

 In a way, Honda's middle-size Four is somewhat like the fabled One-Hoss Shay. But the bike is real rather than mythical and its appeal comes from qualities much more entertaining than mere mundane reliability. All anyone has claimed for the Shay is that it kept rolling for a great many years without repair or adjustment before suddenly disintegrating. Relentless durability would get the Shay rave reviews in Consumers' Report, and we're ready to concede that it's the ultimate virtue in refrigerators, but motorcycles should offer a lot more-and the Honda does. It offers a finely-wrought balance: a frame stout enough to carry its weight and horsepower, enough power to move the bike's mass up to speed pretty smartly, brakes strong enough to make it stop very impressively, and just nearly everything working in happy harmony.

Of course the new Honda CB550F is going to be durable. It had an appliance-like reliability backing its sporting character when it first appeared as the CB500. None of that quality was lost in an update, which included a 2.5-milli-



HOTOGRAPHY: DALE BOLLER

meter enlargement of cylinder bore diameter, it received in the course of becoming the 1974 CB550. And there is no reason to suppose that this Honda is anything but more reliable with further updating, a restyling, and a new name. Underneath the cosmetics Honda's "CB550F Super Sport" remains the same ultra-smooth, finely balanced and supremely agreeable motorcycle it always has been-just very subtly altered and in most respects better than ever.

As regards the changes made in transforming the CB550 into the new CB550F. what you see is fairly substantially what you get. There's that four-into-one exhaust system, a new seat, reshaped fuel tank and side panels, and a slathering of genuine imitation Kalifornia Kustom Kar metal-flake paint. We know about a few

Much smooth cooperation between parts, and willing compliance with a rider's wishes



## HONDA CB550F SUPER SDORT

revisions in internal specification; Honda probably has also slipped in the usual package of improvements in metallurgy, minor alterations in seals and gaskets, etc. And included in this basically splendid package was at least one item that should have been changed but wasn't, and one that shouldn't have been changed but wasn't, and one that shouldn't have been changed but was.

Honda's single mistake in its CB550F adaptation of the Cafe Racers' four-into-one exhaust system was in encroaching on the bike's right-side cornering clearance. A flat exhaust collector, like that on the CB400F, might have been a better choice, because the squarish box provided where the four pipes clump together definitely will clank against the pavement if you dive off into a right turn too briskly. Apart from that, the new exhaust system is an unqualified success. The marvelous exhaust note is there, unblurred, with just the volume reduced to meet current (and



Now that the rear wheel's left side is clear, the axle can be pulled straight out the side.

the immediate future's) vehicular noise regulations. It's like listening to Dennis Brain and his french horn doing Mozart on your stereo—with the volume turned down.

If the new exhaust system and its big. single muffler have hurt the Four's performance, it doesn't show. This latest CB550's engine makes 38.38 bhp, which is handsomely over the once-magic level of one horsepower per cubic inch of displacement, and it stays within a single pound-foot of its maximum torque all the way from 6000 to 8000 rpm. We don't have dynamometer figures for the previous CB550 engine, but it seems certain the four-into-one version is a little stronger. With a curb weight of 455 pounds, the CB550F is only three pounds lighter than last year's four-piper, yet it cleared the drag strip's speed traps a couple of miles per hour faster. The "F" was two-tenths slower, in elapsed time, but the bare number is a little misleading because our regular drag stripper was hors de combat with a busted wrist and the substitute pressed into service, while certainly competent, lacked our regular rider's experience. In any case, Honda's 1975 550 is faster than it was in 1974, which makes it a rarety in a time when most bikes are going the other way.

There are some things new with the CB550F you can't see. The four carburetors have been re-metered-especially with respect to part-throttle mixture-to suit the new exhaust system, and the frame has been very slightly revised for the same reason. Beyond that, there are some very minor changes in the clutch, and the oil capacity has been increased a half-pint-by moving the "full" mark fractionally higher on the dipstick. Honda's specifications also say there has been an increase in fuel tank capacity, up from 3.7 to 4.2 gallons, but the quantity held in reserve below the fuel valve's standpipe has been reduced from 1.3 to 1.0 gallons.

