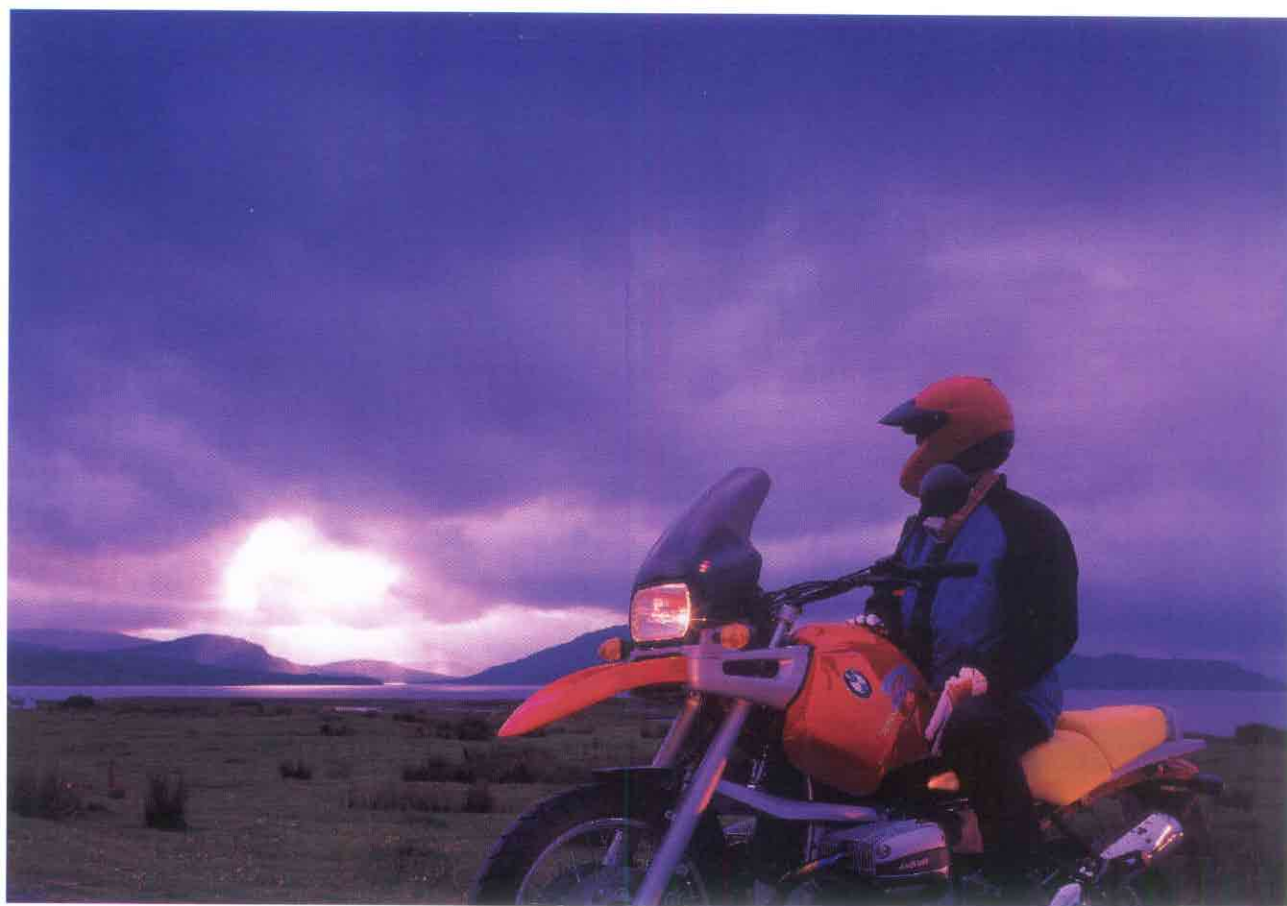


THE NEW BMW R 1100 GS
ANOTHER ORIGINAL TRAILBLAZER



THE TRAILBLAZER THAT CAME FROM THE DESERT. THEY STILL TELL THE STORY.

The BMW GS an ordinary motorcycle? Many would say: no, it's an idea expressed in two-wheeled form. Or, at the very least, a true phenomenon. A trailblazing creation, in fact.

When BMW launched the G/S back in 1980, it was emphatically out there on its own. It signaled the start of a new motorcycling concept: an enduro with a large engine and plenty of power at its disposal to achieve a masterful blend of ride comfort and ruggedness. In fact, it soon became the trendsetter for an entirely new range of machines.



The familiar face of the GS, a trusty companion that you can rely on — to the very ends of the earth.

In 1981, only a year after its launch, Hubert Auriol won the Paris-Dakar Rally on a competition version of the BMW R 80 G/S, proving that its high-tech features and the harsh desert environment were an enticingly exotic match. Three more victories in what is probably the toughest rally in the world followed in the course of the 1980s.

The long list of G/S triumphs extends right up to the present day. And it includes a few surprises, such as Jutta Kleinschmidt, winner of the Ladies' Category in the "Paris-Cape Town" adventure rally at the start of 1993 on a near-standard R 100 GS PD.

These victories were not the only reason for the immense public appeal of the GS. It has been voted Enduro of the Year in Germany nearly every year since 1980, and more than 60,000 have been built to date.



But that is only part of its success story. The rest is illustrated by the Norwegian rider Helge Pedersen, typical of many globe-trotters who have explored the world on this enduro: he spent over ten years riding all over the world on his BMW R 80 G/S, covering no less than 217,350 miles in the process.

For the vast majority of riders, the GS helped yet another kind of dream become reality. A bike that had proved its worth in the burning desert and in other extreme touring rallies proved equally suitable for everyday riding. Its reliability, its outstanding touring features and its operating economy made it the ideal partner for every journey.

Can you expect more from a great enduro? We believe you not only can, but should. To cut a long story short, the time is ripe for the next trailblazer – the new BMW R 1100 GS.



Hubert Auriol's Paris - Dakar victory in 1981 captured the world's attention. The new BMW enduro idea demonstrated for the first time that it was set for an illustrious future.

Plenty of power, endurance and a truly rugged constitution – the qualities that countless riders of the BMW GS have come to appreciate.

The BMW R 80 G/S – it paved the way for a whole generation of motorcycles.

HOW THE NEW TRAILBLAZER LOOKS – AND WHY!

In case you are thinking: "The old GS was very good, the new one will have to be even better!" we can proudly state that it certainly is! The new GS combines all of the virtues of the R 80 G/S with the technical features of the highly successful R 1100 RS sports tourer.



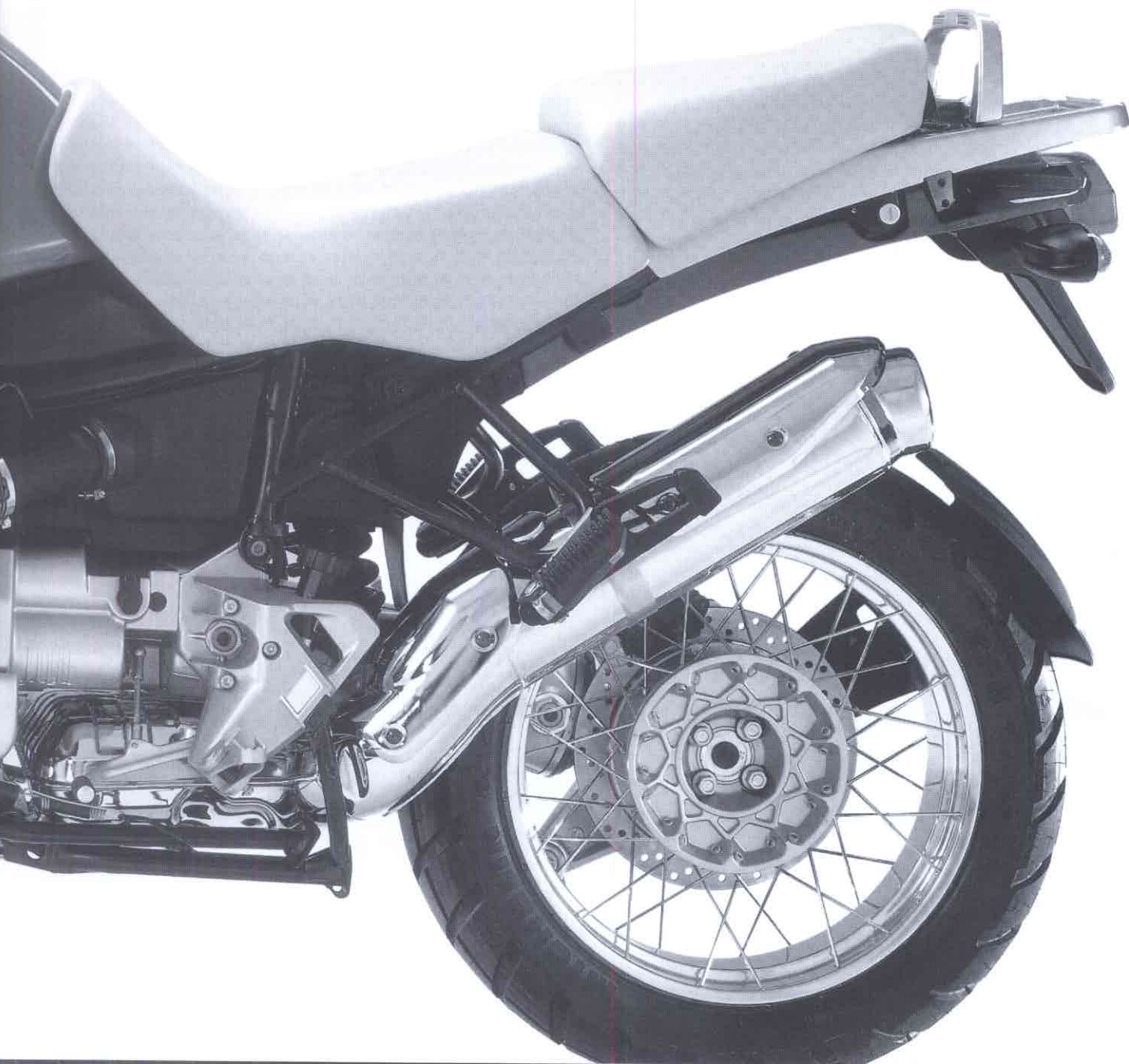
The new BMW R 1100 GS is the second model in BMW's new generation of Boxers. It reflects the signs of the times and the shape of future developments for the large-volume adventure touring enduro market. In fact, it is the first motorcycle built for off-road use that can also claim advanced environmental and safety technology.

