

# CYCLE GUIDE ROAD TEST

# HONDA CB750 K5

*The 750 Four gets better and more refined every year, and loses a little of its personality in the process*

It hasn't been so long since we last tested the Honda CB750 (We tested the K3 in July of last year.), but the 750 Fours are successful and popular enough that we decided to refresh our memory by testing the 1975 version, the K5.

It is interesting to note that the CB750, introduced in late 1968, is the only Honda of six years ago still surviving in the 1975 line-up, except for the indomitable Trail 90. (The 450 twin has become a 500.) And although the CB750 now stands in the shadows cast by the GL-1000 Four, it appears to have quite a few good years ahead of it. It has been accepted by the casual rider, the novice, the cafe racer, the commuter, and the veteran tourer, all with near-equal enthusiasm. Hordes of them fill the interstates during the warmer months and putter along downtown boulevards and rush along freeways during rush hours.

Six years have done nothing to make the CB750 any less modern; the design is as up-to-date now as it was at the moment of its introduction. Subtle changes have kept it abreast of the times while bikes introduced more recently have seen the first glimmerings of obsolescence in the concern about noise, air pollution, fuel economy, and some of the other horrors of civilization. The first CB750s were musclebikes, but small changes have made the later series quieter, milder, and more attractive to the rider whose prime consideration is not out-and-out performance. The refining process has reached the sixth generation in the CB750 K5.

**THE BIKE:** The Honda CB750 K5 still has the same 200-pound, four cylinder, single-overhead camshaft, four-stroke engine. Each cylinder has a bore of 61mm and a stroke of 63mm for a displacement of 184.1cc per cylinder, a total of 736.4cc. The crankshaft rides on five plain insert main bearings. A dry-sump lubrication system pumps oil to all vital clutch, transmission, and engine components, including the plain bearing inserts at the connecting rod big ends. Oil which collects at the bottom of the sump is pumped back to a 3.7-quart oil tank on the right side of the bike.

The overhead camshaft is driven by the traditional (for Honda) single-row chain, guided by a host of rollers and sprockets. The chain tension is taken up by an adjuster that uses a spring-loaded roller.

Dual primary chains run from the center of the crank to a jackshaft just ahead of the transmission. The jackshaft

drives the wet clutch, which has seven drive and seven driven plates. The clutch is on the mainshaft of a five-speed gearbox.

Carburetion is provided by four 28mm Keihin slide/needle carburetors. The slides of all four carbs are linked to the same bar, which is operated by two throttle cables: One raises the bar and opens the throttles; the other pulls the bar back down and closes the throttles. There is nothing to stretch and require re-synchronization in the system, and the throttles can't stick open.



PHOTOGRAPHY BY ART FRIEDMAN

The Honda 750 pioneered the four-cylinder look. Each cylinder has its own one-piece exhaust pipe and muffler. The mufflers on each side are joined by a small balance tube near their ends.

Maybe Honda programmed *pride* into their automatic welding machines, because the welds on the 750's double-loop frame are neater than most other machine-welded frames we've seen. The frame still looks heavy, though, and no doubt contributes its share to the bike's 501-pound dry weight.

The front forks allow 5.6 inches of travel, and the fork tubes are protected by rubber gaiters. The forks have been given 27 degrees of rake and 3.7 inches of trail. The 3.25 x 19 Dunlop rib at the front of the bike is separated from the 4.00 x 18 Dunlop at the rear by a wheel-base that averages 58.6 inches. The rear shocks have five spring preload settings and allow 3.3 inches of wheel travel.

The original CB750 began the disc

brake trend, and the current front brake is virtually the same. The 11.7-inch disc and its single-action hydraulic caliper are located on the left side of the front wheel. Later models have acquired a fender over the rear of the disc, which will throw off water just like a spinning tire. The single-leading shoe rear brake is a rod-operated affair.

