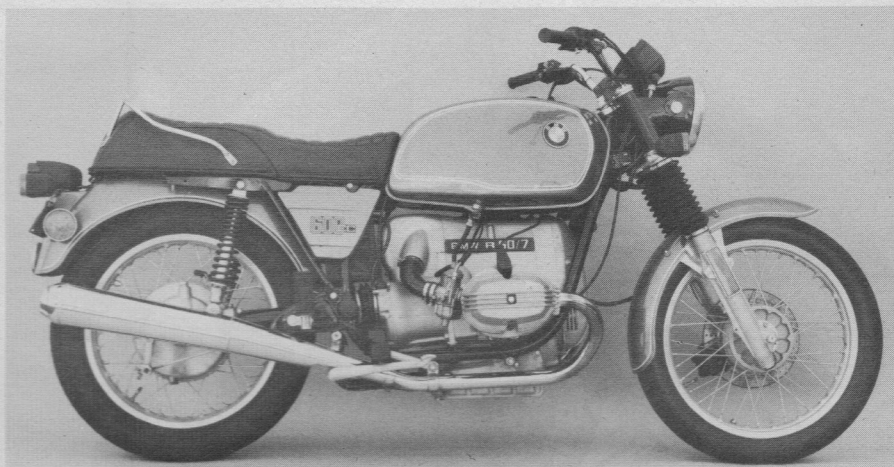


BMW R60/7

BMW's smallest,
lightest, slowest and
cheapest is for the
man with miles
to cover and
nothing to prove.



● WHAT'S IMPRESSIVE ABOUT AN R60/7 BMW? A lot of things, but horsepower isn't one of them. The R60/7 has the smallest displacement engine available from the house of the opposed twins, and the bike lacks the power necessary to haul house-and-garden across the country. The absence of dyno-might has never been known to impress *Cycle* staffers; on the other hand, we've never believed that a motorcycle aimed at the touring market had to be an asphalt-riper of the first order.

The R60/7 has other ways of demonstrating its qualities—and justifying a \$3000 price tag. When the R60/7 showed up at the *Cycle* Magazine offices, the odometer registered over 5500 miles. That's only impressive when you understand how sharply that situation departs from normal practice. In the motorcycle industry biz, almost all importers/distributors see that magazines get the best possible motorcycles for road tests. In the case of street bikes that means a typical example will have logged about 350–400 miles when delivered. Not many distributors would care to hand *Cycle* a road-test unit with more than 5000 miles, especially one that has been subjected to the hard use any test vehicle accumulates in its rounds with various magazines.

BMW's, however, have an arrogant indifference to mileage. Little wisps of rust generally do not develop on chromed or otherwise-plated parts. Weather fails to dull the sheen of the paint. Saddle stitching will not pull apart. Pistons don't begin to rattle in their bores, and mileage doesn't cultivate a lot of valve clatter. Instrument needles hold steady and true, and the plastic parts never turn a chalky grey. The list could go on and on.

Buying a BMW may well leave your wallet limp, but you get far more in return than from other bank-busters. Many pricey motorcycles justify their cost solely in terms of what the machines can do. The paying customer immediately gets to enjoy the acceleration of a Laverda, the handling of a Ducati, the appearance of a Moto Guzzi Le Mans. The Beemers do more. Beyond the instant pleasures, (such as a supremely comfortable ride) the German twins offer long-term reliability and durability. The recommended maintenance intervals, to cite one indicator, are spaced 10,000 miles apart. People pay for BMWs not only for what the bikes can do, but also for what will not happen to them after 5000 or 10,000 miles or more. At 6000 miles our test R60/7 was substantially unchanged in performance and character than a model with 1000 miles. And that is impressive.

Mechanically, the central difference between BMW twins lies in piston size. The 599cc engine has a 73.4mm bore; the 750 has 82mm pistons, and the 1000 BMWs pack 94mm slugs. All the BMWs share a common stroke: 70.6mm. Essentially, the R60/7 has the same crankshaft as the large-displacement BMWs. Each displacement series has its own Al-fin cylinders; that is, in a complicated and patented process the aluminum cylinders are poured around and bonded to the liners. The R60/7 doesn't have a 1000cc cylinder that's somehow been sleeved down 20.6 millimeters.

