

HONDA CB-750 K-3 STREET MACHINE

Those four cylinders sing such a beautiful melody.

The 1969 model year was the Year of the Multi. Triumph and BSA introduced their 750 triples late in '68, Kawasaki rewrote the two-stroke book with a three cylinder 500, and Honda made an impossible dream a reality—the CB750; a production four cylinder, overhead cam touring machine that sold for a reasonable price. As an extra bonus, the big Honda came standard with a hydraulic front disc brake—also a production first.

The ensuing years have seen the emergence of more and bigger multis. There are triples as small as 250 and as large as 900. Suzuki broke new ground with a three-cylinder, liquid cooled 750 two-stroke, and even Benelli has gotten into the act, surprising everyone with the prototype of a very Japanese-looking 750 six.

In the meantime, the British triples have been plagued with various disasters ever since their inception. Incessant oil leaks, clutch problems, frequent unavailability and finally, the complete demise of the BSA/Triumph organization have hampered the success of the 750 threes.

The Kawasaki 500, and its new big brother, the 750, did not at first make the grade as first rate touring machines. They are definitely a pair of dragstrip scorches, but handling quirks and engine peakiness kept these triples from being top-notch touring mounts until this year, when they underwent modifications.

How has the CB750 fared during these four years? That's the question we wanted to answer when we selected our test bike for this month. The Four has an unprecedented reputation for smoothness, comfort, performance and reliability. The 1973 version is called the CB 750 K3.

A close inspection reveals very few changes since the original 1969 model. For some companies, this would indicate a reluctance to spend the bucks for necessary modifications. In the case of the CB750, it indicates that, for the most part, Honda did their homework on the original design. The exception to this would be the early drive chain problems that caused the destruction of many 750 engine cases, but all that seems to be pretty much resolved now.

The engine, unchanged for '73, has a one-piece forged crankshaft

turning on five main ball-bearings, for minimum crank flex and maximum bearing life. The connecting rod big-ends use pressure-fed plain-bearing inserts at each journal.

The single overhead cam is driven by a long chain threaded over sprockets located in the center of the cam and crankshaft. A spring-loaded adjustable tensioner at the rear of the cylinders assures proper chain preload, and allows any slack to be taken up as the chain stretches slightly. The cam lobes lift directly under the rocker arms, with clearance adjustment screws at the valve end of each rocker.

The 750 uses a dry-sump lubrication system to supply oil to all the vital engine, clutch and transmission parts. One side of a dual oil pump forces oil through passages in the engine cases to lubricate those parts. The oil then drains back down into the sump. From there, the second half of the pump picks up the oil and returns it to the 3.7 quart oil tank on the right side of the machine. The purpose of the dry sump system is to circulate the oil away from the hot engine long enough to allow the lubricant to cool off.

The geared primary drives a multi-plate wet clutch and a five-speed constant-mesh gearbox. The kickstart mechanism is the primary type, which means that the engine can be kicked over with the transmission in gear and the clutch disengaged. Final drive is from an 18 tooth countershaft sprocket at the left end of the transmission case.

The CB750 uses a conventional battery/coil ignition, with dual breaker points located at the right end of the crankshaft. One set of points fires the two outside cylinders; the other set fires the two inside cylinders.

The electric starter is tucked away in the crankcases, beneath a chrome plated cover at the rear of the cylinders. Have you ever climbed aboard an electric start motorcycle, and inadvertently left the transmission in gear and the clutch engaged when pushing the starter button? It's tough trying to look cool when the bike lurches forward over your buddy's toe, or falls off the stand. This can't happen with a CB750K3, because Honda thoughtfully wired the starter motor

through a safety switch. The starter only works when the gearbox is in neutral, or if in gear, when the clutch is disengaged. That's nice.

The CB750 breathes in through four 28mm Keihin concentric float carbs, and exhales via four separate pipes and mufflers. The exhaust system is neat and impressive; all four pipes emerge from the engine equally spaced and at the same angle. The upswept mufflers are tucked in nicely, with a heat guard fitted to the top muffler on each side.

The front suspension is of the telescopic variety, with 5.6 inches of front wheel travel. The rear suspension utilizes shock/spring units, with five-way adjustable springs; rear wheel travel is 3.3 inches.

A single-action hydraulic disc caliper is bolted to the left fork slider leg. New this year is a small plastic "fender" covering the rear portion of the disc. The fender prevents the disc from slinging water into the rider's face while riding in the rain. A rod actuated, single-leading-shoe drum brake provides rear wheel stopping power.

The K3 is a bright, colorful machine—in contrast to the darker, more subdued shades used on previous models. The tank and side panels are painted candy orange metalflake. Black and gold inserts decorate the tank, and each insert is pinstriped in white. Large, three-dimensional letters spell H-O-N-D-A on each side of the tank.

The long, well padded seat is hinged on the right side, with a key operated latch on the left. Beneath the rear of the seat are two metal hooks that Honda calls "helmet holders." You just hang the "D" rings of your helmet on one of these hooks and flip the seat shut. A metal bar on the underside of the seat closes off the open end of the hook, preventing removal of the helmet until the seat is unlocked and raised. Unless a thief with a jackknife comes along, your helmet is as safe as your motorcycle.

The fenders are chrome, as are the headlight, taillight and turn signal brackets. The outer engine covers are highly polished alloy, and the die-cast crankcases, cylinder and cylinder head are painted metallic silver.

Japanese frames are perpetually

criticized for their rather hokey looking machine-made welds, but the welding on the K3 is better than on any other production Japanese bike I've ever seen. There are a handful of motorcycles on the market with hand-welded frames; only those few have nicer looking welds than the CB750.

The overall quality of finish and workmanship of the 750 is exceptional. There is no orange peel in the paint; the finish is like glass. The chrome and other brightwork shines with a high gloss. The black anodized aluminum hand-lever brackets and disc brake caliper provide just the right amount of contrast to all the gleam and glitter. The K3's look of quality alone will make many riders feel that they have gotten their money's worth.

Kickstarting the Honda is easy, as easy as using the electric starter. Good thing it's easy, because when the engine is cold, you generally have to start it two or three times before it will keep running. In typical Honda fashion, the engine is extremely cold-natured; it requires from four to eight minutes of running before throttle response is worth a damn.

The starting procedure is simple, once you get the key into the ignition lock. The lock is located beneath the front edge of the fuel tank; when you're seated on the bike, getting the key into the lock requires a few seconds of fumbling. Once, when wearing gloves, I had to climb off the bike in order to insert the key into the lock.

So, after turning on the ignition, move the petcock lever to "on," and flip the choke lever all the way up. Crack the throttle open slightly, and use a touch of the button or one medium sized romp on the kickstarter to bring life to the Four. Be prepared to do it again, though; usually the bike dies three or four seconds after the first start, regardless of how you work the throttle. Sometimes really wicking the throttle open will keep the bike running, but it's far better to start the engine two or three extra times rather than score the bearings and cams due to excessive rpm before the oil can circulate.

After 30 seconds or so, the choke can be opened slightly, but allowing the rpm to drop below 1500 may result in stalling. After several minutes, depending upon the outside temperature, the engine will respond sufficiently and the motorcycle can be ridden off without difficulty.

