

QUITE SIMPLY AN OUTSTANDING BIKE

If you are expecting a list of superlatives to describe the new BMW R100RS as the most mouth-watering motorcycle ever, then stand by for a surprise because I have to reveal that this £2,899 wunderbike is an annoying machine on several counts. First, the Bee Emm's 100 mph cruising speed turns the "temporary" speed limitations into a pathetic pedestrian plod, particularly frustrating when the law is making a concerted effort to take away your driving licence. Second, the sheer luxury of being able to ride fast and hard in utter confidence has left me for any other bike I ride. Third, even if I mortgage the wife and kids, I'll never be able to afford one, Goddammit.

Alright, so it's slipped out — I like it, but I make no apologies for joining the BMW - is - best bandwagon. Anyone who rides a lot of motorcycles over a lot of miles wants a machine to handle, steer and stop as rapidly and precisely as the will that commands it, plus a top speed way in excess of anything they are likely to use so there is effortless power at the flick of a wrist. Next to that comes a degree of comfort that permits a day-long ride of 600 miles without the rider collapsing in a state of exhaustion.

The BMW is not perfect — in fact there are quite a few minor things wrong with it — but in all the major requirements of a very serious motorcycle for a very serious (and wealthy) motorcyclist the R100RS is outstanding.

BIKE

**ROAD
TEST**

By BOB GODDARD

From the moment you get your leg over the streamlined hump of the single - cum - dual seat, lean forward to grasp the short and low handlebars, and find that your feet drop onto the footrests without having to look where to find them, you know the bike feels right. Certainly any apprehension about riding such a big and expensive machine vanishes as soon as the motor is started when, with a single stab of the starter button the 980cc flat twin shakes itself into life and throbs away as

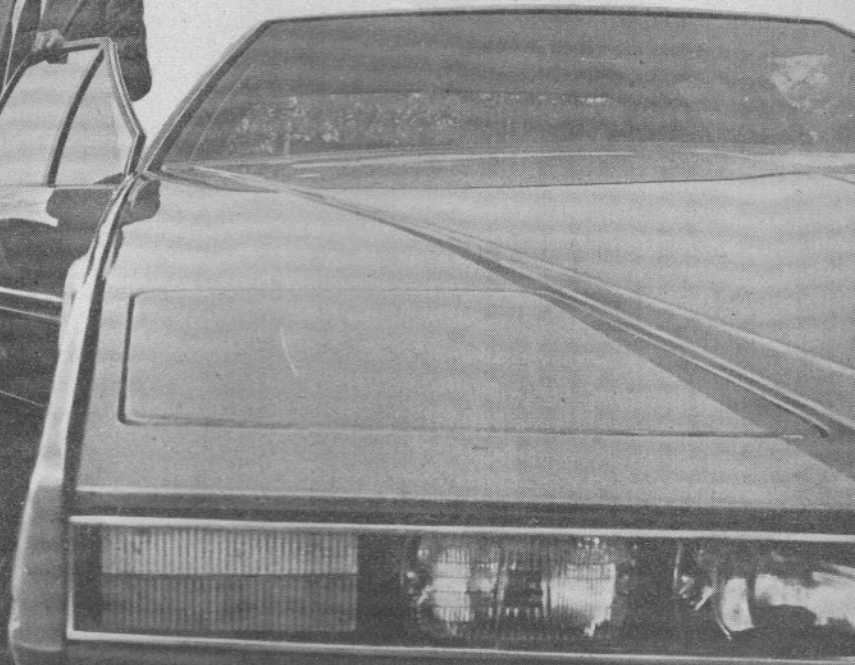
contentedly as
Lagonda V8!

Selecting first gear, which came with a firm click after two prods on the pedal, reminded me that BMW's gearchange is their renowned Achilles heel, and I made a mental note to see whether the cogbox on this unashamedly upper-class motorcycle was anything to be snobbish about, or as embarrassingly clonky as other BMs. It did seem better than the R90S, but it still emits a solid "thunk" with each gear if you are careless in gear-changing.

