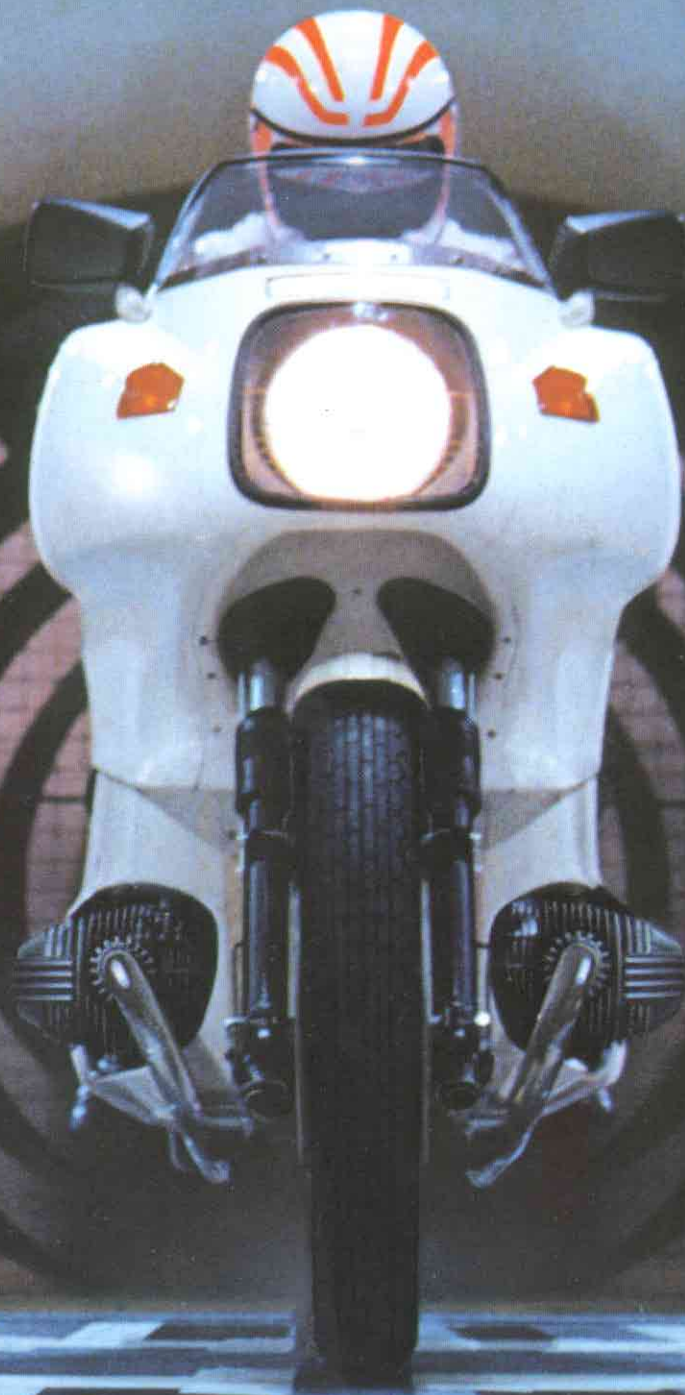


**Guide to a  
new riding experience.**

**The 1977  
BMW motorcycle line.**





# The ultimate honing of a the new BMW

Over the course of the last 50 years, BMW has consistently and methodically developed a singular motorcycle concept, a concept designed to create dynamic, efficient, high-performance machines which will be safe under all conditions, handle responsively, and be super-comfortable.

Starting with this basic concept about what a motorcycle should be, the entire BMW line has been re-examined and technical changes have been made based on our ultimate engineering goal: to enhance those features that contribute to the joy of riding, and to eliminate anything that would detract from it.

The result is the finest lineup of

motorcycles BMW has ever developed, which is to say the finest lineup of motorcycles ever developed-period.

In the front of this evolutionary program are 3 new motorcycles with new 1000 cc engines. Following the logic of our 50 year motorcycle concept, these new engines have increased torque at lower RPM's. The result is outstanding power, acceleration, and response. Proving once again the practical superiority of the BMW flat twin concept.