As soon as you sit on the 750, you become aware of its size. The footpegs are placed far apart, the seat is fairly high, and even though the fuel capacity is four and one half gallons, the engine hangs out beneath either side of the tank. As you straddle the

seat and move the bike between your legs, the 750 feels top-heavy. Once underway though, the seating position feels good, and some of the top-heaviness goes away. The handlebars will probably suit most riders, as will the footpeg location. Short-legged riders may have to stretch a bit to reach the ground when stopped, but not nearly as much as with the early CB750s.

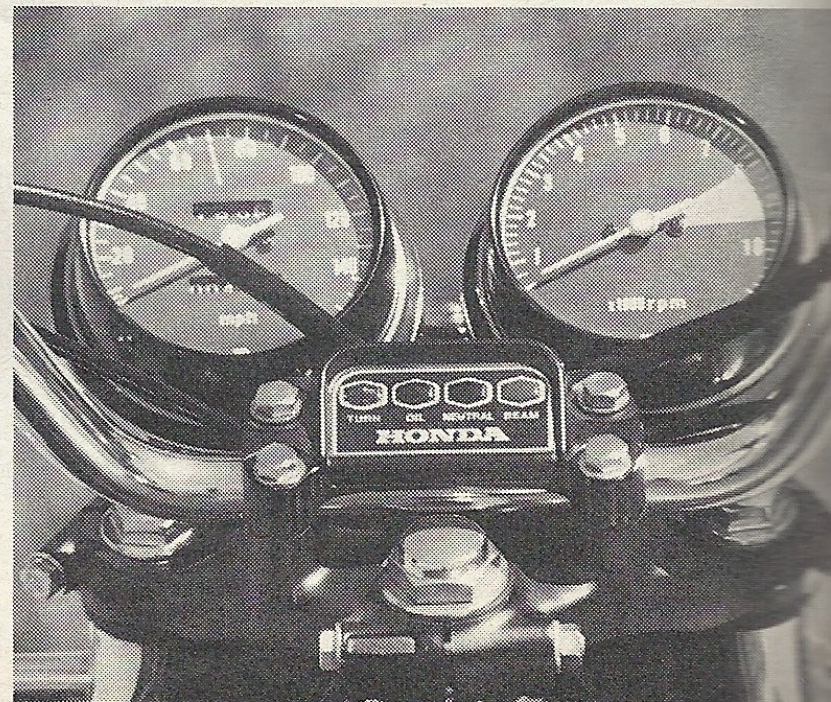
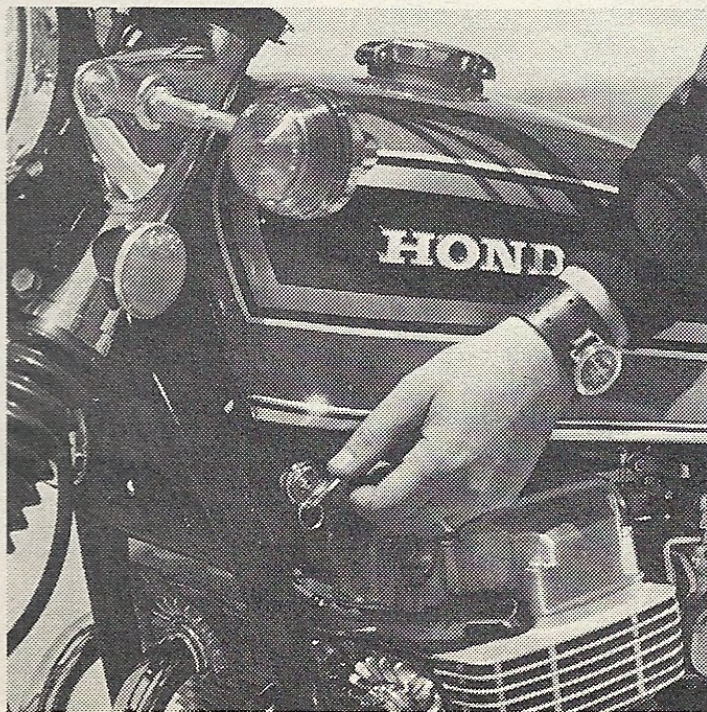
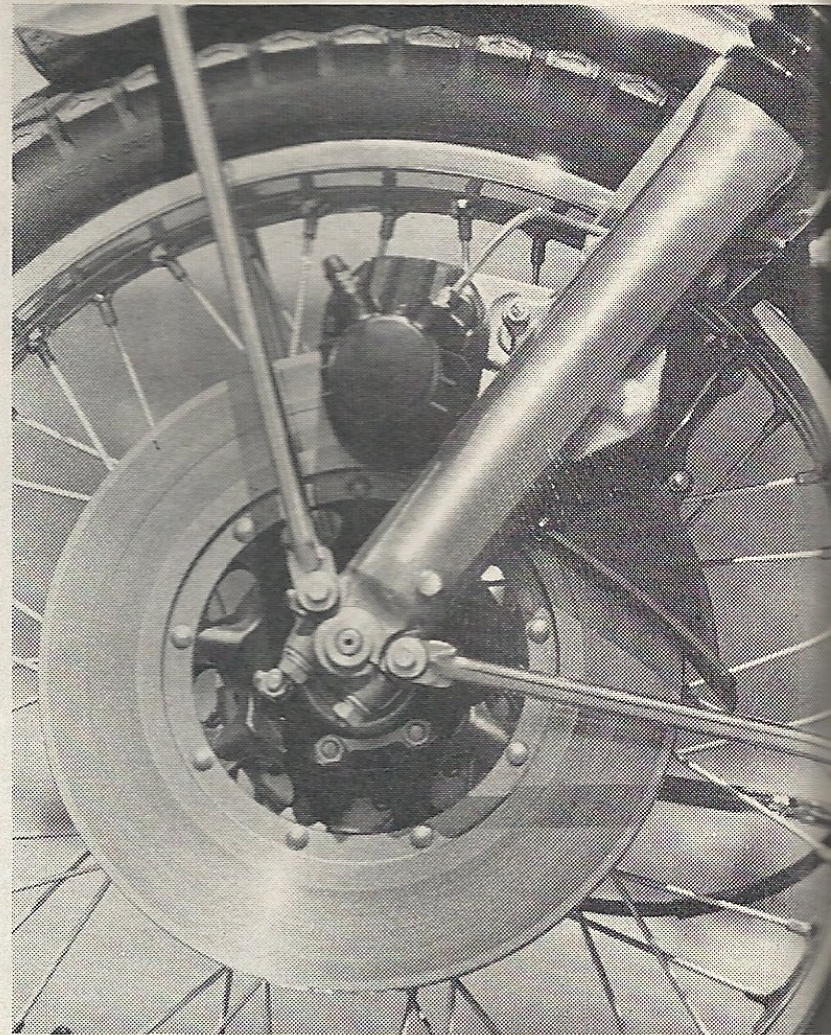
Getting the machine underway is no problem whatsoever. The clutch works smoothly and easily; so easily, in fact, that it almost feels like there isn't enough spring tension to keep the clutch from slipping. But don't worry, once this clutch is engaged, no way is it going to slip. No way.

