IT'S OFFICIAL. THE 21ST CENTURY IS STARTING SEVEN YEARS EARLY.

THE NEW BMW K 1100 RS, K 1100 LT.



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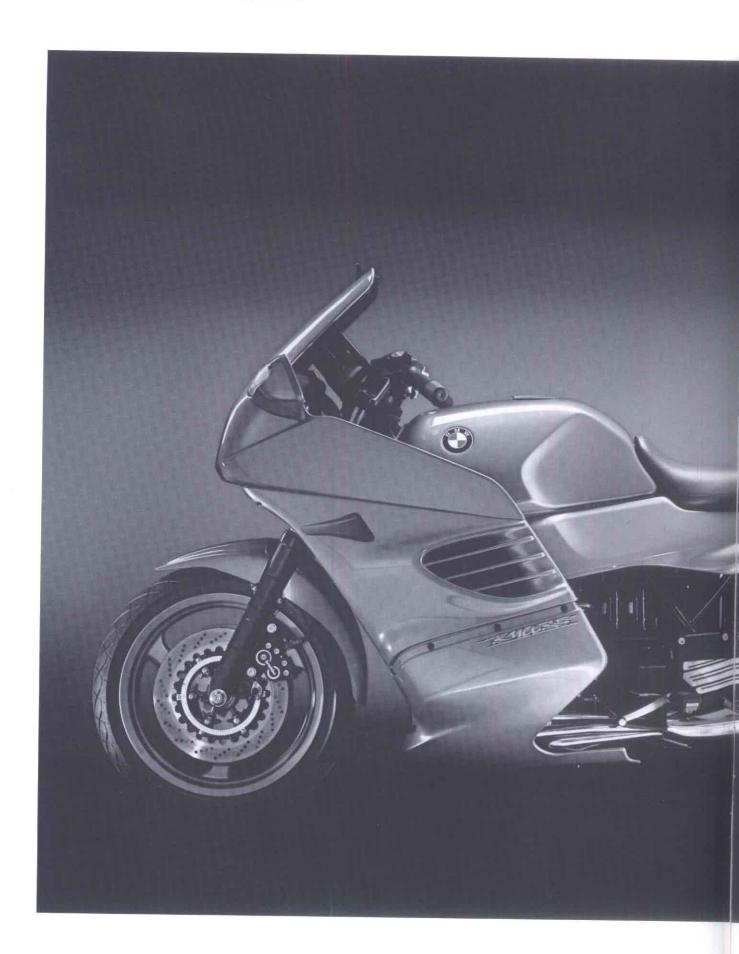
pp. 6 - 7 BMW K 1100 RS Features/ Specs **pp. 8 - 9** BMW K 1100 LT pp. 10 - 11 BMW K 1100 LT Features/ Specs pp. 12 - 13 The new 1100-cc powerplant technology pp. 14 - 15 The new 1100-cc suspension technology pp. 16 – 17 Electronics/ Catalytic converter technology pp. 18 - 19 BMW Accessories/ BMW model range So. What makes a motorcycle so special that it remains king of the hill not just for one season, but for almost a decade? Easy: the BMW K-Series introduced an idea that simply blew away the motorcycle world. It was the first machine ever to offer the best of both worlds. Dynamic performance married to comfortable, refined touring. What we used to call "the harmony of a unique concept" offered outstanding versatility and no-nonsense performance to the truly dedicated rider. This was, and continues to be, what is particularly ingenious about the K-Series. Why

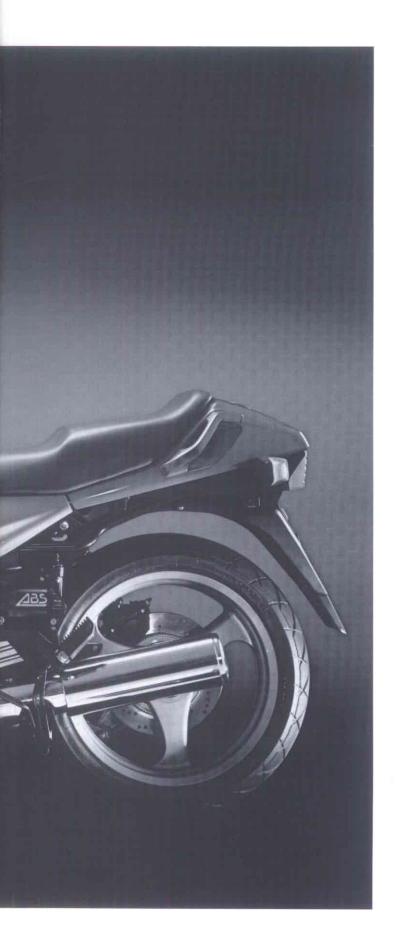
it was ticketed for cognition and titles internationally. K 1100 RS quickly popular sports tourboth nationally and
And why the BMW
became the most
ing machine of

