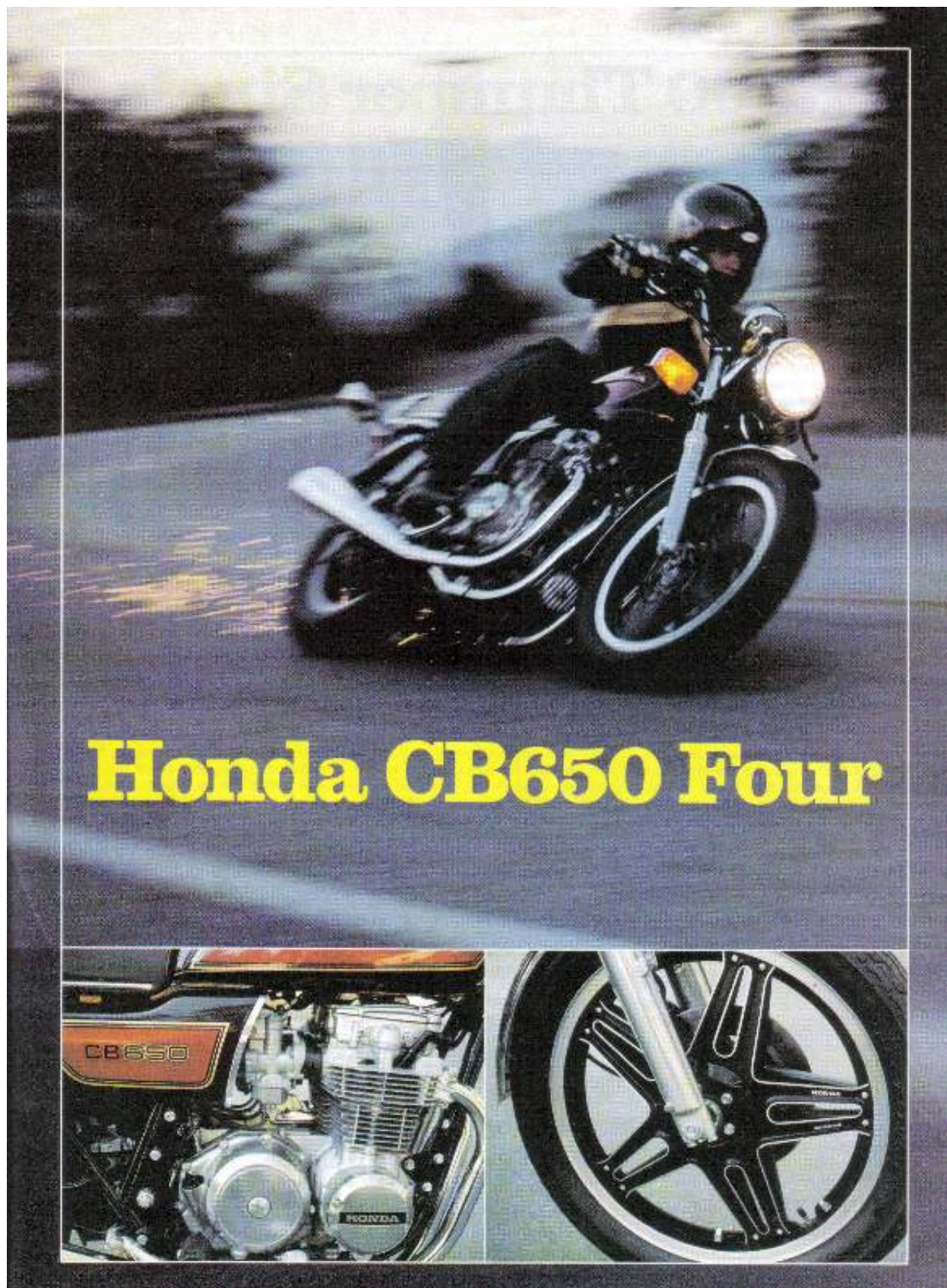
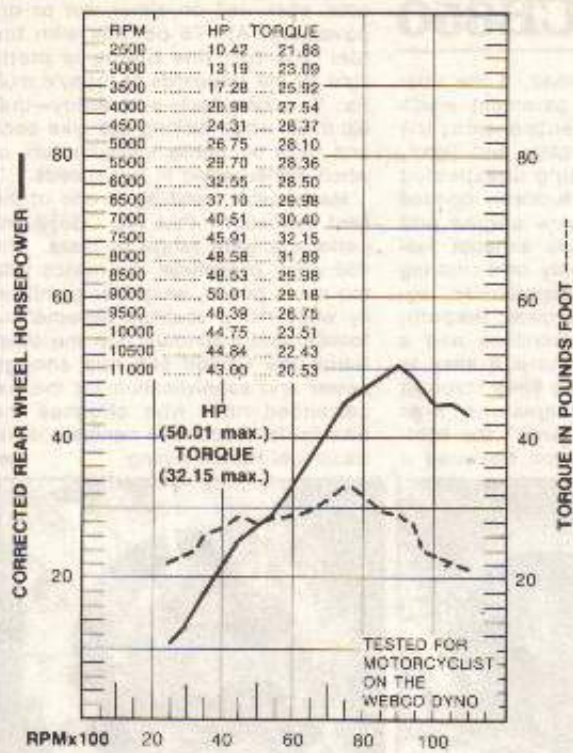
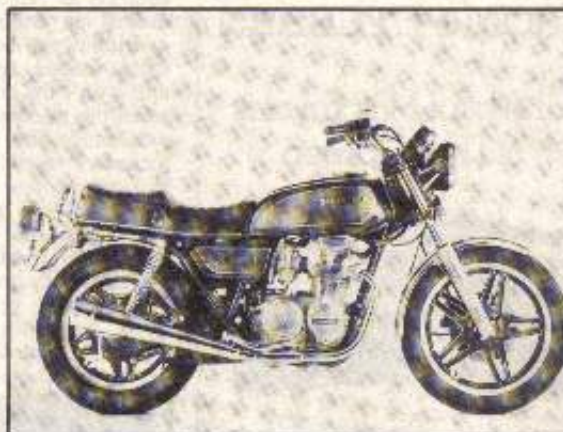


