

BMW R100RS

The bike with most of what you want and not too much of what you don't really need — Tested by Colin Taylor

HOW could I be so lucky? An R100RS to test. Yes it was true! I was to be let loose on the ultimate from BMW. All I had to do was to return the R65LS long term test bike to BMW at Bracknell and pick up the RS. I thought it sounded good but there was even better in store.

When I arrived, the one litre bike could not be given to me; although it was there, the meticulous technicians in the importer's workshop were not satisfied that the bike was A1 perfect . . . and that is the only condition in which they are prepared to let out their products to critical test riders. The trouble was that the guy to whom they had lent the bike had kept hold of it longer than he was supposed to. Having ridden it, I don't blame him for doing so either.

The bike needed its first service and the odd adjustment to various parts which had settled down during the running in period. Rather than keep me waiting and to avoid putting pressure on their wrenchmen, PR man Grahame Pearce offered me the choice of their range to go home on, so that they could fettle the RS at their normal pace and have it just the way they wanted it, ready for my return. Now I've always wanted a shot on one of their 800 cc dirt bikes, so now was the moment I'd been dreaming of! It fulfilled all my expectations but really, that's another story.

A couple of days later when I collected the



Above: the complete motorcycle? The BMW has comfort, weather protection, full instrumentation and (below) can still turn on lively performances.

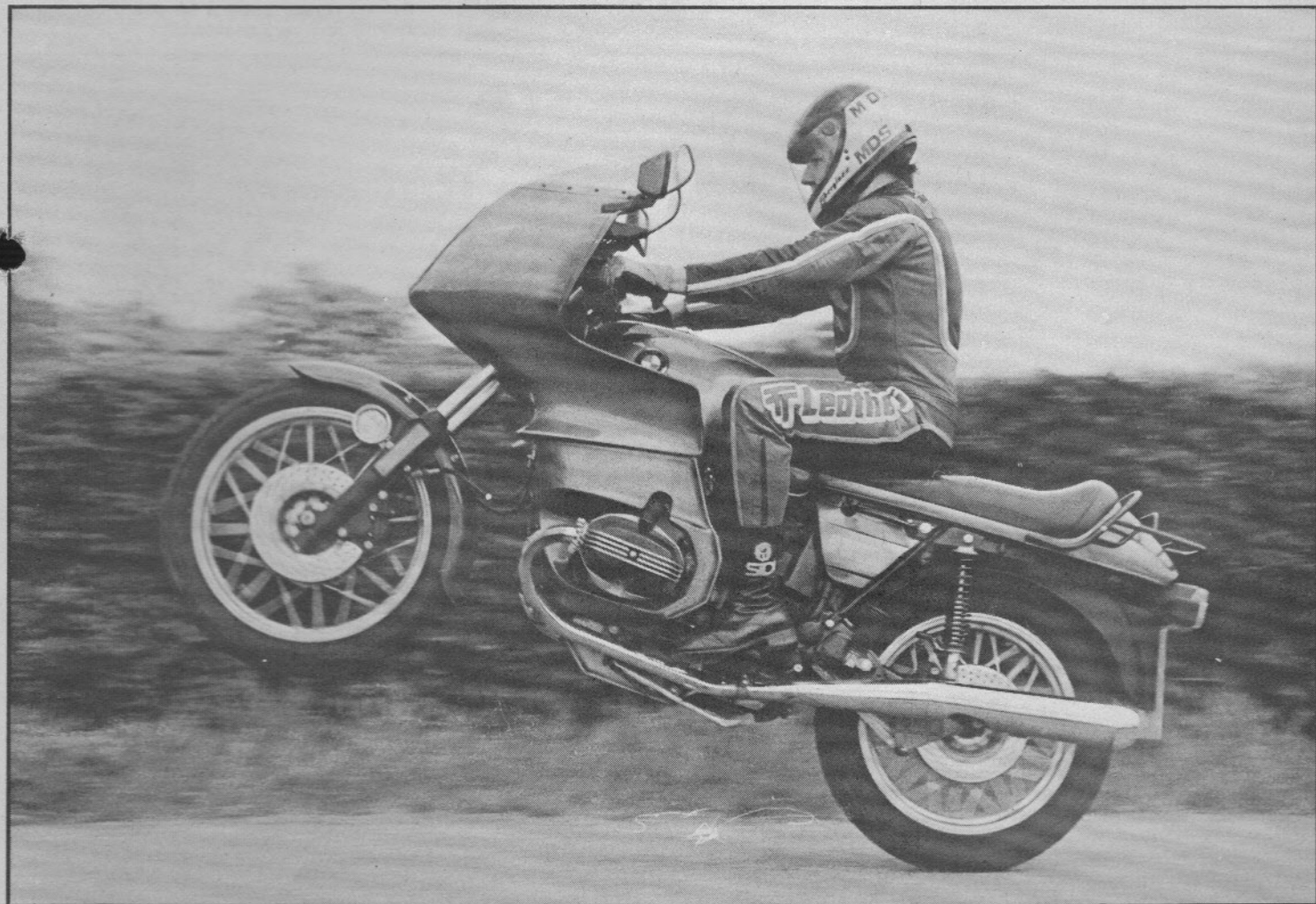
R100RS I realised just what I had missed in my life until that point. All BMs have that certain something about them. This one has it all over, almost dripping off it!