After a while I found that by co-ordinating the movement of throttle, clutch and gear lever the ratios would slip in and out quickly and silently. Nevertheless, I have every sympathy with the guy who has just paid the best part of £3,000 for a motorcycle, and finds the transmission anything less than perfect.

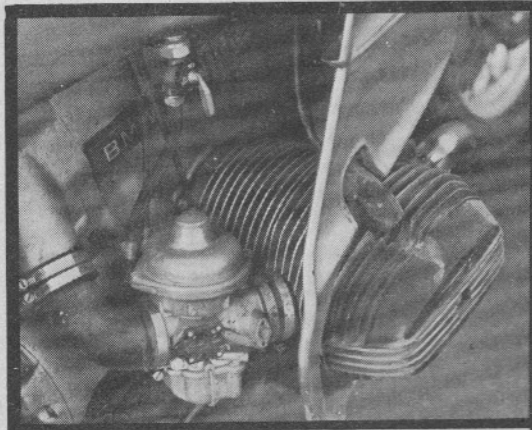
One change I could never execute silently and swiftly was between first and second gear, but apart from accidentally hitting neutral a couple of times I never missed a change, and consider the gearbox something that can be lived with.

The ratios were otherwise very well chosen, and with a wide spread of muscle that took the machine from a shuddering surge at 2,000 rpm up to a bass howl at 7,000 rpm, there was little need for gearchanging. I frequently used top as an "automatic" when I wanted to travel smoothly and quickly with minimum effort, and only used the maximum revs and power when I wanted to clear away the office cobwebs with the flood



The BMW R100RS's equivalent on four wheels is the new Lagonda V8 which will cost around £30,000 when it hits the market next year.

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The fairing curls around the cylinders to give adequate cooling whilst keeping the rider's legs and feet warm and dry.



The seat hinges up to reveal a handy "boot" at the rear, and lift-out tool tray which, unfortunately, let in water.



Enough instruments to make even a pilot feel at home! Fairing mounted mirrors give a clear unhindered view to the rear.

of adrenalin. Then, the bike's performance was not far short of mind-blowing, in a deceptive sort of way.

It wasn't the arm-wrenching acceleration of a 900 Kawasaki, or the frenetic wheelie-popping surge of some of the quick two strokes, but at every bend, or every time I checked the speedo, I found I was travelling much faster than I thought. On our acceleration tests, the BM clocked 13.5 secs for the standing quarter mile, despite the rear wheel spinning wildly on the damp track.

Surprisingly, the R100RS produces less bhp than its predecessor the R90S, but has such a boost in torque that a rider is unlikely



to notice the fractional reduction in top-end go. In fact, the fairing probably cancels out the two bhp loss in power.

Sticking to the 50 mph speed limit, the BMW woofles along at 2,750 rpm in top yet will react instantly to the throttle to give instant overtaking ability. Even at 85 mph the motor is only spinning at 5,000 rpm, and never feels to be exerting itself. From 30 mph to well over 100, the fat spread of torque provides top gear performance that many other big bikes can't even begin to match.

The BMW motor's long-legged gait, and superlative suspension and handling obviously played a part in the machine's effortless progress on the road, but most of the credit must go to the fairing. Unlike the usual conglomeration of fibreglass bits and bulky brackets, usually tacked on as a "fits-mostbigbikes" extra, this injection moulded

ABS bodywork looks and feels like an integral part of the motorcycle.

It's easy to believe BMW's claim that the fairing was intensively wind-tunnel tested to find the best aerodynamic shape considering the luxurious comfort it affords.

With the fairing you can cruise the R100RS at 100 mph plus all day without the strain of being buffeted by a hurricane, and the wing shapes incorporated into its design helps high speed stability by putting more weight on the front wheel. There are a couple of complaints though — the fairing so effectively reduces wind pressure that the rider's full weight goes onto the bars, and at first I suffered wrist ache. Another debit point is that the slipstream produced a draught from behind, which whistled up the back of my helmet and down the collar of my riding suit.

