

Hidden away under the Honda CB-750 Four's fuel tank, flanked by its quadruple carburetors, you'll find the secret of this Superbike's success. Don't look in there expecting to find cabalistic symbols, mathematical formulae or a message for your Captain Midnight decoder ring. What you'll see is that part of the throttle return spring is now covered by a short neoprene sleeve, placed to protect a pair of rather unimportant carburetor vent hoses from pinching or chafing. Nothing of any great consequence would occur even if the return spring chafed through both vent hoses. But the protective sleeve is there, just as a refinement, and it is typical of the kinds of refinements that make the Honda CB-750 what it is. Other Superbikes are faster and at least a couple handle better, but none are as slick, as steadfastly reliable, as the big Honda. None but the Sportster and the Norton have been in production as long but more important, none have had the incredible attention to detail typified by that little sleeve on the Honda's throttle return spring.

Oddly enough, none of the refinements worked on the CB-750 since its introduction in 1970 seem to have been intended to make the bike any faster - and it is certain that none have had that effect. Considering that Honda created one of the first true Superbikes (and thus set an example that brought all the others) one might have expected more attention to the performance side of things, But the main thrust of the CB-750's evolution has been in the opposite direction. It is widely known that early pre-production prototypes were quicker and somewhat less civilized than the Fours actually delivered into customers' hands back in 1970, and subsequent development has moved the bike further away from the pure performance concept. Smoothness, silence and reliability have been paramount considerations. Those fired with the sporting spirit may find Honda's approach regrettable, but with total CB-750 sales now closing in on 100,000 units it would be hard to convince the firm's directors that they are making a mistake.

Now we have the 1973 CB-750 K3, which is a slightly slower but more refined version of the CB-750 K2-which had about the same relationship with its predecessor. Some of the CB-750's decline in absolute performance probably is attributable to subtle changes in its valve-lift specifications. There also has been a power loss incurred with the introduction of more efficient, and more restrictive, mufflers. With the 1973 model the CB-750 becomes even quieter-and slower-due to a restricted inlet for the air-cleaner housing that more effectively silences intake roar. The net result is, that there is little racket emerging from either the inlet or exhaust sides of the engine, and careful work inside has squelched what can be a lot of clatter from pistons and valve gear. The CB-750 K3 is quiet!

None of these measures has done a thing for absolute performance, as has already been noted, but they actually do not have much effect in terms of daily operation. Those exhaust and inlet restrictions do shave the peak off the CB-750 engine's power curve, and that definitely reduces the kind of performance you'd get at the drag strip. However, most riders will hold the engine well below its 8,000 rpm redline, shifting up at perhaps 6,500 rpm, and the restrictions mentioned do little to depress performance in the lower portion of the engine's powerband.

Another series of changes have been made in the CB-750's final drive system. Like all Superbikes the big Honda sends a lot of pressure to the rear wheel through its sprockets and chain, with deleterious results to the service life of both. This was a severe problem in the beginning, when the bike had a 16-tooth transmission sprocket and a 45-tooth sprocket on the rear wheel. That proved an unsatisfactory arrangement, and the sprocket sizes were increased to lower chain tension under load as well as provide larger wrap-over radii at the sprockets. Today an 18-tooth transmission sprocket is used in combination

with a 48-tooth rear wheel sprocket, which has improved chain life and yields a taller overall drive ratio (originally 5.61:1, now 4.99:1). This obviously does little for flat-out acceleration. On the other hand it makes highway cruising less busy for the engine, which pays dividends in smoothness, fuel economy and reliability. It is a change entirely in keeping with the other CB-750 developments.

Most of the other changes over earlier models found in the CB750 K3 have nothing to do with speed or lack of same. For example, there are the wear indicators on the bike's disc brake pucks. Because the wear adjustments with hydraulic disc brakes are entirely automatic it is possible to scrub away the puck's friction material right down to the steel backing pieces before there is any indication of wear and impending trouble. This difficulty has been resolved very neatly with the addition of a little red tab to each brake pad. The tab marks the limit of the friction material, and indicates how much is left to anyone who takes the trouble to glance into the brake caliper. It's a service/safety measure, and a good one.

Safety is also served by other changes in the CB-750 K3. It now has bigger rear-view mirrors, and the turn indicator lights now have double-filament bulbs that make them clearance lights as well. Turn on the headlights and you also light one set of turn-indicator filaments. You won't be as likely to hit the high/low-beam switch instead of the headlight switch, or vice versa, with the revised control layout-which now has these switches on opposite ends of the handlebars. Also, the emergency kill switch has been turned 90 degrees so that you are not as likely to accidentally bump it into the off position while riding. And finally, the turn-indicator switch has been redesigned to permit a partial actuation for signaling lane changes. Push the switch over gently with your thumb and the lights start to blink, but the switch will pop back off unless it has been shoved over hard into its locked-on position.

Some of the changes are hidden, like the fuse box located behind the left sidecover. Previously the CB-750 has had its fuses placed in-line in little plastic holders, positioned much more for the manufacturer's convenience than yours. In the CB-750 K3 all the fuses are in a single box, just like a car, which certainly will make troubleshooting less a chore. Just like a car, too, is the device that stops actuation of the starter unless the transmission is in neutral.

