

MOTORCYCLES





BMW holds the absolute world's record with 174 miles per hour

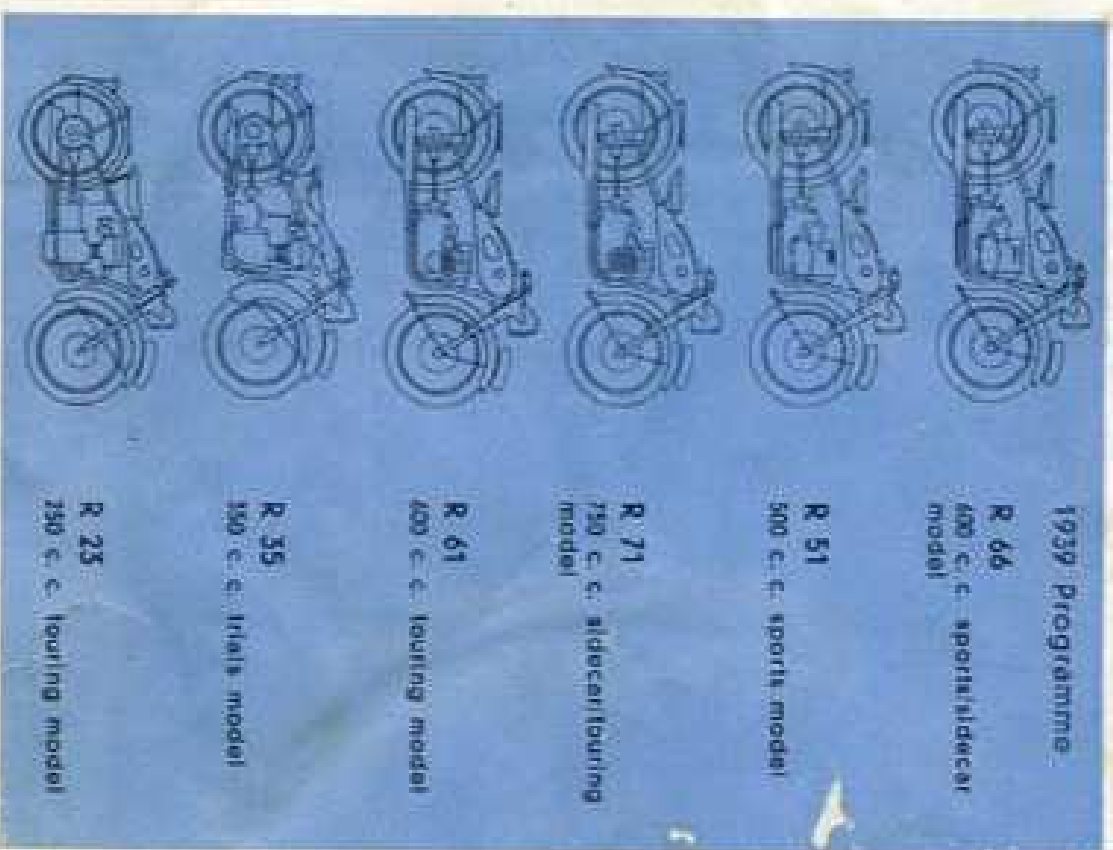
BMW Motor Cycles won in 1938

European Grand Prix
German Grand Prix
Dutch Grand Prix
Belgian Grand Prix
Grand Prix of Bucarest
Ulster Grand Prix
Italian Grand Prix
European Championship
German Road Championship
Championship of Holland,
Yugoslavia, Brazil and Guatemala
International 6-days Silver Cup

**with the successful
telescopic front forks and
Telescopic rear
wheel suspension**

Unprecedented Success in Competition

..... and now production!