Enduro riders enjoy the great outdoors. So to safeguard the environment, it was an obvious step to equip the new GS with an optional catalytic converter.

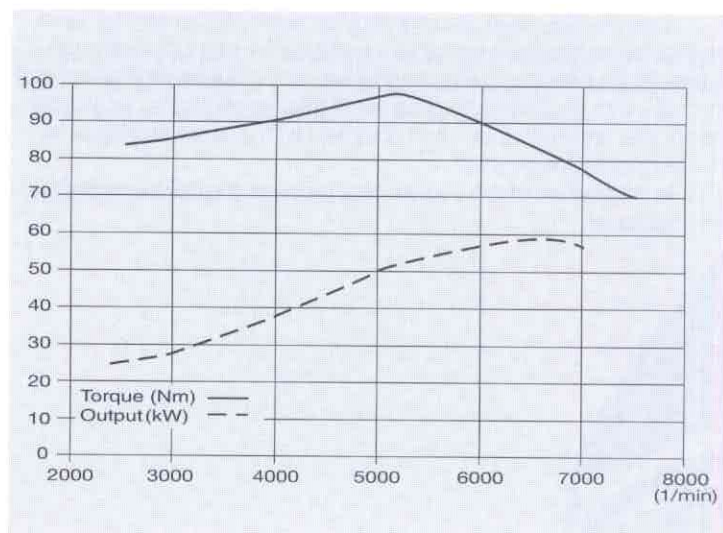
Even enduro riders spend much of their riding time on the roads, amidst traffic that has become much more dense, fast-moving and risk-laden. For general riding conditions, enduro riders can take comfort in knowing that the R 1100 GS is equipped with BMW's further improved ABS II, which can be deactivated when riding off road.

The new GS makes no secret of its origins. All the original, fascinating appeal has been preserved, because the new GS retains the basic design principle of its predecessor. Yet, it is a Boxer through and through, with everything that has made this generation of motorcycles so popular and successful, and complete with all the advantages of this unique engine concept.

In the context of this evolutionary process, the GS is another original trailblazer.



THE NEW BMW BOXER HAS THE POWER YOU NEED, ON OR OFF THE ROAD.



No other enduro can match these engine characteristics. The new BMW GS unleashes abundant power with just a slight turn of the twistgrip.

The new BMW Boxer engine is set for an illustrious future, with its powerful, economical and environmentally compatible concept. It retains such classic advantages as refinement and reliability.

The horizontally-opposed Boxer engine was the obvious choice for the new GS. Not simply because it reflects the bike's temperament, but above all because of the fundamental advantages that this engine principle offers for a large enduro. In addition to its refinement and pulling power, the Boxer engine has a low center of gravity and excellent heat dissipation from the cylinders in the air stream.

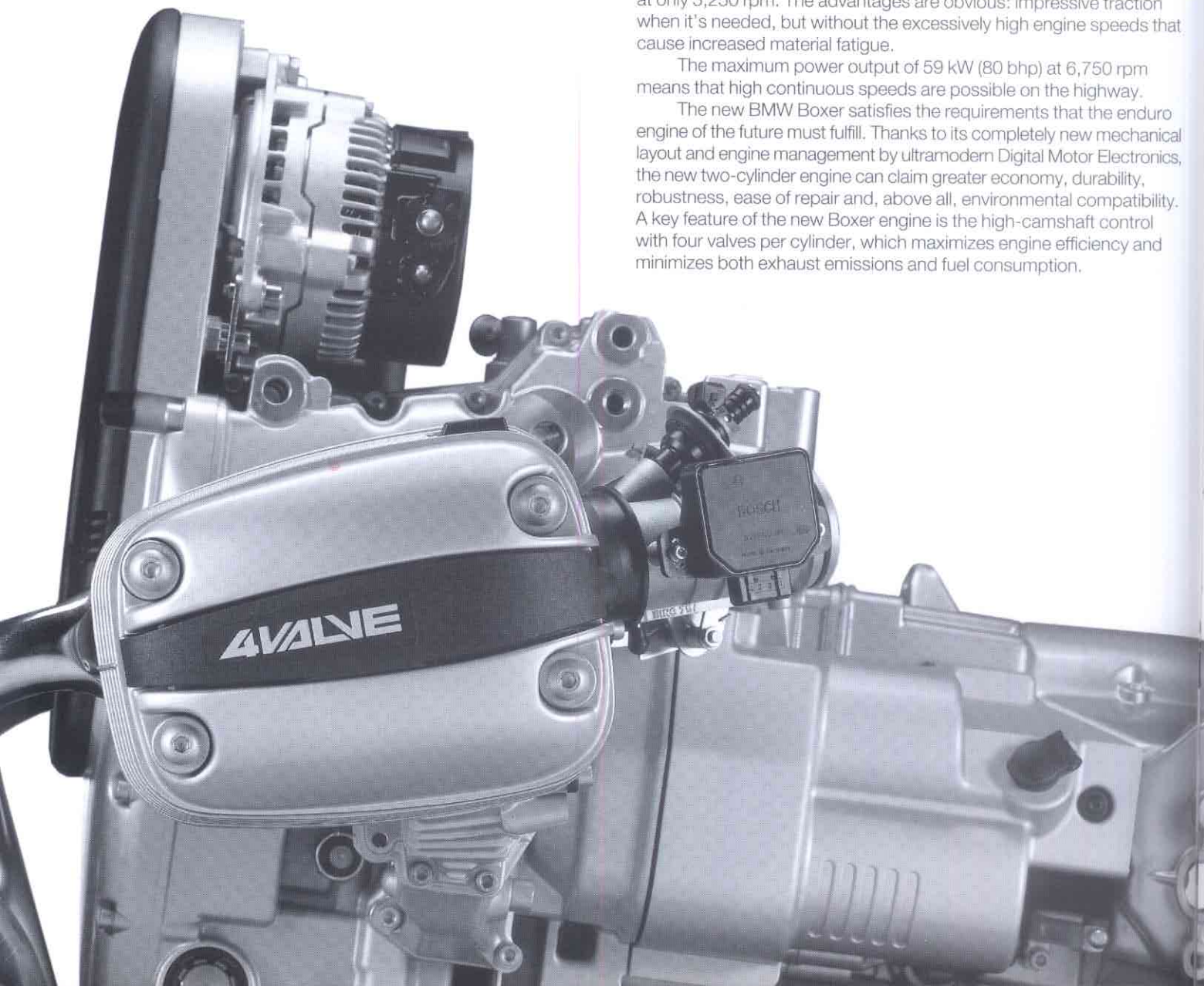
The new BMW Boxer engine, available on the R 1100 RS for several months now, confirms that the horizontally-opposed Boxer concept still offers ample scope for development. Riders and members of the trade press gave it rave reviews. For example, the German magazine "Tourenfahrer" wrote in its May 1993 issue: "Even with a 'mere' 90 horsepower, the BMW has nothing to fear from any other superbike".