The above reduction in fuel reserve doesn't translate directly in terms of the

miles a new 550 will travel after it runs dry on the primary feed. Last year's bike gave us just 35.5 mpg, and the 1.3-gallon reserve was therefore good for a 46-mile search for gasoline before you could expect to start pushing. The new model's one-gallon reserve will take it 40 miles; the difference in miles is somewhat less than that in fuel volume. You probably know people riding CB550s who have bettered our 1974 mileage figure; most riders will get more than the 40.0 mpg average we show for the CB550F. The truth is, test riding will bring out the gluttonous side of any motorcycle, if it has one. We'd rate any motorcycle we can't hammer below 40 mpg as being a genuine gas-miser.

Other than the stuff we've been talking about, and ignoring an upward shift in compression ratio so tiny as to be insignificant (from 9.0:1 to 9.1:1) the CB550F is changed very little from the CB550, which was changed very little from the CB500. We're not sure we'd want it any other way, because the bike was so good from the moment it went into production. What makes it so good? It's not any one feature, but the whole combination.

Honda may have learned something from the CB750, its first Four, which has a longish stroke relative to its cylinder bore dimension. In-line fours have perfect primary balance but their secondary shaking forces are uncompensated, occur at twice engine speed, and rise disproportionately with increases in stroke. The secondaries we're talking about produce high-frequency vibration, of which the long-stroke CB750 has its fair share. But the CB550, with the same pattern of running dynamics, was given a stroke of only 50.6mm and vibrates hardly at all. The short stroke also lets the engine spin like a dervish without crowding piston speed anywhere near the danger zone. It must have been the result of a design decision made when the CB500 was just lines on paper, and the experiences of thousands of owners, not to mention magazine road testers, say the

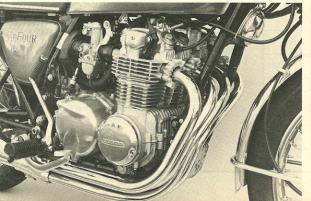
choice was correct.

Theory predicts smoothness and a free-revving character for the CB550's engine, and that's how it is. The highfrequency buzz is there, and make the bike's mirrors go fuzzy at 55-60 mph. But it doesn't gnaw at a rider's feet or fingers even though the overall gearing is rather short and keeps the crank spinning briskly. You have to spin that crank very briskly to get a real lunge out of the Honda when you're trying to nip around a line of traffic. The engine will pull without a sign of hesitation right from idle, but it doesn't show its serious side below 6000 rpm and needs to be run between 7500 and 9000 rpm if you want its maximum effort. Those crank speeds would set off a real commotion in some bikes; the Honda's maximum effort just doesn't feel like a maximum effort.

It's unreasonable to expect rocket-like acceleration from a bike with the CB550F's weight/displacement parameters and if that's what you want, look elsewhere. What the Hond does offer is an entirely adequate if not overwhelming level of straight-line performance—and truly exceptional manners in the way it takes you down the road. Its throttle response is excellent (though the return

The complex but carefully thought-out electrical

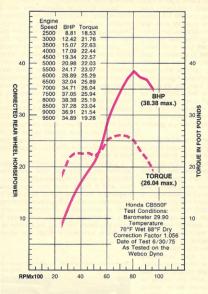


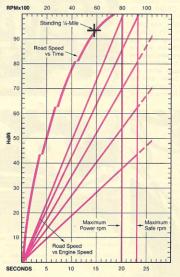




This four-into-one exhaust system boosts power, lowers noise and drags in right-hand turns.

Honda's CB550F Four: no leaks, shakes, quirks or problems; solid as a Swiss bank account.