Another important change in the new motorcycle program has been the revamping of the entire line to resemble the former top-of-the-line R 90 S. This has been accomplished

by fitting the entire line with the sporty, handsome S-type gas tank and fenders.

## BMW R 60/7, R 75/7

These models have been changed, and improved, through a multitude of fine detail modifications. For example: a new large 6.3 gallon gas tank has been fitted, complete with flush-mounted special safety lockable gas cap. For example: redesigned cylinder heads, and specially-contoured foot-pegs. For example: perforated disc brakes have been added to the R 60/7. The revamped 600 cc and 750 cc engines retain their well-known high performance and super torque characteristics. And, as with all BMW engines,





# successful design concept: motorcycles.

particular attention has been paid to noise levels and their control.

## **BMW R 100/7**

This model is the direct descendant of the R 90/6. Its 1000 cc engine has stronger performance and a noticeably wider torque curve. This results in improved acceleration as well as faster throttle response. These new 1000 cc engines run smooth, with a minimum of vibration.

## **BMW R 100 S**

The engine of this model, which is the logical successor to the R 90 S, has been designed to deliver even

more torque and quicker response, at lower engine speeds. The new constant velocity carburetors of the R 100 S – in contrast to slide carburetors – have not only better environmental and economical characteristics, but also faster response. This model features the sports fairing with built-in instruments, and comes in its own brilliant color.

## **BMW R 100 RS**

This new flagship of the BMW motorcycle line is indeed revolutionary. The futuristic, frame-mounted Integral Cockpit Fairing has been especially developed to create a new level in riding pleasure. The sum total

of its aerodynamic design results in improved roadholding and handling, and improved rider comfort under all conditions. The performance of the engine is that of a true sports motorcycle, though this power has been gained without losing the typical BMW engine characteristics of flexibility and strong low-end torque. The end result is a machine that, with its completely unique Integral Cockpit Fairing and its exceptionally powerful engine, creates an image and impact that is impressive beyond words.

To sum it all up: for the rider who wants the best, it is not a question of whether to buy a BMW. But a question of which model.





# The future of BMW R

## The engine

The new 1000 cc engines evolved from BMW's most extensive test program on roads and race tracks. An engine incorporating the experiences gained in long distance racing.

The singular torque characteristics of the new BMW 1000 cc engines are the basis for a superior riding experience. Many motorcycles have great



power ratings "on paper": the BMW R 100 RS shows its mettle where it counts – on the road.

## The features

A newly styled sports-type solo seat (comfortable dual seat and passenger footrests optionally available). A matte-black rear fender and battery covers. Mag-Wheels are available as an option at extra cost. These styling features also add to the sporty flair of the BMW R 100 RS.

## The frame-suspension unit

The unique roadability of BMW motorcycles comes from an extremely strong cradle frame and an optimal suspension system with superior springing and damping. It is so sensitive that

it reacts to little ripples of the road, and the long 8" travel is so well tuned that it eats up the potholes.

