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MAXI-MUMM ICOA X-clusive

First English Translation Ever of the Motorrad 1978 CBX Pre-Production Road Test

(Reprint Permission granted by Motorrad Magazine. Test dated 5/31/1978 by Franz Josef Schermer)

Translated by Achim Grabb and edited by Ed Willett

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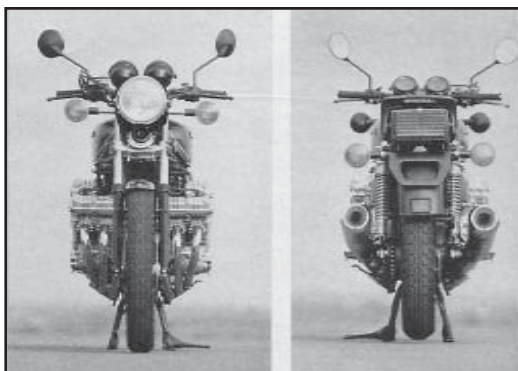
Half a year ago the Honda CBX was introduced in Japan. Now, in the second half of June (1978) it shall be available at the German distributors. MOTORRAD tested the first machine in Germany.

On the street and in the statistics-Honda models were being outstripped. They did not win any comparison tests by MOTORRAD, did not accelerate as good as previously, had lower maximum speeds and braked worse than the competitors. Since the legendary CB750 Four, one of the best bikes ever built, the worlds largest bike manufacturer had not had a real big hit.

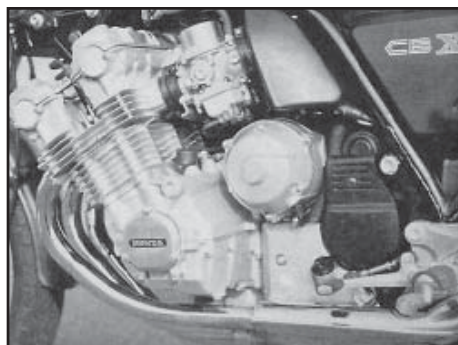
With the CBX, Honda again has a superstar, in a form no other manufacturer can provide. *"This model was developed for the experienced biker"*. This press text shows the target group: the mature biker it should be, who has some years of experience besides the needed pennies.

The engine is the obvious attribute. It is built crosswise in the frame, and the right and left cylinders protrude below the ponderous fuel tank. But the first impression deludes, with 595mm width it is not as wide as it seems. The Kawasaki Z1000 (560mm), Yamaha XS 1100 and Suzuki GS 1000 (580mm) are not much smaller, and the BMW twins with 745mm are even wider!

Chirping, the starter motor rotates the crankshaft. And if the engine runs-



Despite width of only 595 mm width the 6 cylinder is not to be overlooked



Alternator on a separate shaft behind the barrels

which it does immediately when warm and is only reluctant when cold - it is smooth, quiet and vibration-free, barely audible at idle speed. When running from cold the choke lever (left from the clutch lever) must be pulled in steadily over a distance of about one or two km. Once running, the 6 cylinder does not respond as spontaneously as expected. At least the test machine (a pre-production bike) had a hole in the power band.

The movement at the throttle grip is pleasantly short, and one does not have to follow-up with two handfuls like some other Honda models. The opening of the six carbs (with 28mm) is amazingly easy, and big forces are not necessary. From little more than idle speed the CBX pulls. At every test ride it was clear how quiet the engine was: engine speeds above 6000 rpm were not really audible. A watchful look at the tachometer is strongly recommended. All too fast the needle climbs into the red zone beyond 9500 rpm. Vigilance is in order because the big thrust comes as late as 6500 to 7000 rpm in full intensity and it makes it really fun to run each gear to its limit.

Extraordinary for an in-line engine are not only the six cylinders but also the four valves for each barrel too. The background of Honda with four valves is long, such that the everyday capability of a 6cylinder with 24 valves maybe is no issue. After all said and done, all Honda race engines of the successful GP era 1959 - 67 had four valves per cylinder and turned up to 22,000 rpm.

The CBX does not even turn half of that. At 10,500 rpm 24 twittering valves are calling for an upshift. This limitation is only 1500 rpm above the nominal speed, because the short stroke engine (53.4mm stroke with 64.5mm bore) gives its 77.3 kW not until 9000 rpm. Also the max. torque of 84.3 Nm (8.5 mkp) is delivered at 8000 rpm.

In spite of this small effective speed range on paper the CBX can be ridden lazily. At 5000 rpm there is 39 kW (53 hp) delivered and even the 31 kW (42 hp) at 4000 rpm are good for more than pure swimming in the traffic. The engine shows good performance in this speed range also.