In addition to telescopic front forks,

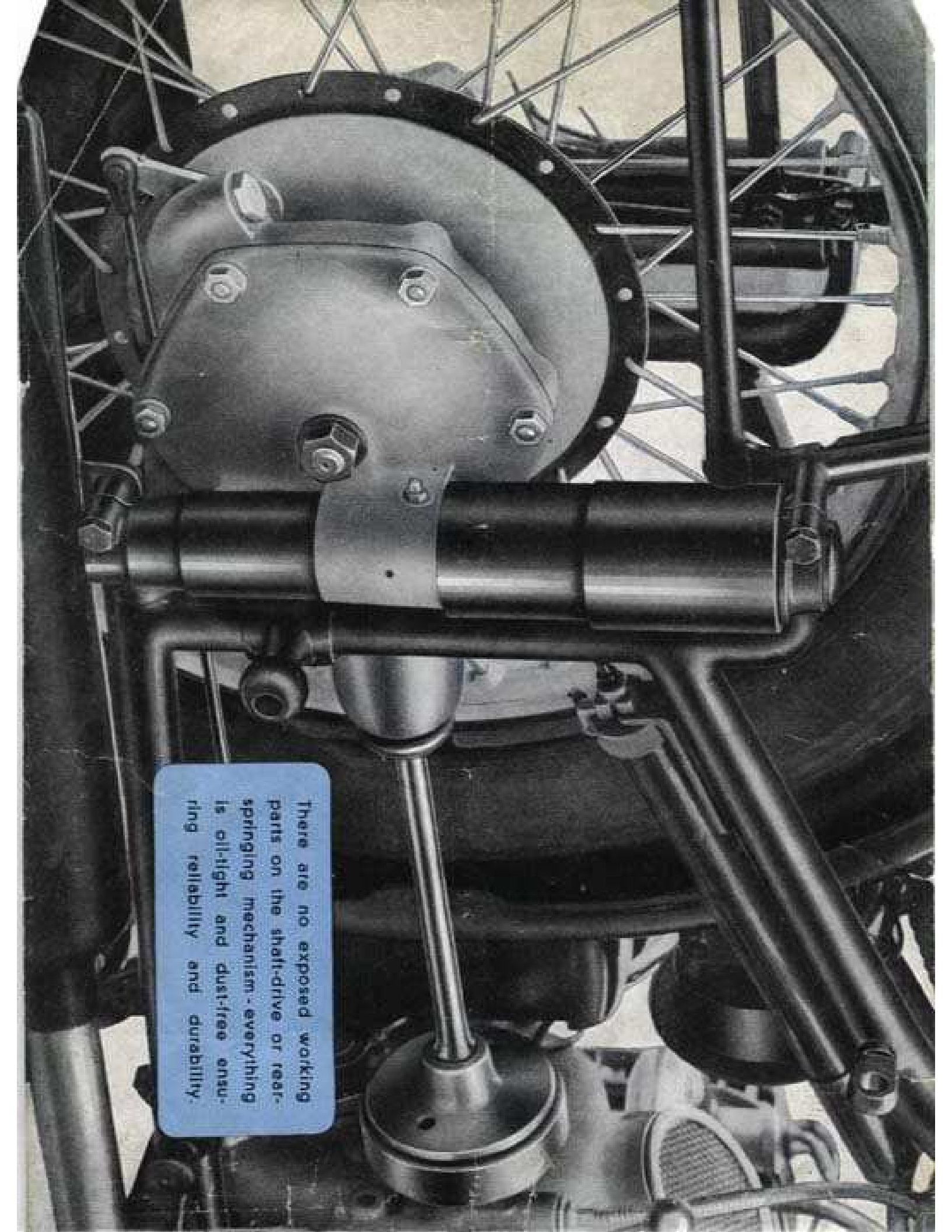
BMW Motor Cycles

are being equipped as standard with

telescopic rear-wheel springing

Thus has BMW reached the goal of perfection in the realms of motor-cycle design. For some years past BMW has held supremacy in the field of motor-cycle sport, both for speed and reliability - proved by successes in the most important races and trials, and by the amazing performance in 1937 of Ernst Henne in putting up the World Speed Record to 174 miles an hour. But development went a stage farther, and was devoted to an endeavour to improve the road-holding and comfort. BMW, pioneers of design, added to the telescopic front forks, which give such ideal springing, the **telescopic rear-wheel suspension** which has been put to the acid test of trials and road-racing. This is an added feature to the basis on which BMW design lies: Simple and clean unit-construction of engine and gear-box, shaft-drive, and duplex frame. That these features of design are right is confirmed, not only by the performance and reliability of these machines, but by the fact that still more designers are beginning to follow these principles.

HE RIDES BEST WHO RIDES BMW.

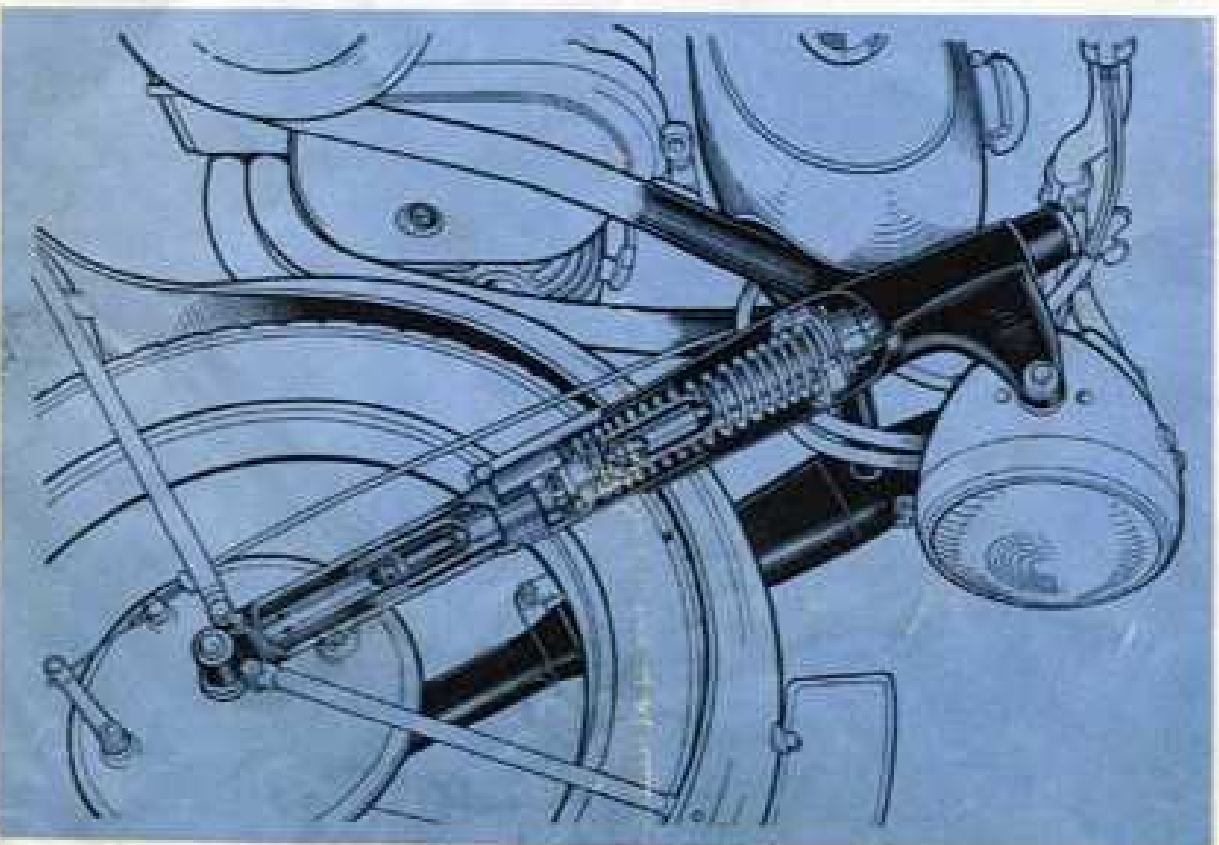


There are no exposed working parts on the shaft-drive or rear-springing mechanism - everything is oil-tight and dust-free ensuring reliability and durability.