The R60/7 cylinder heads have smaller valves, smaller combustion chambers, and different camshafts than their larger brethren. But parts such as the cam followers, pushrods and valve springs are identical in all models. Externally the

Cycle-Test

BMW R60/7

599cc engine mounts two 26mm Bing slide carburetors, rather than the fancier constant-vacuum Bing instruments found on the 750 and 1000cc bikes.

Inside the shortblock the R60/7 uses the softest of three BMW diaphragm clutch springs. Nothing has been changed in the internal gearbox ratios; first-to-fifth are common to all BMW twins. The final drive in the R60 is tighter (or shorter) than the bigger bikes. The 600 carries a 3.56 rear end; the R75/7 has a 3.36 gear (the smaller the number, the taller the gearing); the R100/7 has a 3.00 ratio while the R100S and RS use 2.91:1 ring and pinion sets.

Unlike mid-displacement Japanese engines, the 600cc BMW is not a particularly high-revving unit. In fact, the factory manual specifies a maximum permissible engine speed (7200rpm) that's 200 rpm down on the specs for the big-bore sports models. BMW has rated continuous engine speed at 6500 rpm; translated into road performance, you could theoretically run a R60/7 well over 90 mph in fifth gear all day without abusing the parts.

The R60/7 has an aura of unbreakability. To an extent, that impression derives from the fact that the 600 is a BMW, and in part from its straightline acceleration. The R60/7 gains momentum in an unhurried way. Flogging the motorcycle through the quarter-mile results in a 14.7 second trip with a terminal speed of 89 mph. Never is there any suggestion from the bike that it might break—only that it holds standing-start sprints in utter contempt.

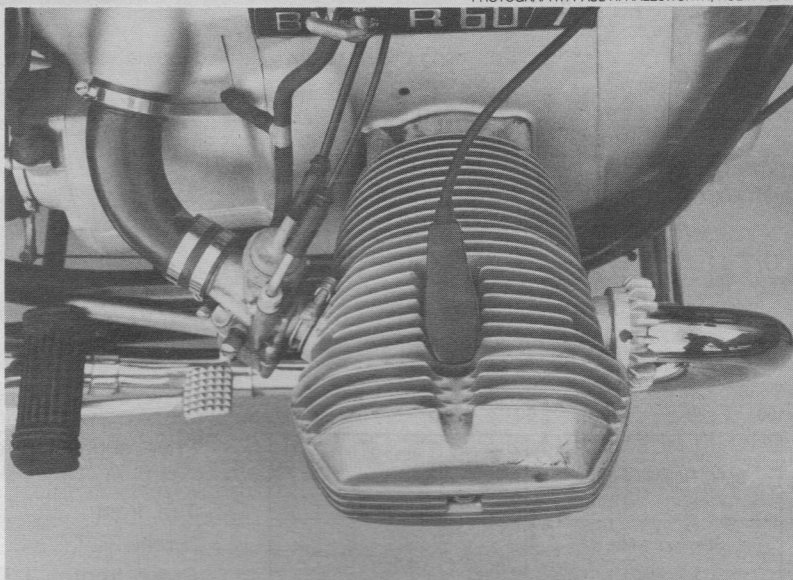
But the dragstrip times indicate that this BMW has limited capabilities as a heavy-duty long-distance runner, American style. Since shaftdrive motorcycles will not fit on Webco's dyno, there's no way we can quantify the R60's output exactly. But given the BMW's weight and its dragstrip times, we would estimate that the 485-pound machine has 40 horsepower or thereabouts at the rear wheel. For long trips, the R60's horsepower would be a limiting factor. Without 50 or 60 horsepower at the rear wheel, it's difficult to handle big loads and push an enormous fairing through the air.

The BMW's power places the bike in the performance range of middleweight touring bikes. A GT-550 Suzuki, for example, will clear the quarter-mile in 14.9 seconds at 90 mph, and the XS-500C Yamaha can get through in 14.6 seconds at nearly 90 mph. For power, that qualifies the BMW R60/7 for short-to-intermediate distance touring, the kind of riding that does not load the bike down flat.