## The rear drive

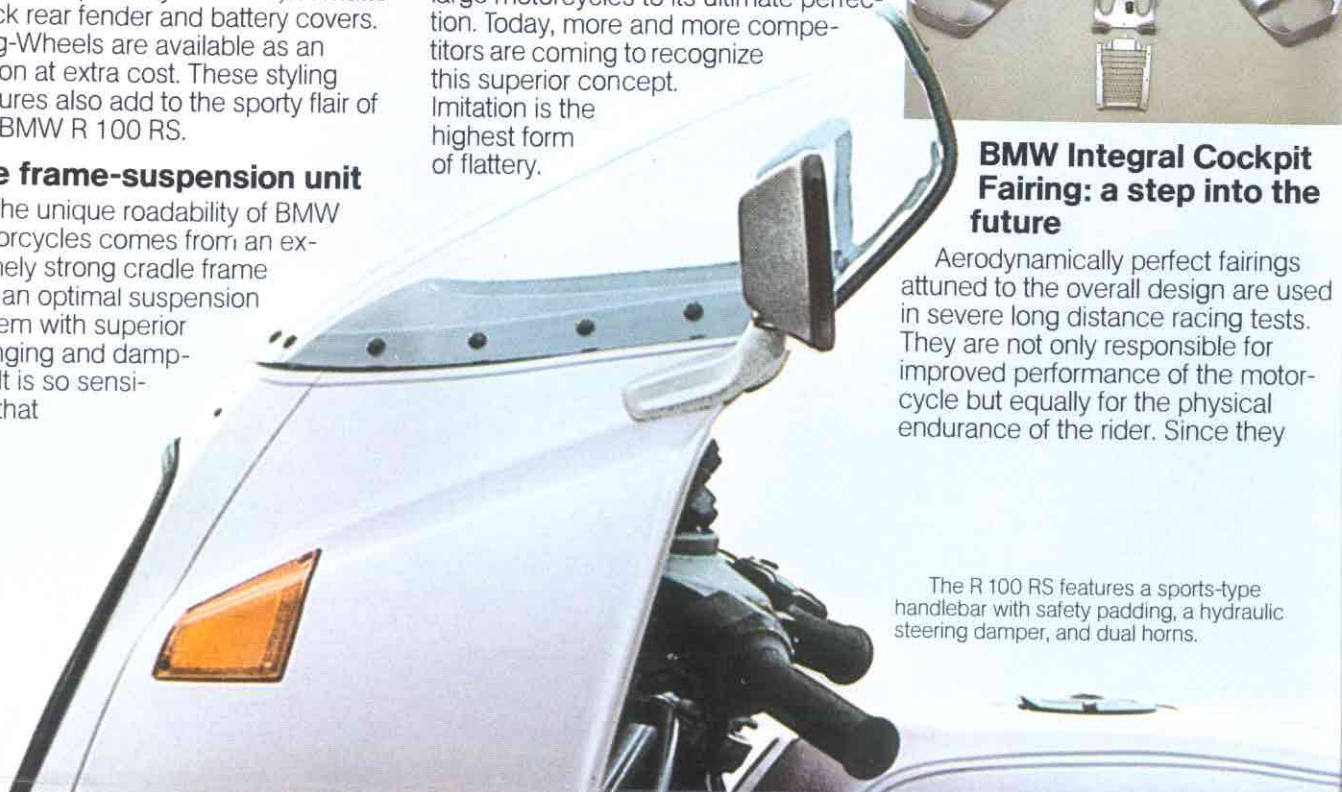
During its 50-year history, BMW has developed the shaft drive concept for large motorcycles to its ultimate perfection. Today, more and more competitors are coming to recognize this superior concept. Imitation is the highest form of flattery.



## BMW Integral Cockpit Fairing: a step into the future

Aerodynamically perfect fairings attuned to the overall design are used in severe long distance racing tests. They are not only responsible for improved performance of the motorcycle but equally for the physical endurance of the rider. Since they

The R 100 RS features a sports-type handlebar with safety padding, a hydraulic steering damper, and dual horns.



# On two wheels: R100 RS

prevent the wind from buffeting on the handlebars, the arms and the body, they make better and safer riding at high speeds possible.

The advantages: Improved ability of the rider to react, improved endurance and thereby better riding performance. This is even important on regular roads and at comparatively low speeds. BMW is the first motorcycle

manufacturer to serially produce a completely matched cockpit fairing. It was planned as part and parcel of the overall design, developed after intensive aerodynamic research, styled and engineered to its last detail.

