silicone tubular seal between lid and body. Integral handle and side reflector. Capacity 32 litres (1.13 ft³) or 10 kg (22 lb) payload. Can accommodate an integral helmet. Case and retaining locks (pull-action) with corrosion-proof enamel finish. Keyhole cover, 30 different lock combinations (3).

Mounting brackets: chrome.

Inner bags: convenient and capacious; fit perfectly inside touring cases. Ideal for separate use as a travel bag.

Power socket: useful for connecting a work light or many other items.

Cylinder guards: chrome-plated or black tubular steel, to protect the motorcycle and the rider (4).

Mudflap: to protect your passenger and also the traffic behind.

Magnetic tank bag: with or without internal compartments; also for use as a shoulder bag (5).

Tank bag: can be altered in size by means of rainproof zip fasteners. Add-on clear wallet, upper section detachable for use as a separate travel bag. Foam rubber base panel protects bike finish. Easy access to fuel filler cap.

New: the first integral helmet to suit every riding need.

Safety: The helmet's outline is the result of wind tunnel testing; it is made of high-strength GRP to keep weight low. Anti-mist visor. Broad neck roll and wind deflector, chinstrap with recessed press-stud fastening.

Comfort: High-grade internal padding for maximum comfort in use and good air circulation. Chin guard hoop swings up so that helmet can be put on and removed easily (even when wearing glasses). Visor sealed in to prevent air currents and cut wind noise to an exceptionally low level.

Convenience: Various fixed visor settings to suit riding speed and air temperature. Chin hoop and visor are detachable to make helmet suitable for serious off-road riding (6).

Sports jacket, windbreaker and coveralls: these functionally elegant accessories also enhance your riding appearance with their evident high quality. All BMW's clothing is made from high-grade weatherproof material that's both light to wear and easy to keep in shape (7+8).

The BMW leather suit: made from specially tanned nap cowhide, with vinyl plastic safety reinforcement at the shoulders, elbows, hips and knees. Gold-pattern stretch seams of "bi-elastic" material. To round off the ensemble, high-quality leather gloves and genuine leather boots with inclined heel to prevent catching on the pedals (9).

The right clothing for all speeds and all weathers: BMW's one-piece, pure silk undersuit with storm hood is the ideal way of insulating the body against extremes of heat and cold (10).



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Specifications

R 100 RT R 100 RS R 100 R 80 G/S R 65 LS R 65

Dimensions and weights

Length 2210 mm (87.0 in), width (engine) 746 mm (29.4 in), wheelbase 1465 mm (57.7 in), seat height (unladen) 820 mm (32.3 in)	Length 2230 mm (87.8 in), width (handlebars) 820 mm (32.3 in), wheelbase 1465 mm (57.7 in), seat height (unladen) 860 mm (33.9 in)	Length 2110 mm (83.1 in), width (engine) 688 mm (27.1 in), wheelbase 1400 mm (55.1 in), seat height (unladen) 810 mm (31.9 in)
Dry weight 217 kg (478 lbs)	Dry weight 173 kg (382 lbs)	Dry weight 185 kg (408 lbs)
Dry weight 210 kg (463 lbs)		
Dry weight 200 kg (441 lbs)		
Max. permissible weight 440 kg (970 lbs)	Max. permissible weight 398 kg (877 lbs)	
Fuel tank capacity 6.4 gal. (24 liters) incl. 0.53 gal. reserve (2 liters)	5.1 gal. (19.5 liters) incl. 0.53 gal. reserve (2 liters)	5.8 gal. (22 liters) incl. 0.53 gal. reserve (2 liters)

Engine and transmission

Displacement 980 cm ³ (59.8 in ³)	Displacement 798 cm ³ (48.7 in ³)	Displacement 650 cm ³ (39.7 in ³)
Alternator: 280 Watts; 5-speed gearbox; shaft drive with torsional vibration damper		

Frame and brakes

Twin loop steel tube frame with bolted-on rear section				
Front suspension: 200 mm (7.9 in) spring travel, telescopic fork with double-acting hydraulic shock absorbers				
Rear suspension: Swinging fork pivoted on taper roller bearings, with 2 progressive-rate coil springs and shock absorbers; 125 mm (4.9 in) spring travel (R 100 RT: Nivomat self-levelling suspension standard)		BMW "monolever" with "mono-shock" (single-sided arm with single spring/shock absorber strut), travel 170 mm (6.7 in)	175 mm (6.9 in) spring travel	
Front brakes: Perforated twin discs, diameter 260 mm (10.2 in)		single disc, Ø 260 mm (10.2 in)	twin discs, Ø 260 mm (10.2 in)	single disc, Ø 260 mm (10.2 in)
Rear brakes: Perforated single disc, diameter 260 mm (10.2 in)	Full-width hub with leading and trailing shoe drum brake, diameter 200 mm (7.9 in)		diameter 220 mm (8.7 in)	diameter 200 mm (7.9 in)
Tires (tubed): Front: 3.25 H-19		3.00-21 R 48	3.25 H-18	
Rear: 4.00 H-18		4.00-18 R 64	4.00 H-18	
Pressure cast light alloy wheels:		Light alloy rims (spoked wheels):	Compound cast light alloy wheels:	Pressure cast light alloy wheels:
Front: 2.15 B x 19	2.15 B x 19	1.85 B x 21 WM	2.15 B x 18	1.85 B x 18
Rear: 2.75 C x 18	2.50 B x 18	2.15 B x 18 WM	2.50 B x 18	2.50 B x 18

Standard equipment

Identical-key locks for ignition, steering, fuel filler (except for R 80 G/S) and dual-seat lock; speedometer with trip distance recorder; tachometer (except R 80 G/S); adjustable handlebar and (except for R 80 G/S) foot rests; R 65 LS with sport- or raised-handlebar available; tool box with complete toolkit; tire pump (except R 65 and R 65 LS); corrosion-proof fuel tank; H4 halogen headlight, diameter 180 mm (7.1 in); R 80 G/S: diameter 140 mm (5.5 in); R 65 and R 65 LS: diameter 160 mm (6.3 in); steady state; two-chamber rear light (except for R 80 G/S); sports dualset with two storage compartments beneath (R 80 G/S: 1 compartment); R 80 G/S: electric starter and kick starter, cylinder protection bars, and sidestand. R 65 LS: sports cockpit. R 100: saddlebags with mounts or "S" cockpit fairing. R 100 RS and R 100 RT: integrated oil cooler. R 100 RS: saddlebags with mounts and fully integrated sports fairing. R 100 RT: saddlebags with mounts and fully integrated touring fairing.

Models illustrated are to the specifications sold in the United States and Canada and in some cases include options for which an extra charge is made. In many other countries model and equipment specifications may differ on account of legal requirements. For precise details of local specifications, please contact your BMW importer or dealer. We reserve the right to amend designs and equipment.

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