The completely sprung motor-cycle

was an ideal in search of which many years of thought and experiment have passed. Step by step BMW have been progressing towards this ideal which they have finally reached with their production as standard of machines telescopically sprung not only as regards the front wheel, but also as regards the rear wheel.

The basic reason for the wonderful road-holding qualities of BMW machines lies in the telescopic front forks which a few years ago were standardised on all the firm's models. The springs are enclosed in fork shafts which are completely oil- and dust-tight, and the movement is controlled by built-in hydraulic shock-absorbers. These forks require no special maintenance. The already fine suspension provided by this fork is now brought to perfection by the addition of the new BMW TELESCOPIC REAR-WHEEL SUSPENSION. The rear wheel, complete with cardan shaft and crown-and-bevel, is attached to, and floats on, the springs enclosed in tubular guides built into the frame, ensuring accurate movement. The great advantage of a sprung rear wheel lies not only in the greater comfort and reliability provided, but further in the vastly improved adhesion of the rear wheel to the road preventing waste of engine power. The BMW rear-wheel springing requires little extra attention, and the removal of the rear wheel is not in any way obstructed - all BMW machines have really quickly-detachable rear wheels through the medium of their "pull-out" axles.





R 66-600 c.c. sports/sidecar model (30 Brake H.P.) with telescopic front and rear suspension

The R 5, the most successful solo sports machine of the past years, created the idea for the development of this powerful 600 c. c. machine for sporting or side-car purposes. It was a happy thought which led to this development of the fast solo R 5 into a machine which would provide a vivid performance with a side-car. This is a machine which will give real riding pleasure under really arduous conditions.

Frame: Duplex cradle frame. Telescopic front- and rear-wheel springing. Adjustable rubber-top saddle. Gracelul saddlelet with quick action filler-cap, knee-grips, and enclosed tool-box. Quickly detachable and interchangeable wheels with pull-out axles. Large internal-expanding brakes. Adjustable handlebars. Steering damper. Twist grip throttle control. Handlebar ignition control. 6-Volt 75-watt Bosch lighting equipment and horn. Speedometer built into head-lamp. Thiel proof handlebar lock.

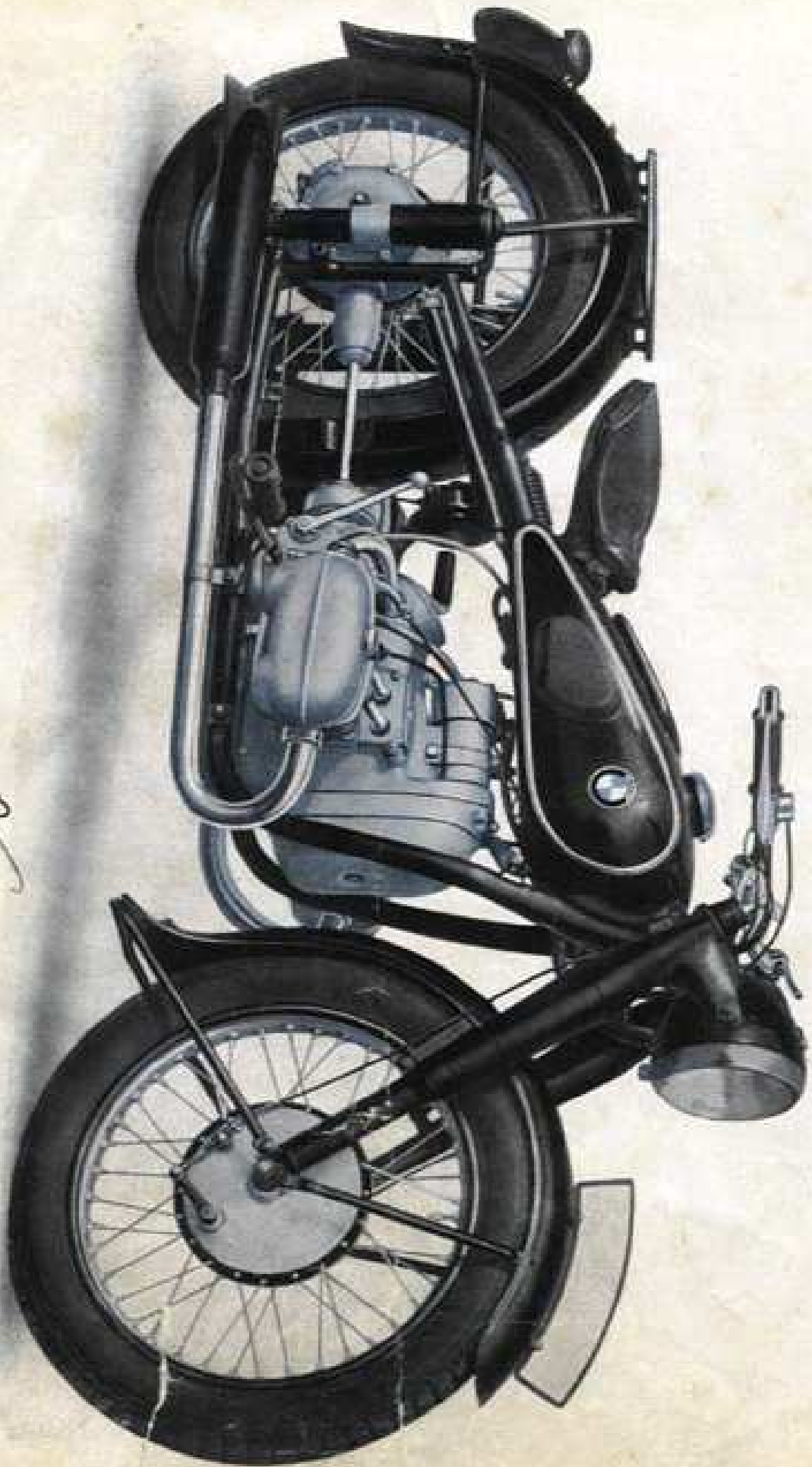
Engine: Horizontally-opposed twin-cylinder four-stroke engine developing 30 brake-horse power. Clean one-piece crankcase. Enclosed, but accessible, dynamo. Aluminium cylinder-heads with large cooling area. Enclosed valve mechanism. Overhead valves with hairpin springs. Ball-bearing crankshaft. Steel connecting-rod with roller-bearing big-end. Cam driven by pinion direct from crankshaft. Enclosed distributor and coil. Twin Amal carburetors with joint air-filter let into the gearbox housing. Single plate dry clutch.