The whole plot is laid out the way a serious bike should be. They call it the ultimate riding machine, perhaps that's just a little over-the-top. In terms of what it has got, it would take a lot of equalling but to be ultimate, there should be nothing left wanting.

I would like to see something done about the front suspension. It's 1982 and the days when you are prepared to put up with the front end of your superbike diving down like it's trying to avoid a snowball should be long gone. Come on you design men in Munich, it's not too difficult to dig bits of your one litre bikes into the asphalt when cornering at the best of times, so don't make it all the easier by letting the front suspension go down as far as it feels inclined under the influence of the braking pressure. Get your anti-diving act together.

Diving apart, the level of comfort you encounter with the BMW's conventional suspension systems, fore and aft, make you wonder if all the current trendy sophisticated bellcrank and pivot-pin uni-shocking, Oriental rising rate, fancy trick super bounce setups are really necessary. (What a mouthful — Ed.)

Once you have ridden any distance on the seat of a big BM you learn the secret of



comfort. No knotted up buttock muscles with this bike. Mile after mile you can happily go with never a thought about a rest to stretch your legs. Indeed, the fuel tank's capacity allows journeys of 160 plus miles before you need to replenish the jungle juice supplies. During the test, the bike averaged 45 mpg and this only dropped to 37 when I was really gunning it.

The things which stick out most about the bike concern comfort and ease. Now isn't that what you really want if you are honest? I tried to work out from my knowledge of the German tongue just what the RS in R100RS could stand for. I came up with plenty of words that related to racing. But this bike only just cracks the 120 mph barrier; so that couldn't be right. Indeed a good many sports 750s go faster than that, and a few 550s, so it couldn't stand for Racing Style. After a few more consultations with my English/German dictionary I gave up!!

Then several hundred miles later I came up with the answer.

RS must stand for *Really Sensible*.

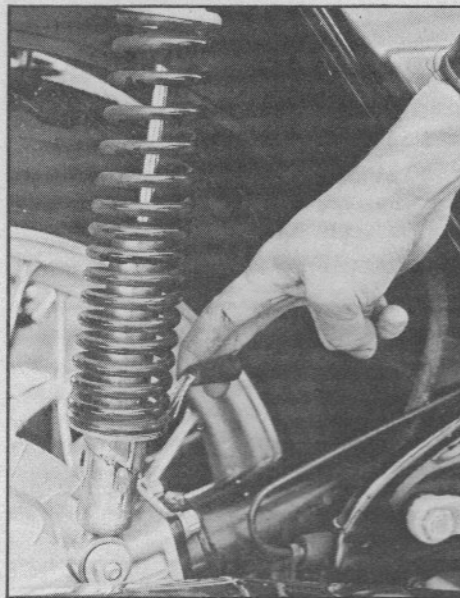
The wind and weather protection afforded by the fairing on the RS are such that you can happily ride along at 100 plus mph without actually realising that you are doing that speed. No pain in the neck from the wind, even the pillion is given some protection from the buffeting normally experienced at three figure speed.

Some attention is needed to the mirror mounts though. They are attached to either side of the fairing and give an excellent field of rearward vision but only at low engine speed. They do pick up vibration badly. For some reason the offside vibrates more than the near, but shake they do and with a bike that goes so effortlessly over the legal limit it is essential to be able to keep a weather eye behind you!

Brakewise, the bike is as plentifully en-

dowed as it is in every other department. You do have to be prepared to use plenty of finger-pressure on the front lever, but once you get used to them, the brakes are both powerful and progressive.