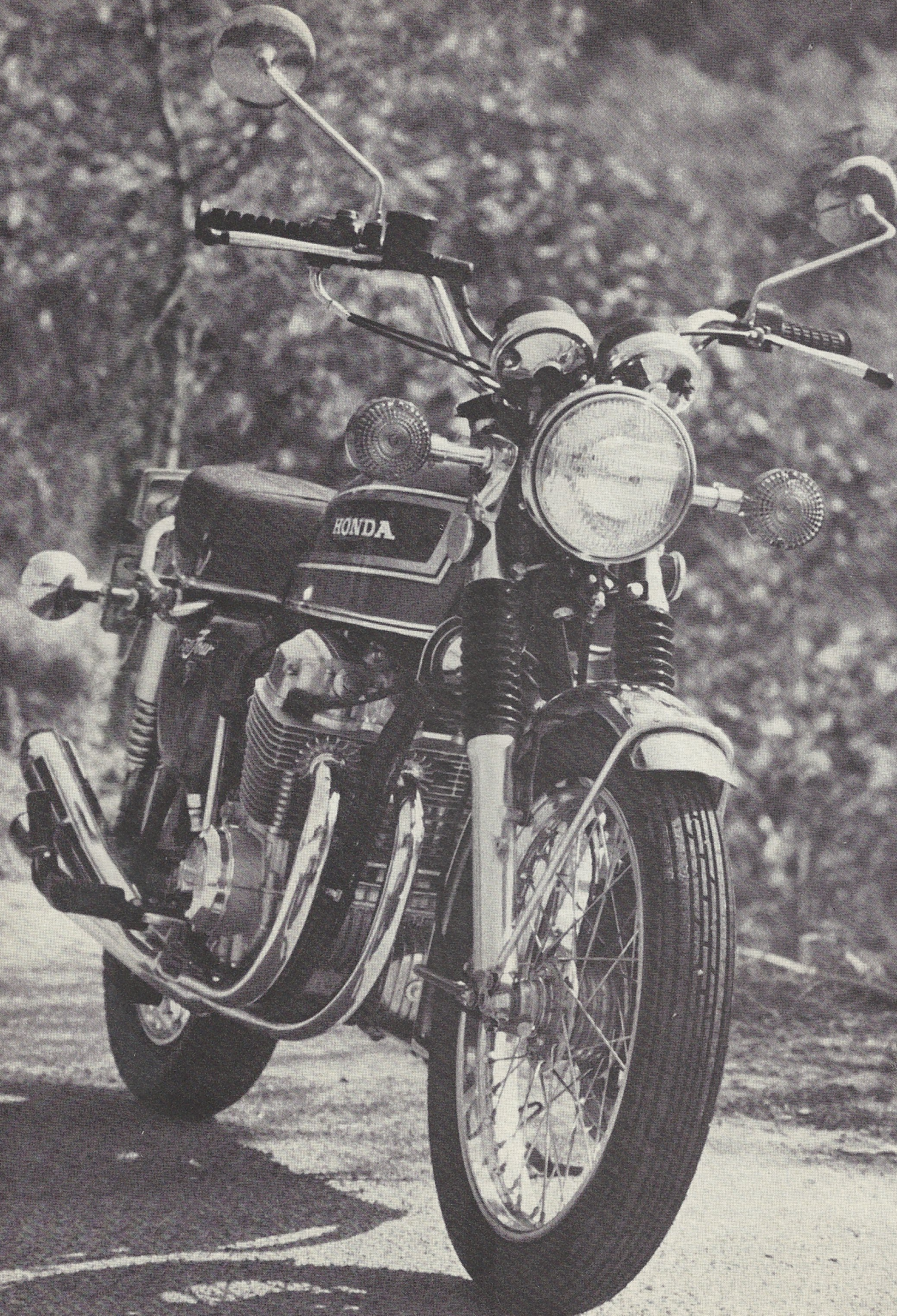
The steel gas tank holds 4.5 gallons, and except for a different paint color, looks just like last year's tank. The gas cap doesn't lock, but the flip-up seat does. Beneath it are the battery, the tools, and a small compartment for an owner's manual and registration papers. Many of the electrical components, including a three-fuse box, rectifier, flasher, starter relay, and starter motor "safety unit" (interlock), can be reached by snapping off the left side panel.

The changes in the K5 include bigger turn signals, with a beeper included in the circuit to remind you that you are signaling. If it annoys you, the signal will work without the beeper if the switch isn't pushed all the way to its stop. The front turn signal bulbs also have a second filament that comes on when the headlight is turned on. It's a good idea, but why it isn't also employed in the rear signals, where it could go a long way in saving your life if the taillight bulb burns out, is a mystery.

A rubber tab has been added to the sidestand on all street Hondas for 1975. The tab hangs down below the foot of the sidestand and is designed to drag the ground if the rider forgets to fold the stand up when riding off. Theoretically, the rubber dragging on the ground will cause the stand to fold up slightly. We found that it would work if we leaned into a turn gradually with the stand down, but if we turned left quickly, the bike would bounce off the stand as if the rubber wasn't there.

Changes which didn't happen to the CB750 this year but will probably show up in the future include moving the ignition lock from beneath the front of the gas tank to a position between the 140-mph speedo and the 10,000-rpm tach. There are no smog-control concessions yet and the lights don't come on automatically when the key is turned on. There's no taillight or charging system failure indicators, either.

**ENGINE AND GEARBOX:** To start the bike when it's cold, you turn on the gas, flip up the choke lever (The Four has



real chokes, not starting plungers.), turn the ignition on, and push the button. If the starter motor doesn't turn over, the bike is probably in gear, so either put it in neutral or pull in the clutch lever. That should do it if the battery isn't low. In that event, there is a kickstarter connected to the primary drive. If the engine turns over but doesn't fire, the kill switch above the starting button is probably off. (A lot of angry people with new bikes that wouldn't start have pushed them back to the dealer only to find the kill switch was off.)

The CB750 is very cold-blooded and won't idle until it warms up, which takes several minutes. It likes a minute or so

speed; the power just builds constantly as the engine speed increases. If you are in a particular hurry and the engine is below 5000 rpm, downshifting will give you a boost in acceleration. The power output is strong right up to, and past, the 8000-rpm redline. In fact, when we stopped our dyno run at 10,000 rpm, the 750 was still making good horsepower, although it had peaked at 8000. Maximum torque was produced at 7000 rpm. At the dragstrip the K5 didn't set any records and wasn't quite as quick as the early Honda 750s, but it did a respectable 13.64-second ET at 98.6 mph.