Transmission: Four-speed sliding dog gear-box built in a unit with the engine. Built-in dust-tight positive-stop foot change lever with emergency hand lever. Combined hand and foot levers can be supplied at slight extra cost. Reliable, water-tight, shaft-drive to the rear wheel with flexible universal joints and helical cut gears.

See also the page "BMW Technical Data".



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R 51-500 c. c. sports model (24 Brake H.P.)

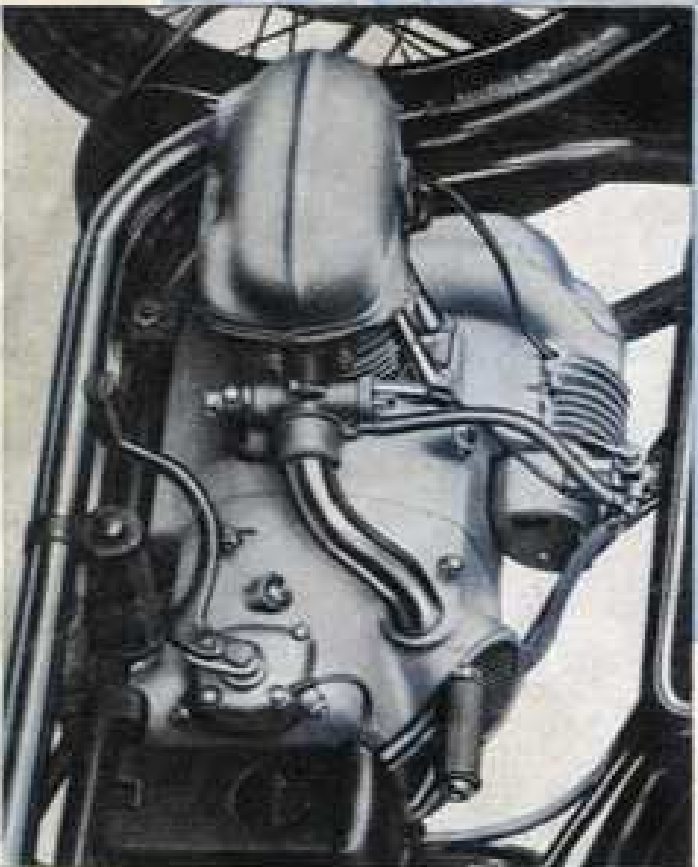
with telescopic front and rear suspension

Racing and trials have shown the capabilities of this machine. In 1937 the Dutch and in 1938 the German team relied on this model for the 'Six Days' Trial, and their choice was proved correct when they won the hotly contested Silver Vase Trophy. The 1938 road champions of Yugoslavia, Brazil and Guatemala owe their titles to this machine. Anybody who must put up high averages over long journeys, who delights in riding for sport, and who demands all that modern technique has to offer, cannot, in the long run, be without the R 51.

Frame: Duplex cradle frame. Telescopic front- and rear-wheel springing. Adjustable rubber-top saddle. Graceful saddle-tank with quick-action filler-cap, knee grips, and enclosed tool-box. Quickly detachable, interchangeable wheels with pull-out axles. Large internal-expanding brakes. Adjustable handlebars. Steering damper. Twist grip throttle control. Handlebar ignition control. 6-Volt 75-Watt Bosch lighting equipment and horn. Speedometer built into headlamp. Theft-proof handlebar lock.

Engine: Horizontally-opposed twin-cylinder four-stroke engine developing 24 horse-power. Clean one piece crankcase. Dynamo enclosed yet accessible. Aluminium cylinder-head with good cooling properties. Complete enclosure of valve mechanism. Overhead valves with hairpin springs. Steel connecting-rod with roller-bearing big-end. Ball-bearing crankshaft. Chain driven cams direct from crankshaft. Full protection for coil and distributor. Twin Amal carburettors with common air filter built-in with the gear box housing. Dry, single-plate clutch. **Transmission:** Four-speed sliding-dog gear-box built in a unit with the engine. Built-in dust-tight positive-stop foot change lever with emergency hand lever. Combined hand and foot levers can be supplied at slight extra cost. Reliable, water-tight, shaft-drive to the rear-wheel with flexible universal joints and helical cut gears.

See also the page "BMW Technical Data".