On level ground, the bike will start off with even the smallest of throttle openings and a minimum of clutch slippage. A little more throttle is necessary when pulling out on an uphill grade or while riding double. Twice during the test, I had to start off from a traffic light with two large, loud trucks on either side.

Even though I could not hear the Honda's engine from inside my helmet, both takeoffs were smooth and positive.

Shifting gears is easy, but the gearbox itself is noisy. Unless you synchronize the engine speed perfectly when shifting gears, the gearbox will reward you with a loud "clunk." There is also a high-pitched gear whine during acceleration. The harder the acceleration, the louder the noise; each gear has its own distinctive whine. Perhaps the reason this gear noise is so highly audible is because the engine and exhaust are so quiet. The Four has a powerful exhaust note, but the quad mufflers keep the noise level within legal limits. The engine does not emit any loud mechanical clatter either; it is probably noisier at idle than at 4000 rpm.

The overall gear ratios are fairly tall, and the gears are pretty evenly spaced, but due to the incredible powerband, the engine doesn't much care what gear it's in or what the rpm is:



turn the throttle and the bike goes faster. If you want to go faster in a big hurry, downshift. If there's no big rush, just leave it in whatever gear it's in and open the throttle; the bike still accelerates, but just doesn't get all worked up about it.

It's impossible to tell where the powerband begins and ends; in my opinion, you're within the powerband anytime the engine is running. Here's an example: The recommended idle speed is between 900 and 1000 rpm. As an experiment, I slowed the bike down to approximately 750 rpm in *fifth gear*! The speedometer isn't very accurate at low speed, but 750 rpm in fifth equates to about 12 mph. Then I carefully opened the throttle, and the Four chugged once or twice and began accelerating—slowly at first, then faster and faster until it reached top speed. This kind of engine flexibility can be found only in a multi-cylinder

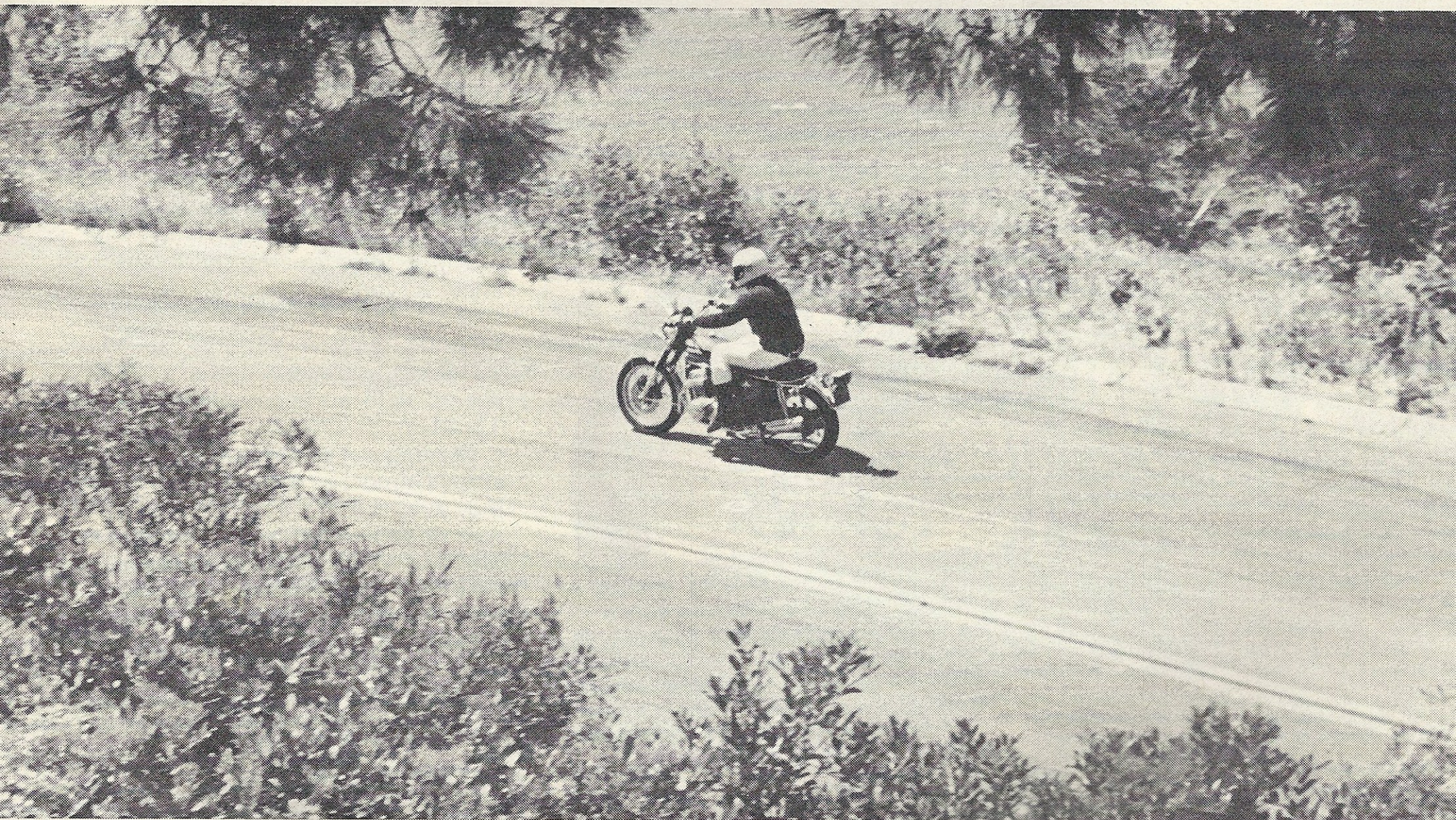
motorcycle; it has helped the CB750 earn its reputation as a real lugger.

Engine response is great, except when the throttle is quickly snapped wide open below 2000 rpm. Then the bike simply falls flat on its face and slows down like the ignition had suddenly been turned off. Sometimes this can be hazardous, especially in the lower gears; when you return the twistgrip to about mid-throttle, the engine suddenly takes hold and launches the bike forward, unexpectedly. Constant-velocity carburetors, as used on the CB450, would cure this problem completely. The engine works so well in all other respects that it's a shame to have this giant dead spot lying around waiting to bite you.

Riding on city streets and through traffic is relatively pleasant with the 750, provided that you don't want to play racer. You are constantly aware that this is *not* a 250-pound cafe

racer; the Four weighs over twice that much, and a lot of the weight is on the front wheel because of the 191-pound engine. If you ride the corners with these facts in mind, the bike is predictable and handles well. When you try to really heel it over, the high center of gravity fights back and tries to keep the bike upright. Once you get used to the 750, you can charge the corners with a bit more tenacity, but it takes time and some dedicated practice.