The engine revs up and returns to idle very quickly—almost instantly—because of

after a couple of fast, hard, slip-the-clutch starts.

The shift lever throw is light but long and requires a positive, deliberate movement of the foot to insure that the shift has been completed. A light, casual shift will usually work, but the transmission will occasionally either pop out of or fail to slip into gear after a too-easy shift.

Shifting into first from neutral produces a healthy clank from the transmission, and a shift that isn't well synchronized will also be marked by a similar noise. There is some transmission whine during acceleration, which probably accounts for a significant portion of the bike's 83.5-decibel sound level.

The gears are spaced fairly evenly; first gear isn't particularly low, but you can leave the clutch engaged at a creeping pace because of the smooth low-rpm power. And starting off requires very little throttle to get away smoothly.

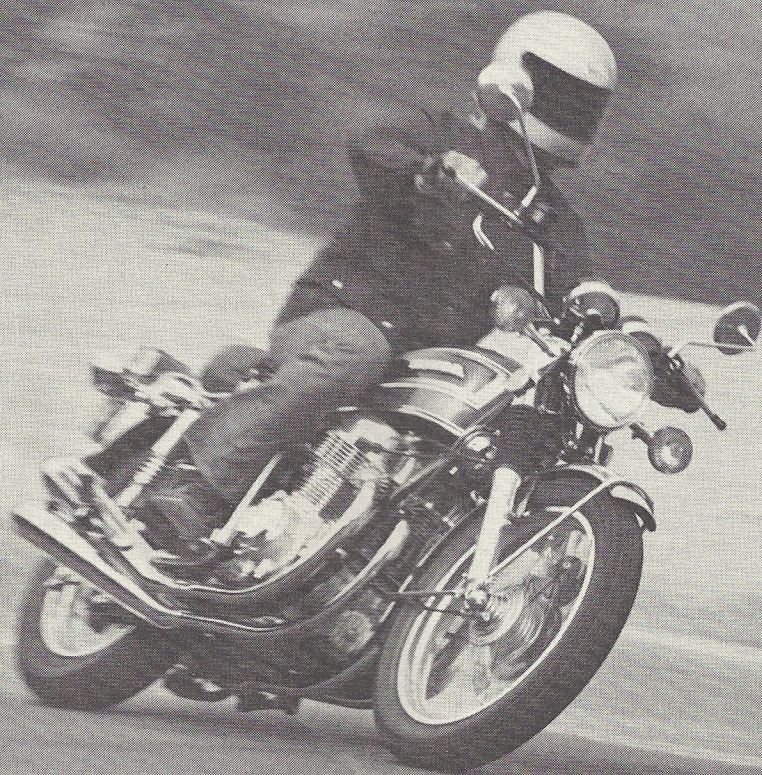
**HANDLING:** The central factor in the CB750's handling is its high center of gravity. The engine weight is carried quite high in the frame for the sake of ground clearance, which raises the center of gravity. When the bike is leaned over past a certain point while cornering, the weight up near the top of the bike tries to drop and lean the bike further into the turn, making it take a line tighter than the one you've chosen. If the bike is closer to vertical, centrifugal force pulls this weight to the outside of the turn, thereby straightening up the bike and widening the line you're taking. At low speeds when there is less centrifugal force, the bike tends to fall inward more. At high speeds it tries to straighten up more.

The tendencies aren't extreme or dangerous, but they make it difficult to take and hold the precise line you have chosen. However, you improve with practice, and there are certain angles of lean for any cornering speed where the bike is stable. And by moving your body weight around on the motorcycle, you can compensate somewhat for the bike's center of gravity.

The high center of gravity also amplifies any sideways movement or any oscillation. If you hit a bump or ride into a sharp dip, the bike will tend to lean in the direction that it is bumped. If it starts to wobble, the high center of gravity can act like a pendulum and give the wobble the ability to continue. Under certain circumstances—like if the bike were to be used in a road race, for example—it will wobble. But the average street rider isn't likely to ever know about it because he won't ride it that hard or that fast.

The high center of gravity also makes it a bit difficult to throw the bike from side to side quickly in a tight S bend. And it is particularly difficult if you try to do so with real precision.