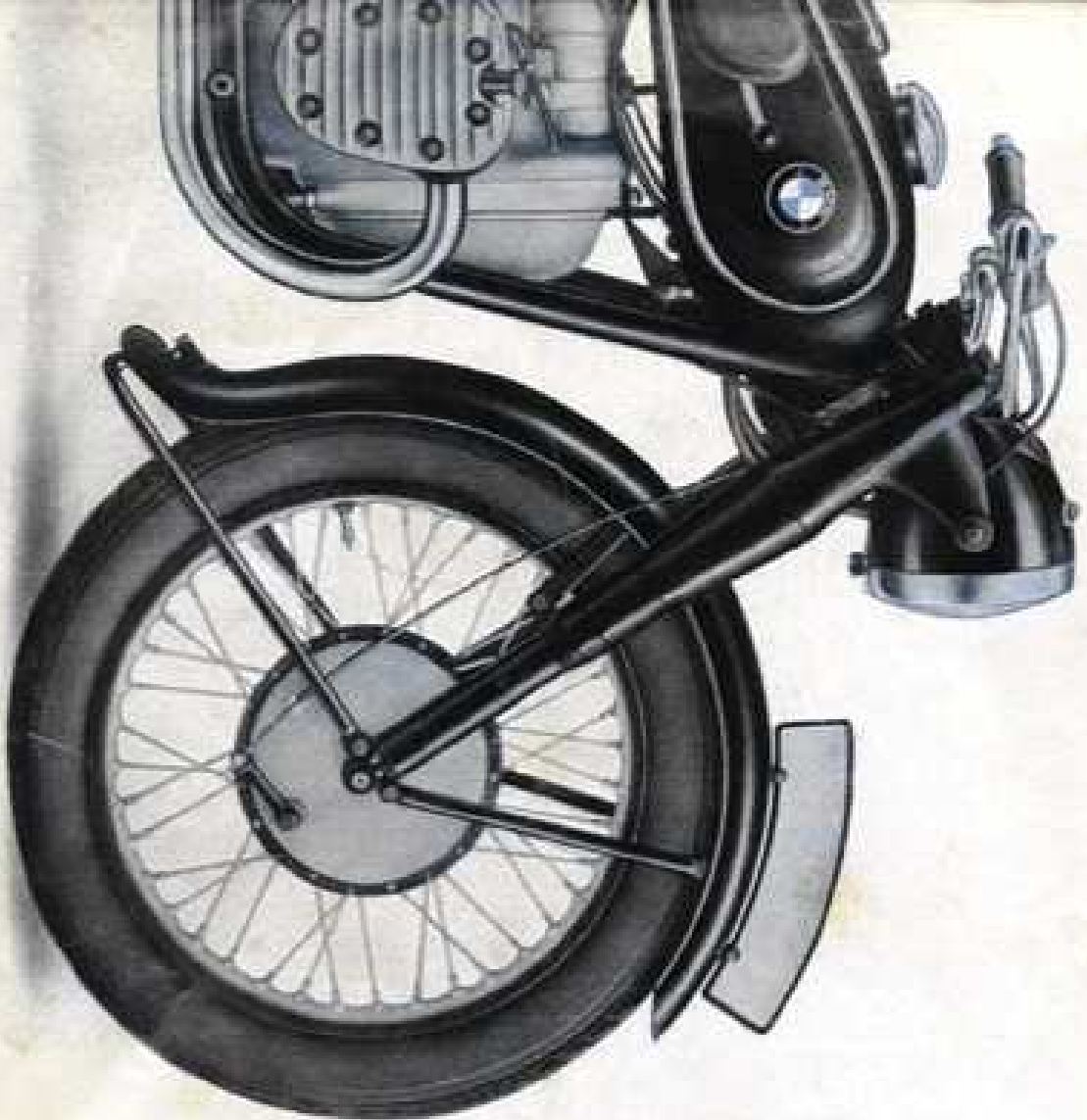


**R 71-750 c. c.
sidecar touring model
(22 Brake H. P.)**

**with telescopic front and rear
suspension**

The R 71 is a further development of the R 12 in a sound and logical manner. The latter model made a name for itself for good performance and for reliability. The present model follows the general lines of other twin-cylinder machines in the series, and still greater comfort comes with the new rear-wheel springing, the adjustable saddle, and four-speed gear-box. This machine, also, has a fine performance. It is the ideal type of machine for every sort of heavy duty from extensive touring to work in the roughest country, on account of its stability, reliability, and great reserve of power. Also, it is a machine to which a sidecar can be attached with confidence that it will handle the heaviest loads.





Frame: Duplex cradle frame. Telescopic front- and rear-wheel springing. Adjustable rubber-top saddle. Graciosa saddle-tank with quick action filler-tap, knee-grips, and enclosed tool-box. Quickly detachable and interchangeable wheels with pull-out axles. Large internal-expanding brakes. Adjustable handlebars. Steering damper. Twist grip. Throttle control. Handlebar ignition control. 6-Volt 75 Watt Bosch lighting equipment and horn. Speedometer built into head lamp. Theft-proof handlebar lock.

Engine: Horizontally-opposed twin-cylinder four-stroke developing 22 brake horse power. Clean one-piece crankcase. Dynamo enclosed but accessible. Cast-iron cylinder with heavy lining and detachable aluminum cylinder-head with good cooling properties. Side-by-side valves completely enclosed. Ball-bearing crankshaft. Steel connecting rod with roller-bearing big end. Gear driven cam wheel direct from crankshaft. Distributor and coil fully protected. Twin carburetors with common air-filter in gear-box housing. Dry one-plate clutch.

Transmission: Four-speed sliding-dog gear-box built in a unit with the engine. Built-in dust-tight positive stop foot change lever with emergency hand lever combined hand and foot levers can be supplied at slight extra cost. Reliable, water-tight, shaft-drive to the rear-wheel with flexible universal joints and helical cut gears.

See also the page "BMW Technical Data".



R 61-600 c. c. touring model (18 Brake H.P.)

with telescopic front and rear suspension

It was only natural that the model R 6, so popular with the tourist and sidecar driver, should be brought into line with the rest of the twin-cylinder machines by the fitting of the rear-wheel springing. Just as natural was it that all those features which had proved their worth in the R 6 should be embodied in this new model.