The side stand is not all that good. It is quite awkward to get out and when you want to retract it, if you are sitting on the bike it is necessary to lean the machine over to the right to get the stand to clear the ground. Furthermore it is the first part of the bike to touch the ground if you take left hand curves in a determined manner. The main stand is a much better device. It features the BMW 'stay down while you move your foot' system. What you do is to use the small side projection to push the stand down until it just touches the



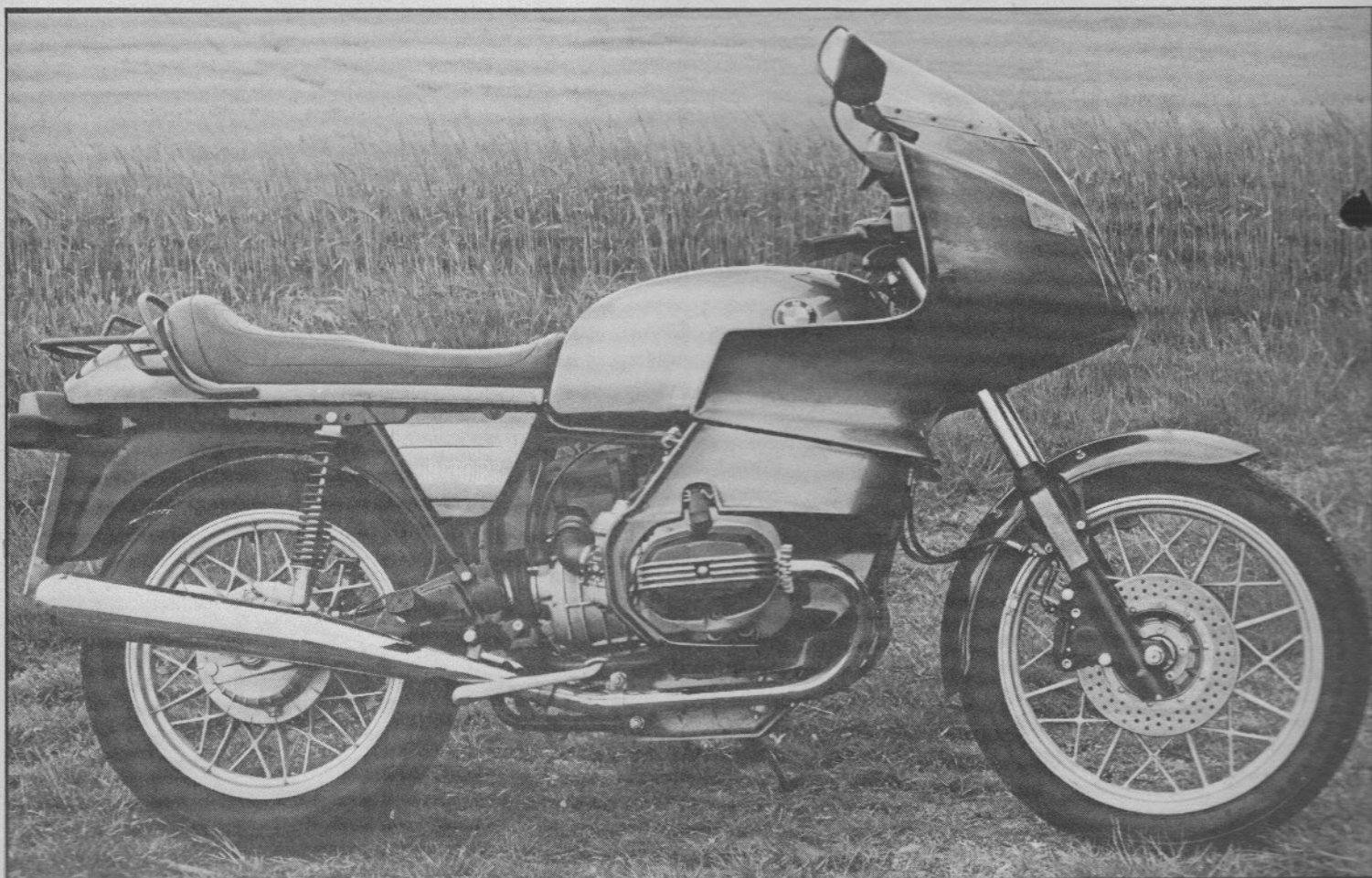
Above: small rear carrier often proved useful.

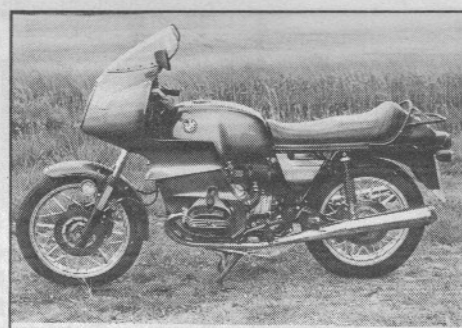
Left: built-in levers make it easy to alter the rear spring settings.