The ground clearance is adequate for most riders, but it's not exceptional. One rider climbed on the bike who had never before ridden a Honda 750, but he man-



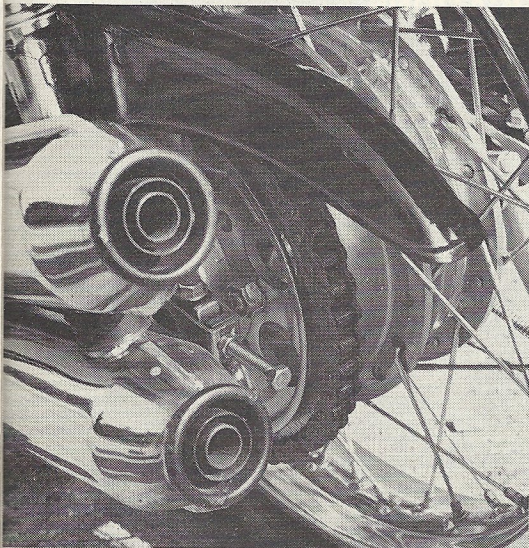
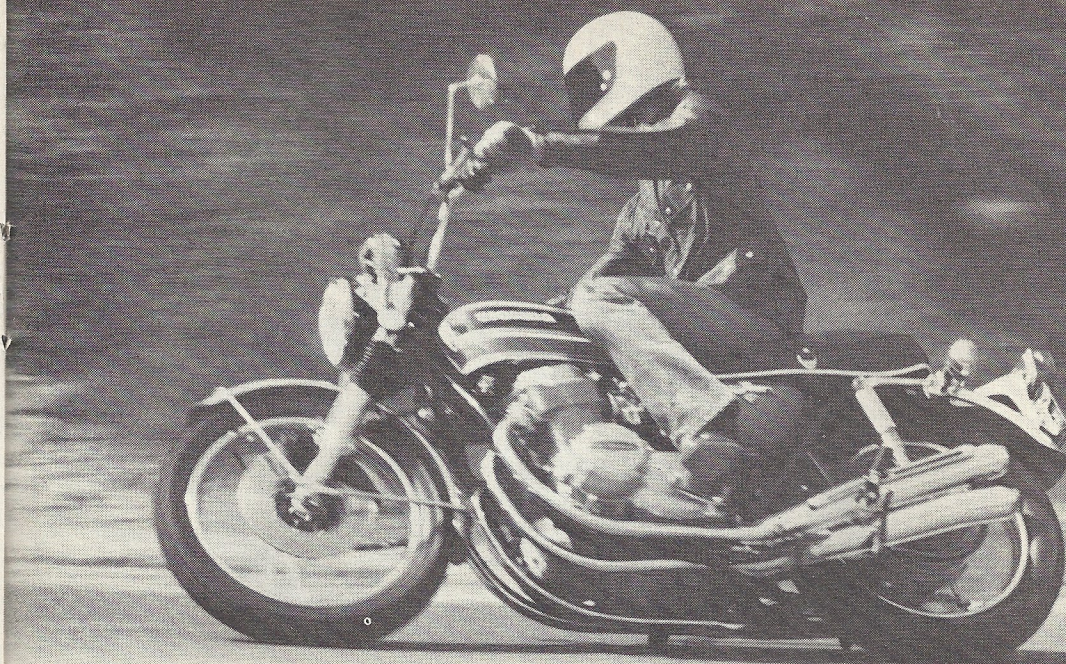
of warm-up before you pull away, and it takes two or three miles of running before it responds to throttle changes.

Once warmed up, the 750 has an enormous powerband. It will run down below 1000 rpm in *fifth* gear and pull away smoothly and strongly if the throttle is opened gradually. If the throttle is opened wide quickly below 3000 rpm, the intake gas velocity drops off, and the engine will stumble and die. But it will run quite comfortably and smoothly at very low rpm with smaller throttle openings. The twist-grip has quite a large amount of travel, so whacking the throttle all the way open requires a bit of twisting—almost a second handful.

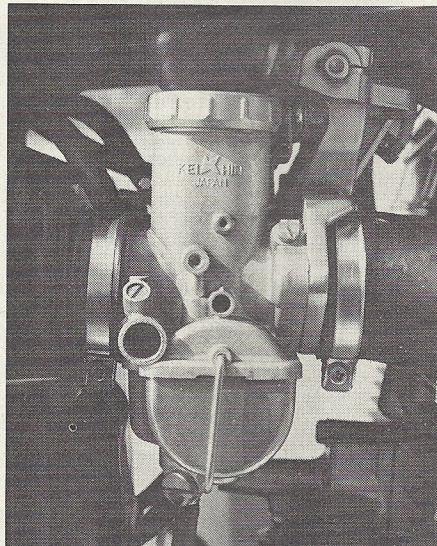
The engine pulls strongly from any

the Four's lack of flywheel effect. So, making a smooth shift requires that you synchronize the engine speed with the bike's ground speed. If you close the throttle too quickly as you shift, the revs drop sharply and the bike will slow down with a lurch as the clutch is engaged. If you blip the throttle and engage the clutch as the engine revs, the bike will jerk forward.