Wide ranging wind tunnel tests were used to develop the optimal shape. Systematic airflow and spoiler construction made it possible to in-

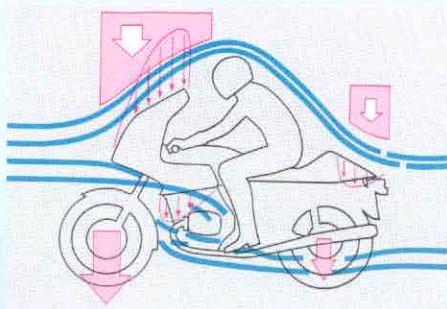
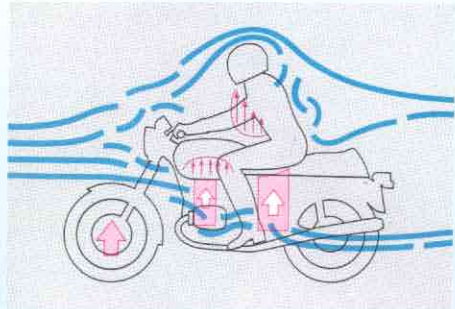


crease front wheel road holding. Thus stability and straight line roadability are superior.

The BMW Integral Cockpit Fairing adds new emphasis to the superior road performance of BMW motorcycles. Over and above that: safer, longer, and more relaxed travel adds to the fun of motorcycle riding. The controlled airflow reduces wind resis-

tance and, as an added benefit, eliminates cold drafts on the rider's back.

In extensive research on racing cars and BMW automobiles aerodynamic assists such as spoilers have been developed and utilized. With the BMW Integral Cockpit Fairing this advantage has now been incorporated in motorcycle design – a long step into the future.



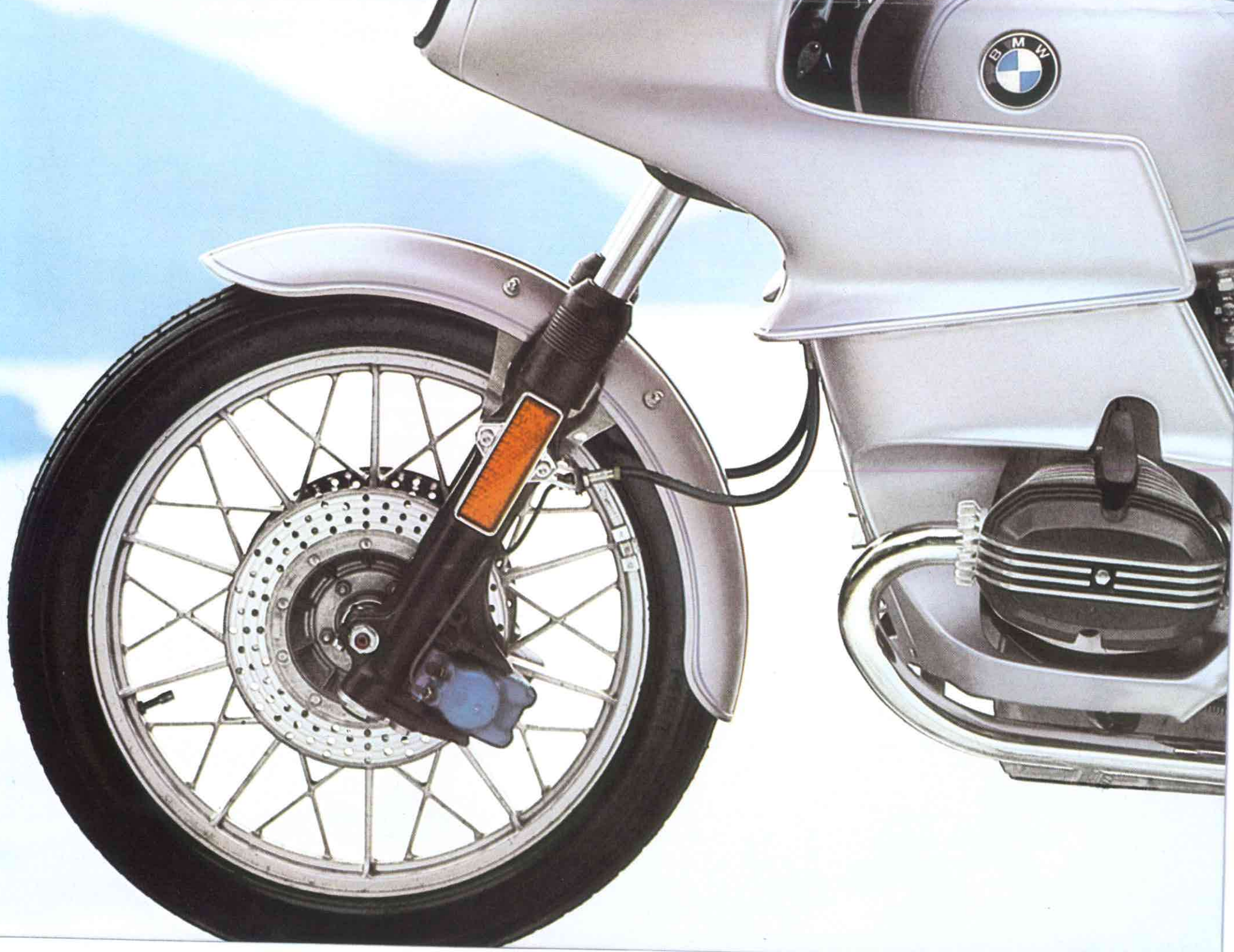
Crash-tested, impact proof, flush, lockable gas cap. Tank capacity 6.3 Gals.