A Brand-New Motorcycle In The Old Tradition



HONDA CB650



Suggested retail price..... Approx. \$2450-\$2495
 Warranty..... 6 months, 6000 miles
 Number of U.S. dealers..... 1787
 Cost of shop manual..... N.A.

ENGINE

Type..... Four-stroke SOHC four
 Displacement..... 626.8cc
 Bore x stroke..... 59.8 x 55.8mm
 Compression..... 9.0:1
 Carburetion..... 4, 26mm Keihin slide-needle (acc. pump)
 Ignition..... Transistorized Inductive, pointless
 Lubrication..... Wet sump, trochoidal pump
 Battery..... 12V, 12AH

DRIVETRAIN

Primary transmission..... Link-plate chain and jackshaft,
 2.74:1
 Clutch..... 15 plates, wet
 Final drive..... No. 530 EK chain, 16T/40T

CHASSIS

Fork..... Showa, 35mm dia., 5.4-in. wheel travel
 Shocks..... Showa FVQ, 3.1-in. wheel travel
 Front tire..... 3.50H19 Bridgestone S703
 Rear tire..... 4.50H17 Bridgestone 21R2
 Rake/trail..... 27.5°/4.13 in. (115mm)
 Wheelbase..... 56.8 in. (1445mm)
 Seat height..... 31.8 in. (808mm)
 Ground clearance..... 4.5 in. (114mm)
 Fuel capacity..... 4.9 gal. (18.5 lit.)
 Wet weight..... 476 lbs. (216kg)
 GVWR..... 835 lbs. (379kg)
 Colors..... Candy burgundy or black
 Instruments..... Tachometer, speedometer, odometer,
 tripmeter resettable to zero

PERFORMANCE

Quarter-mile..... 13.37 sec., 95.64 mph
 Power to weight ratio, unladen..... 9.52 lbs./hp
 Fuel consumption..... 39 to 49 mpg, 44.3 mpg average
 Average touring range..... 217 mi.
 RPM @ 60 mph..... 4880
 Speed in gears @ redline (9500 rpm)..... 1st 42.2 mph;
 2nd 61.2 mph; 3rd 79.1 mph;
 4th 98.2 mph; 5th 119.3 mph
 Speedometer error..... 30 mph, 29 actual
 60 mph, 58 actual

PRICE

'79 HONDA CB650	N.A.
'78 KAWASAKI KZ650 SR	\$2395
'78 HONDA CX500	\$1898

WEIGHT

'79 HONDA CB650	476 lbs.
'78 KAWASAKI KZ650 SR	513 lbs.
'78 HONDA CX500	483 lbs.