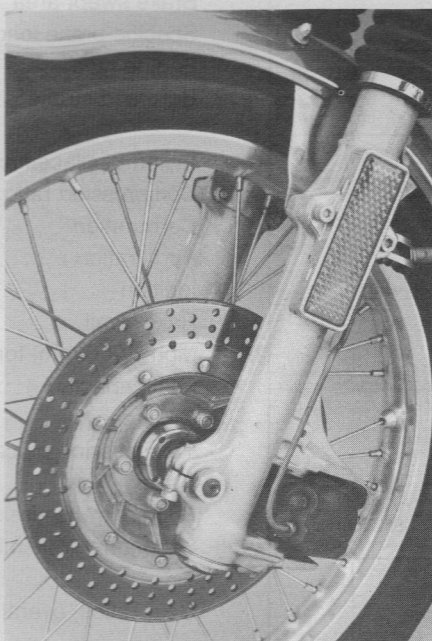
While the BMW may not have any greater capability for touring than a GT-500 or XS-500 in terms of horsepower, several other factors make the BMW a better—though far more expensive—

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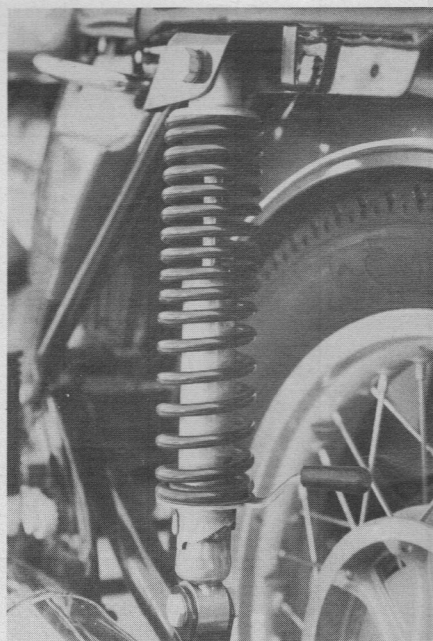
PHOTOGRAPHY: PAUL R. HALESWORTH, ROBIN RIGGS



The small Bing carbs and their intake plumbing stay well out of the way of the rider's shins.



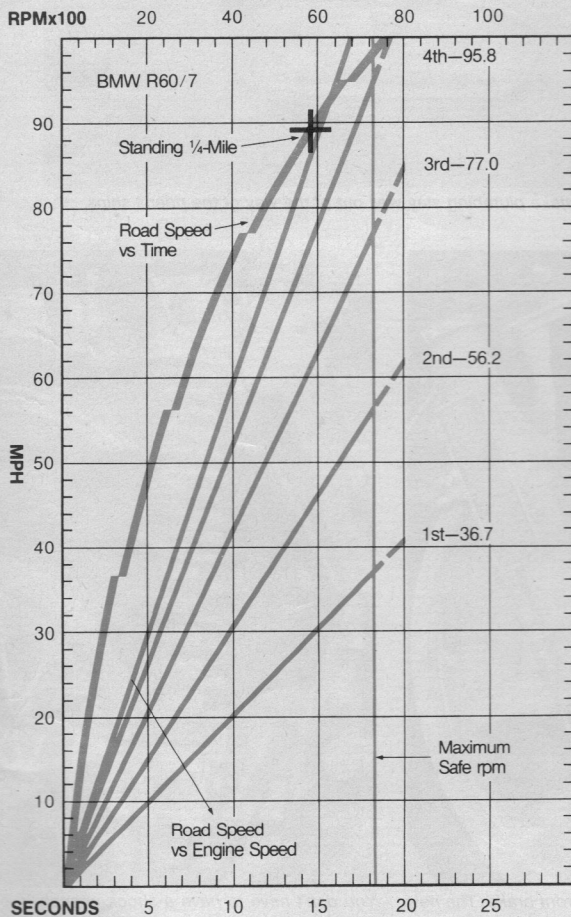
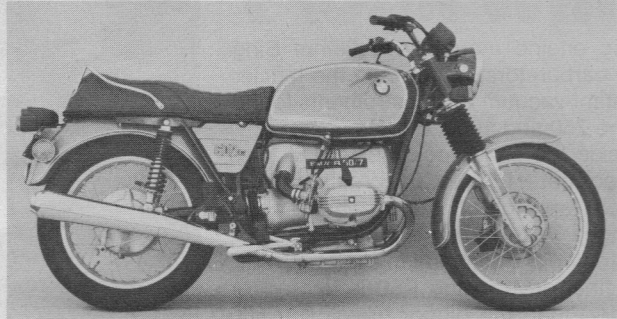
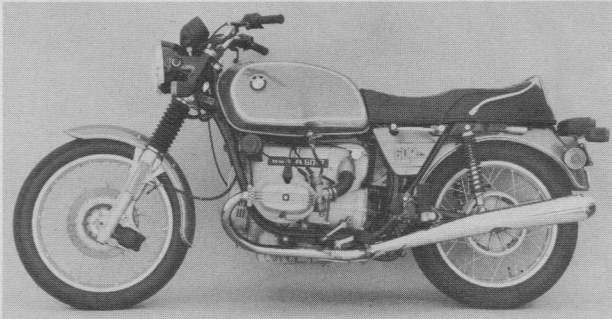
Earlier R60 models had a drum front brake. The new R60/7 uses BMW's perforated front disc brake.