### HONDA CB550F

Price, suggested retail	\$1825
Tire, front	x 19 Bridgestone
rear 3.75	x 18 Bridgestone
Brake, front	1.5 x 10.5 in. x 2
(38.	1 x 266.7mm x 2)
rear 1.19 x 7.08 in	n. (30.2 x 180mm)
Brake swept area 71.0 sq.	in. (457.9 sq. cm)
Specific brake loading	8.66 lb./sq. in.
Engine type Four-stroke, S	SOHC, in-line four
Bore and stroke 58.5 x 50.6mm (	
Piston displacement 544	tcc (33.18 cu. in.)
Compression ratio	
Carburetion	. 4; 22mm, Keihin
Air filtration	Dry pleated paper
Ignition	. Battery and coil
Bhp @ rpm	38.38 @ 8000
Torque @ rpm	26.04 @ 7000
Rake/Trail	°/4.2 in. (107mm)
Mph/1000 rpm, top gear	
Fuel capacity	
Oil capacity	3.4 gt. (3.2 liters)
Electrical power Controll	ed field alternator
Battery	12V. 12AH
Primary transmission	Hy-Vo chain
Secondary transmission	
anisponi rollani of adda emai a vi	2.17:1 (37/17)
Gear ratios, overall(1) 15.68	(2) 10.90 (3) 8.46
	(4) 6.90 (5) 6.00
Wheelbase	55.3 in. (1405mm)
Seat height	31.0 in. (787mm)
Ground clearance	5.8 in. (147mm)
Curb weight4	55 lbs. (206.4 kg)
Test weight6	
Instruments Seiki tachome	ter, speedometer,
odometer, tripmeter, oil press	sure warning light
Standing start 1/4-mile 14.4	7 sec.; 93.36 mph
Average fuel consumption	40 mpg
Speedometer error 30	mph actual 27.46
60	mph actual 57.72

spring is a little heavy) and its brakes are both powerful and finely controllable. One finger tugging at the left-side lever is enough to disengage the clutch, which further obliges you with its wide, easily controlled engagement point. All these things, along with the Honda's willingness to start when cold and little things like the handy positioning of switches, make the CB550F a rider's friend. Even so, the bike's best feature (in our admittedly very personal view) is the way it can be hurled along at wisty road.

The principal element in the CB550F's splendid mountaineering capabilities is its handling. Some bikes have good stability but are heavy feeling, slow in their response to steering inputs. Others are agile, almost anticipating a rider's desire to change direction or attitude, but become very flighty and start making decisions entirely on their own when the chips are down. Worst of all are those a rider

has to fight all the way; those without enthusiasm for anything but their self-induced wobbles and lurches. The Honda doesn't fit into any of the above categories. Its rear suspension is typically Japanese, in that the springs are too much for the shocks to handle, and that creates a couple of minor guirks: the rear wheel patters on rough surfaces, and a heavy rider can find the Honda wavering slightly if he stuffs it too fast into a fast turn. Otherwise, if you run the rear springs at full-preload to keep the bulky muffler from dragging, the Honda is a marvel. It goes where its front wheel is pointed, precisely, without requiring a lot of levering at its handlebar and without surprises.

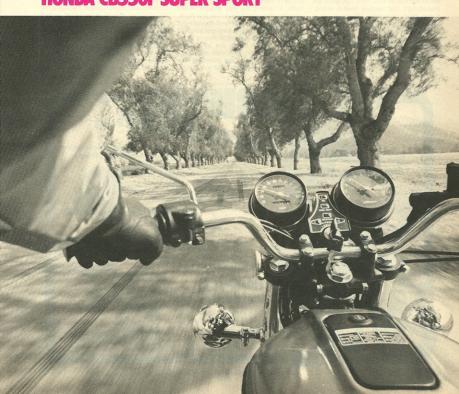
There's more to handling than just the way a motorcycle steers; there's handling in the total sense. Here, too, the Honda scores very well. Those mid-corner transitions, when you have anticipated steady-state conditions and find vourself

wanting to accelerate or brake instead, are no occasion for dramatics on the CB550F. Responses are all controllable, and let you go from braking to steadystate to acceleration without dropping a stitch. This side of things is helped along by the overall ride quality, which is superior. The CB550F's fork does absorb bumps really well, its rear suspension-limp shocks and all-rate as highaverage, and the bike not only produces a comfortable freeway ride out of those factors, it also provides a nice, stable platform. You don't have to devote half your attention to clinging to the Honda; you just sit there, unjostled, and work the