But we had ambitious plans for our new enduro, since its priorities were by no means the same as for a sports touring bike. High torque, for example, was more important than sheer power. In other words, we needed an engine with smooth, easily-regulated flow of power even at low engine speeds, permitting energetic acceleration at any time.

The new Boxer engine on the BMW R 1100 GS satisfies these requirements and more. Even just above idling speed the large high-performance engine delivers ample torque – over 58 lb/ft from 2,500 rpm up to almost the engine speed limit. Peak torque of 71.54 lb/ft is reached at only 5,250 rpm. The advantages are obvious: impressive traction when it's needed, but without the excessively high engine speeds that cause increased material fatigue.

The maximum power output of 59 kW (80 bhp) at 6,750 rpm means that high continuous speeds are possible on the highway.

The new BMW Boxer satisfies the requirements that the enduro engine of the future must fulfill. Thanks to its completely new mechanical layout and engine management by ultramodern Digital Motor Electronics, the new two-cylinder engine can claim greater economy, durability, robustness, ease of repair and, above all, environmental compatibility. A key feature of the new Boxer engine is the high-camshaft control with four valves per cylinder, which maximizes engine efficiency and minimizes both exhaust emissions and fuel consumption.





Clearly visible: the crank big end is produced by the cracking technique and has unique joint lines that fit together with remarkable precision – an innovation that is, by no means, considered the industry standard.

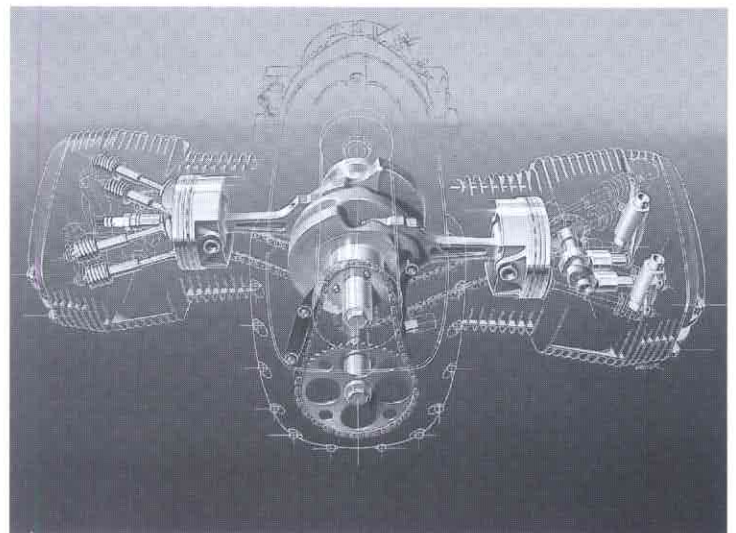
HC control means that the valves for each cylinder are operated by a side-mounted camshaft, bucket-type tappets and rocker arms; this arrangement permits high engine speeds and keeps the engine's overall width low, so that the maximum heel angle is not unnecessarily reduced. The new engine is actually 7 mm (0,28") narrower than the previous GS unit. In contrast to the roadgoing R 1100 RS, the GS engine has cams with different lift patterns and dwell times to create the engine's specific, torque-oriented characteristic.

Each camshaft is driven from the crankshaft via a timing chain that requires virtually no maintenance, thanks to automatic tensioners.

An innovative production method is used to obtain exceptionally durable camshafts. The sintered-steel cams are pressed onto a nitrided steel shaft.

The GS engine also has new pistons with a lower compression ratio than on the new RS engine. Consequently, it can withstand extreme continuous loads. And, with its cast light-alloy pistons of impressive weight-saving design, the new Boxer engine revs freely and incurs minimum vibration.

The new conrods also help in this respect: they are produced according to a new method from sinter-forged steel, resulting in identical weight rods that minimize undesirable inertia forces.



A highlight of the new engine: 4-valve technology with high-camshaft valve gear. The advantages: impressive fuel efficiency, compact dimensions, low weight, low-noise operation and maximum durability.

Another innovative feature of the big ends is trendsetting in the motorcycle industry: the cap joint lines are obtained by a cracking technique that results in surfaces which fit together with remarkable precision in the assembly process. No conventional reamed bolts or tedious alignment procedures are needed. Weight is reduced and the big end bearings are easier to exchange - one of many details that indicate how this engine was designed with ease of repair in mind.

Despite its higher performance, the engine is designed to be even more reliable than its predecessor. A highly efficient but straightforward cooling system helps boost its reliability: the new engine is cooled by air and oil. The cylinders are cooled by the stream of air flowing past the engine, as previously; the temperature of the exhaust valves, which are subjected to high thermal loads, is kept down by a cooling oil circuit.

To maximize safety, the engine oil cooling circuit has been disconnected from the lubricating circuit and has a separate oil pump. An external oil cooler, located in a protected position at the front of the BMW R 1100 GS, reduces the temperature of the oil.

Maintenance intervals of 6,200 miles instead of the 3,100 miles that are customary for an enduro indicate just how reliable the entire engine design is. And since the amount of service required is in any case very low, maintenance costs for the BMW R 1100 GS are extremely moderate, making a considerable difference as the mileage builds up. Valve adjustment has been further simplified, and the air cleaner element, for instance, can easily be removed for cleaning after long, dusty journeys.

AN EVEN MORE IMPRESSIVE LEAD: MOTRONIC AND CAT FOR THE LARGE BMW ENDURO.

Greater economy and, above all, greater environmental compatibility are prime product development objectives for BMW's Motorcycles Division.

BMW has already demonstrated that environmental technology is possible on an off-road motorcycle. Several years ago, we introduced the Pulse Air System for the BMW GS, a technical concept which at that time represented an extremely practical solution.

In the future, only the best technology will be available on the GS: a closed-loop three-way catalytic converter plus engine management by Digital Motor Electronics. The catalytic converter may be ordered as an option – advanced technology that also benefits BMW's four-cylinder K Series engines.

All control functions on BMW's new Boxer twin are for the first time performed by a Motronic system. Put simply, the main advantage compared with conventional carburetors and ignition systems is optimum engine running in all operating conditions, with fuel consumption and exhaust emissions kept to a minimum. The environment also benefits because the Motronic system is the ideal basis for a catalytic converter with lambda control.

The Motronic system's microcomputer, performs the vital task of controlling all functions in the engine and combining them into an integrated management system. External sensors provide a constant supply of information on all relevant parameters: throttle position, engine

speed, air temperature/pressure and oil temperature, plus oxygen sensor readings on bikes with catalytic converter.

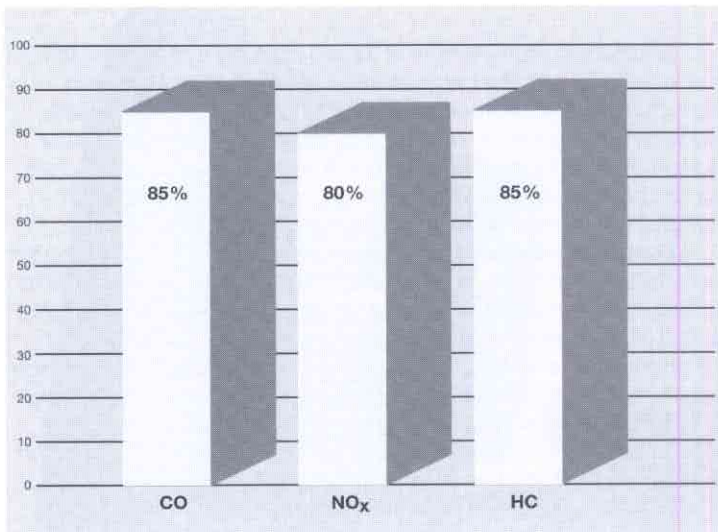
Within a fraction of a second, the computer calculates the correct amount of fuel to be injected and the ideal ignition timing with the aid of a pre-programmed "map". This data is sent to the electronically controlled injectors and ignition components to initiate each individual combustion process.

And because optimum combustion basically amounts to nothing more than economical use of energy, fuel consumption is reduced as a result. BMW Motronic also activates an integral fuel shutoff function when coasting, which saves fuel when the accelerator is eased off at more than 2000 rpm.

In practice, there are many more advantages: better response and performance compared with carburetor engines, and scope for electronic diagnosis via the integral fault memory for maximum ease of servicing.