You don't have to have a shock wrench in order to adjust the preload. The big handles are always handy.



The BMW tool kit is complete with good quality tools, owner's manual and service directory.



BMW R60/7

Price, suggested retail \$2955 POE, East Coast
 \$2995 POE, West Coast

Tire, front 3.25 S-19 RB2 Continental
 rear 4.00 S-18 K112 Continental

Brake, front 1.375 x 10.24 in. x 2 (35mm x 260mm x 2)
 rear 1.18 x 7.87 in. (30mm x 200mm)

Brake swept area 105.5 sq. in. (680.5 sq. cm)

Specific brake loading 6.2 lbs/sq. in.

Engine type Opposed four-stroke twin, OHV

Bore and stroke 73.5mm x 70.6mm
 (2.87 in. x 2.75 in.)

Piston displacement 599cc (36.54 cu. in.)

Compression ratio 9.2:1

Carburetion 2; 26mm Bing

Air filtration Micronic dry paper

Ignition Battery & Coil

Rake/Trail 28°/3.5 in. (90mm)

Mph/1000 rpm, top gear 14.8 mph

Fuel capacity 6.3 gal. (24 liters)

Oil capacity 4.75 pts. (2.25 liters)

Transmission oil capacity 1.7 pts. (0.8 liters)

Battery 12V 25AH

Primary transmission Helical gear

Secondary transmission Drive shaft,
 crown wheel and pinion, 3.56

Gear ratios, overall (1) 15.66 (2) 10.18 (3) 7.37
 (4) 5.95 (5) 5.34

Wheelbase 57.5 in. (1465mm)

Seat height 30 in. (762mm)

Ground clearance 5.25 in. (1333mm)

Curb weight 485 lbs (220kg)

Test weight 660 lbs (297kg)

Instruments Tachometer, speedometer, odometer

Standing start 1/4-mile 14.71 seconds @ 89.10 mph

Average fuel consumption 46.3 mpg

Speedometer error 30 mph, actual 28.63
 60 mph, actual 59.76

BMW R60/7

proposition. In the first place, the BMW has superior ergonomics; second, the German twin has a high Gross Vehicle Weight Rating; third, a multitude of touring accessories (primarily offered for large-displacement BMW twins) will bolt right on the R60/7.

The R60 owner must resist the temptation to bolt on every conceivable touring option (including passenger), or he'll crowd the maximum permissible road weight (877 lbs), at which point the R60/7 will perform like a 200cc street bike. Assuming you don't want an Imperial-sized fairing and saddle bags the size of hotel rooms, and don't need a fellow traveller to share the good tunes on the built-in stereo, then the R60 will retain its modest performance. Actually the R60/7 is an ideal commuter bike, provided that you can adjust to the concept of a two-wheeled \$3000 commuter. Besides being comfortable, quiet and reliable, the R60/7 has all the pep you'll need for bumper-to-bumper 55 mph rush-hour traffic.