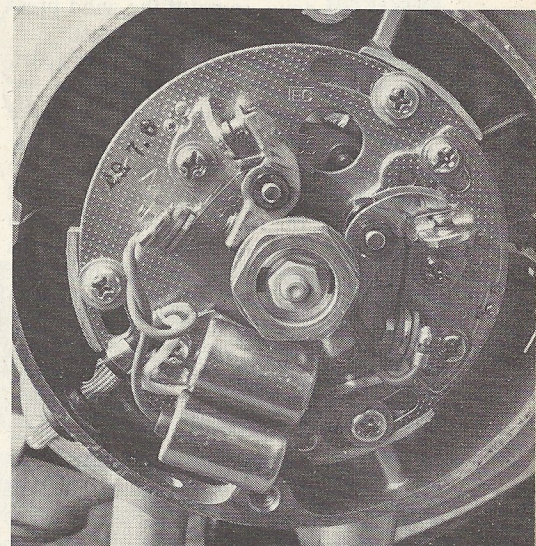
Smooth shifting is also made a little difficult by the clutch engagement, which is rather quick and unprogressive. It takes a little bit of getting used to—which at least is made easier by the very light clutch lever pull. That light clutch feel might lead you to believe the clutch will slip. It doesn't. What it does is heat up and drag



*The guard on the sprocket keeps rocks, dirt, pant cuffs, and small frogs bent on suicide out of the sprocket and chain.*



*There are attachments on the manifold for vacuum gauges, almost a necessity for equalizing the carburetors.*



*Each ignition circuit handles a pair of cylinders. One circuit is for cylinders 1 and 4, the other for cylinders 2 and 3.*

aged to scrape both the sidestand and centerstand in a left-hand turn before he'd ridden 100 yards. We could also scrape the footpeg and centerstand on the right side, depending on the suspension setting and the turn. If you are carrying a passenger, the ground clearance becomes more of a problem, and you find it possible to drag the passenger pegs.

The suspension works quite well in most situations. It is firm enough to avoid wallowing in corners and soft enough to keep the bike from being bounced around by bumps. The rear suspension is just slightly short on damping, causing the back of the bike to bounce up and down an extra time or two after a big bump.

The bike is very stable when traveling

in a straight line. You aren't hassled by most crosswinds, and rain grooves will only occasionally wiggle the handlebars a little bit; generally, the grooves will go unnoticed. If you look over your shoulder or fall asleep or something else equally ridiculous, the bike won't wander off course right away.

**COMFORT AND RIDE:** The CB750 K5 is a very comfortable motorcycle, and only a few minor details prevent it from nearing perfection. One of our staffers took a 600-mile ride during the test, and it was over three hours before anything began to give him any discomfort. He got a slightly numb fanny, and his right hand and wrist grew sore from holding the throttle open. His hand was the first thing

to bother him. The four springs in the carbs are quite strong, and the friction lock that used to be found in the throttle drum housing is unfortunately gone this year. The locks used to wear out rather quickly if they were used frequently, but they were nonetheless a nice feature on a touring bike—especially one with four strong throttle springs.

The hand grips on the bike are new, bigger, and softer than the old ones; it's an improvement, but not quite good enough. The waffle pattern molded into the grips digs into your hands if you aren't wearing heavy gloves. This is especially true with your right hand, which has to maintain a fairly firm grip on the throttle twistgrip.

The vibration level is negligible. You notice just a little at odd rpm intervals above 4000 rpm (about 60 mph in fifth) mostly because the mirrors blur slightly. It's never annoying.

The seat is very comfortable for short rides, and only fairly comfortable for long ones. You'll have to go three or more hours before you start getting saddle sores, however. The seat height (33 inches) and width will make it a little difficult for shorter riders to get a firm stance while at a stop. Our shortest rider (5'10") wasn't bothered by it, but we've heard some negative comments from short-legged CB750 owners. The seat and seating position are well-designed to keep you from sliding around during braking and acceleration.

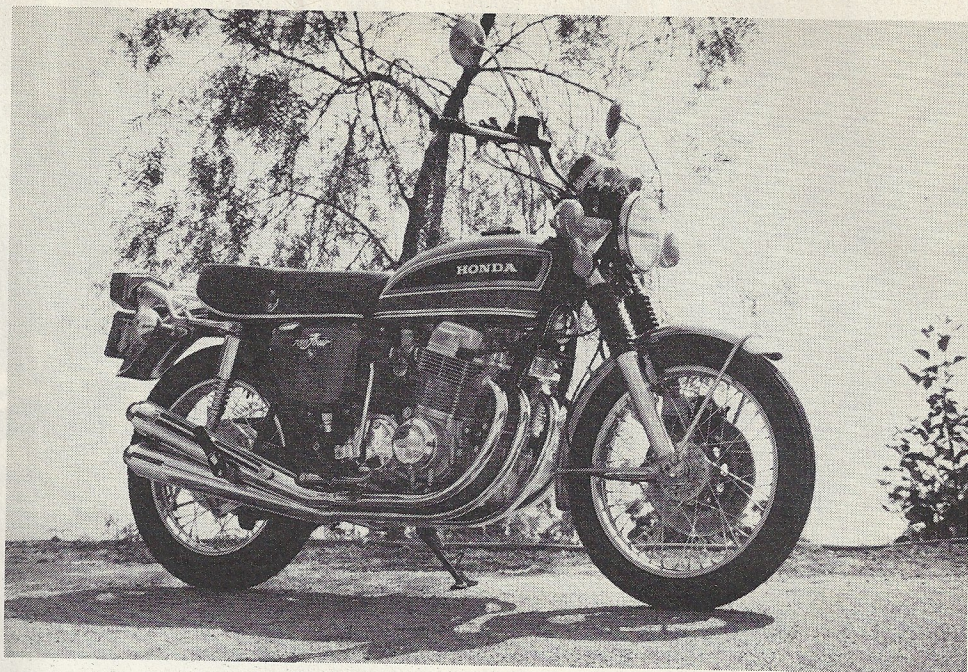
The rather high bars are something that may also annoy shorter riders who like bars they can lean on during high-speed riding. The 750 bars verged on being too tall for our 5'10" rider while he was riding the freeways, but our bigger riders liked them. The large instruments stick up into the windstream and act as a small spoiler to help cut down some of the wind pressure reaching your torso and chest.