Full acceleration from standstill is not that easy, either the rear wheel spins or the performance falls when hastily engaging the clutch. So the time from 0 to 100 kph/62 mph is not as imposing as the pure performance data suggests. But once the 274 kg/606 lb vehicle with 75 kg/165 lb rider is rolling, it races forward: up to 140kph/87mph only takes 6.3 seconds, 160 kph/100mph only 7.9 seconds.

Opposite the new Suzuki GS 1000, Kawasaki Z 1000 Z1-R and Yamaha XS 1100 the Honda CBX is one nose ahead with these times. The CBX was only undercut at the MOTORRAD measurements by the MV Agusta 1100 GP (0 to 160 kph/100mph in 7.4 seconds) and the Egli-Kawasaki Bonneville (6.8 sec. to 160 kph/100mph), tested in MOTORRAD 24/1975.

The clutch of the CBX deals with the power perfectly. More than 10 acceleration tests were endured without fatigue effects. Only the gearbox did not play fair. It shifted lightly and exactly, but the 4th gear wanted to be engaged only with the shift lever held up. It is to be expected that this known error from the CB 750 won't appear in production.

The quoted max. speed of 220 kph/137mph] was not reached. The light barrier measurements were always between 135 and 136 mph. The new Yamaha XS 1100 is faster. At 125 mph, the CBX ran nearly as fast at the "Hockenheim Gerade zur Ostkurve" riding two up.

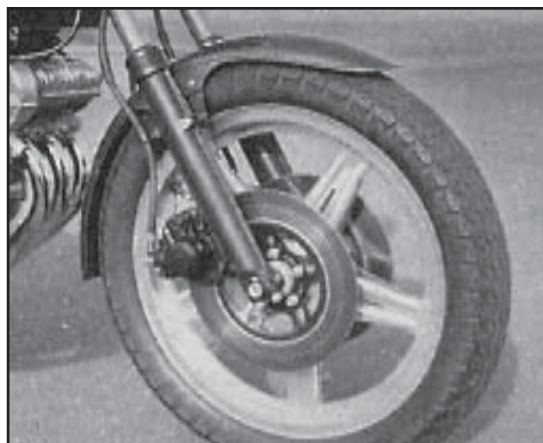
Straight off the CBX rides amazingly easy. Even with a little cheekier pace the first impression stays a while. The rider does not believe the many pounds [of the vehicle].

Difficulties appear only if a sporting pace is held. The CBX won't be easily pushed from one turn to another. Here one notices the width and the outer lying masses. They provide a high mass indolence. Even on flat pavements the CBX does not show the calm side -from time to time she shakes herself without reason through corners, even without excessive speeds. The straight line travel from 160 kph is also strongly questionable.

The adjustable shocks do not help, although the spring pre-load is 5 way adjustable, the rebound damping 3 way adjustable and the compression damping twice adjustable. Best results in different traffic were with compression rate on 2, rebound on 3 and pre-load on 3. Only on the autobahn (freeway) should the compression be at damping position 1 if a light response is desired.

The telefork with 160 mm spring space is flawless. It responds to the smallest pavement irregularities and tucks away rough ones. Only on sharp braking manoeuvres does it bottom from time to time.

The front brakes (from the CB 750 F2) indeed need a forceful hand, but provide good braking. In particular fading is no issue. The rear disc works as a good assistance for the front ones. But only slight overbraking leads to a skipping rear wheel.



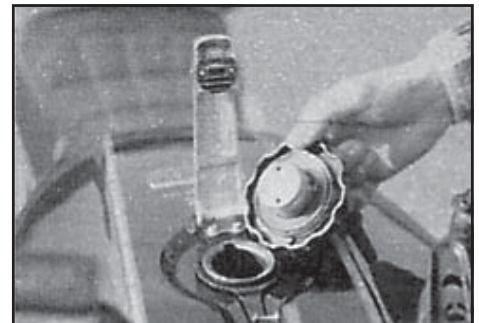
Brake and forks from the CB 750 F2, spokes out of light metal sheet material

The CBX must be ridden methodically at full power. On entering a turn the right gear must be selected with the clutch

applied, and the speed must be perfect. If the engine is still braking while beginning to lean over, the rear wheel will hop again.

Also corrections of the leaning angle or curve radius are not the domain of the CBX: She leans over willingly but then behaves stubbornly. She does not let the rider pull her up, and suddenly appearing obstacles in turns are not to be driven around. The CBX is not a race machine but a 5 star heavy motor bike, but she can lean over more than the smaller and lighter CB 750.