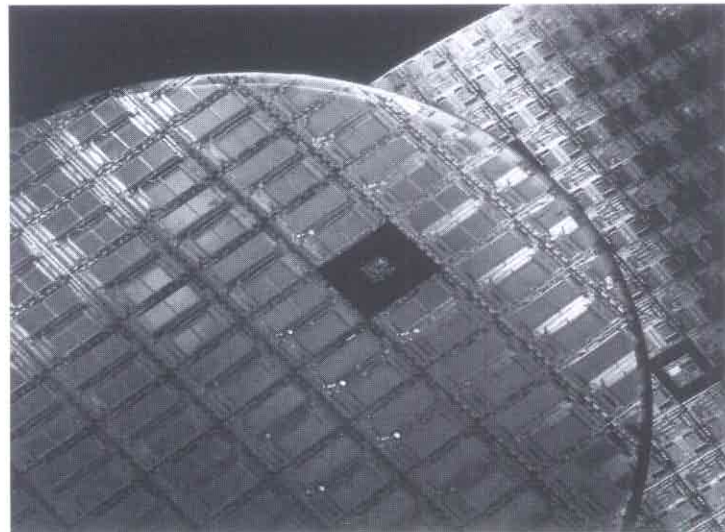
What's more, in contrast to mechanical systems, one aspect of Motronic that makes it particularly attractive for off-road motorcycles is that defects resulting from wear, contamination or faulty maintenance are substantially minimized. An emergency-run function provides the added security that even if individual components should fail, the engine can continue to operate subject to certain restrictions.

Without exaggeration, Motronic makes the GS engine more efficient than ever before. It has already proved impressively reliable over



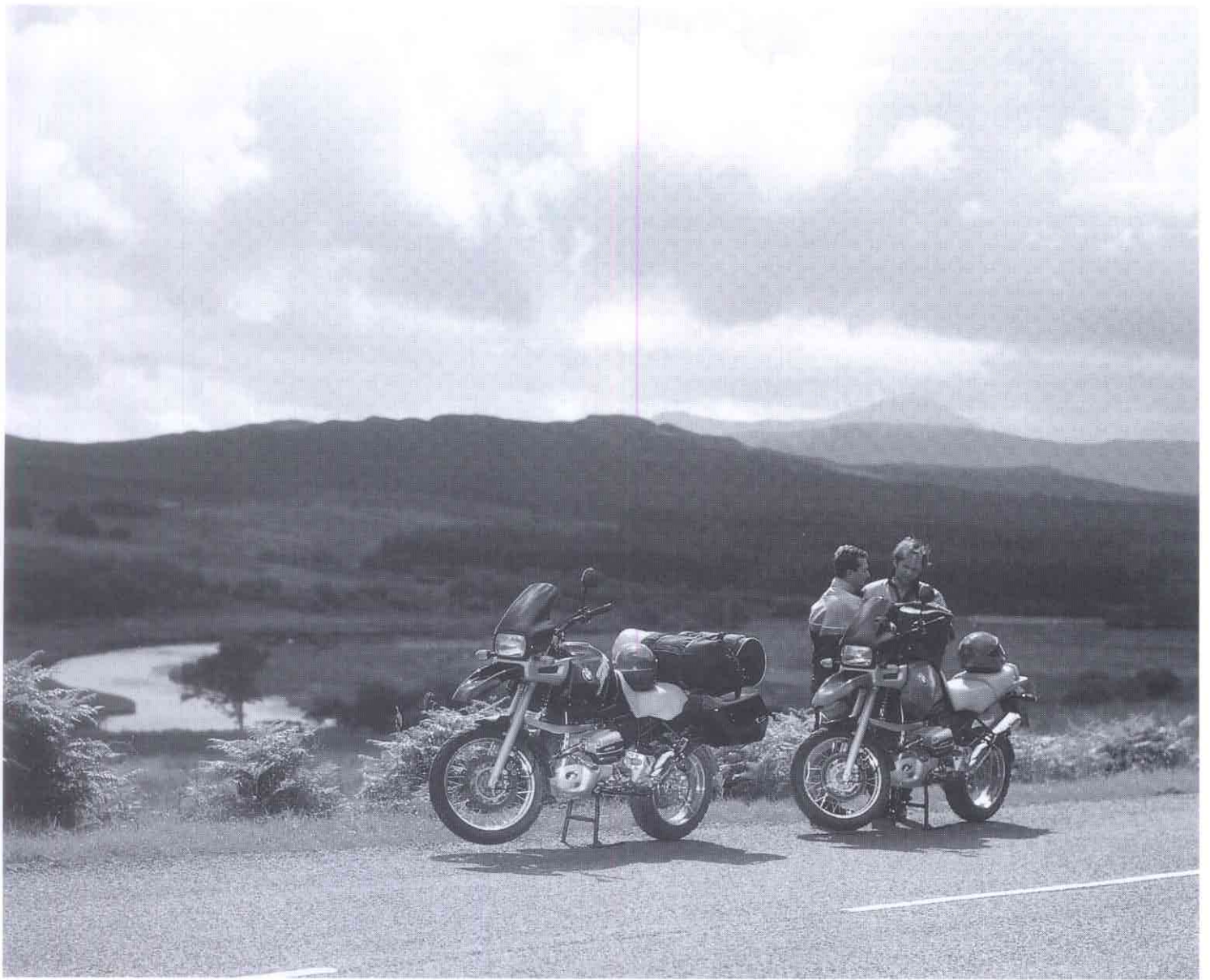
The values that matter now: The closed-loop three-way catalytic converter significantly reduces pollutant emissions. Carbon monoxide (CO), hydrocarbons (HC) and nitrogen oxides (NO_x) are cut to only a fifth of the normal amount.

The shape of things to come, not previously available on any enduro: Digital Motor Electronics control the combustion process in the engine with considerably greater precision than conventional technology. Lower fuel consumption and reduced pollutant emissions are the main benefits.



countless test kilometers. The environment arguably benefits from this advanced concept even more than the rider. First, because lower fuel consumption should result in fewer emissions. The efficiency of a catalytic converter is severely reduced without efficient engine management and an oxygen sensor. The "lambda control" system is designed to ensure optimum mixture combustion even before the exhaust gas reaches the catalytic converter.

For the "Cat" to purify the pollutants as effectively as possible, the air/fuel mixture for the combustion process should ideally have a constant ratio of 14:1. Even slight deviations from these proportions significantly reduce the emission control effect.

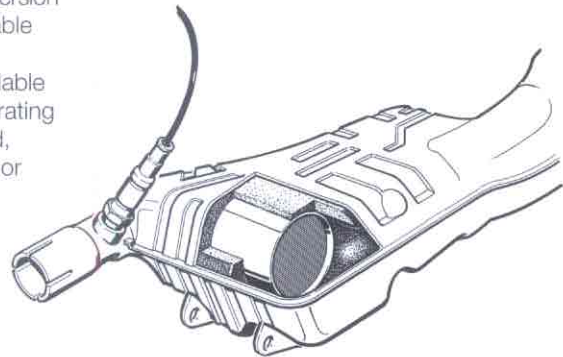


The benefits of Motronic are clear: by virtue of its swift response and precision it can meter the precise amounts of air and fuel and derive maximum benefit from the catalytic converter in all operating conditions, including short journeys. This is demonstrated by the pollutant conversion rates shown in the diagram. Such high rates would be inconceivable with an open-loop catalytic converter.

The catalytic converter, a high-grade metal monolith, is available as a factory-fitted optional extra and is notable for its lengthy operating life and sturdy construction. With the catalytic converter activated, riders should not experience any significant loss of engine power or increase in fuel consumption.

The high-grade metal catalytic converter assures lengthy operating life and is highly resistant to mechanical wear and tear.

You benefit personally when riding a motorcycle with modern environmental technology and electronics: enjoy the great outdoors secure in the knowledge that you are not adding to pollution problems.



SUSPENSION TECHNOLOGY YOU WON'T FIND ANYWHERE ELSE IS STANDARD ON THIS BIKE. FOR EXAMPLE, THE NEW BMW TELELEVER.

The advanced running gear on the new BMW GS is illustrated most impressively by the BMW Telelever, BMW's new front suspension system that has already demonstrated what progress means on the BMW R 1100 RS. All test riders agree that our objective of creating a superior alternative to the telescopic fork has been achieved.

The Telelever can excel to an even greater degree on the new BMW R 1100 GS than on the R 1100 RS sports tourer, because the concept is really put to the test on poor surfaces.

A glance at its operating principle reveals why this is so. The Telelever combines the advantages of the front fork and front swinging arm. In other words, it still has fork tubes, with the difference that they no longer contain springs and dampers. Instead, a single central spring strut performs their function.