The screen is low enough to see over in all

MOTOR CYCLE MECHANICS

but a chin - on - the - tank crouch, which is just as well as the plastic distorts vision considerably. All in all, the fairing represents real progress in motorcycle manufacturer's thinking, and it can only be hoped that BMW's example starts a new trend in the manufacture of fully equipped road going bikes, whatever their size.

For a near £3,000 motorbike the BMW has quite a few detail disappointments: like the screen edge trim which peeled off during the test, and the headlamp window in the fairing which leaked, allowing dirt contaminated water to dirty the inside of the glass where it reduced headlamp power, and was impossible to clean. The steering damper, too, could have done with much clearer markings to make it easier to see what the setting was while riding. The edges of the seat pan were so thinly covered with sponge that they dug into the thighs when stopped at traffic lights etc. The seat was poor in other respects, too. It is big enough for one - and - a - half people making it almost as unsuitable for solo use as with a pillion passenger crammed in behind. The hump is too far back for anyone but a giant to use it as support, yet far enough forward to force the rider to sit on the back of the tank with his knees outside the fairing whenever he takes a passenger. It is amazing that this seat should be a product of Germany, where it has not got design approval for carrying a passenger, and R100RS's fitted with it cannot be sold with pillion footrests over there. The natty cutaway hand-holds in the seat for the pillion rider are small consolation, but shorties like me will be pleased to know that it is easy to get both feet comfortably on the ground, thanks to the low seat. The bike is available with a proper dual seat but it must be ordered specially.

The advantages of developing and improving a long established design are evident in the 100RS's handling, steering and suspension, which seem almost unimprovable. The long-travel forks and rear suspension are sprung and damped to near perfection, and most bumps are absorbed with no shock getting through to the rider, although it is still possible to feel exactly what the wheels are doing.

Steering is light and easy at low speeds and the Metzeler tyres are superb, even in the wet.

There is no wallowing, weaving or yawing, or any other handling vices that tend to spoil so many big capacity motorcycles and yet you can guide the machine with no more than a light pull on the bars and knee pressure on the five gallon petrol tank.

Talking about the tank, it gives a range of well over 200 miles with fuel consumption between the mid forties and low fifties. Over the test, which included track performance and relatively sedate touring, the BM returned an average of 47 mpg, the best being 54 mpg, and worst 42 mpg, which is good for a big, high performance sportster.

The tank cap on the latest range of BMs is a hefty screw-in device, looking rather like a large Thermos flask stopper, with a lock and flap-up handle incorporated in the design which makes it virtually leak-proof in a spill (sic). The whole lot lies flush with the tank top to meet US legislation.

The brakes, or rather the twin drilled disc set up at the front was disappointing. It lacked positive bite and needed quite a lot of pressure to haul the bike down from high speeds in a hurry. It wasn't daggerous, but only just adequate. Operation in the wet, however, was very safe, thanks to the perforated discs which could be heard buzzing during low speed braking. The rear drum brake was very good with plenty of feel and

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positive action when used in anger.

On the brighter side, the quartz halogen headlamp was really good. Despite having to get through an extra layer of glass in the fairing, the beam bathed the road and verges with light and allowed rapid night time travel in safety. The dip switch cut the beam dead before it dazzled other drivers, but gives a slice of light up the nearside verge, where it's wanted.

Switchgear took a little getting used to, particularly the down - for - right, up - for - left winker switch on the twistgrip console. The matching dipper mechanism on the other bar is cleverly designed to incorporate the headlamp flasher... with the horn button in easy thumb-reach above it.

The twin tone horns let out enough noise to wake a sleeping policeman (who the hell wants to do that? Ed.) and are just the thing for warning motorists at "T" junctions that you are using the road as well as them.

A cockpit full of instruments saves anybody being lulled to sleep by the soothing mumble of engine and rock of suspension while cruising the highway, by provid-

ing enough information to keep the brain actively engaged computing distance travelled against time elapsed compared to cruising speed etc.

One cynic said: "Wot, don't it tell yer when yer going to arrive then. Huh, loads rubbish" and rode away smugly on his Triumph.