QUARTER-MILE

'79 HONDA CB650	13.37 @ 95.64 mph
'78 KAWASAKI KZ650 SR	13.36 @ 98.14 mph
'78 HONDA CX500	13.90 @ 91.93 mph

MILES PER GALLON

'79 HONDA CB650	44.3 mpg
'78 KAWASAKI KZ650 SR	43.0 mpg
'78 HONDA CX500	49.0 mpg

The coming of Honda's 1979 highway hardware with its technical flash and complexity has left behind the whole generation of single-cam fours which shredded prejudices against Japanese machinery and ushered in a new era in motorcycling. The grand old CB750, the shrieking little 350 and 400 fours, the ever-so-competent 500 and 550 - all the SOHC two-valve Honda fours which reshaped motorcycling In the 1970s are all gone.

Almost...

Partially because they wanted to cover themselves and partially because they see a renewed importance in the 'middleweight' class, the Movers and Shakers at Honda gave the SOHC, two-valve four one final Incarnation-the CB650. Honda knew that there would continue to be buyers ambling into dealers' show-rooms who still beheld the familiar layout and conventional lines of the the 'old' fours with considerable regard - perhaps with more regard than they viewed the exotic New Generation. Even with its stepped seat, fat rear tire and eye-catching black-reverse Comstar wheels, CB650 has the look, the sound, the feel and the technical credentials of a decade of Honda fours. Honda describes the CB650 as a 'traditional' machine, and perhaps the bike was built because Honda wanted to be sure they didn't disaffect those buyers who like the old Honda fours better than the new machines.

But Honda also intended the CB650 to play another role, that of a first-time buyer's mount. An enormous number of inexperienced riders feel compelled to buy 750s and 1000s after hearing the fairly illogical contentions of some experienced riders and fast-talking motorcycle salesmen that 400, 500 and 550cc machines are "too small", "soon out-grown" or (most absurdly, since they are all faster than current cars) "too slow". Unfortunately the power of the big bikes soon scares some would-be motorcyclists right back into their sedans and motorhomes and hurts motorcycle sales (not to mention safety statistics).

A decade ago only a Harley rider would say a 650 wasn't a big bike. However, after the recent deluge of 750 to 1300cc road bikes, 650s seem to have lost some of their stature, even if they are faster than ever. So Honda is calling the CB650 a middle-weight and aiming it, along with the CX500, at the first-time buyer who has been convinced that a 400 isn't enough motorcycle. The CB650 is intended to be an alternative to the 500cc V-twin with similar power, price, performance and accommodations but with a more traditional look and less of the technical complication which, Honda believes, may worry the first-timer.

The 627cc four-cylinder engine is very similar to the old SOHC Honda fours and is even assembled on the same production line as the defunct CB550, thereby lowering the new bike's price by eliminating many re-tooling costs. However, this doesn't mean that the 650 is just a hogged-out version of the 550. In that old and somewhat inscrutable Honda tradition which apparently avoids parts interchangeability, the two engines share only half-a-dozen common parts, the most major of which is the Hy-Vo-type link-plate primary chain.

When you take the engine apart, the 650 stops looking so much like the 550. The 550's roller cam chain has been replaced by a heftier link-plate chain. Besides increasing the bore (up 1.3mm to 59.8mm) and stroke (5.2mm longer at 55.8mm), the designers sought to increase power with a new piston crown shape, by increasing valve size by 4mm on the intake side and 1mm on the exhaust side, and with bigger carbs

(26mm instead of 22mm) which now have an accelerator pump. To accommodate the extra power, racing-type kelmet rod bearings were used and the lubrication system's pumping rate and capacity (up 4 quart to 3.8) were both increased.