Riding the K3 in stop-and-go traffic is surprisingly easy, despite the top-heavy condition. The low-speed stability is excellent, and the engine will allow the bike to move along slower than a walking pace without jerking or bucking. I could always keep my feet on the pegs until coming to a complete stop; and I could pick them up as soon as the bike began moving again. However, maneuvering sharply to the

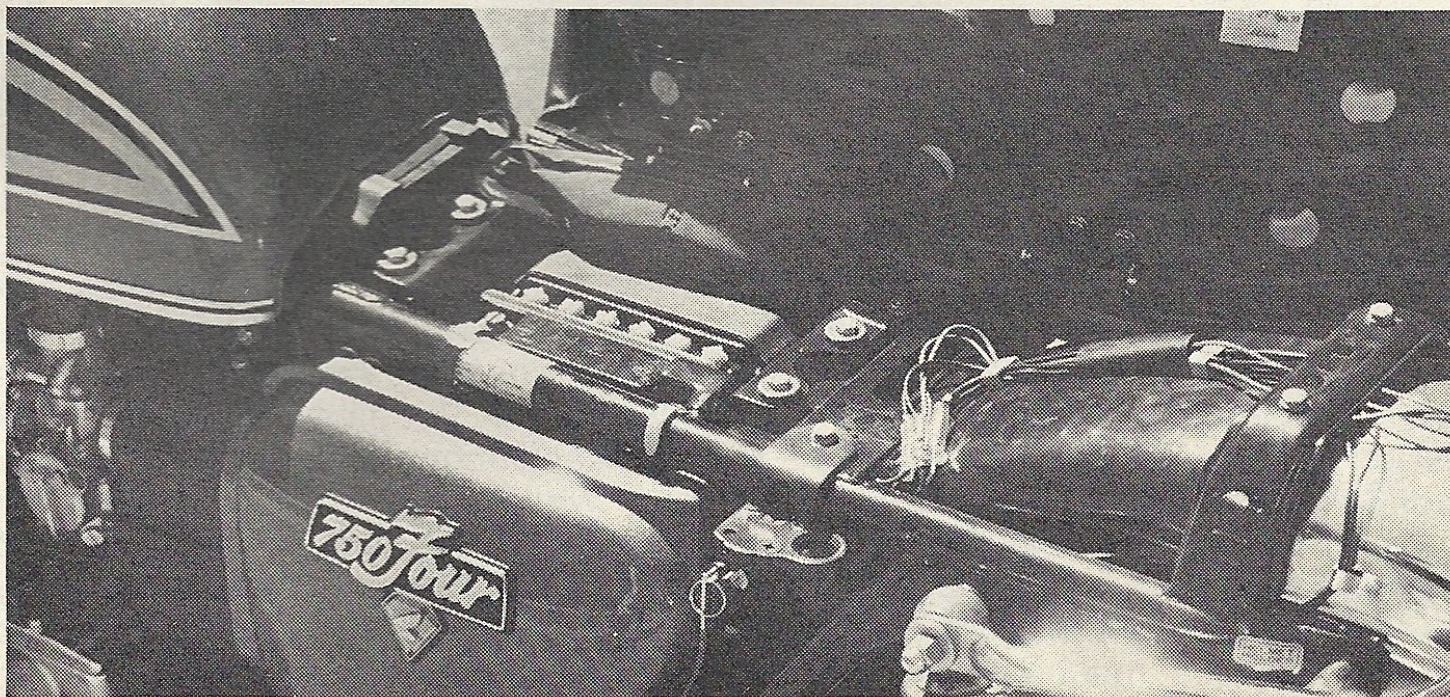


The single-action front disc caliper is compact but efficient. A plastic shield protects the rider from rain water tossed off the disc.

The ignition key placement is poor; the rider can't see the lock while seated.

The speedometer and tachometer are big and easy to read.

The lockable seat flips up for access to the battery and tool kit. A small door in the seat base contains the owner's manual.



right or left at slow speeds was not so good. The high center of gravity took over again; occasionally I'd have to dab my foot to keep the bike stable.

Twisty back roads or winding mountain highways are not the bike's forte, either. The high center of gravity announces itself as soon as you charge into a tight turn too fast. And it's often difficult to hold a steady line through a long corner; at first, the bike wants to straighten up and move to the outside of the corner. However, as the machine slows a bit, the high cen-

stantly makes you feel like a roadracer.

But, a touring bike it is, 'cause that's what it was made to be. Turn off that snakey, winding road onto a highway with reasonable bends, and the Four will show you a whole new personality. It cruises at 70 or 80 mph effortlessly, with lots of power still on tap if needed. It tracks straight and true, unaffected by crosswinds or surface irregularities. Gusting blasts of air from passing trucks don't bother the 750 at all. The freeway rain grooves make

stiff or tired or sometimes bored. You try to alleviate that condition by squirming around on the bike, adjusting your riding position, or stretching your limbs. It's nice to know that your motorcycle will stay aimed if you leave it alone for a few seconds.

On the 750 you'll never have any trouble keeping up with traffic; power is always there, at any speed, in any gear.

Contrary to popular belief, the CB750 *does* vibrate a little bit. It begins at about 4800 rpm and continues until 6000. There isn't enough vibration to make your hands and feet numb, but you can feel it in the bars and footpegs. Within this 1500 rpm span, your vision in the rear view mirror is blurred badly; it is impossible to discern who or what is in back of you. Since 70 mph is equivalent to about 4800 rpm, most freeway and highway riding requires you to guess what's going on behind you. I don't like 4000-pound surprises.