Newly formed adjustable footrests add to the riding comfort.

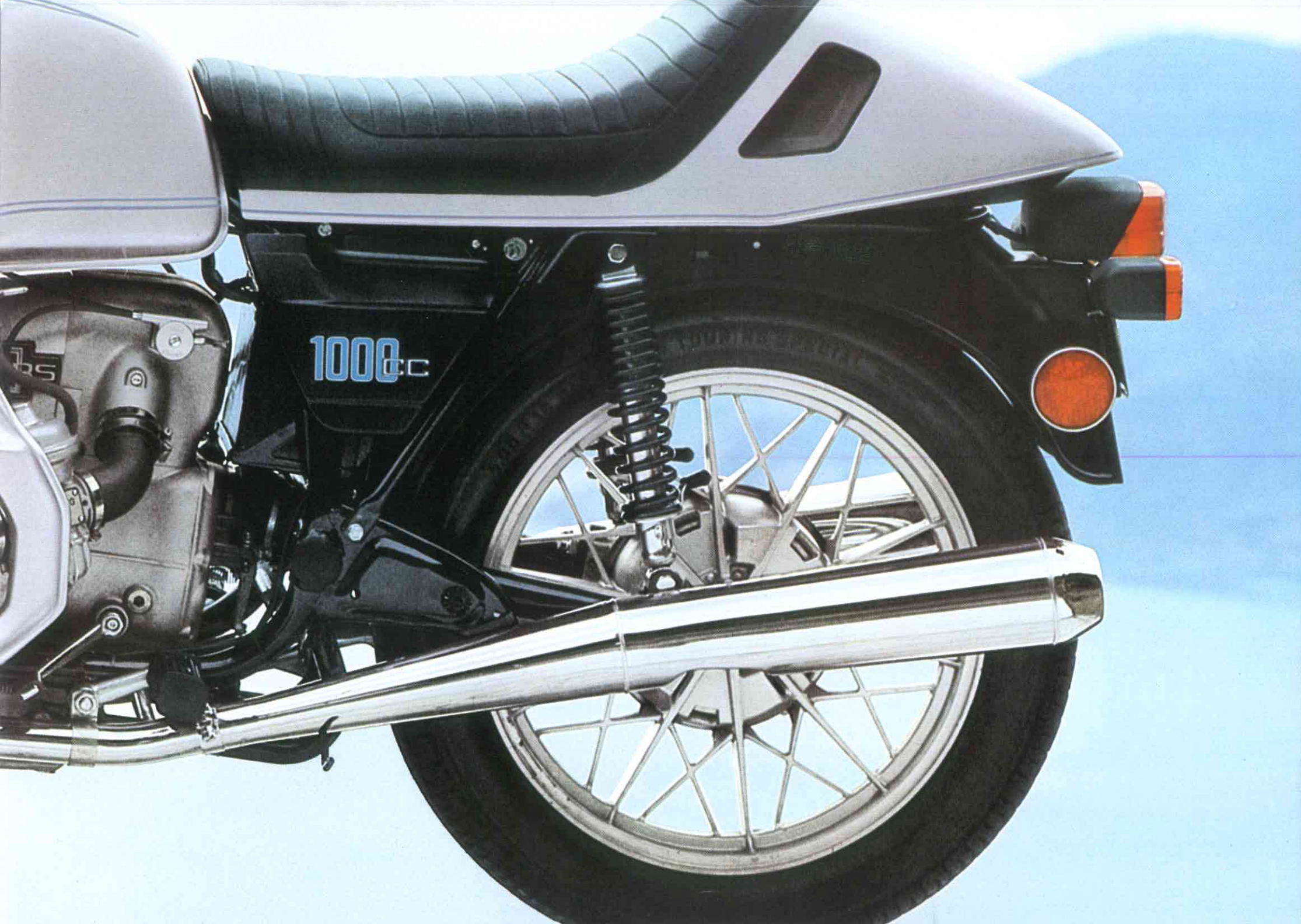
Newly styled and designed valve covers with improved heat dissipation.