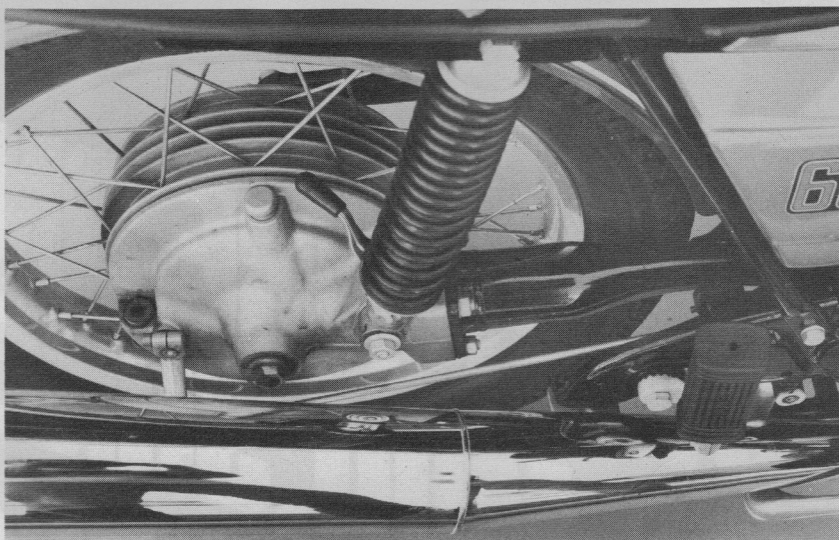
Another ideal use for the R60/7 involves a pleasant Sunday ride, something in the 350-mile range. In the course of such a day, only one gas stop is really necessary, thanks to the 6.3 gallon tank and the BMW's consumption average of 46.3 mpg. You don't have to be alert to the whereabouts of gasoline stations: you just go, even on deserted highways where motorcycles with 120-mile ranges would make for chancey riding. Hard riding pushes the mileage into the low forties.

One staffer covered a lonely 50-mile stretch of desert highway at an 80 mph average, which had the tachometer riding at 5500 rpm, in fifth gear. Momentarily, at least, that kind of tach reading gives one pause, inasmuch as you tend to think of R60/7 as a big motorcycle. (A big-engine Beemer would be loping at 4700-4800 rpm at 80 mph.) Then you have to catch yourself, remembering that the R60 is more nearly kin to a 500cc than a 900cc motorcycle. At 80 mph, for example, an XS-500 Yamaha is spinning over 6000 rpm, though its redline is set at 9000 rpm, a considerable bump up from the BMW's 7200 rpm limit.

The thing that gives the rider the confidence to let the R60/7 whirl along at 5500 rpm without any interruption actually has nothing to do with counting revs or noting redlines. The basic smoothness of the little boxer engine will convince anyone that all is well. It should come as no surprise that the R60/7 is the smoothest running BMW of all: the R75 is close, but that's all—just close.

BMW probably could have skimped on tires for the R60/7, but they didn't. Our test bike had a Continental RB2 3.25 S 19 front tire, and 4.00 S 18 K112 rear. We first encountered these tires (but in the higher

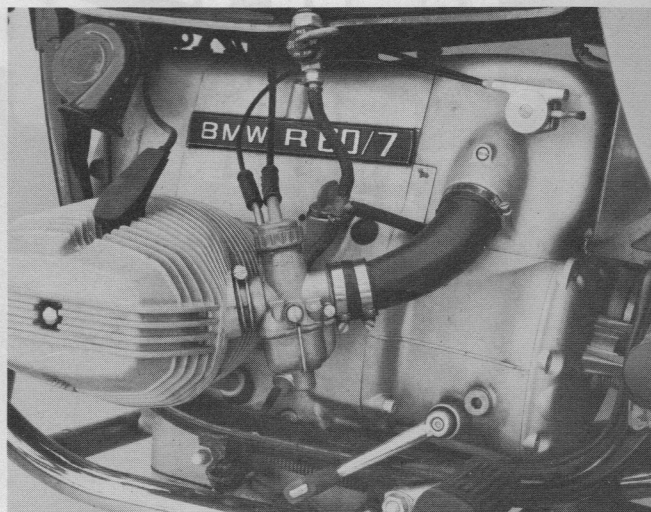
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Shaftdrive is a BMW tradition, almost a trademark. The passenger footpegs are thick and wide.