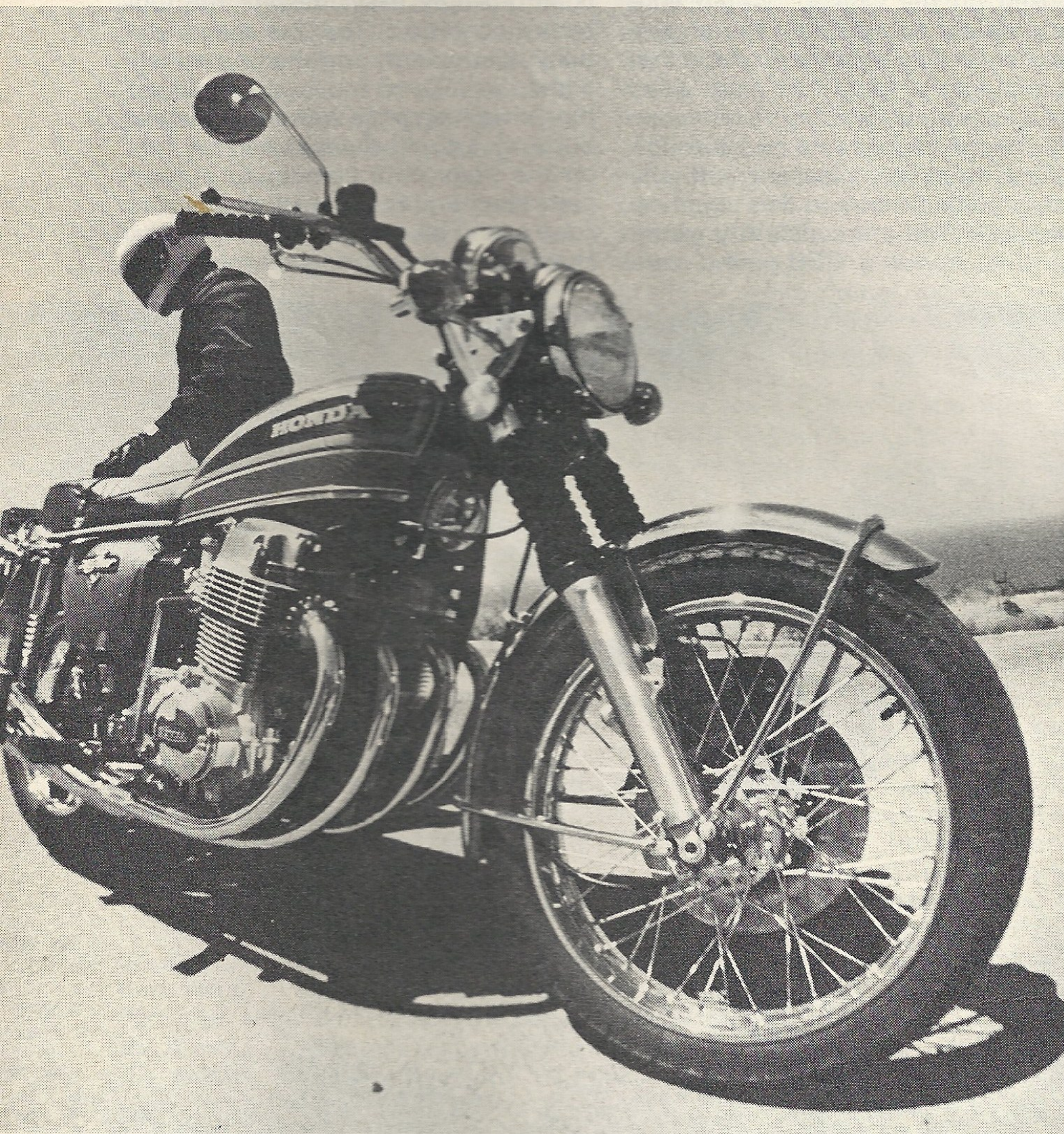
This blurry rear vision is my only strong objection to the vibration; it doesn't feel as bad as it looks. The only other reason it is noticeable is the absolute lack of vibration at other engine speeds. The Honda at its shakiest is still smoother than most other bikes at their smoothest.

The Four's quarter-mile performance is very respectable, and consistent. The fastest ET was 13.22 seconds, with a terminal speed of 99.45 mph. One run netted a 100.73 speed, with an accompanying ET of 13.41.

Coming out of the hole at the drag-strip is almost as easy as normal starting. Just run the engine up to 4000 rpm or so and let fly the clutch lever. There is no fishtailing, no wheelies, no bogging; the 750 smokes off in a straight line. Ten or twelve continuous runs did not dampen the Honda's enthusiasm; the fastest time was recorded on the ninth of twelve consecutive passes.

Stopping is another thing the CB750 does exceptionally well. The disc brake is capable of locking up the front wheel at 70 or 80 mph. But locking it up won't be done accidentally; the amount of hand-lever pressure necessary to lock the wheel increases with the speed of the bike. I like that, because it won't dump you on your gourd during a panic stop. The disc setup is almost fade-free. Continual downhill braking or repeated panic stops are always smooth and consistent.

The rear drum brake is good, but it has one shortcoming: when you're braking over rough or bumpy ground, you can feel the pedal moving up and down under your foot, indicating that the braking pressure is fluctuating