The fork is mounted on a bridge between the sliding tubes on a leading arm, and on a ball joint (ball-jointed fork) at the front of the frame. The ingenious feature of this layout is that steering movement is made possible by the ball joints on the sliding-tube bridge and in the front frame. These ball joints are free from play and require no maintenance. Braking forces are largely introduced into the rigid engine housing by way of the lower ball joint, which is bolted to the leading arm. The leading arm is pivoted to the engine housing. The upper ball joint is bolted to the fork bridge.

In contrast to the telescopic fork, castor angle and wheelbase remain largely unchanged across the entire range of suspension travel even when the suspension is compressed a long way, thus ensuring maximum stability in all riding conditions.

A useful anti-dive effect, which prevents the motorcycle from plunging

forward when the brakes are applied forcefully, is also achieved. Consequently, there is always sufficient spring travel available – a vital improvement in comfort and safety on poor roads.

And the fact that there are now no fork support springs means that very little friction is caused, and suspension response is significantly better.

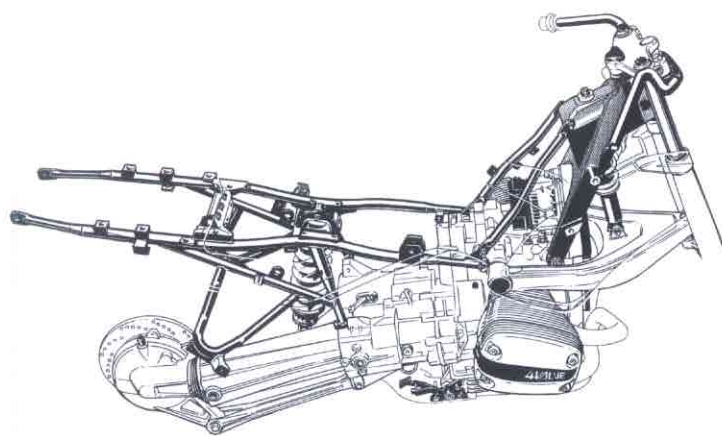
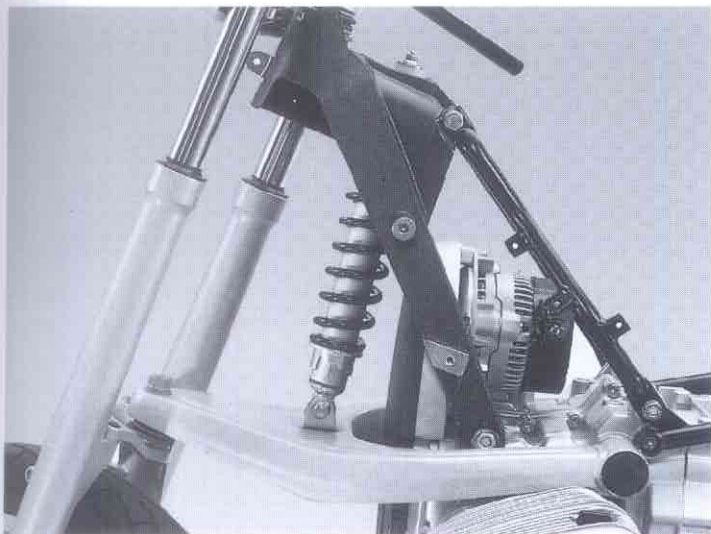
A factor that is particularly important for off-road riding: the entire structure is very strong, but light weight and virtually non-wearing. The fork tube seals scarcely have any loads to bear, and a steering head bearing that would otherwise be subjected to high loads is unnecessary. The typical problems encountered by conventional telescopic forks are avoided – the Telelever can accordingly clock up 62,000 miles without the need for maintenance.

The impressive technical maturity of this solution was confirmed by Motorrad magazine (issue 18/93) which evaluated various alternatives to the BMW R 1100 RS Telelever. Its conclusion: the testing team considered the Telelever to be the most impressive, highly advanced concept of all.

In contrast to the sports touring version, the Telelever for the BMW R 1100 GS has been adjusted to obtain a suspension layout that satisfies roadgoing and off-road conditions equally well. The new front spring strut illustrates this most clearly: with 7.58" of spring travel, it easily absorbs the most extreme surface irregularities; in addition, spring preload can be set to five different rates, allowing the rider of the GS to adopt preferred settings for any given surface conditions. A further innovation: the handlebar is decoupled from the Telelever by a pivot structure, so that the rider does not feel the turning movements that result from the considerable amount of spring travel.

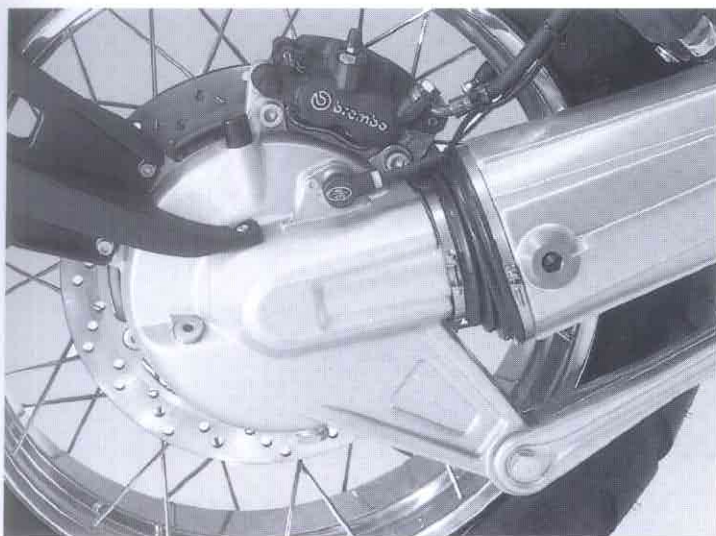
The BMW Telelever is one of the most revolutionary new motorcycle design developments of our time, yet already fully matured and acknowledged as the best because of all the advantages it brings: dynamic stability, better handling and the ability to withstand extreme loads. Precisely the things that matter most.





62,000 miles without maintenance—no other front suspension can match this. It is not even necessary to change the damper oil due to aging. The preload rate of the central front spring strut can be adjusted very easily.

Three instead of one: the new three-section frame concept reduces weight and enhances dynamic stability. The engine/gearbox unit forms a torsionally rigid "backbone".



It's no surprise to find the BMW Paralever on the new GS. This principle is virtually without equal. A new feature: the spring strut can be adjusted with even greater ease and precision to suit operating conditions.

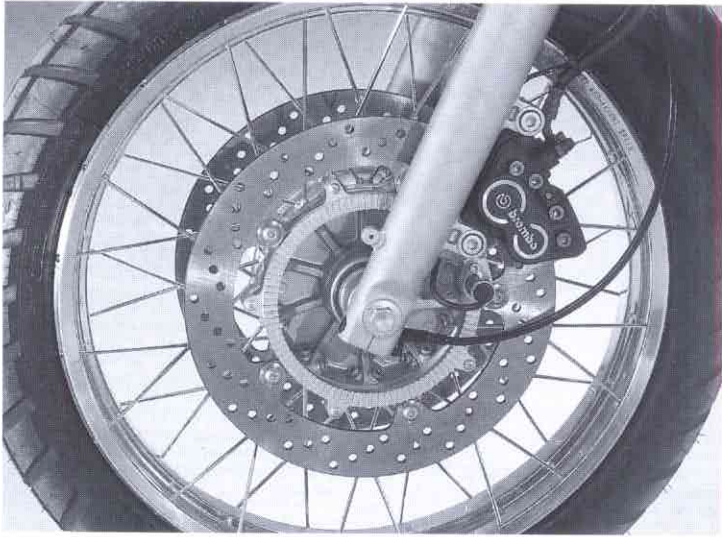
The Telelever is matched by a new, weightsaving frame concept that is designed to ensure accurate wheel location. The strong engine/gearbox unit forms a backbone to which the front and rear frame sections are secured. The high-strength pressure-cast front section is connected to the upper ball joint and the Telelever suspension, with a tubular steel structure at the rear to carry the dualseat and support the rear spring strut.

The tried-and-tested BMW Paralever has been retained on the new BMW R 1100 GS. Its shaft-drive layout reduces interference effects, such as lifting moments, to a minimum, easily withstands extreme loads in off-road conditions, requires very little maintenance and is designed to remain virtually free from wear for tens of thousands of kilometers. A further advantage: the single swinging arm means that removing the rear wheel could scarcely be easier.

Only a few minor details of the Paralever have been modified. The spring strut is now centrally located, and its rebound damping and springing rates can centrally be adjusted in 40 stages to suit operating conditions. To simplify the adjusting procedure as far as possible, the spring preload device operates hydraulically and can easily be regulated externally at a handwheel control.