the '80s. While the new BMW K 1100 LT was setting new standards in the luxury tourer market. BMW's recipe of continuity and technological innovation continues to turn a great motorcycle into an even greater one. And, as far as we can see, there's no end to the success of the K-Series in sight.

The new 1993 K 1100 RS and K 1100 LT prove that BMW's large K-Series models will remain at the top of the hill for the foreseeable future. Why? Because they boast more experience and know-how than virtually any other machine in the market. And because they clearly live up to what the true motorcyclist expects today and what today's world expects of the motorcycle. Which is precisely what makes these machines so unique in the Big Bike market.

THE BMW K 1100 RS.
FAMILIARITY BREEDS SUCCESS.







Without a doubt, the BMW K-Series RS is one of the very few motor-

cycles known to virtually everybody in the universe.

But what else would you expect from such a universally successful motorcycle?

The RS made headlines from the moment it vroomed onto the scene in 1983. It was not only BMW's first four-cylinder sports tourer, but also a trendsetter in innovative technology. Making its success almost inevitable:

- · Best-seller in the German 1000-cc market.
- · More than 47,000 units sold worldwide.
- Voted "Motorcycle of the Year" five times in Germany,
   "Bike of the Year" in the USA and Australia, and
   "Year's Best Moto" in Italy.

Success breeds success. So, naturally, BMW soon launched similar models based on the same concept. Which explains why the BMW K-Series RS was constantly improved. Why one of the best sports tourers in the world was turned into an even better sports tourer. And why the new BMW K 1100 RS is a fully developed motorcycle in every respect. A machine representing the absolute state of the art. Displaying superior technology. Optimum power. Torque for even greater riding pleasure. A motorcycle with the detailed refinements of BMW's unique styling for even more comfort and dynamic performance. A motorcycle with the typical reliability, ease of service, and all-around economy of a BMW. Not to mention a vital environmental feature: the BMW K 1100 RS comes with electronically controlled ABS and the most sophisticated catalytic converter technology.

## THE BMW K 1100 RS: BETTER IN EVERY NOOK AND CRANNY.



In virtually every respect, the new K 1100 RS represents an improvement over its very successful predecessor. Even a glance at the new 1100-cc four-cylinder 16-valve powerplant will quickly reveal a sense of all-around harmony. Which makes the K 1100 RS just as suitable for dynamic, high-performance riding as it is for relaxed tours with passenger and baggage. The increase in engine size by nearly 10 percent improves the torque curve and, accordingly, the motorcycle's pulling force at all speeds. With a maximum torque of 77.3 lb/ft now coming at 5500 rpm. Use of lighter pistons and connecting rods with optimum balance enhances running smoothness to an even higher level. While the new engine mounts and dampened handlebar and footrests minimize any residual vibration. The

running gear is equally impressive, with the final details being improved even as we speak. The telescopic fork has been finely tuned for even better response.

The new rear spring strut features an adjustable base spring and various damper action settings to suit specific requirements. Even the frame has been rein-





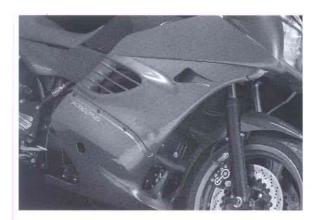
forced to rule out any roughness regardless of riding conditions.

Protection from wind and weather has also been refined. The modified fairing with optimum streamlining now provides better protection for the rider's lower legs and feet. And the ergonomic BMW cockpit, already praised as an outstanding example of modern design, has even been improved: the brake lever, adjustable to four different positions, now

nestles perfectly in your hand.