The only one of the CB550F's controls that doesn't work well is its shift lever, which in 1975 continues the tradition established with the first 1971 CB500. Now as then, the shifting goes smoothly much

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# **HONDA CB550F SUPER SPORT**



of the time-but has moments in which everything is infuriatingly wrong. Our test bike would slip from one ratio to the next without a hitch when ridden gently; it caused not a single problem at the drag strip when it was being crowded right at the limit; and it could not be coaxed. wheedled, nudged, vanked or cursed into decent behavior when it was whipped along moderately hard. Something down deep inside simply didn't want to cooperate, especially on the shift from second to third. Most CB550s are somewhat nicer-shifting than this particular CB550F. and a few are worse. None shifts at anything approaching the level of excellence found elsewhere in the motorcycle's overall character. The shift mechanism keeps working, and you'll find the gear you want eventually, but it was conspicuously a candidate for change in the CB550 and remains one in the Super Sport.

A change that shouldn't have been made, and was, is the new seat. The CB550F is a good perch for a rider, to the extent that its seat/footpegs/grips are placed right. But the seat itself is wrong. It has been narrowed, effectively, by a couple of inches by the new high-crowned shape, and the unfortunate effects of the new contours are aggravated by the lack of padding. The seat is hard enough to be rated somewhere on the Rockwell scale with alloy steels. At least that's the way it feels after a couple of hours in the

saddle, and it would be intolerably uncomfortable but for the suspension's ability of soften bumps.

Our subjective opinion about the CB550F's muffler is that it messes up the bike's otherwise fabulous corner-carving abilities. Many riders, with stronger instincts for self-preservation and a sense of moderation, wouldn't agree, And there must be people somewhere in the world who would find the CB550F's orange paint job a delight; we think, subjectively, it's borderline hideous. The color on ours was a brassy orange, and we suspect there's a lot of the old orange-peel effect on the surface but can't be sure because the metalflakes in the paint are so coarse they produce a textured effect all by themselves. Luckily the 550F also comes in blue, and that color is at least halfway

Except for the paint, the CB550F is a triple-distilled Honda in its fits and finishes. That is to say, the chrome isn't up to Rolls-Royce standards but it would rate high among motorcycles, and the real quality of the various mechanical components, including the way they're bolted together, may well rank above the Rolls. Hondas generally are well-thought-out and well-tested before they get sent out into the world; the CB550F seems to be especially good. Wires are all held in place by clips and grommets instead of being left to dangle; the plumbing has been arranged with care, and is complete

right down to the little tubes that carry away fuel (if any) overflowing from the float chambers. There's even a one-screw idle stop adjustment that handles all four carburetor slides.

Best of all, it all works. The little touches-locking seats and fuel filler lids and their like-just don't mean much if they don't function. The CB550F has them all, and Honda has used its abundance of engineering talent to beat the potential problems to death. The pull open/pull shut throttle linkage, which terminates in a thicket of shafts, levers and rods over the carburetors, was obviously engineered-not cobbled together out of parts left over from some other project. The engine doesn't smoke, rattle or make worrisome noises. Electricity gets generated in the right amounts and arrives right on cue when and where it is needed. There is, nearly everywhere, much smooth cooperation between parts, and willing compliance with a rider's wishes. You can't point to any single item on the CB550F as being the source of its charm; neither is it possible to trace through all the mechanical interactions that make the bike do what it does so well. It all comes down to balance-the fact that nothing on or in the CB550F is guilty of over- or underwhelming anything else-and it all adds up to excellence. It's flawed in spots. like the best of man's artifacts, but it comes as close to being perfected as anything rolling on two wheels.