Also unchanged on the new BMW R 1100 GS are the patented BMW cross-spoke wheels; the special spoke pattern means that their strength is comparable to that of cast wheels. Tubeless tires can also be used, boosting riding safety at high speeds, in particular. The GS has newly-developed low-section tires as standard, 110/80 x 19 at the front and 150/70 x 17 at the rear, which are also extremely suitable for road use.

THE ENDURO IS NOW EVEN MORE ADVANCED: WITH SECOND-GENERATION BMW ABS.



A generously dimensioned brake system easily holds the GS' high performance in check – it is responsive and not susceptible to fading even under extreme loads.

The first ABS for motorcycles was invented by BMW, and has long since proved its value on roadgoing motorcycles; over 40,000 riders of BMW motorcycles to date have chosen this important option. Their decision was a sensible one, because if the brakes are applied forcefully, ABS prevents the wheels from locking; in many circumstances locked wheels would cause the rider to be thrown off the bike.

This added feature is now available for the first time to enduro riders. Experience has shown that large enduros clock up most of their miles in ordinary traffic - and therefore have to cope with increasingly demanding riding conditions. It's good to know that ABS is there for you.

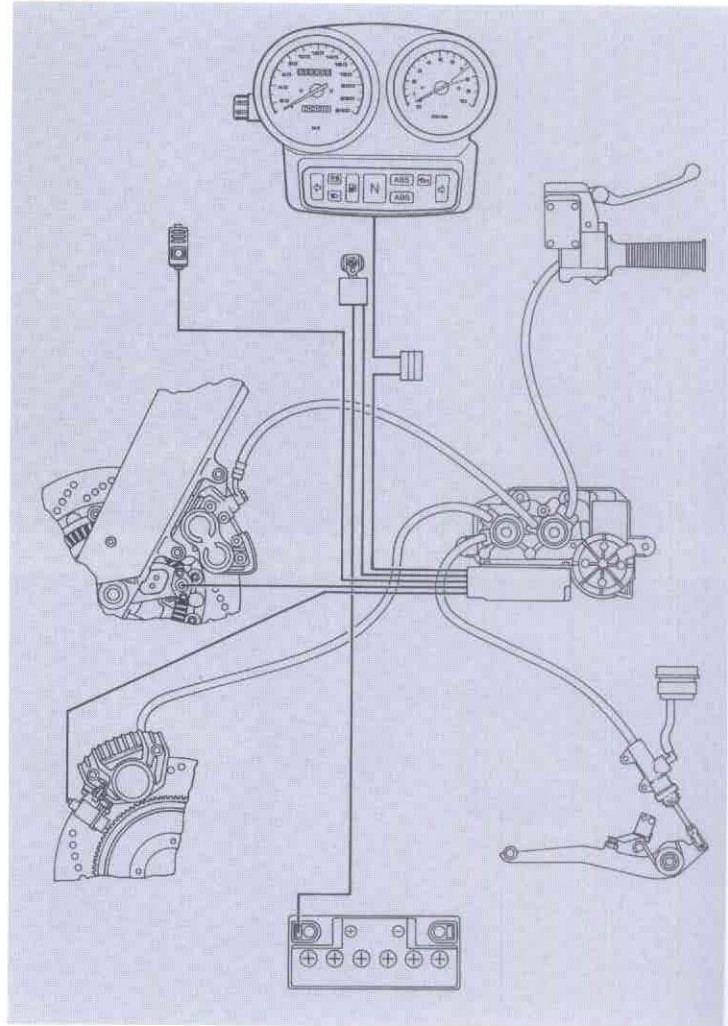
On the other hand, as every professional knows, in order to keep the motorcycle under control in off-road conditions or on loose surfaces, it may be necessary to have one wheel locked for reasons of stability or effective braking. A stationary rear wheel builds up a wedge of loose material between the rear wheel and the ground, to help brake the motorcycle.

The solution chosen for the new BMW R 1100 GS: the new ABS II, available as an optional extra, can be switched off whenever its effect might be undesirable.

In actuality, this will hardly be necessary. The ABS II is so effective that even BMW test riders have difficulty performing better. Test rides show that ABS II performs well on unstable surfaces – it's even been known to stop on ice without locking the wheels.

BMW ABS is, therefore, always activated unless the rider deliberately switches it off. This prevents any unpleasant surprises as a result of it having been shut down inadvertently; the ABS can only be switched off by pressing the cancel button at the same time as the ignition is turned to start the engine. Whenever the ignition is switched off and back on again, ABS is automatically reactivated.

The new ABS II has mature software that is designed to cope with even the most unusual braking conditions. For instance, it takes effect even before a rear wheel leaves the ground as a result of excessively violent braking.



Very advanced technology is used: ABS II for the first time has a "piston system with relative pressure monitoring". This system maintains the braking effect at a very high level throughout the period for which the brakes are applied hard.

Its functional principle: rotation of both wheels is permanently monitored by sensors and the readings passed to the ABS control unit. If this identifies a tendency on the part of one or both wheels to lock, the pressure modulator is activated. It reduces braking pressure until the locked wheel begins to turn again.

The moving piston in the pressure modulator deliberately modifies the volumetric ratios and, ultimately, the brake pressure in the system for this purpose – separately for the front and rear wheels, of course.

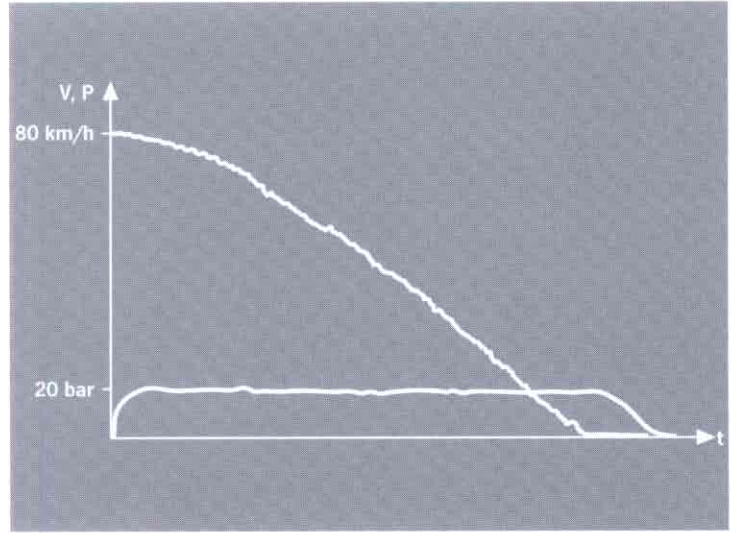
This piston's high-speed actuation by means of a piston position monitoring sensor, together with the high-performance control unit, ensure that brake pressure is never reduced by more than the necessary amount.

The system has been developed to respond within four thousandths of a second. The wheels can always be braked just below the locking point without sacrificing any valuable braking distance.



All components of the ABS II at a glance: the central element is the pressure modulator (center right) with integral control electronics. When the brakes are applied in normal circumstances, it is out of action. ABS II only cuts in if a wheel threatens to lock.

If a wheel is overbraked and locks, the motorcycle will become unstable and the rider is likely to fall off. ABS is the effective way to prevent every motorcyclist's nightmare.



The diagram confirms how ABS II maintains a constantly high braking force for the entire period over which the brakes are applied hard. It does so much more effectively than if the brakes are applied hard by the rider in an emergency.

ABS II does not take effect below a speed of 1.25 mph, so that the motorcycle can be brought safely to a standstill. The rider does not detect the regulating action of the ABS II in any way, as its extremely short response time means that it operates very gently and smoothly.

It is also outstandingly reliable: the system, with three independent computers in communication with each other, has a permanent self-monitoring function.

If malfunctions should occur, ABS II automatically cuts out and indicates this at a telltale light. The full effect of the standard brake system is, of course, maintained.

ABS II helps assure braking control because the efficiency of the new brake system is beyond any doubt. Even without ABS, it reaches an impressive standard for a large enduro. The front wheel has a double disc brake with four-piston fixed calipers, brake pads resistant to fading in wet conditions and angular wear compensation; floating stainless steel brake discs 12.04" in diameter are used. At the rear wheel, the conventional drum brake has been replaced by a newly-developed two-piston floating-caliper brake with a 10.87" brake disc.

The combined effect: outstanding rates of deceleration, precise control of the required braking force and the ability to withstand continuous loads even on long downhill stretches at maximum payload.



Does ABS II make sense in off-road conditions? Yes: it does, particularly on slippery surfaces or on sand, where this system utilizes its advantages to good effect. Riders who wish to drift, professional-style, with the wheels locked can switch off the ABS II temporarily.

THE TIME WAS RIPE TO BRING RIDER AND MACHINE EVEN CLOSER TOGETHER.



Now adjustable: the rider can choose a seat height of 33.6 or 34.4 inches.