Above and beyond all these improvements, the BMW K 1100 RS possesses other features you'd expect of a BMW. Motronic engine management for fuel efficiency and reliability. A standard three-way catalytic converter for environmental compatibility. Advanced and sophisticated brake technology featuring optional ABS for extra safety.

The ability to cope with loads of more than 440 lbs. All of which make the new RS a truly outstanding sports



tourer with supreme all-around versatility.

### Facts and figures you should know about the new K 1100 RS:

- · Superior fuel economy for a motorcycle of this class and caliber.
- · Long range exceeding 200 miles on a tank capacity of 5.2 gals.
- · Unique combination of ABS and three-way catalytic converter not to be found with any other sports tourer.
- · The only sports tourer in its class with drive shaft and Paralever technology.
- · Optimized streamlining with even better rider protection.
- · Power socket and hazard warning flashers now fitted as standard.
- Exclusive new colors: mystic red metallic silk blue metallic astral blue metallic classic black metallic

#### SPECIFICATIONS

Powerplant: Four-cylinder, four-stroke in-line, 1092 cc

Output: 100 bhp at 7750 rpm

Torque: 77.3 lb/ft at 5500 rpm

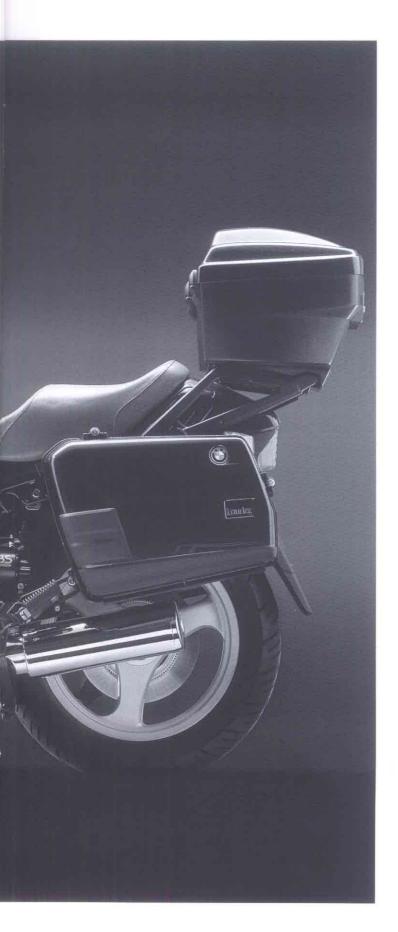
Weight: Unladen: 617 lb. (in road trim)

Maximum permissible: 1069 lb.

Fuel type: Unleaded middle grade premium (89 AKI)

THE BMW K 1100 LT.
SITTING ON THE LAP OF LUXURY.







What kind of luxury

tourer meets all of today's tough requirements while at the same time catering to the rider's personal demands? Think about it. First, it must offer more than "just" superior comfort and a wide range of features. It must also be easy to handle and extremely agile. Able to cope efficiently with increasing traffic. It must be available with ABS and catalytic converter for maximum safety and environmental friendliness. And it should offer superior economy with features like Digital Motor Electronics.

The powerplant must provide ample performance and torque for genuine riding pleasure. Particularly when you're humming along with a passenger and lots of baggage. The running gear should ensure the highest standard of riding comfort and tracking stability. And the brakes should have sufficient reserves to keep your motorcycle under control at all times.

Last, but not least, it must offer the right kind of reliability and carefree maintenance. Allowing the rider to set off fully confident even to the ends of the earth.

We have, of course, been describing the BMW K 1100 LT.

The ideal luxury tourer. The ideal way to enjoy the thrilling world of motorcycle touring. Giving you an open mind for new discoveries, new impressions. And the pleasant feeling that you're riding way ahead of the times.

### THE BMW K 1100 LT. ALL THE AMENITIES YOU'D EXPECT FROM LUXURY ACCOMMODATIONS.



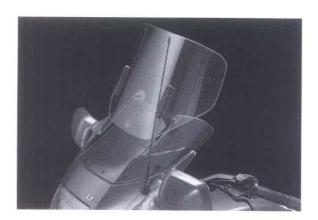
The BMW K 1100 LT. The ultimate large touring machine.