Right: the cockpit layout adds a clock and a voltmeter to the usual instruments.

Far right: the powerful headlamp is fully faired-in, along with sidelight and indicator lenses.

Below: it may seem a bit dated but the big twin is still very usable.





PERFORMANCE

Maximum speed	
sitting up	117.24mph
prone	120.84mph
standing start 1/4-mile	13.23 @ 101.95mph
Fuel consumption	
average	45mpg
worst	36.4mpg

ENGINE

Type ...	pushrod flat-twin horizontally opposed
Bore x stroke	94 x 70.6mm
Piston displacement	980ccm
Compression ratio	9.5:1
Fuel system	Two Bing constant depression
Ignition system	Electronic

TRANSMISSION

Gear ratios 1st — 12.8, 2nd — 8.32, 3rd — 6.02,	
4th — 4.86, 5th — 4.36	
Primary drive	helical gear
Final drive	shaft
Primary reduction	4.41
Final reduction	1.50
Clutch	single dry plate, diaphragm spring

ELECTRICS

Generator	AC 280W
Battery	28A/h
Headlight	60W

CHASSIS

Front tyre	Metzeler Perfect ME11 3.25H-19
Rear tyre	Metzeler Perfect ME77 4.00H-18
Front brake	twin discs
Rear brake	single disc
Front suspension	telescopic forks oil damped
Rear suspension	swing arm

DIMENSIONS

Wheelbase	1465mm (57.6 inch)
Overall length	2210mm (87 inch)
Overall width	746mm (29.3 inch)
Dry weight	210kg (462lb)
Fuel capacity	24litres (5.3gal)

PRICE

Warranty	12 months unlimited mileage
Importer	BMW (GB) Ltd., Ellesfield Avenue, Bracknell RG12 4TA

TESTER'S VERDICT

Good points	opulence
Bad points	diving front forks
Performance	sensible
Economy	OK
Handling	secure
Comfort	sumptuous
Braking	front requires strong fingers rear overbraked

Equipment	lots of it
Value	worth its price

deck. At this point the springs are just stopped from retracting the unit by virtue of the fact that the spring pull is just 'over centre'. You are then supposed to transfer your foot onto the end of the stand, and as you put your weight on it, so you lift with the handle at the top of the rear spring unit. It works jolly well, not requiring any gut-busting efforts.

If you had parked up on smooth tarmac or concrete, getting the bike to roll off the stand onto its roadwheels could prove a minor problem. The whole plot preferred to slide forward on the stand rather than roll off the stand. The two feet/skid tubes which are the bottom of the stand could really do with something welding onto them to overcome this niggling fault.

As soon as you start the engine any 'unparking' hassles you may have had faded from the mind, select a gear and feed in the clutch and they pale into insignificance!

After experiencing the slow engine reaction from rapid throttle opening (at low engine revs that is) which characterises Jap engines, fed by CV carburettors, it's a very pleasant change to encounter the instant response which the two Bings give you. At 1500 revs in first gear, if you give the throttle a little tweak the response is so swift as to aviate the front wheel. No need to get the front end bouncing or to nip the clutch in for an instant, no such bother, the bike just stands up on command.

Acrobatics over and settle down to serious riding! The gear shifts are all very precise. You have to be very sloppy to find a false neutral. The controls and switchgear are all very well made. I would like to see the horn button a little larger, a mushroom head would be a good idea so that when 'Team Stupid' car

driver decides he wants your bike on his bonnet instead of the emblem he has there already, your thumb can't miss the blaster button to let him know you've got other ideas!

The three position steering damper is really good. It stops the bike 'nodding its head' at speed, in fact when flat-out this bike is as stable as the proverbial rock. The damper also helps when you yank the front brakes on hard. With it set to the 'O' minimum effect position the tail of the bike could be felt to wag slightly under heavy braking. Turn the knob to position 2 and all is under control.

So much easier than twiddling with damper rods to vary oil flow rates.

Rubberwise the bike had Metzeler's to roll on. They really suit the BM. One might even be tempted to say they were Perfect! Wet or dry roads they were sure-footed boots. There are no special things about the R100RS which stick in the mind. It's just the whole thing being so good that makes it so desirable. The attention to detail and quality of workmanship give a feeling of immense pride to the rider.

Yes it's got lots of everything you want; comfort, style, quality, safety and smooth effortless performance, all there in good measures. It just lacks outright speed but 120 mph is fast enough surely... Yes this R100 is Really Sensible.