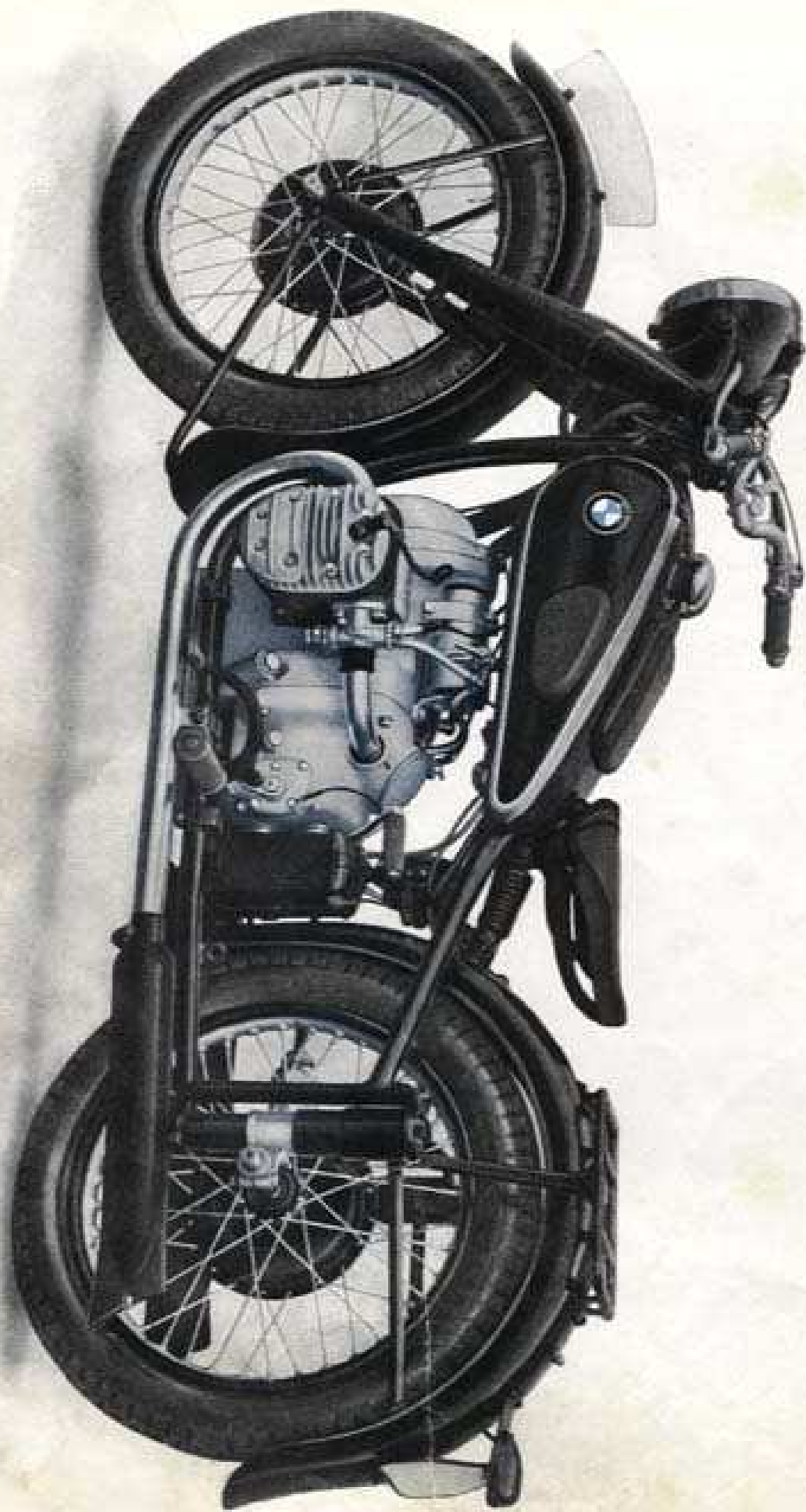
Thus the R 61 is a powerful, uniting machine, which can be used for the longest journeys, solo or sidecar, by the most inexperienced of riders. It will perform every duty in a faultless manner, and with its luxurious springing and quiet running it makes the longest journey a pleasure.

Frame: Duplex cradle frame. Telescopic front- and rear-wheel springing. Adjustable rubber-top saddle. Gracelul saddle-tank with quick-action filler-cap, knee-grips, and enclosed tool-box. Quickly-detachable and interchangeable wheels with pull-out axles. Large internal-expanding brakes. Adjustable handlebars. Steering damper. Twist-grip throttle control. Handlebar ignition control. 6 Volt 25 Watt Bosch lighting equipment and horn. Speedometer built into head-lamp. Thief-proof handlebar lock.

Engine: Horizontally-opposed, twin-cylinder, four-stroke, developing 18 brake horse power. Clean one-piece crank-case. Dynamo enclosed but accessible. Cast-iron cylinder with heavy fining and detachable aluminium cylinder-head with good cooling properties. Side-by-side valves, completely enclosed. Ball-bearing crank-shaft. Steel connecting rod with roller-bearing big-end. Gear driven cam wheel direct from crankshaft. Distributor and coil fully protected. Twin carburetors with common air-filter in gear-box housing. Dry one-plate clutch.

Transmission: Four-speed sliding-dog gear-box built in a unit with the engine. Built-in dust-tight positive-stop foot change lever with emergency hand lever. Combined hand and foot levers can be supplied at slight extra cost. Reliable water-tight shaft-drive to the rear-wheel with flexible universal joints and helical cut gears.

See also the page "BMW Technical Data"





R 35-350 c. c. trials model (14 Brake H.P.) with telescopic front forks

This model has more than proved its worth in reliability trials, in long journeys, and in very heavy duty in the service of various civil authorities. It is proved to be reliable, robust, and still exceptionally easy to handle. A machine built to withstand the rigours of service in the roughest kind of land it has a very favourable petrol consumption of 80.90 miles per gallon and is, therefore, also a utility machine for ordinary purposes.

Frame: Torsion-free triangulated duplex pressed-steel frame. Smooth and efficient telescopic front forks with fully protected working parts and requiring no special attention. Gracious saddle-tank with quick-action filler cap and knee-grips. Quickly detachable and interchangeable wheels with pull-out axles. Powerful internal expanding brakes. Comfortable, adjustable, handlebars. Steering damper. Twist-grip throttle control. Handlebar ignition control. 6-volt 25 Watt Bosch lighting set and horn. Large speedometer fitted in headlamp.

Engine: Vertical single-cylinder four-stroke engine developing 14 brake horse-power. Overhead valves set in an aluminium cylinder head with good cooling properties. Completely enclosed valve mechanism. Ball-bearing crankshaft. Steel connecting-rod with roller-bearing big-end. Triple jet carburettor with air-filter. Reliable dry single-plate clutch.