But with the exception of the battery condition indicator, all the equipment is worthwhile. Particularly pleasing are the mirrors mounted on the fairing which give an excellent view behind.

Finish was what you would expect of a vehicle with the BMW name on it and, apart from a small oversight which lets water into the tool compartment, every part of the machine has been carefully thought out. There was a good quality, comprehensive tool-kit, and hand pump for the tyres.

That still leaves us with the question: is it worth £2,900 when you can get a 900 Kawasaki for half that?

Certainly the Z900 represents remarkable value for money, but if you are a biking devotee and can scrape up the bread, the BMW R100RS is worth every penny.

PERFORMANCE AND SPECIFICATION

TEST CONDITIONS

Damp track, ambient temperature 48 deg F, no wind

PERFORMANCE

maximum speed 116 mph
braking from 30 mph 33 feet
fuel consumption worst 42 mpg
best 54 mpg
av over test 47 mpg
oil consumption 470 mpp
standing quarter 13.5 sec at 98 mph
speedo error 7 mph fast at 70 mph

ENGINE

Air cooled, push-rod flat twin four stroke. Twin 40mm cv carburettors, wet sump lubrication, single cb and coil ignition, 12V, 240W alternator feeding 28 a-h battery.
displacement 980 ccm
bore x stroke 94 x 70.6 mm
compression ratio 9.5:1
claimed output 70 hp DIN at 7,250 rpm

TRANSMISSION

Crankshaft mounted single plate dry diaphragm clutch and five speed gearbox, driving through an enclosed drive shaft with helical drive at bevel gear crown wheel and pinion in rear wheel.
primary reduction 1.000
secondary and overall reduction .3.000 or 2.91 option
gearbox ratios: 4.40, 2.86, 2.09, 1.67, 1.50
mph/1000 rpm in top 17

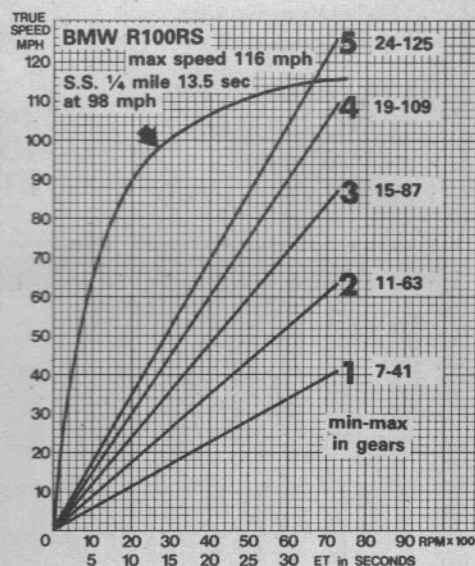
CHASSIS

Telescopic forks with 7.9 in travel, rear swing arm with 3 pre-load adjustable dampers and 5 in travel. Twin perforated hydraulic disc brakes at front, s/s drum brake rear.

front tyre Metzeler 3.25 H 19
rear tyre Metzeler 4.00 H 18
wheelbase 57.7 in
trail 3.54 in
ground clearance 6.5 in
seat height 32 in
overall length 84 in
overall width 29 in
dry weight 464 lb
test weight 511 lb
fuel tank 5.3 gal
inc reserve66 gal
oil tank5 gal

PARTS PRICES inc VAT

front mudguard £ 54.77
handlebar 11.08
speedo cable 4.82
cb points 2.92
set of pistons/rings 32.10
exhaust system 184.27
list price 2899
warranty: 12 months, unlimited mileage, parts and labour.



HOW IT COMPARES

MODEL	price inc vat	max spd	av mpg	S/S 1/4 mile	dry weight
BMW R100RS	2899	116	47	13.5	464
Moto-Guzzi Le Mans	1999	122	49	13.6	456
Honda GL 1000	1600	122	45	14.0	584
Benelli 6	1798	109	37	14.0	485
Ducati 860GTS	1499	107	43	13.1	506
Kawasaki Z1(Z900)	1369	135	48	12.3	506
Dunstall Honda 900	1750	122	47	12.5	498