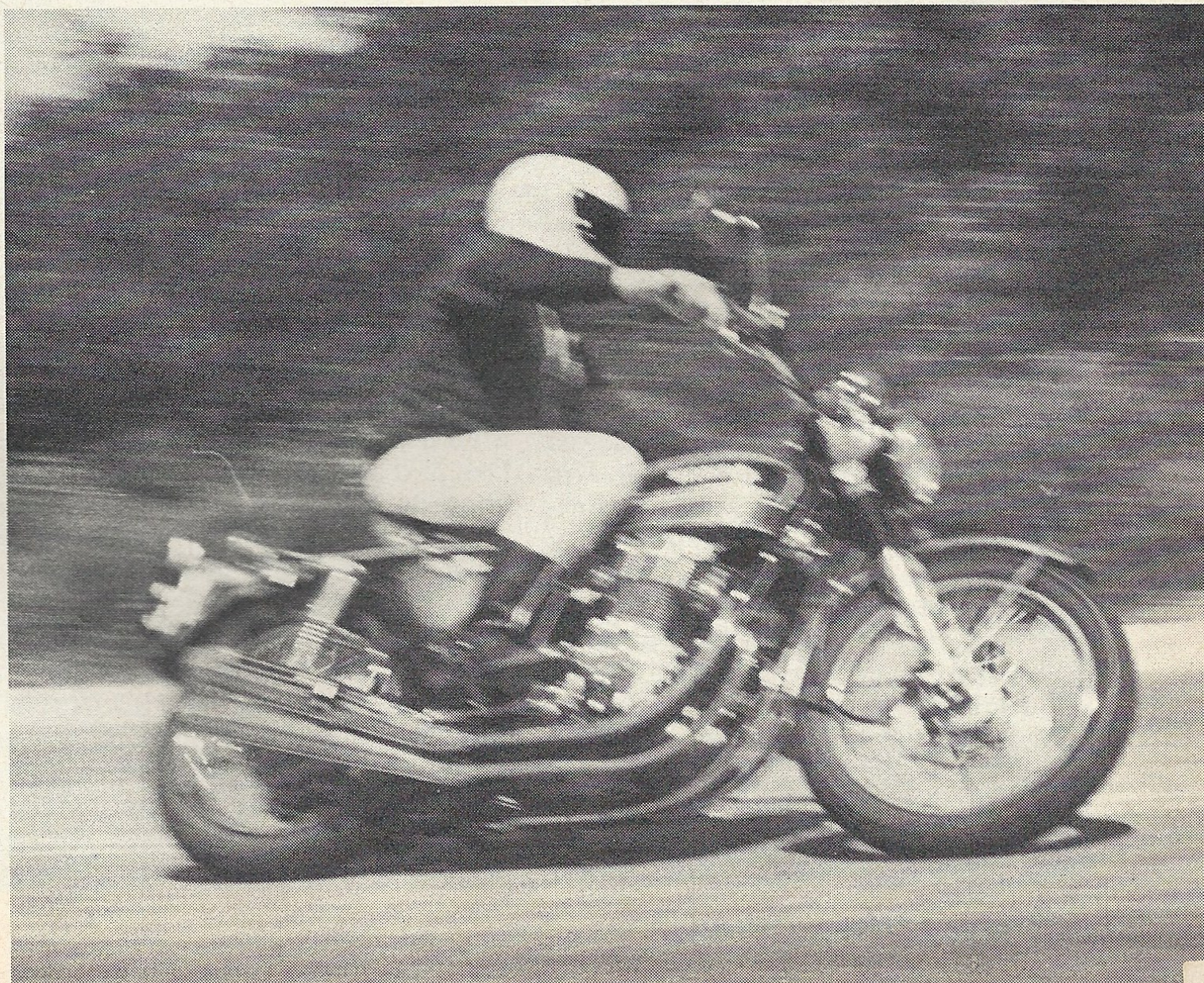
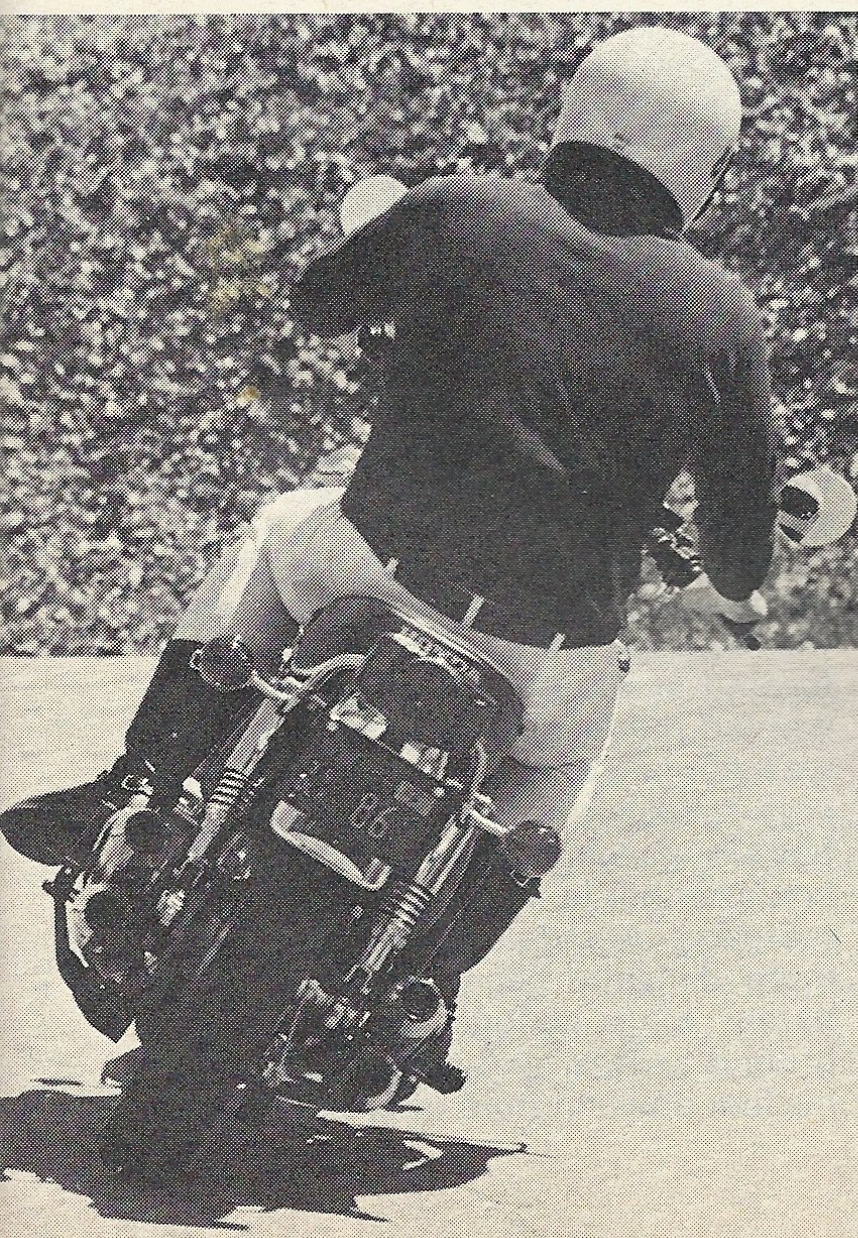
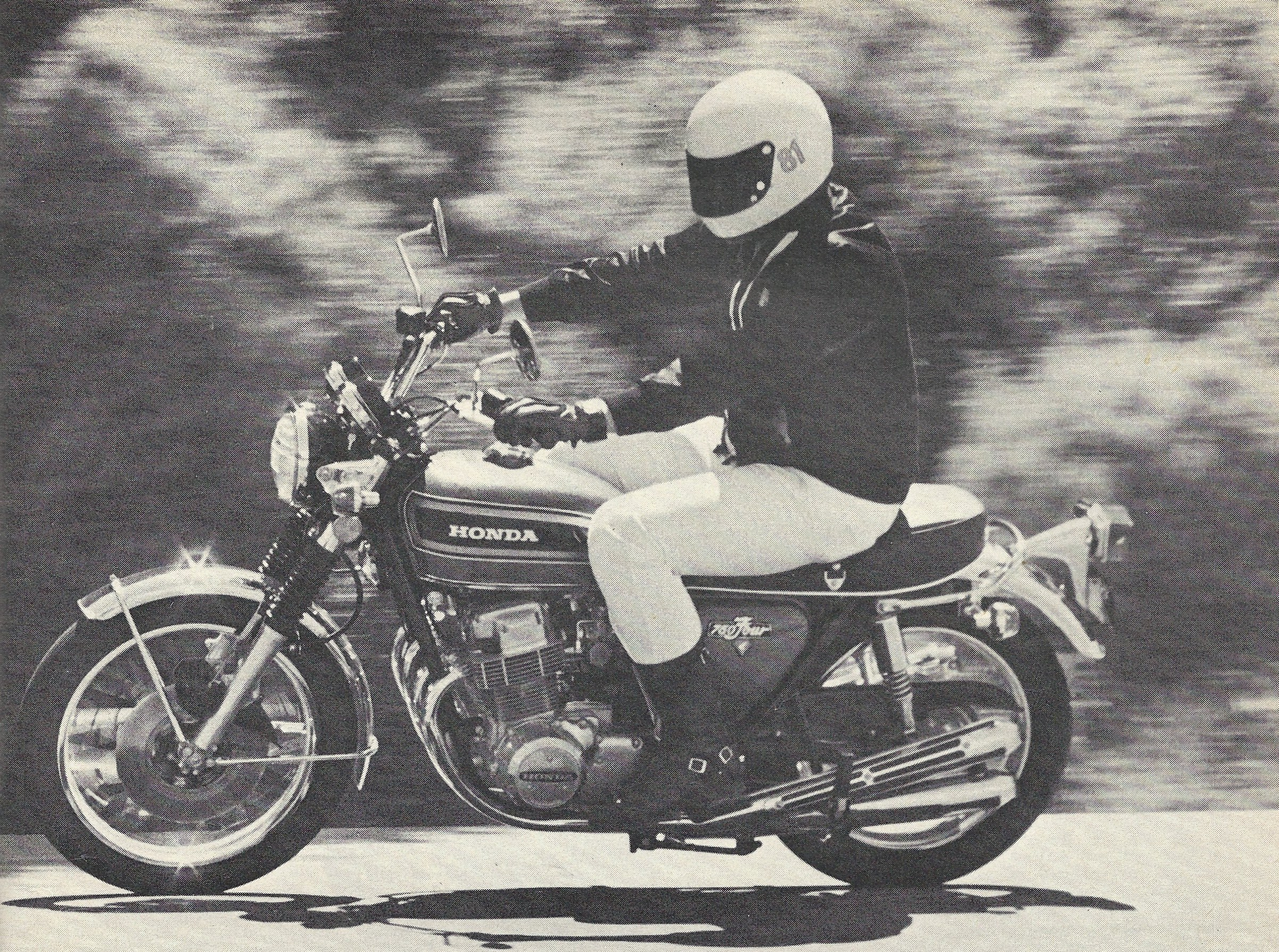