Offering the ultimate in technical progress and riding comfort. The new four-cylinder 16-valve powerplant is both extremely dynamic and exceptionally flexible.

Ideal for fast acceleration, enjoyable touring without the constant shifting of gears, and easy passing thanks to superior power. The running gear, featuring BMW's

patented Paralever, an optimized spring strut at the rear, and the newly tuned telescopic fork, makes the BMW K 1100 LT easy to handle, safe, and extremely comfortable in every situation.

Even when carrying its maximum load of 463 lb., the K  $1100\ LT$  retains all its handling qualities and superior



agility. Naturally, the four-piston fixed-caliper brakes featuring floating discs provide the K 1100 LT luxury tourer with a perfect match for the power of its engine. As standard equipment, there's even BMW's electronically controlled ABS.

Both rider and passenger benefit from all the amenities that befit the ultimate luxury tourer. Unmatched protection from wind and weather provided by a windshield with infinite power adjustment to meet all your requirements. Superior ergonomic features, such as the convenient arrangement of the instruments and controls. Exceptional seat comfort for both rider and passenger. And the new topcase now comes with a capacity of 1.23 cu. ft. for maximum loading.



Facts and figures you should know about the K 1100 LT:

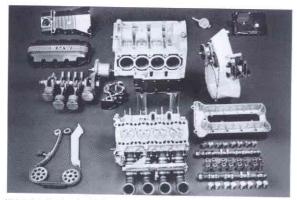
- Lowest unladen weight of all motorcycles in this segment: 639 lb. in road trim with full tank.
- Highest service load of all comparable motorcycles:
   463 lb.
- Superior fuel economy: long range thanks to the 5.2 gal. fuel tank.
- The world's only luxury tourer to offer the combination of ABS and three-way catalytic converter.
- · The only luxury tourer with Paralever technology.
- New larger 35 liter saddlebags, and the 35 liter topcase.
- Exclusive colors:
   pine green metallic
   classic black metallic
   silk blue metallic
   mystic red metallic
   astral blue metallic

#### SPECIFICATIONS

# THE NEW 1100-CC POWERPLANT: THE MOST INTELLIGENT PERFORMANCE EVER CONCEIVED.



The valve cover characterizes the looks of the four-cylinder 16-valve powerplant.



High-tech to the last detail: 16 valves and two overhead camshafts guarantee optimum efficiency. The camshafts are driven by an extra-smooth and quiet roller chain.

The brilliant K-Series powerplant, the 16-valve fourcylinder 1100-cc unit, is the result of the consistent improvement of BMW's unique brainchild. Just how smart is it?

Fitted in a flat, longitudinal arrangement, the water-cooled in-line engine ensures a direct flow of power from the crankshaft to the drive shaft without any loss of power. This Compact Drive System patented by BMW also offers superior smoothness: the crankshaft,

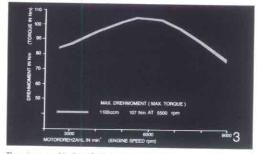
drive shaft, clutch, and alternator rotate in opposite directions to compensate for engine vibrations without even requiring balance shafts. Our unique powerplant also boasts a low center of gravity, light weight, and outstanding ease of service.

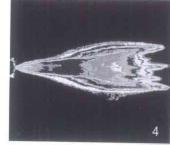
The newly-designed cylinder head with

four valves per cylinder, already featured in the BMW K1's 1000-cc power unit and in the 1990 K 1100 RS, combines a superior 100 bhp with a substantially improved torque curve. Providing a faster and better cylinder charge, this greater efficiency also means improved fuel economy. The new powerplant also features improved combustion chamber contours, modified valve angles, and a higher compression ratio.

To give the intelligent 1000-cc powerplant even more muscle and improved torque, engine capacity has been increased to 1100 cc. Engine bore is up from 2.64" to 2.78", increasing capacity from 987 to 1092 cc. In conjunction with the modified timing (the camshaft opening angle has been reduced from 284° to 256°), this provides a substantially improved torque curve. The maximum torque of 77.3 lb/ft now comes at 5500 rpm, compared with the previous peak of 72.3 lb/ft at 6250 rpm. And more than 60 lb/ft is now available throughout the entire speed range from 2000 to 8500 rpm (3). The obvious results are even better performance and improved pulling force at all speeds.

