## Road Test Cycle 1970 – Honda CB450

It has become the habit of most large consumer-oriented manufacturers to first cultivate and then pander to the dubious taste of Your Average American Buyer, who, grateful as a spaniel and lumbered with an ingrained tendency towards the baroque, continues to consume and consume and consume, throttle wide open and judgment to the wind. It's an easy and lucrative road for manufacturers to take—so easy and so lucrative, in fact, that any product offered on the American general consumer market intimating that Average Buyer possesses a shred of taste comes as an overwhelming surprise.

The Honda Four is such a product. So is the Moto Guzzi. So is the Hatta Kawasaki.

And so, to an even greater extent, is the newest Honda CB-450, engineered with passion and styled with restraint, an embodiment of all the qualities a motorcycle should possess. It's the kind of machine that makes any road-tester wish he hadn't already dug so deep into his store of superlatives.

We tried to find something wrong with it. We always do. Flaws, niggling or otherwise, must necessarily be at the core of any evaluation. Like, such and such machine wasn't screwed together tight enough, and everything fell off. Or it vibrated. Or the seating position was messed up. Or the brakes weren't too sharp. Something. Anything. Anything to keep the report from sounding like free advertising for the manufacturer.

Here's what we found wrong with the 450 Honda: the fork lock malfunctioned. And one fork boot came loose. And the side stand dragged if you leaned the bike over too far. Period. That's all. As of 1970, the CB-450 has been developed to perfection—or as close to perfection as any mechanical contrivance can come.

'Twasn't ever thus. The 450, as you may recall, got off to a shaky start. It had a fat, nasty-looking tank and the rear fender dropped way down there like a 1945 Army surplus Harley-Davidson and the thing shook in an exotic new way previously inexperienced in all of motorcycling. Transmission gear spacing was all fouled up and the 450 rode harsh.

Honda, in a word, had missed the boat mechanically. Worse, the bike was heavy for a lightweight, slow for a super bike, and small for a long-distance tourer—a combination which perplexed the dealers, frustrated the owners, and sent the Honda designers scuttling back to their drawing boards and abaci.

The next one was better—a lot better. The tank and fender had been redesigned. There were five speeds in the transmission. A completely redesigned frame had taken care of the vibration, and a few detail changes in the engine bumped horsepower to 45 @ 9000 rpm. Additionally, the real Super bikes were just around the corner, which meant:

The CB-450 finally had a place in the American market. Because of its price, performance, and generally exotic mein, the earlier 450s were thrown in with the bigger, faster, deeply entrenched British 650s. The buyer has to have a choice. If he doesn't he'll manufacture one, and the buyers back in 1966 and 1967 were manufacturing a choice: the 450 or BSA and Triumph vertical twins.

When the multi-jug killer-bikes began appearing in 1969, distance was established between them and the 450. Buyers no longer could force a choice between the 450 and any number of 650s. If they wanted big-buck high-performance, they went with a Norton or a Sportster or a Trident or a Rocket Three or a Honda Four; surprised, the big-bore twins found themselves in quasi-competition with the multis and no longer any competition whatsoever for the 450.

Which had, by the way, come a long way on its own. The CB-450s introduced in 1969 bore a more than passing resemblance to the 750, a motorcycle which, as soon as it was introduced, rattled the American market like no other bike in history had or ever will.

And the 1970 450, with its grafted-on 750 front-end and look-alike styling and paint treatment, strikes one as nothing less than a miniature Four. It stops as well—better—than the big bike. It's damn near as smooth, and every bit as comfortable.

The disc brake to the contrary, the alterations effected sometime between 1969 and 1970 are of the "gingerbread" type. The aluminum upper triple clamp is black anodized, as are the hand control mounts and the disc master cylinder, and the mufflers have been slightly re-engineered. Chromed tank side panels are gone for good, as are the old tank knee-grips—changes made midway through 1969 to bring the 450 closer in appearance to the 750 and amplified in 1970.

The application of the single-disc Honda brake to the CB-450 was an absolute stroke of genius. The brake it replaced was none too pure to begin with, a state of affairs irritated by the pure heft of the 450; and not only is the new disc neat-looking and modern and all that jazz: it works superbly, able to generate braking force that borders on the uncomfortable.

Disc brakes, in theory, beat drum brakes all hollow. A disc setup can provide more total braking area per pound; because the disc is out in the open there are few heat dissipation problems; and the amount of braking force generated is directly proportional to the amount of force applied at the hand lever. Most internal expanding drum brakes are self-energizing—friction makes the shoe want to follow the rotating brake drum and jam itself between the drum and the pivot pin—which results in a high degree of sensitivity at the drum as the brake assembly approaches lock-up. It's the kind of sensitivity you don't need, especially with a front wheel brake.

A disc affords consistency. The harder you pull on the lever the faster you stop, just like a drum, but you receive plenty of warning before it'll lock up and throw you into a tree.

Hit the street with it—you know, come thundering up to a stoplight and then slam on the brake just to feel what it can do, to feel it yank you forward into the handlebars and just about stand the motorcycle on its nose. It's a great game—until you realize that you're making rather harsh demands on the motorists following you. The sound of a car dragging all four skins right up to your taillight as you sit there with your shoulders hunched and your fingers in your ears is enough to make you cut it out—at least in traffic.

It's impossible to make the front brake fade. We tried. Series after series of panic stops served only to bed in the disc pucks more thoroughly and cause a small amount of brake fluid to seep out of the bleed orifice.

The brake is beautifully simple in its operation. When the brake lever is pulled, a cam in the base of the lever pressurizes the fluid in the base of the master cylinder. Since liquid is not compressible the pressure is transmitted through reinforced line to the brake light switch (mounted on the front of the steering head) and from there to a piston which actuates the outboard (left) brake puck. The entire caliper assembly pivots on the fork housing; as the movable puck contacts the stainless steel disc and pushes against it, the caliper pivots, pulling the right puck into contact with the other side of the disc. The caliper doesn't have to swing too far—clearance between the pucks and the disc is maintained at less than .004 of an inch.

We have a sneaking suspicion that some changes were made to the spring rates and damping action when the forks were plucked off the 750, although American Honda assures us to the contrary. The 450 weighs roughly 80 pounds less than the 750 and distributes its weight differently, and it would seem that forks capable of controlling the ample avoirdupois of the Four would be far too muscular for its lighter little brother. But changed or no the forks are perfectly suited to the 450. Approximately 26 degrees of rake combined with a little more than 3 inches of

trail gives the 400-plus pound Honda light, quick, accurate steering, which frankly surprised us somewhat considering that the engine, mounted high, is even taller than a Sportster. The forks transmit very little road shock to your arms and shoulders, couldn't be persuaded to bottom by the raunchiest pothole in New York City, and gave stability at speed matching the best of the heavyweight Super bikes.

The rear shocks are just as civilized. They are adjustable, nitrogen-pressurized DeCarbon units with progressively-wound external springs. Briefly, the high-pressure gas is separated from the shock absorber fluid by a flexible membrane, and transmits enough pressure to the fluid to keep it from becoming aerated. Thus shock action remains consistent regardless of the punishment inflicted on them. The CB-450 tracked with precision around bumpy corners (scraping its side stand on the ground), could not be induced to wiggle at speed, and afforded riding comfort unmatched by any machine of any displacement (outside of the Four).

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