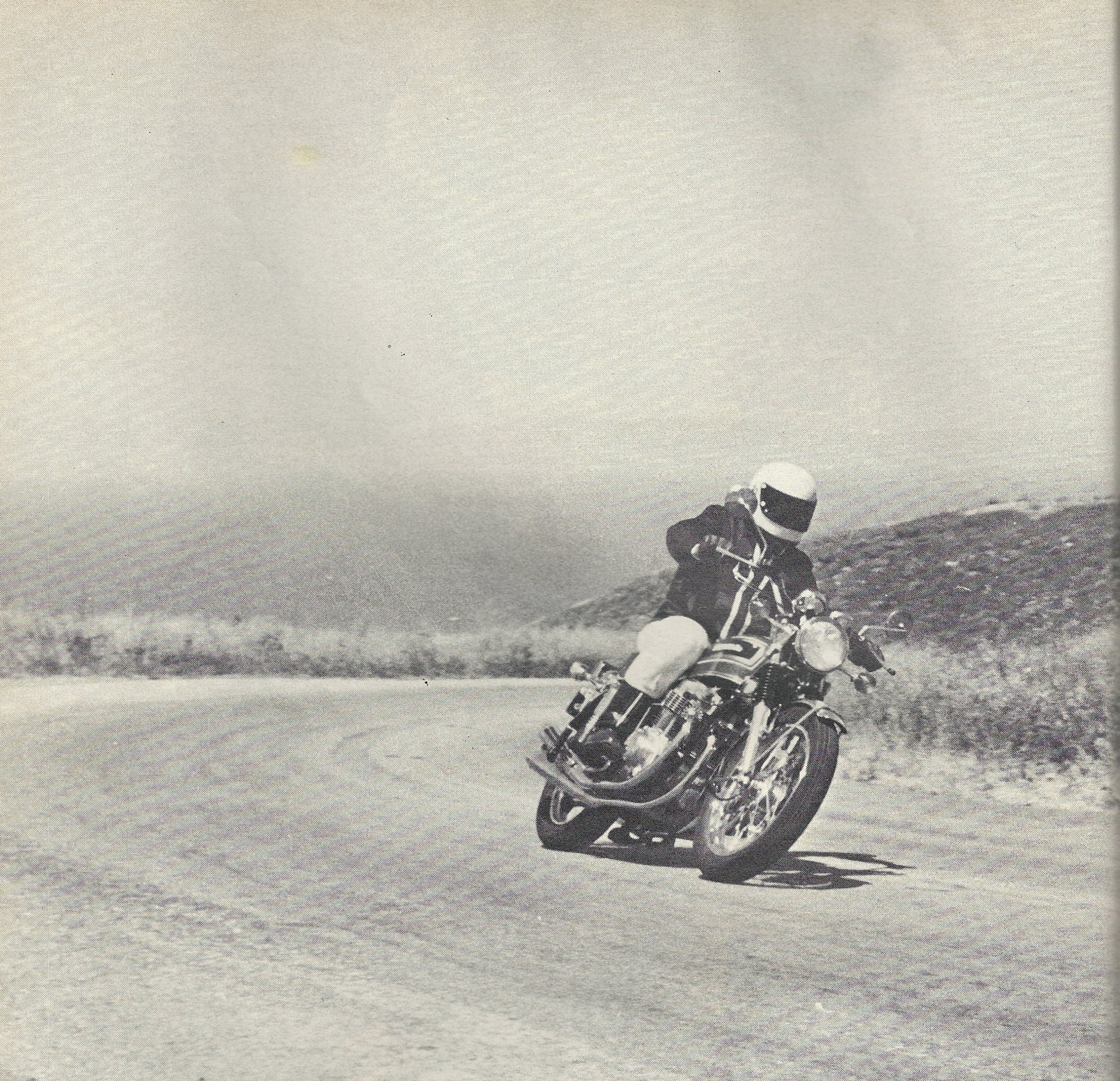
ter of gravity then makes the bike lean over farther, which causes it to move to the inside of the corner. This is what I meant earlier when I said that cornering the 750 could be improved with practice; there is one speed at which you can take each corner without all the wandering first one way and then the other. Practice teaches you how to find that speed.

On the other hand, don't get the impression that the CB750 is a squirrely handling motorcycle; it certainly isn't. You never have the feeling you're going to be pitched off or that the bike is out of control. It's just that the Four is not one of those machines that in-

stantly makes you feel like a roadracer.

But, a touring bike it is, 'cause that's what it was made to be. Turn off that snakey, winding road onto a highway with reasonable bends, and the Four will show you a whole new personality. It cruises at 70 or 80 mph effortlessly, with lots of power still on tap if needed. It tracks straight and true, unaffected by crosswinds or surface irregularities. Gusting blasts of air from passing trucks don't bother the 750 at all. The freeway rain grooves make





radically. A floating rear brake or a cable-operated brake would provide more consistent, controllable stopping power at the rear.

The CB750 is one of the best bikes available for long-distance riding. The seat is soft, well padded, and comfortable in any number of seating positions. When travelling solo, the rider usually occupies the middle portion of the seat. With a passenger aboard, the rider moves forward and sits on the front part of the seat. In either position, the seat is comfortable, and the relationship between the seat, bars and footpegs remains acceptable.

The suspension is generally adequate, but two-up riding will allow the

centerstand and sidestand to ground out while cornering. Turning the rear-shock spring adjustments to their stiffest settings helps a great deal, but then the ride at the rear becomes very firm and abrupt, even with both riders aboard.

I did not like the operation of the twistgrip. It is by no means a quick throttle, requiring almost half a turn to get from idle to wide open. And you really have to put out some effort to turn it on. Because the 750 uses one cable to open the carburetors, and another separate cable to close them, the spring tension on the twistgrip could be considerably less with no danger of the throttle sticking open.

The stiffness of the throttle caused my right hand to tire on long rides, especially the rides on back roads, where I worked the throttle a lot.

After riding the Honda for awhile, I made a slightly disturbing discovery; the footpegs, being very far apart, are located at exactly the place where I wanted my legs to be when the bike was stopped at traffic lights. This was only mildly irritating to me, since I have long legs and was able to put my ankles either in front of or behind the footpegs. A shorter rider may have more difficulty because his legs are barely long enough to reach the ground as it is, and stretching to put his feet down in front of or behind the

pegs makes him get up on his toes.

The speedometer and tach are big and easy to read, day or night. The speedometer is about 4% optimistic, and the tach needle is a little lazy about keeping up with engine rpm, especially while the engine is revving in neutral.