Running smoothness has also been improved: we've optimized the oscillating and rotating masses within the engine. Piston weight, for example, has been reduced from 285 to 260 grams. And superior reliability





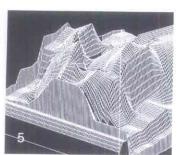
The unique combination of advanced engine technology and superior electronics provides equally unique results: superior fuel economy,

(reflected in features like the extremely stable valve drive) helps decrease maintenance costs (4).

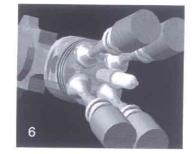
The brilliance in mechanical engineering is matched by the same kind of intelligence in engine management: the BMW is still the world's only production machine with Digital Motor Electronics for intelligent control of all engine functions. The fuel volume to be injected, the ideal ignition timing, and ignition angle are all calculated by a micro-computer with perfect accuracy in each combustion stroke (5).

Digital Motor Electronics carefully considers all relevant operating conditions – engine load (throttle butterfly position), engine speed, air pressure and temperature, oil temperature, and, on the catalyst model, even the data provided by the oxygen sensor. Applying a multi-dimensional control map stored within the system, DME calculates the optimum engine settings within fractions of a second, transmitting these signals to the electronically controlled injection valves and coils (6).

Thanks to DME, the powerplant runs perfectly under all conditions. Even when starting cold, accelerating from idle speed, in hot and cold weather, and at high elevations. Conventional, less intelligent systems with separate control of the carburetors and ignition are,



100 bhp at 7750 rpm, 77.3 lb/ft at just 5500 rpm.



of course, far less efficient.

Engine map control also helps cut back fuel consumption to a minimum at all engine speeds. And additional economy results from overrun control that interrupts the supply of fuel when coasting.

Yet another special feature of DME is the much greater ease of service provided by the built-in defect memory quickly linked up, whenever necessary, to the BMW Service Tester for efficient and reliable evaluation.

DME even features failsafe functions to keep the engine running in the unlikely event that individual components fail to operate.

Most intelligently of all, perhaps, DME works with maximum efficiency throughout the entire life of the motorcycle. Without requiring routine maintenance or service. Because unlike mechanical systems, there is no wear, contamination, or lack of maintenance that might denigrate routine operation.

To sum up: BMW's 1100-cc powerplant is the most intelligent ever built. Because it's the only motorcycle engine in the universe with fully integrated mechanical and electronic control, ensuring the continuing harmony of all components.

## THE SUSPENSION OF THE NEW 1100-CC SERIES: STABLE AND SECURE. NO MATTER WHAT COMES DOWN THE PIKE.



Consistent refinement always pays off. Just consider the suspension and running gear of the K 1100 RS and K 1100 LT.

While both blend performance and comfort to perfection, the suspensions of the two machines differ in their spring tuning, wheel caster, rim size, and tires, tailored in each case to the motorcycle's individual requirements.

Yet both machines share the same basic concept of the highest standards of agility, stability, and riding safety you'd expect of a BMW. No matter what comes down the pike: whether you're taking fast bends at a low angle or riding in a straight line at high speeds.

The heart of the suspension is the BMW Paralever (1).

An articulated swinging arm patented worldwide and

featuring a pivot joint resting in adjustable bearings between the axle drive and swinging arm, together with a support arm made of ultra-strong aluminum. The result of this sophisticated technology is perfect rear wheel geometry (which could otherwise only be provi-

ded by a rigid swinging arm more than 4 1/2 feet in length). Compared with conventional shaft drive,

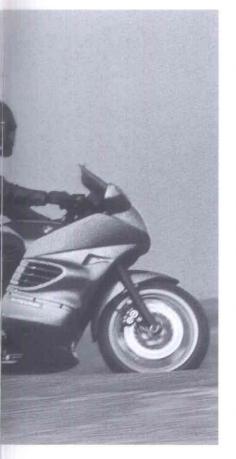
load change reactions and



The unique BMW Paralever (1).

brake studder are reduced to a minimum. While traction, suspension comfort, and handling in bends are increased to a maximum.