The footpegs are placed fairly far apart, which you don't notice while you are riding. But when you are pushing the bike around by straddling the seat and paddling with your legs, your ankles bump the pegs. The passenger pegs, which mount outboard of the mufflers, are spaced even wider than the rider's pegs. In fact, when folded down, the passenger pegs are within an inch of being as wide as the handlebars.

The passenger is well provided for with a seat that is long, wide, level, and amply padded. The width of the pegs didn't bother any of our test passengers, and the fact that the pegs weren't up too high was a bonus, except when they scraped—which scared the hell out of some of our passengers.

The CB750's suspension offers a pleasant ride. It soaks up small bumps quite well, and only bigger bumps, especially sharp ones, will jar you a little bit through the rear end of the machine, even on the softest suspension setting.

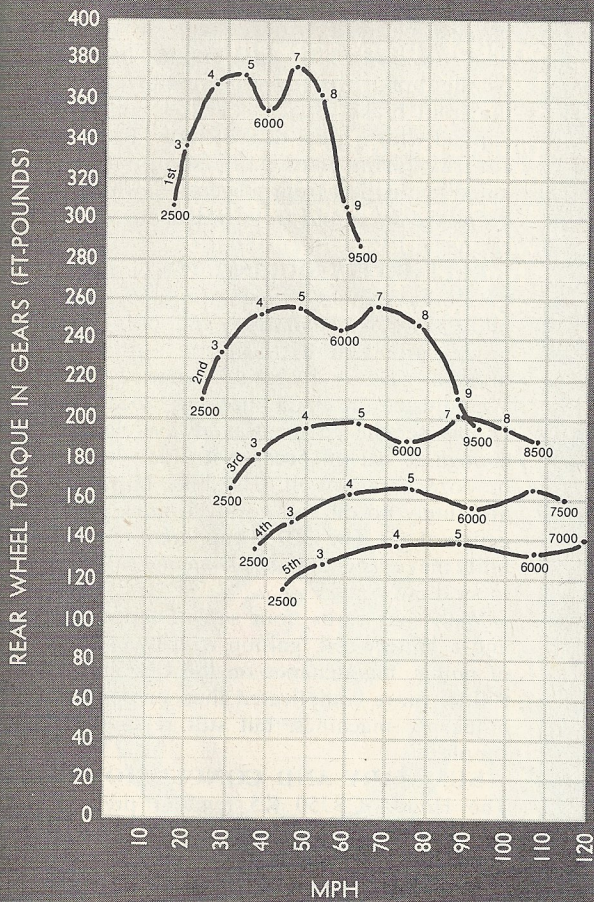
**BRAKING:** Honda's designers seem to have taken a cautious approach with the brakes. The hydraulic front disc brake is capable of locking the wheel, but an enormous amount of lever pressure is required to do so. The feel at the lever is also just very slightly mushy, so bringing the wheel to the point of maximum stoppage takes a split second longer than normal. However, the Honda front brake isn't likely to get a novice rider in trouble if he instinctively grabs the lever. That split second required to build pressure may save him some skin, particularly if he has to brake quickly while heeled over in a corner. The lack of pin-point sensitivity will make it a little more difficult to get it stopped quickly, however. Unlike some