Transmission: Robust four-speed sliding dog gear-box with tank-side gear change. Tool-box and kick-starter built into gear-box housing. Powerful weather-proof shaft drive with flexible couplings. An indestructible transmission requiring the minimum of attention.

See also the page of "BMW Technical Data".

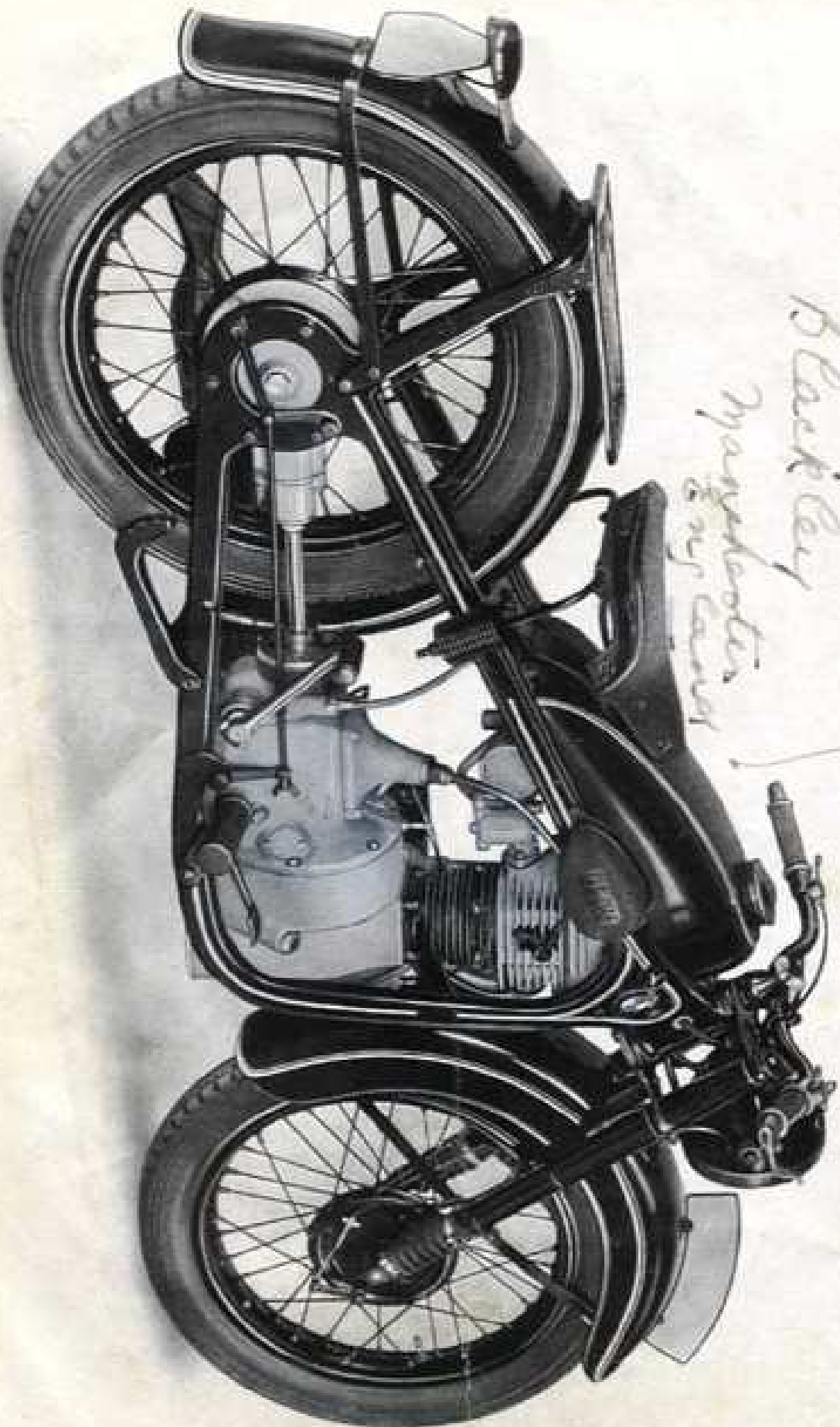


My
W. A. E. Lane
12, Broadway, Pa.

Blackley

My dearest
my love

Please write back



R 23-250 c.c. lightweight model (10 Brake H.P.)

with telescopic front fork and foot gear change

This handsome and handy 250 c. c. BMW model is an improved version of the well-known 200 c. c. machine. The increased output permits of better acceleration and of carrying a passenger on the pillion seat. With its attractive lines and the telescopic front forks it is bound to make many more friends - especially as on this, the smallest of the range, all vital components of the engine and transmission are as carefully protected from dust as with the big models. It is always ready for pottering about town - as it is for longer journeys or for holiday tours. Its great virtues lie in the very easy handling and low fuel consumption. Small in size - but big in the usual BMW value!

Frame: Duplex-cradle frame. Telescopic front forks with smooth action and completely oil-tight, requiring no special attention. Saddle tank of graceful form embodying foot-box. Both wheels equipped with pull-out axles and large internal-expanding brakes. Comfortable, adjustable hand-lebars. Steering-damper. Twist-grip throttle-control. Hand-lebar ignition lever. 6-volt 75-watt Bosch lighting set and horn. Speedometer incorporated in headlamp.

Engine: Single-cylinder four-stroke engine developing 10 brake horse-power. Heavily-tinned aluminium cylinder head. Overhead valves with complete enclosure of operating mechanism. Ball-bearing crankshaft. Steel connecting-rod with roller-bearing big-end. Amal carburettor with air-filter. Dry single-plate clutch.

Transmission: Robust three-speed sliding-dog gear-box built in a unit with the engine, positive foot-change. Weather-proof, indestructible shaft-drive completely protected from dirt. Shock-absorbing shaft couplings.

See also the page of "BMW Technical Data".