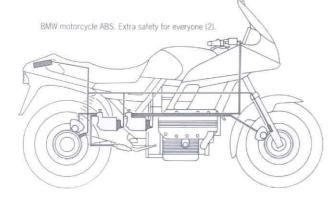
The new progressive-action spring strut (4) is specially matched to the Paralever, with infinitely adjustable



damper action and a base spring adjustable to five different settings. Providing an optimum grip on the road without any loss of riding comfort. The dampers can even be adjusted individually to both road conditions and the load the motorcycle is carrying. The telescopic fork with optimum response has also been retuned. And we've reinforced the already very stable frame of the BMW K 1100 RS: a V-arm lead-

ing to the handlebar centerpoint and a separate support arm at the rear help to avoid the slightest bump, no matter what's waiting around the corner.

The brake systems of both the K 1100 RS and K 1100 LT are technologically unparalleled. Two 12-inch brake discs at the front in floating mounts, with four-piston fixed calipers and diagonal brake pad wear compensation, ensure safe retardation and short stopping





The brake system; sophisticated technology with outstanding results (3).



New: Showa rear suspension unit (4).

distances even under the worst conditions (3). The rear wheel features an 11.22-inch two-piston fixed-caliper disc brake integrated in the drive system.

The superior safety reserves offered by this sophisticated technology are further enhanced by ABS as standard equipment (2). Indeed, BMW was the world's first manufacturer to introduce electronically controlled motorcycle ABS. Experts praise BMW's anti-lock brakes above all for their superior stability on slippery surfaces. So it's easy to understand why more than 90 percent of K-Series riders choose ABS as an option. Even the most spoiled enthusiast enjoys the benefits of this technology, particularly when braking in critical situations.

## BMW'S CATALYTIC CONVERTER TECHNOLOGY: FOR THE BMW 1100-CC MODELS, IT'S LONELY AT THE TOP.



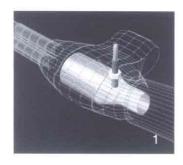
These days, people differ on what road the motorcycle will take in years to come. Most agree, however, that performance alone is not the only issue. Because anyone who really cares about the environment knows how crucial this is to motorcycle design.

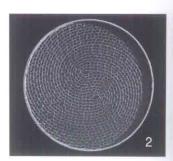
The fact is that the motorcycle is coming under increasing environmental criticism, which might result in further restriction of our two-wheel freedom. So more performance means, above all, more performance for the environment.

BMW was the first manufacturer to prove that active riding pleasure and dedicated support of the environment could happily co-exist. Featuring fully controlled catalytic converter technology, BMW's motorcycles come with the best and most efficient emission management available today. The result is a reduction of carbon monoxide emissions by approximately 74 percent,

hydrocarbons by about 77 percent, and nitric oxides by up to 84 percent. Thus relieving the environment of a considerable burden.

BMW's major contribution to environmental technology, the catalytic converter, is made up of a metal substrate housed in a presilencer (1). Inside this monolithic body is a honeycomb structure with about 400 cells/square inch (2). An ultra-fine layer of catalytic metals – palladium and rhodium – on the surface of these fine tubes ensures maximum efficiency in converting exhaust pollutants into harmless substances (3). For optimum results, combustion within the engine must be tailored

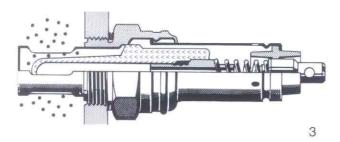






exactly to the catalyst's requirements. Including consistent maintenance of the correct air/fuel ratio of 14.7:1. Performed with the utmost reliability by the oxygen sensor (4) and Digital Motor Electronics. The sensor permanently monitors the residual amount of oxygen in the emissions. Enabling DME to find out immediately whether there is too much

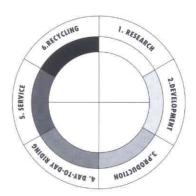
air or fuel in the combustion mixture. This completes the DME, oxygen sensor, and catalytic converter con-



trol cycle operating with maximum efficiency. The sensor is even heated to ensure optimum emission management when the engine is cold (a significant advantage when riding for short distances).