Below the ergonomically formed sports-type seat two sealed storage compartments can be found.









1000cc



# Technical Data

**R 100 RS**

**R 100 S**

**R 100/7**

**R 75/7**

**R 60/7**

## Weight and Dimensions

Overall length 2130 mm (83.9"), overall width 746 mm (29.4"), wheelbase 1465 mm (57.7"), ground clearance 165 mm (6.5")

Overall height (unladen) 1300 mm (51.2")	Overall height (unladen) 1210 mm (47.6")	Overall height (unladen) 1080 mm (42.5")
Seat height (unladen) 820 mm (32.3")		Seat height (unladen) 810 mm (31.8")
Dry weight 462.9 lbs. Curb wt./fully serviced 507.0 lbs. GVWR permissible total wt. 881 lbs. GAWR/gross axle wt. ratio 396 lbs. front, 619 lbs. rear	Dry weight 440.9 lbs. Curb wt./fully serviced 485.0 lbs. GVWR permissible total wt. 881 lbs. GAWR/gross axle wt. ratio 396 lbs. front, 619 lbs. rear	Dry weight 429.9 lbs. Curb wt./fully serviced 474.0 lbs. GVWR permissible total wt. 881 lbs. GAWR/gross axle wt. ratio 396 lbs. front, 619 lbs. rear
Tank capacity: 24 l. (6.3 gal.) incl. 4.5 l. (1.2 gal.) reserve		

## Engine

Air cooled, 2 cylinder, 4 stroke, horizontally - opposed twin light alloy unit with optimal heat dissipation

Engine capacity: 980 cc Bore: 94 mm, stroke: 70.6 mm	Engine capacity: 745 cc Bore: 82 mm, stroke: 70.6 mm	Engine capacity: 599 cc Bore: 70.5 mm, stroke: 70.6 mm
Compression ratio 9.5:1	Compression ratio 9.5:1	Compression ratio 9.0:1
Bing constant velocity carburetor		Bing slide carburetor
Type V94, 40 mm diameter	Type V64, 32 mm diameter	Type V53, 26 mm diameter
Micronic air filter		
12 Volt, 250 Watt, 3-phase alternator		12 Volt, 280 Watt, 3-phase alternator
Battery: 12 Volt, 28 Ah		
Centrifugal spark advance		

## Power Train

Single plate, dry clutch with diaphragm spring

5 speed transmission

Transmission ratio: 1. gear 4.40:1; 2. gear 2.86:1; 3. gear 2.09:1; 4. gear 1.67:1; 5. gear 1.50:1

Final drive ratio: 2.91:1      Final drive ratio: 2.91:1      Final drive ratio: 3.0:1      Final drive ratio: 3.36:1      Final drive ratio: 3.56:1

Rear drive by enclosed drive shaft with universal joint, bevel shaped spline coupling, ring and pinion gear with "palloid" tooth design

## Frame and Suspension

Double tube cradle frame with oval tubing and bolt-on rear frame

Front suspension: Telescopic front fork, double hydraulic action, with 8" travel, quick removable front wheel and axle, tapered roller bearings in steering head.