The handlebar mounting-bracket incorporates a panel of four indicator lights; one each for turn signals, oil pressure, neutral, and high beam. The turn signals are also equipped with a buzzer that beeps intermittently when the signals are in use, to remind you to shut the signal off after making the turn. The two front turn signals are fitted with dual filament bulbs. One filament lights up when the headlight is on, and permits the signals to function as running lights. The other filament is much brighter, and performs the normal turn-signal function.

All the switches and controls are easy to get at (with the exception of the ignition switch), and they worked perfectly during the test. The right handlebar grip houses the headlight on-off switch and the ignition kill switch. The left grip contains the high-low beam switch, turn signal switch and horn button. The horn works every time, but it is a mealy-mouthed polite little tooter, just like all motorcycle horns.

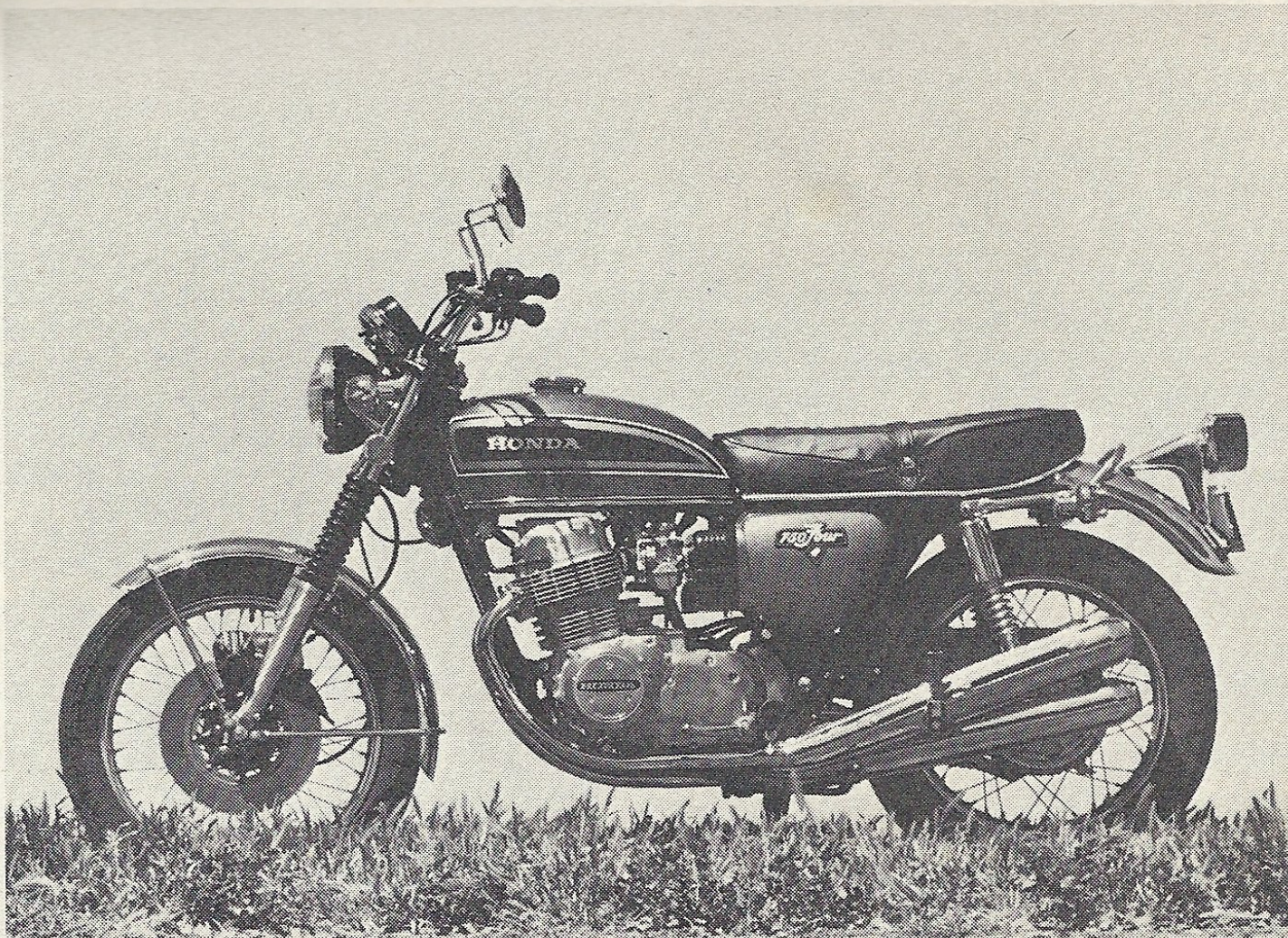
The CB750 was reliable throughout the test. Nothing broke, fell off, or came loose. The engine and front forks remained 100% oil-tight, with not even the slightest trace of seepage or leakage anywhere. Engine performance was consistent, as were clutch and gearbox operation. Gas mileage averaged 31.7 mpg for the whole test, including a dozen and a half runs down the drag strip.

When routine maintenance becomes necessary, most everything can be handled by the average owner with a minimum of tools. One major exception would be tune-ups, where precise carburetor synchronization requires the use of a special gauge set. A trip to the dealer is usually necessary for this type of service.

So, after testing and evaluating, is the 1973 CB750 worthy of the reputation earned by its predecessors? Yes. It is smooth, reliable, comfortable and fast, to satisfy the requirements of the high-speed tourist.

It's not a cafe racer, so if you have a burning desire to be a back-road hot-shoe, look elsewhere. With a few minor exceptions, everything on the bike works the way it was designed to work, and does so for a long time. It's a whole bunch of motorcycle for the money, and besides, it really sounds neat. On rainy days, you could just go out into the garage and listen to it . . .

Paul Dean.



HONDA CB750 K3

Engine type	four stroke, overhead cam, four cylinder
Bore & stroke	61mm x 63mm
Displacement	736.46cc
Compression ratio	9.0:1
Horsepower	67 at 8000 rpm
Ignition	battery/coil
Carburetion	four 28mm Keihin concentric
Lubrication	dry sump
Length	85.6 inches
Wheelbase	57.3 inches
Ground clearance	5.5 inches
Dry weight	502 pounds
Front tire	3.25 x 19 Dunlop F6
Front brake	hydraulic disc
Rear tire	4.00 x 18 Dunlop K87
Rear brake	internal expanding
Transmission	five speed, constant mesh
Clutch	wet, multi-plate
Overall drive ratios	(1) 11.38 (2) 7.78 (3) 6.07 (4) 4.99 (5) 4.27
Countershaft sprocket	18 tooth
Rear wheel sprocket	48 tooth
Air filter	disposable paper element
Fuel tank	steel, 4.5 U.S. Gallons
Front suspension	telescopic forks, 5.6 inches travel
Rear suspension	5-way adjustable hydraulic, 3.3 inches travel
Frame	Double cradle, tubular steel
Seat height	33 inches
Swing arm length	18 inches
Handlebar width	32 inches
Handlebar height	43 1/4 inches
Steering head angle	27 degrees
Fork trail	3.7 inches
Best 1/4 mile ET	13.22 sec, 99.45 mph
Color	candy orange metalflake, gold & black trim, chrome fenders
Price	\$1800 West Coast

DISTRIBUTOR:

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Gardena, Calif. 90247