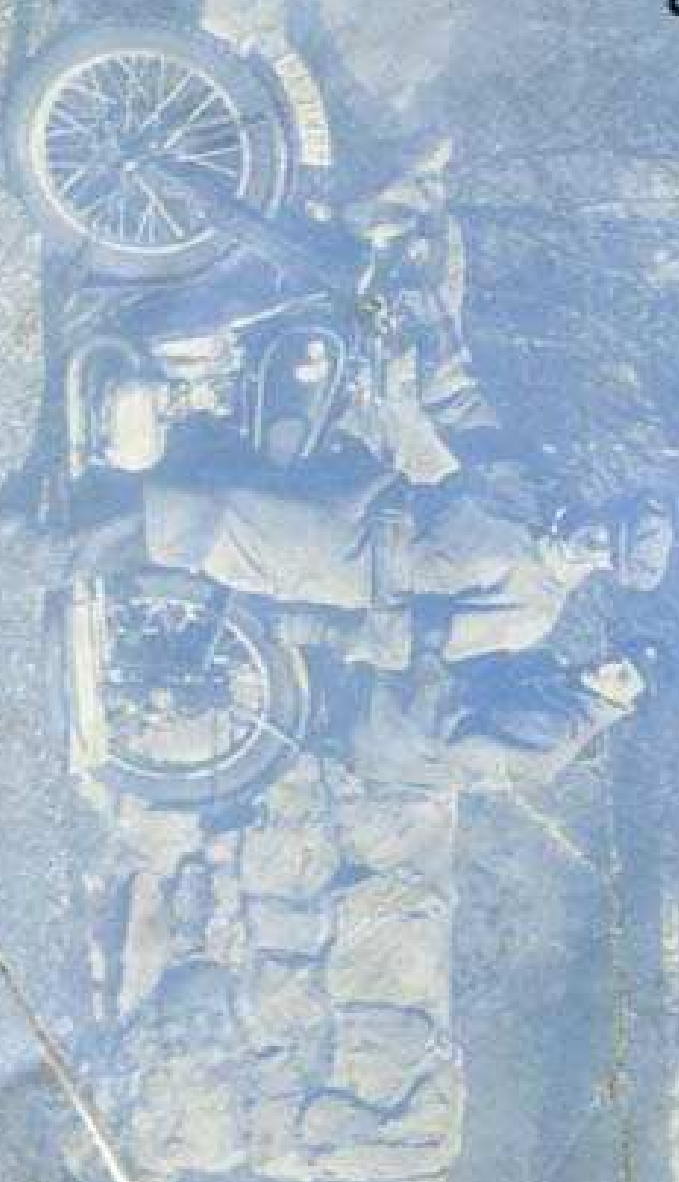


BMW Technical Data

	R 66/30 B.H.P.	R 51/24 B.H.P.	R 71/22 B.H.P.	R 61/18 B.H.P.	R 35/14 B.H.P.	R 23/10 B.H.P.
Revs. per min.	5400	5400	4600	4600	5200	5400
Cubic capacity	597 c.c.	494 c.c.	745 c.c.	600 c.c.	540 c.c.	347 c.c.
Bore and Stroke	69.8 x 78 mm	68 x 68 mm	78 x 78 mm	70 x 78 mm	72 x 64 mm	68 x 68 mm
Compression ratio	6.8 : 1	6.7 : 1	5.7 : 1	6 : 1	6 : 1	6 : 1
Lighting set	6-V/75 Watt	6-V/75 Watt	6-V/75 Watt	6-V/75 Watt	6-V/75 Watt	6-V/75 Watt
Carburettor	2 Amal	2 Amal	2 Graetzin	2 Amal	1 Sum	1 Amal
Gear-box ratios:						
bottom	3.6 : 1	3.6 : 1	3.6 : 1	3.6 : 1	3.6 : 1	4.55 : 1
second	2.28 : 1	2.28 : 1	2.28 : 1	2.28 : 1	2.18 : 1	2.58 : 1
third	1.7 : 1	1.7 : 1	1.7 : 1	1.7 : 1	1.35 : 1	1.64 : 1
top	1.3 : 1	1.3 : 1	1.3 : 1	1.3 : 1	1 : 1	
Axle ratio:						
solo	3.6 : 1	3.89 : 1	3.6 : 1	3.59 : 1	5.63 : 1	4.18 : 1
sidecar	4.38 : 1	4.62 : 1	3.89 : 1	4.62 : 1		
Tank capacity	3 Galls.	3 Galls.	3 Galls.	3 Galls.	2 1/4 Galls.	2 1/4 Galls.
Consumption:						
Petrol: solo	63 m.p.g.	72 m.p.g.	63 m.p.g.	72-84 m.p.g.	84-94 m.p.g.	94 m.p.g.
sidecar	48 m.p.g.	57 m.p.g.	46 m.p.g.	57 m.p.g.		
Oil	2800 m.p.g.	2800 m.p.g.	2800 m.p.g.	2800 m.p.g.	2800 m.p.g.	2800 m.p.g.
Tyre Sizes	19 x 3.5"	19 x 3.5"	19 x 3.5"	19 x 3.5"	19 x 3.5"	19 x 3"
Overall width	32"	32"	32"	32"	32"	31 1/2"
Overall length	83 1/2"	83 1/2"	83 1/2"	83 1/2"	78 1/2"	78 1/2"
Saddle height	28 1/2"	28 1/2"	28 1/2"	28 1/2"	28"	27 3/4"
Ground clearance	5 1/2"	5"	5 1/2"	5 1/2"	5 1/2"	4 3/4"
Weight (with full tanks tools and pillion seat)	411 1/2 lbs.	400 1/2 lbs.	411 1/2 lbs.	405 lbs.	341 lbs.	286 lbs.

Data without prejudice and subject to alteration.

**Features of design
which have proved
their worth by the
most drastic tests
of open competitions
before being put
into production en-
sure the public of
trouble-free service**



B.
THE MOTOREN WERKE AG. MUNICH