Other hidden changes are in the CB-750's forks and rear suspension units. The nitrogen-filled DeCarbon rear shocks have been replaced with those of a more conventional pattern with a five-position adjustment for spring preload instead of the earlier three-notch arrangement. The forks have also come in for a change: last year's CB-750 K2 used fork damping virtually identical to that of the CB-500, but there has been a change back to the original damper valve configuration. Both spring rates and damping for the forks and rear suspension struts have been revised to improve the CB-750's ride though we are not at all certain this "improvement" is a reality. In plain fact, the CB-750 neither handles nor rides as nicely as its smaller brother. Road surface irregularities are far more unsettling for the CB-750: it twitches when running over freeway rain grooves, and has a comparatively harsh ride. Other Superbikes are generally worse in these respects and we might not even notice the Honda's ride/handling shortcomings but for the extraordinary quality of both in the CB-500 which presumably was produced by the same design team. Perhaps such anomalies exist just to remind us that motorcycle suspension engineering still is more art than science.

One of the CB-750 Honda's best features is its front disc brake, which it has had from the beginning. The only difference we can detect between then and now is the complete absence of brake squeal - a big source of aggravation with most discs, including those on other Hondas - and a splash guard wrapped

over the disc itself to keep the thing from spitting rainwater in your eye. All the near-incredible stopping power of the modern motorcycle disc brake (another Honda first, introduced on the CB-750) is of course still there.

Unfortunately the Four's rear drum-type brake is nothing like as effective and agreeable as the one up at the front wheel. The Honda's rear brake locks far too easily, and this problem is compounded by a disagreement between the arcs described by the swingarm and the brake rod: the lack of coincidence in these arcs makes the brake pedal jiggle up and down, unless you are using the brake, in which case the tendency to jiggle is converted into jagged changes in braking pressure. With all that happening it becomes almost impossible to avoid locking the rear wheel unless the rear brake is used very lightly. Obviously the fact that the front brake does most of the stopping for the motorcycle effectively reduces this problem to a mere annoyance, but it is sadly out of character for the otherwise wonderfully refined CB-750 and one hopes that Honda will have corrected this in the K4 model.

As mentioned previously the CB-750 K3 falls somewhat short of the CB-500 in handling, but it still is pretty good judged by broad-spectrum standards. The big Honda will carve around turns very well, as long as the road is reasonably smooth. Rough spots set off more wheel hop and fork waggle than is comfortable in such a large and heavy motorcycle, and the CB-750 definitely is a double handful under those conditions. Even so, with experience you'll find that the bike can be pitched around vigorously, and the only thing you must remember is that this Honda always has you outnumbered. It's big, heavy and needs both time and muscle to get it from hard-right to hard-left. And you really wouldn't ever want to get the Four into a big slide. You can ride it hard, as it has excellent tires and rates high in terms of fundamental stability. Thus, serious trouble will only be encountered after serious brain-fade has overcome the Honda rider's judgment. There's plenty of warning when you've gone far enough. You can use the right footpeg and the centerstand extension on the left as limit gauges, and you certainly won't run out of tires at the cornering angles those things permit.

Ride, like handling, falls short of the CB500's refined behavior but still puts the CB750 right up there with the best. The bike feels like maybe its springs are a bit too stiff and the damping too limp by about the same amount. That doesn't keep it from being comfortable. Its seat is broad and soft, and there is enough distance from the seat down to the pegs to prevent your legs from getting cramped. This last may account for the CB750 lending the impression that it is very tall, which it isn't. The difficulties those with short legs have in keeping the bike upright at a stop are due more to seat width than seat height, which is not much greater than the average for all motorcycles.

Riding comfort gets a boost from the engine's power output characteristics, which derive from a torque curve that is virtually a straight line. It is much like those of Honda's various SL engines, with lots of raw torque available anytime you whack open the throttles. You can indulge in a flurry of upshifts and downshifts if that is what pleases you; it won't make a terribly big difference in your rate of progress down the road. Indeed, this is one of the CB-750's principal charms.

Serviceability may not be a big thing with the high-rollers who can afford new CB750; it will be appreciated by mechanics and their appreciation should be reflected in the bill they present to the owner. Also, high-rollers as well as lesser mortals can encounter minor problems out on the road and it should comfort them to know that there is easy access to nearly all the ancillary jazz on the Honda. Lift the seat and pull the sidecovers (which plug into place) and you can get at most of it. And in the unlikely event

you have to fix something underneath the bike you can flop it over on its side without having oil and fuel run all over the place.

Fuel doesn't even run through the carburetors nearly as rapidly as you might suppose. We found that whipping the CB-750 hard would pull the mileage down to about 41 mpg, and that mixed-conditions riding gave us an average of about 45 mpg. That translates into a maximum cruising range, between service stations, of 200 miles, running 144 miles on the 4.5-gallon tank's main supply (3.2-gallons) and then switching to the 1.3-gallon reserve.

And would that all motorcycles were as basically refined as the Honda CB-750 K3 Four, and as reliable. Our test bike had been thoroughly thrashed by a variety of test riders by the time we finished, and apart from developing a slight jangling in its clutch the Honda showed not the slightest distress at having been so harshly used. It wasn't puffing or leaking oil, didn't develop any tendencies toward hard starting or an uneven idle, and in general displayed a willingness to continue happily along in the face of our best (worst?) efforts.

Best of all, while the CB-750 is out there on the roads in numbers too large to give it any eye-appeal as a curiosity, it will boost the prestige of its road-rider owner at every coffee stop just because it is so incredibly well-finished. The Four sparkles and shines and gleams, and its every detail is just so tremendously tidy you can't help but admire the bike even if you're riding something else. You look at that "K3" designation and consider the CB-750's three-year history and you know that it is to some extent the creature of afterthought, but nothing in its broad layout, appearance, or smallest detail suggests anything except meticulous advanced planning. Or maybe what you get in the CB750 K3 is more nearly the result of meticulous afterthought. Either way it has produced in the Honda CB750 an uncommon degree of refinement and for the Honda company a hundred thousand pretty well satisfied customers.