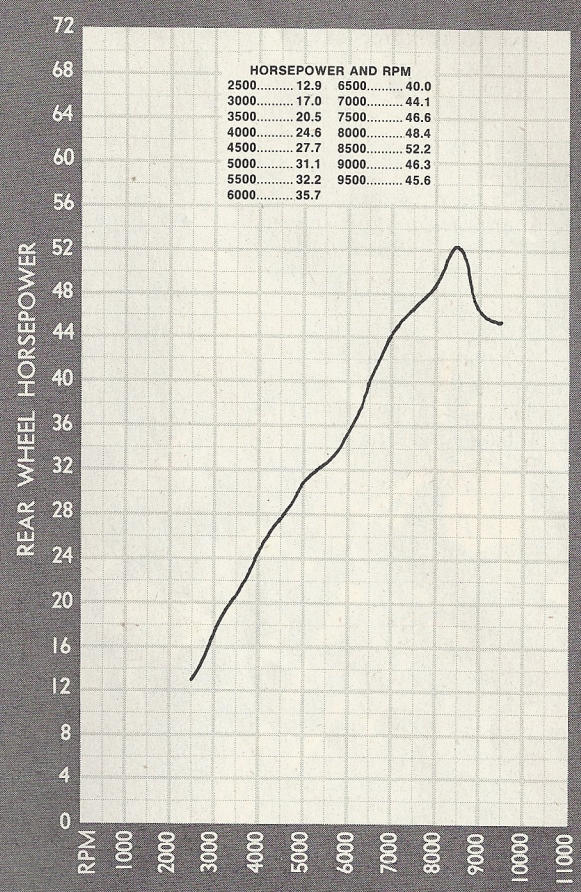
## SPECIFICATIONS

Engine type.....	four-stroke
Cylinder arrangement.....	transverse parallel four
Valve arrangement.....	single overhead cam
Bore and stroke.....	61mm x 63mm
Displacement.....	736.4cc
Compression ratio.....	9.0:1
Ignition.....	battery/2 coils/2 points
Charging system.....	12-volt, AC generator, silicon rectifier
Carburetion.....	four 28mm Keihin slide/needle
Air filter.....	disposable paper element
Lubrication.....	dry sump, 3.7 qt. (3.5 L.) tank capacity
Primary drive.....	two single-row chains, 1.708:1 ratio
Clutch.....	wet, 7 drive plates, 7 driven plates
Starting system.....	electric, primary kick
Transmission.....	5-speed, left-foot shift
Overall drive ratios.....	(1) 11.38; (2) 7.78; (3) 6.07; (4) 4.99; (5) 4.27
Transmission sprocket.....	18-tooth
Rear wheel sprocket.....	48-tooth
Drive chain.....	3/8-in. pitch, 3/8-in. width (#530)
Front forks.....	5.6 in. (142mm) travel
Rear shocks.....	5-way adjustable, 3.3 in. (84mm) wheel travel
Front brake.....	11.7 in. (297mm) disc, single-action hydraulic caliper
Rear brake.....	drum, single-leading shoe, rod operated
Front tire.....	3.25 x 19 Dunlop rib
Rear tire.....	4.00 x 18 Dunlop block
Frame.....	tubular steel, double downtube
Steering head angle.....	27 degrees from vertical
Front wheel trail.....	3.7 in. (94mm)
Wheelbase.....	58 to 59.3 in. (147 to 151cm.)
Length.....	85.6 in. (217cm)
Weight.....	501 lb. (227 kg) dry
Weight distribution.....	46.8% front, 53.2% rear
Ground clearance.....	5.5 in. (140mm) at sidestand lug
Seat height.....	33 in. (838mm) unladen
Handlebar width.....	31.5 in. (800mm)
Handlebar grip height.....	44.5 in. (113cm)
Footpeg height.....	12.8 in. (325mm) right, 13.7 in. (348mm) left
Instrumentation.....	speedometer, tachometer, tripmeter resettable to zero
Speedometer error.....	30 mph indicated, 28 mph actual 60 mph indicated, 55 mph actual
Gas tank.....	steel, 4.5 gal. (17 liters) capacity
Gas consumption.....	42.6 mpg (18.1 km/L.)
Best 1/4-mile acceleration.....	13.65 sec., 98.6 mph (158.6 kph)
Stopping distance from 30 mph.....	36 ft., 1 in. (11m)
Stopping distance from 60 mph.....	136 ft., 3 in. (41.5m)
Sound level as per SAE JX 331a.....	83.5 db(A)
Suggested retail price.....	\$2112 East Coast \$2099 West Coast

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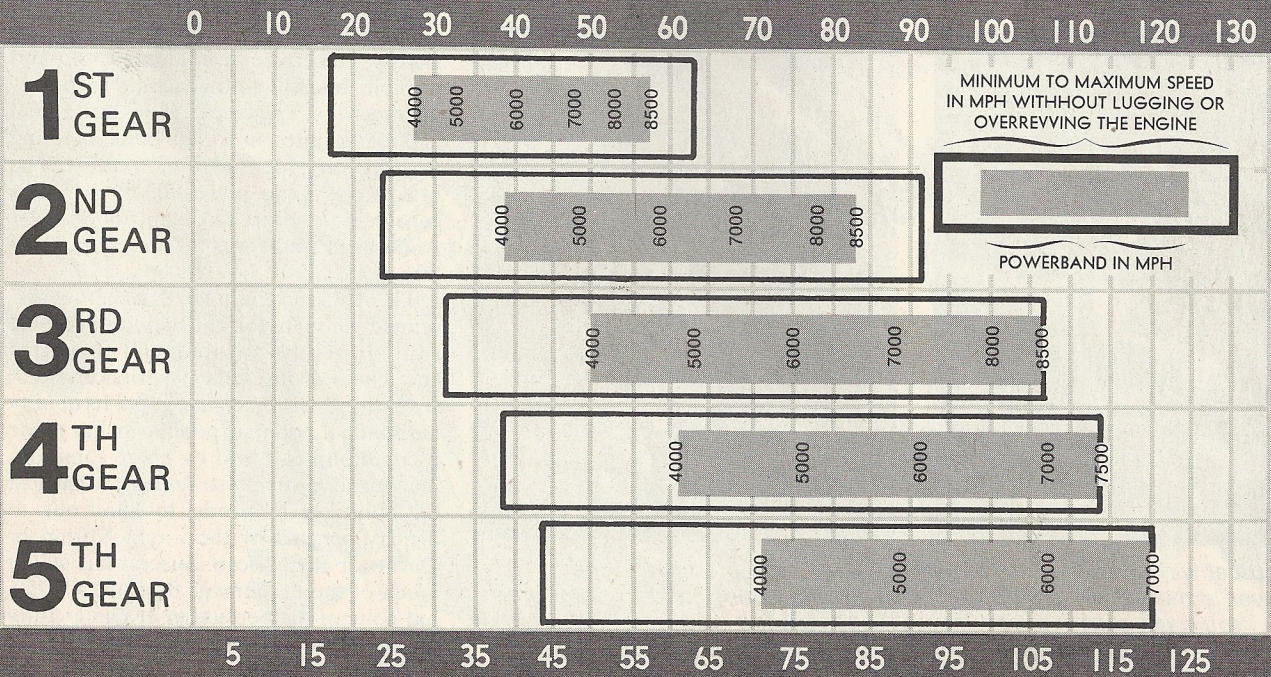