Rear suspension: Swing arm mounted in tapered roller bearings, progressive spring loaded shocks, with triple adjustment, 5" travel and quick removable rear wheel and axle

## Brakes

Front brake: Perforated double disc brake with floating calipers, 10.2" diameter

Front brake: Perforated single disc brake with floating caliper, 10.2" diameter

Rear brake: Finned alloy hub, diameter 200 mm (7.8")

Straight spoke wheels with alloy rims and finned alloy hub

Front rim size: 1.85 B x 19"

Rear rim size: 2.15 B x 18"

Front tire: 3.25 H x 19"      Bias tires with tube

Rear tire: 4.00 H x 18"

Front tire: 3.25 S x 19"      Bias tires with tube

Rear tire: 4.00 S x 18"

## Performance and Consumption

Top speed in excess of 100 mph	Top speed in excess of 100 mph	Top speed in excess of 100 mph	Top speed in excess of 100 mph	Top speed in excess of 100 mph
Acceleration from 0-100 km/h (62 mph) in 4.6 sec. from 0-400 m (1312 ft) in 13.3 sec. from 0-1000 m (3280 ft) in 25.3 sec.	from 0-100 km/h (62 mph) in 4.7 sec. from 0-400 m (1312 ft) in 13.3 sec. from 0-1000 m (3280 ft) in 25.3 sec.	from 0-100 km/h (62 mph) in 5.1 sec. from 0-400 m (1312 ft) in 13.6 sec. from 0-1000 m (3280 ft) in 26.0 sec.	from 0-100 km/h (62 mph) in 6.6 sec. from 0-400 m (1312 ft) in 14.8 sec. from 0-1000 m (3280 ft) in 28.1 sec.	from 0-100 km/h (62 mph) in 7.6 sec. from 0-400 m (1312 ft) in 15.6 sec. from 0-1000 m (3280 ft) in 29.7 sec.
Fuel consumption in excess of 40mpg (high test gas)				

## Equipment

Locks are common keyed for ignition, steering and seat

Frame mounted "RS" integral cockpit fairing with clock and voltmeter. Safety padded steering head and handle bars.

Handle bar mounted "S" cockpit with clock and voltmeter

Speedometer with trip odometer, tachometer, pressure molded polyester fenders, halogen 7 inch headlight, corrosion free sport tank with lockable flush filler cap, adjustable hand controls, handle bar and foot rests, tool box with complete set of tools, air pump and owners handbook

Dual horn, hydraulic steering damper adjustable

Single horn

Sport solo seat (optional dual seat) with 2 glove compartments (lockable)

Dual sport seat with 2 glove compartments, lockable

Lockable dual seat with glove compartment

## Optional Extras at extra cost

Kick starter; hazard warning light; cylinder safety bars; saddle bags with brackets; rear fender flap; oil cooler; heavy duty springs and shock absorber

Mag type wheels with turbo ventilated rear brake hub

Dual horns, steering damper

Front mag type wheels: 1.85 B x 19"

Rear mag type wheels: 2.50 B x 18"

High speed tires

Accessory group TS: Hazard warning light, rear mud flap, cylinder safety bars, saddle bags

Dual front disc brakes; "S" cockpit fairing with built-in electric clock and voltmeter; voltmeter; electric clock; low handlebars; windshield "Touring International"; luggage carrier with saddle bags.

Accessory group T: BMW Touring Fairing; electric clock; voltmeter; luggage carrier; saddle bags; hazard warning light; rear mud flap.

BMW Motorrad GmbH, Munich/Germany  
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BMW - Sheer riding pleasure

Printed in West Germany 11/76 611 2007 25