Perfect for long-distance riders: the luggage rack beneath the detachable pillion passenger's seat can be used to secure a large number of articles. This ideal arrangement keeps the motorcycle's center of gravity low.

Many GS riders opted for a BMW enduro on the strength of its suitability for both touring and long journeys. Its proverbial standards of ride comfort and excellent ergonomic design mean that even long journeys can be completed in relaxed style.

However, the best is the enemy of the good, as they say. This is why we have adopted so many new ideas on the new GS that have never been attempted before.

The new BMW R 1100 GS is the first motorcycle ever to have a variable-height rider's seat. The dualseat is in two sections; the front section can be adjusted to a height of either 33.6 or 34.4 inches simply by slotting the dualseat into different sockets.

The pillion passenger can also ride in comfort; BMW strives to provide all riders of its motorcycles with the best seated position.

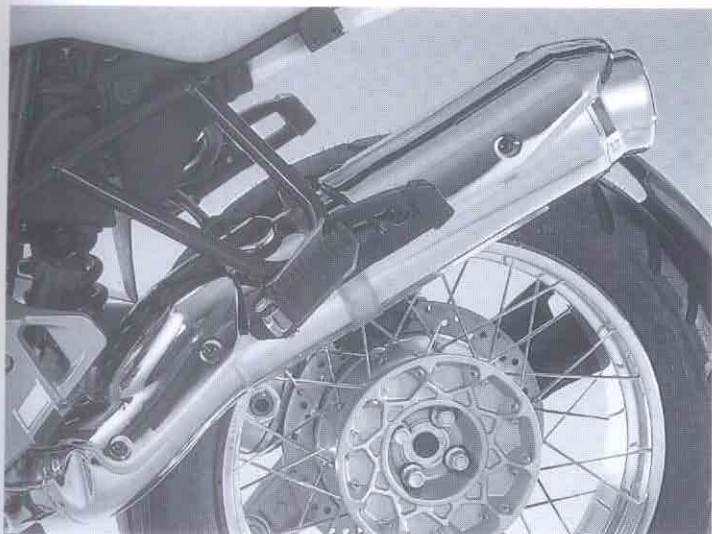
The second special feature that long-distance travelers will appreciate: the rear section of the dualseat can be removed, revealing a large luggage rack to secure all types of small loads. When luggage is attached to the motorcycle in this way, it should have minimal impact on the bike's dynamic behavior. The payload limit with standard equipment and a full tank is 456 lbs.

The new fuel tank is further evidence of the BMW R 1100 GS' outstanding suitability for touring, as its 25-liter (6.6 gals.) capacity permits a large operating radius, more than 248 miles at an assumed average fuel consumption of 39.2 mile/gal. The tank is made of high-strength, lightweight 6 G polyamide, which is properly coded so that it can be recycled separately at the end of its useful life.

The rider is protected against the wind by a fairing fixed to the frame; for optimum effect at all speeds, the windshield angle can be adjusted through an angle of 13°.

In fact, everything about the rider's "work area" is precisely as he or she could want it to be. The high, cranked handlebar is shaped to provide a relaxed, upright riding position, for optimum control of the enduro. Vibration-reducing rubber elements which isolate the grips from the center section of the handlebar and protect the rider's hands from vibration.





The exhaust system is now of stainless steel and therefore highly durable.



When the going gets tough, the new BMW GS has all the necessary fittings as standard. For example, undertray and cylinder guards.

Two large, virtually vibration-free mirrors, seldom standard equipment on enduros, ensure a clear view to the rear. And the instruments, developed for the new BMW Boxer according to the latest ergonomic principles, are directly within the rider's field of vision.

For night-time riding, the quality of the motorcycle's lights is a definite plus – the powerful H4 rectangular headlight is among the best currently available on any motorcycle.

For parking, the BMW GS has both a center and side stand. It can be raised onto the center stand with minimal effort and has a side peg for increased leverage. The side stand can be provided with a starter-motor interlock as an option, so that the rider cannot set off with the stand extended.

For the real rough-and-tumble, there is a strong aluminum undertray and the cylinder guards to prevent damage. Incidentally, the new GS offers much more ground clearance under the cylinders than its predecessor.

It also has more effective protection against mud and water splashes. There are two sturdy mudguards on each wheel, collecting and channeling water away from the tire; this design satisfies all the legal requirements. The long upper mudguard, which is fixed to the frame, and the rear wheel arch ensure that both rider and motorcycle are shielded from water, dust and flying stones.

Many ingenious details on the new GS make riding it a never-ending pleasure. For instance the adjustable, four-position handbrake lever, the 12-volt power socket or the central steering lock that engages when the handlebar is turned to the left or right. In fact, all locks on the motorcycle – ignition, steering, tank and dualseat – can be operated with the ignition key, plus the case keys if desired, provided one-key operation is specified when ordering. A glance inside the rear compartment confirms that BMW has thought of just about everything: the toolkit is as sturdy in design as it is extensive in content, even including tire repair materials.



The standard windshield can be adjusted through 13° to suit the desired road speed. All fairing elements are material-coded, for recycling at the end of the motorcycle's useful life.

THE COMPLETE ENDURO: NOTHING IS IMPOSSIBLE.

Maybe you have one or two requirements that we haven't mentioned. Not to worry: BMW is bound to have the right items in its truly impressive range of accessories for rider and motorcycle.

A wide range of optional extras will be available on the BMW GS: they include such items as the rider information display, which indicates oil temperature, fuel level, gear currently selected and actual time at a glance on a liquid crystal display. There are also heated handlebar grips and a pannier case holder. Suspension, engine and dual seat can be specified with a black finish. The BMW anti-theft alarm system, BMW's tried and tested pannier cases, topcases and inner case bags, the Multivario tank-top rucksack, foam rubber grips and an impact pad for the handlebar are also available as accessories for the GS.

Your BMW motorcycle dealer can supply the right rider's gear. One particular brand-new line is the BMW Marrakesh enduro suit that combines excellent standards of safety with wearer comfort and perfect protection against wind and rain. BMW also supplies outstanding equipment for touring and sports riders. And riders who also indulge in other sporting pursuits will benefit doubly from BMW's versatile Active Line range of multifunctional sportswear.

BMW has its own enduro training course – an entirely new idea that has already met with a tremendous response. Riders can try out maneuvers to their heart's content at our scenic Enduro Park at Hechlingen, Bavaria, under the supervision of experienced off-road specialists who demonstrate all manner of skills and techniques. As fun as it is responsible, the BMW course satisfies very stringent environmental requirements.

Or how about an exciting 6-day enduro tour through the Italian Alps in Friuli-Venezia Giulia? Our range of motorcycle vacations includes numerous other opportunities to take your two-wheeler on tour. Along Europe's most scenic routes or through other exciting parts of the world - Namibia, for instance. The best thing about these tours is that everything is perfectly planned, from start to finish - including the use of a BMW motorcycle.

Your BMW dealer can tell you more about these interesting forays, as well as deliver a very special standard of service. Parts supply strives to assure that spare parts arrive at the workshop within 24 hours. The quality of advice and maintenance work also enjoys a justifiably high reputation, as surveys by motorcycle magazines have repeatedly



Our extensive selection of tours is the easy way to take to the roads with like-minded riders.

confirmed. Equally important is the fact that there are over 240 BMW service stations in Germany alone, and many more in over 100 other countries worldwide.

Your BMW motorcycle dealer can also assist with all aspects of financing, whether you opt for purchasing on deferred terms or the attractive leasing or financing arrangements offered by BMW Financial Services NA. It's worth remembering too that we can assist with financing not only for your new GS, but also for accessories or even a used motorcycle of your choice.

To find out more about BMW's range of products and services, please contact us and state the topic on which you require further information: Please call 1-800-345-4 BMW.



The rider information display (optional extra) shows the time, gear currently selected, fuel level and oil temperature at a glance.



Why not visit the BMW Enduro Park in Hechlingen, Germany? It offers ideal conditions in which to develop and improve your riding skills. What better way to prepare for adventure tours in far-off countries?

BMW has long since proved that waterproof rider clothing fitted with the GORE-TEX® membrane is successful in practice. Now we go a stage further with the BMW Madison suit – in the form of new materials which afford greater safety. The trousers can also be combined with the Aspen touring jacket.



THERE'S NO DOUBT ABOUT IT: THIS IS THE SHAPE OF THINGS TO COME.