This graph shows the amount of rear wheel torque available at any speed, at any rpm, and in any gear. Maximum acceleration will be obtained by shifting gears at the points where the consecutive lines intersect.



This graph shows the amount of horsepower delivered to the ground as measured by a Patraco MKIII rear wheel dynamometer. These figures may vary from the manufacturer's claims, or from those obtained on a different dynamometer.

## MILES PER HOUR



MINIMUM TO MAXIMUM SPEED IN MPH WITHOUT LUGGING OR OVERREVING THE ENGINE

POWERBAND IN MPH



other manufacturers, Honda doesn't offer an optional second disc for the front end.

The rod-operated rear brake is very sensitive and progressive. But maximum rear wheel braking and control are limited by the hopping and chattering the rear wheel often goes through during hard braking, particularly over rough surfaces or if you downshift while braking hard. Neither brake ever faded perceptibly, but the front brake usually squeaked unless applied with a great deal of force. Rider control during hard panic stopping is aided by the firm front suspension, which keeps the front end from nosediving excessively.

**RELIABILITY DURING TEST:** The CB750 has earned a reputation for reliability since its beginning, and our K5 model upheld the tradition. Nothing broke or gave us any trouble whatsoever. We adjusted the chain once and lubed it. Otherwise, the engine was always clean enough to eat off because it didn't leak or ooze a bit of oil. The bike burned absolutely no oil and got 42.6 miles per gallon of gas. The CB750's apparent reliability makes spending \$2100 on one easier to swallow.

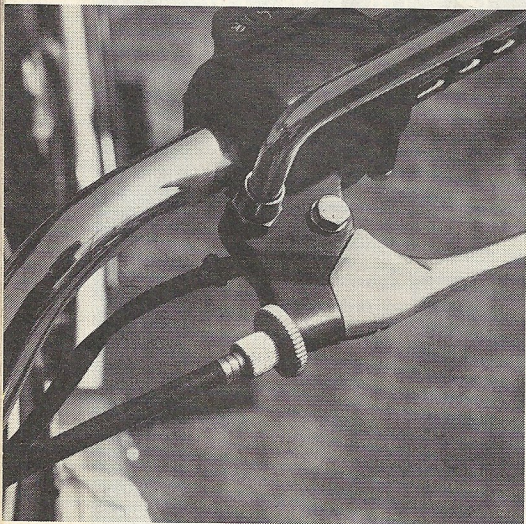
With four carbs, four sets of tappets, and a battery-coil ignition with two sets of points, maintenance on the CB750 is a little more complicated than on some other big machines, but still relatively simple.

**SUMMARY AND CONCLUSION:**

The Honda CB750 K5 remains pretty much the bike that it was in 1968, but a little tamer and more refined. The four-cylinder engine has a wealth of usable power and is smooth, quiet, and gets good gas mileage. Out-and-out horsepower isn't as great as some other 750s, but the incredibly wide power range of the engine makes up for it over and over again.

The bike's handling requires some rider adaptation because of the high center of gravity. Once you have adapted, you find it stable, but still a little lacking in cornering precision. The suspension is quite good and contributes much to both handling and the very high level of comfort. The brakes are quite powerful, but it takes considerable effort to obtain that power. And our test bike was absolutely trouble-free.

The CB750 is a bike that's mild and refined enough for the novice big bike rider but sophisticated and powerful enough not to insult the experienced rider. If anything, it's almost 100 good. Its quality has made it popular; popularity has made it commonplace; and by being commonplace, and by being so refined, it has lost the ability to be exotic, to stand out, to display personality the way a Norton or Ducati or Benelli can. Success has stolen much of the excitement from the CB750, but none of the perfection. It's an awfully good motorcycle, perhaps too good to be exciting. **CG**



*The electrical wiring running to the clutch lever is part of the starter interlock. You can't start the bike unless the clutch is pulled in or the gearbox is in neutral.*



*The rubber tab added to the side stand is designed to drag and fold the stand up if you leave it down accidentally. It only worked about half the time.*