The BMW catalytic converter has a very long service life and is fully resistant to mechanical forces. There is virtually no increase in fuel consumption or reduction in power and torque. While acceleration and top speed remain almost unchanged.



The BMW environmental concept was oriented to the future right from the start. Ride a BMW to help the environment.

#### Which pollutants have to be controlled?

The most important pollutants generated by the gasoline engine:

- · carbon monoxide
- hydrocarbons (HC) and nitric oxides (NOx)
- sulfur dioxide (SO<sub>2</sub>)

#### Carbon monoxide (CO)

Obstructing the flow of oxygen in blood, carbon monoxide may be fatal in very high concentrations. In the atmosphere, carbon monoxide converts into carbon dioxide (CO<sub>2</sub>) within a few hours. Carbon dioxide is also generated by burning oil, coal, or wood.

#### Hydrocarbons (HC)

The most dangerous substance in this case is benzpyrene, generated, among other things, by smoking. It is carcinogenic.

#### Sulfur dioxide (SO<sub>2</sub>)

Sulfurous acid, the main ingredient of acid rain, precipitates onto the surface of the earth and may have very negative effects. It is produced above all by power stations.

#### Nitric oxides (NOx)

These pollutants, also emitted by combustion engines, contribute to the generation of acid rain. Experts now agree, however, that acid rain is not the only reason for the harm done to our forests. Another factor is the ozone generated together with sunlight from nitric oxides and subsequently attacking the leaves and needles of trees.

By and large, up to 80 percent of these pollutants are removed from a motorcycle's exhaust emissions with the help of modern environmental technology.

### EXTRA REASONS FOR CHOOSING THE NEW BMW RS OR LT: THE EXTRAS.

Although riding itself is a thrilling experience, the dedicated motorcyclist needs even more for the thorough enjoyment of his obsession. And since every rider has his own ideas and preferences, BMW offers its extras accordingly.

Thus, the BMW K 1100 RS and LT are available with a wide range of standard and special equipment straight from the production line:

#### BMW K 1100 LT

Heated handlebar grips

AM/FM radio w/ cassette

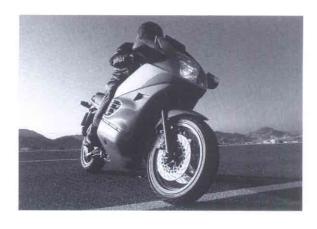
Broadband loudspeakers

Engine protection guards, ABS

Touring cases/rear travel trunk

Fully controlled catalytic converter

Temperature/fuel gauge



#### **BMW K 1100 RS**

ABS

Fully controlled catalytic converter

Temperature/fuel gauge



BMW also offers a wide range of additional features for unparalleled versatility:

- Numerous other options and special equipment for your motorcycle, from tank bag to repair kit. First-class rider gear from head to toe, like the GORE-TEX® and leather suits, gloves, and boots. Or our full range of multifunctional Active Line sportswear.
- BMW accessories offer the same excellence in function, design, and quality as BMW motorcycles. Practical value always comes first.
- Free enrollment in Motorcycle Safety Foundation
   Riding School programs for both beginners and experienced riders. Precisely the right opportunity to ensure even greater riding safety.
- Your BMW motorcycle dealer offers you first-classservice, a reliable supply of parts, expert maintenance and repair. He can give you qualified advice at the time of purchase and beyond. Plus all the tips and suggestions you'd expect of an equal partner.
- Your BMW Dealer also offers fast and efficient help in financing your dream machine. He can make sure that you benefit from the excellent terms for purchasing or leasing a new or used BMW. With the financing period and monthly payments geared to your requirements.

So just contact your BMW motorcycle dealer for all the information you need. He'll be happy to invite you to a personal presentation and test ride at your convenience.

BMW MOTORRADAUSSTATTURG

AMW FAHRERAUSSTATTUNG

ACTIVE LINE UNLIMITED



The models illustrated in this brochure show the specifications for the German market. In part, they include optional equipment and accessories not fitted as standard and only available at extra cost.

Subject to change in design and equipment.

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