This Bing carburetor slide shows a fair amount of wear after 6000 miles. It makes carburetion a bit imprecise.



BMW locates the choke lever on the upper left rear side of the main case. Fiamm horn gives a loud and clear warning.



sustained-speed H-rated series) on the R100RS and R100S. We liked the grip and feel they gave the 1000cc sports models, and the S-tires worked just fine on the R60/7 too. In the course of 5500 miles, the rear tire had been worn down a bit, so the K112's rounded profile had developed a flattish contour—the result of much straight-up cruising. This shape caused some transitional uncertainty when the bike was cranked over, but didn't prove especially bothersome: the low-power R60/7 doesn't lend itself to spirited mountain riding.

The R60/7 gives the rider the full com-

plement of BMW sights and sounds and sensations. The gearbox shifts with its characteristic kerplunk; the front fork with 7.9 inches of travel lets the bike nose-dive under hard braking; the perforated front disc gives off a familiar whistle as it retards the bike's progress; the brake lever has a faint sponginess (perhaps traceable to the remote master cylinder); the clutch has a fairly narrow engagement band located pretty much at the end of the lever's travel; the unique directional control has an up-for-left, down-for-right pattern; and the soft, muted exhaust reaches the rider's ears over the modulated drive-

line whine and the rustle of the valve gear. Even blindfolded, you would instantly recognize that what you were on was a BMW.

For riders with large feet, there's one thing happily missing: big shinfouling carburetors. The 26mm Bing vergassers are compact instruments that stay out of the way. Nevertheless, the blessing is a mixed one. The old-style Bings don't meter fuel as accurately as the newer CV units. Right off idle, the R60/7 showed some momentary flatness, and in general the carburetion just wasn't sharp. According to our resident Bing experts, the normal degradation of the slides cause this uncertainty. A quick check revealed worn slides which—even when new—don't hold the needles any too tightly.

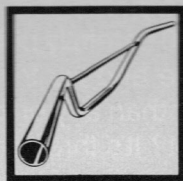
Time and mileage also had diminished the effectiveness of the soft fork springs of the R60/7. With use the springs had collapsed a bit, lowering the front end ride height. Moreover, the spring sag reduced the front fork's sensitivity and responsiveness to small undulations and bumps. Consequently, the front end of the R60/7 felt somewhat harsher than any BMW we have sampled in the recent past. However, a new set of standard springs (or S&W replacement springs) would restore the BMW ride to its normal level. Together with the Yamaha 750, the BMW twins have the smoothest, most supple and comfortable ride in motorcycling.

Why would one buy an R60/7 rather than a R75/7 or R100/7? First and foremost, the R60/7 is for a BMW buyer, dipped and dyed, tried and true. The simple fact is that \$3000 will buy any number of Japanese touring bikes with far more engine performance than the 599cc twin. Or viewed another way, you could buy the same engine performance—and nearly the same touring comfort—in a couple of first-rank middleweight Japanese touring bikes; the XS-500 Yamaha is an obvious example. But, he who truly wants a BMW will have nothing else.

Second, the R60/7 man probably knows the small twin will fit his kind of riding exactly, and he's not inclined to buy more than he needs. After the first \$3000 is on the counter, the dollar jump to the much quicker and stronger R75/7 does seem a short hop. But for a rider who never uses a lot of power and never buys something he doesn't need, there is no compelling reason to buy a bigger BMW.

Finally, the R60/7 fellow may be someone who figures that smaller is better, in this case. It's an easy notion to comprehend: since the same stress-bearing component parts will withstand 1000cc-type power for a long time, then the smaller, less powerful R60/7 ought to last forever. If he's right, that makes the R60/7 owner an antihero of the consumption society—he won't live long enough to wear the motorcycle out.

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