The 650's alternator puts out 260 watts - about double what the 550 made - which should eliminate the charging problems 550 owners encountered when electrical accessories were installed. The alternator is recessed into the crankcase slightly in the interest of keeping the engine narrow for more cornering clearance.

On the right end of the crankshaft, components for the transistorized ignition have replaced the 550's points. With an ignition system that requires virtually no adjustment, the C8650 should require less periodic maintenance than almost any bike on the road. The 650's tappets don't require shims, special tools or the removal of the camshaft to adjust valve lash, so the procedure is fairly quick and simple. The carbs shouldn't need synchronization much more frequently than every 10,000 miles, and oil and filter changes are easy. When the 650 was introduced, some dealers reportedly complained to Honda that the bike wouldn't provide enough service department profits, but we doubt that the home mechanic will complain.

We are told that the CB650's designers intended the bike to be fairly fast. Its quarter-mile performance - 13.37 seconds at 95.6 mph is good but not exceptional, it's quite comparable to the Kawasaki KZ65OSR. Since most of the CB650's power comes on above 6000 rpm, strong performance requires a willingness to frequently stir the smooth-shifting five-speed gearbox. Even at 60 MPH, where the engine is spinning just under 5000 rpm in fifth gear, it's usually necessary to downshift to pass slower traffic at a comfortable rate. Below 6000 rpm the engine accelerates steadily but slowly

At our average of 44.3 miles per gallon, the C8650 will travel over 200 miles on the gas in its 4.9-gallon tank but the stepped seat will begin to dimple your derriere before you use all the gas. The seat's step is a little too firm for the rider to sit on comfortably, but unless we sat back on the step most of us found that the seating position was too far forward and cramped. The passenger portion of the seat was also a little too firm for long hauls.

If you can live with the seat and riding position, the C8650 makes an acceptable touring machine. There's some vibration - enough to blur the mlrrors - in the handlebar and foot-pegs, and the FVQ rear shocks aren't quite compliant enough to give a first-class ride on the seams, bumps and choppiness found on most roads. However, neither of these situations should seriously fatlgue or discomfort the rider on long hauls. Other comfort considerations - front fork compliance, throttle return pressure, fuel tank shape, sound level, etc. - are all first rate.

The front disc was warped which caused passengers some minor problems because the warpage made the front brake surge during the moderate applications used in normal stops. This surging was strong enough to rock the passenger, bang helmets together and be generally annoying although it didn't seem to affect braking power or control during hard stops. We've encountered similar disc warpage in several of the late-style one-piece Honda disc-carrier units so it may be a common problem. The rod-operated rear drum worked predictably without adjustment throughout the 1100-mile test.

The only other component on the C8650 which gave us reason to worry was the clutch. The bike's

gearing, including the first gear ratio, is fairly low, but the normal clutch slipping required to start on a hill or to make a quick getaway at high rpm apparently overheated and swelled the clutch plates because there was often a sudden increase in play at the lever. The play disappeared as the clutch cooled off, but we had to adjust the clutch about four times more frequently than what we consider to be normal. Lever pressure was light but the clutch's engagement span was fairly narrow

The CB650 performs best when ridden energetically on serpentine sections of remote road. If the rider avoids the choppy pavement which overtaxes the rear suspension, the C8650 steers accurately and lightly and won't do anything unexpected when the throttle is suddenly opened or closed. The narrow engine and tucked-in four-into-two exhaust system help create plenty of cornering clearance even for experienced, aggressive corner-chargers. Smooth, predictable throttle response and a low-lash drive train make it easy to carve steady, precise lines through turns, and the Bridgestone tires (which unfortunately aren't the lighter, safer tubeless type because a tubeless 17-inch tire isn't yet available) stick well on either wet or dry pavement. At 476 pounds with the fuel tank full, this Honda is pretty light by the standards of today's multis. You can feel -and enjoy- that lightness when flicking the bike back and forth on tightly kinked roads or when maneuvering at low speeds.

Manageable handling is one of the best indications that the C8650 will perform a wide range of tasks. The 650 won't overwhelm the novice with too much power, weight or complexity while riding routines become automatic and instinctual. On the other hand, the C8650 still has enough power and sophistication for the experienced rider who chooses the bike for its responsive handling or its traditional Honda styling.