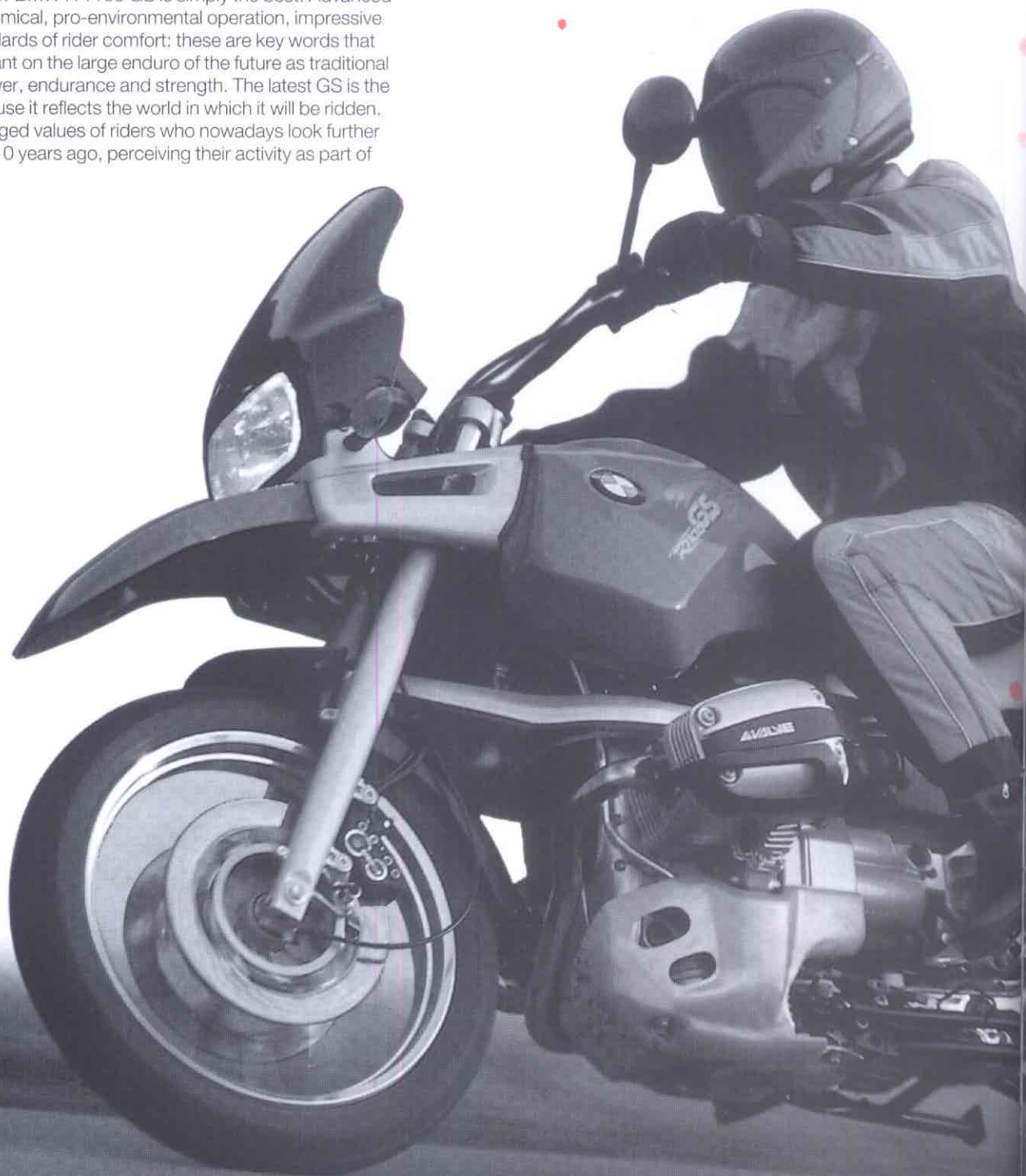
Before you decide on a new enduro, you will obviously want to compare the facts. And quite rightly so, because you are entitled to expect your motorcycle to be a trusted partner for some time to come.

We are firmly convinced that even after lengthy investigation, you'll find that no other enduro comes anywhere near the BMW R 1100 GS. This is no exaggeration: the facts speak for themselves. We're not of course talking about specific individual details, nor would we be so presumptuous as to claim that only we can build motorcycles for use both on the road and off the beaten track.

The concept as a whole is what matters, particularly with the future in mind. When striking a balance between a whole range of different requirements, the new BMW R 1100 GS is simply the best. Advanced technology for economical, pro-environmental operation, impressive safety and new standards of rider comfort: these are key words that will be just as important on the large enduro of the future as traditional qualities such as power, endurance and strength. The latest GS is the new trailblazer, because it reflects the world in which it will be ridden. And mirrors the changed values of riders who nowadays look further ahead than they did 10 years ago, perceiving their activity as part of

the complete picture instead of just as individual riding pleasure. It is good to see that the new GS has preserved much of its original character, for all its innovations. Because riders who enjoyed the "original" trailblazer so much are entitled to expect even more of its successor, whether they want sturdy reliability or suitability for everyday conditions. Enthusiasts for the Boxer engine will continue to derive pleasure from its rugged beat.

Even at a glance it is clear that we are striking out in a new direction. This fresh departure almost defies description with mere words: you need to take an extended test ride on the new GS to understand what we mean. We cordially invite you to do just that. Why not contact your BMW motorcycle dealer now, to arrange an appointment?



Points to remember before you decide:

The new BMW R 1100 GS is the only enduro:

- with an engine displacement of 1085 cc
- with peak torque of 97 Nm (71 lb/ft) at 5500 rpm
- with ABS II (optional extra) for even greater active safety, but also capable of being switched off by the rider
- with Motronic and a closed-loop catalytic converter (optional extras) for maximum economy and environmental acceptability
- with Telelever and Paralever for excellent handling and high safety reserves, both on and off the road
- with variable seat height as standard
- with shaft drive
- with 6,200 mile service intervals for even lower maintenance costs
- with an impressive range of special accessories and equipment.

Engine:

Type:	Flat-twin, 4-stroke
Valves:	4 per cylinder
Displacement:	1085 cc
Bore x stroke:	99 mm x 70.5 mm (3.90" x 2.78")
Output:	59 kW (DIN) (80 bhp) at 6750 rpm
Torque:	97 Nm (71.5 lb/ft) at 5250 rpm
Compression ratio:	10.3:1
Cooling:	Air/oil
Valve gear:	HC, chain
Mixture preparation:	Bosch Motronic MA 2.2 with overrun fuel cutoff
Clutch:	Single dry plate
Gearbox:	5-speed
Gearbox ratios:	I 4.16; II 2.91; III 2.13; IV 1.74; V 1.45:1
Final drive ratio:	3.0:1

Electrical equipment:

Ignition:	Motronic
Alternator:	700 W
Battery:	12 V/19.Amp/h

Dimensions and weight:

Fuel tank capacity:	25 l (5.5 Imp. gal/6.6 US gal), incl. 4.7 l (1.04 Imp. gal/1.24 US gal) reserve
Seat height at unladen weight:	840 (860) mm (33.6" [34.4"])
Unladen weight (ready for road):	243 kg (536 lb)
Gross weight limit:	450 kg (992 lb)

Performance data and fuel consumption:

Top speed:	App. 195 km/h (120 mph)
Acceleration from 60-140 km/h (37-87 mph):	10.4 sec.
Fuel consumption per 100 km acc. to ISO.7118:	at 90 km/h (56 mph): 4.6 l (61.3 Imp./51.3 US mpg) at 120 km/h (75 mph): 5.9 l (47.8 Imp./39.9 US mpg)
Fuel:	Premium grade unleaded

Running gear:

Frame:	3-piece, front and rear sections, engine with load-bearing function
Fork:	BMW Telelever with central suspension strut, 4 settings
Spring travel:	190 mm (7.58")
Swinging arm:	Single (BMW Paralever)
Drive:	Shaft
Suspension strut:	Central suspension strut with coil spring and single-tube gas-filled shock absorber, continuous rebound adjustment, hydraulic spring preload, continuously adjustable
Spring travel:	200 mm (7.87")
Brakes	
front:	Twin disc (dia. 305 mm [12.04"]), floating disc, 4-piston fixed caliper
rear:	Single disc (dia. 276 mm [10.87"]), 2-piston floating caliper
Brake pads:	Fade-resistant in wet weather
Wheels:	Cross-spoke
Tyres	Low aspect-ratio
front:	110/80 H - 19TL (tubeless)
rear:	150/70 H - 17TL (tubeless)





Models are illustrated to the equipment specifications for Germany. They may also include items of equipment that are not part of the standard specification and are only available as options at extra charge. Design and specifications subject to modification.

*© BMW AG Motorcycle Division, Munich, Germany.
Not to be reprinted wholly or in part without written permission from BMW AG.
This catalog is printed on paper bleached without chlorine.
Printed in Germany 3/94*

311 204 725/UX-V-12



FOR THE WORLD AHEAD