The fuel tank holds around 24 litres [6.34 gallons] but because of the deep filler cap the pouring in of the last 4 litres [1.06 gallons] are a puzzle. But a hurry at the tank stop is not bid, an average consumption of 12.3 litres per 100 km [19 mpg] makes important every single drop.



Tank cap secured by hanger and lock



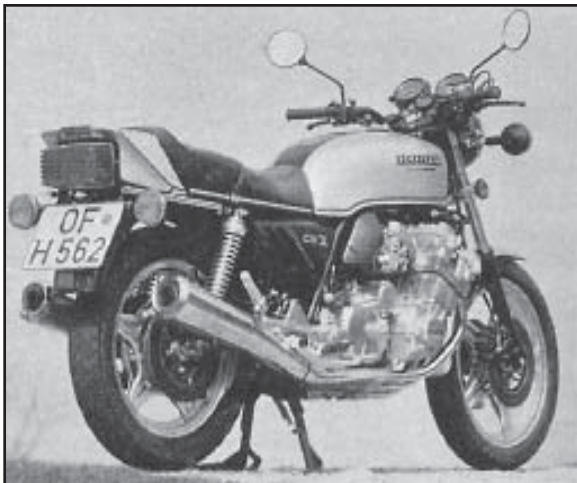
The instruments, tach, speedo and voltmeter are clear; also the idiot lights. Speedometer error: 10%

Speedo and Tachometer read 10 % high in good old Honda style. But they are easily readable and well illuminated at night with the lights switched on. The square idiot lights below the meters for oil pressure, neutral, high beam and turn signals are not missed even in daylight because of their brightness.

Clutch- and brake lever are handy, the other switches are pleasantly big. The somehow obstinate turn signal switch prevents from over reset so that no one signals an unwanted wrong direction. The big indicators are visible security details, even more so the H4 driving (head) light.

For the first time on a motorbike the taillight is rifled so that it can't be "baked" from dirt. For driver as for passenger the seat position is good, all foot pegs are in the right place. The rider with long arms could adjust the forged handle bars.

The big Honda is no toy for green boys. A bike with bombastic performance and critical road holding must be reserved for experienced riders.



The Honda CBX is a tremendous bike with an elegant lines. The seat with the spoiler is a matter of taste, and is not hinged for lower seat height

Likes

- quiet engine
- light throttle operation
- good seat position
- clear instruments
- H4 light
- big indicator lights
- rifled taillight
- good ground clearance

Dislikes

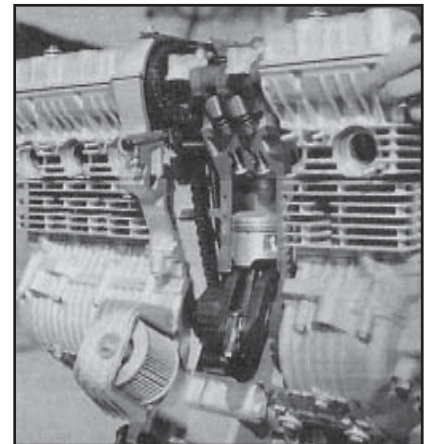
- inadequate straight ahead travelling
- resistive turning
- high fuel consumption
- bad tuned carbs
- gear box inconveniences

The engine and ancillaries. At the first look the CBX engine is revolutionary; at the second look it is a product that is made simple as far as possible and therefore cheap to produce. The crankshaft is pressed from one piece. It has normal bearings as main bearings, conrod bearings and at the piston pins. From the crankshaft the exhaust camshaft is driven by a HYVO timing chain and at the top via another chain to the intake camshaft.

The spring load of 24 valves has to be overcome so Honda choose this form which is wider than a normal roller chain. Plus, such chains are running quietly and provide exact timing.

Another timing chain leads to the separate shaft behind the barrels, which drives the clutch via a toothed wheel. To the right side of this separate shaft there is the pointless transistor ignition system, in the middle resides the starter motor and to the left the 230W alternator. The alternator is not fixed but runs via a dry clutch coupled to the separate shaft. This is to prevent the rotor from damage from heavy acceleration/deceleration.

The big 5 disc wet clutch runs at the right behind the polished engine case. A shift fork shifted 5 speed gearbox and a big 3/4" O-ring chain (with grease inside the rollers) are the final drive. For the German model there is a final ratio of 15/33 specified. The changing to 35 tooth for better performance in lower speed ranges is possible. Two Eaton oil pumps provide with 5.5 litres [1.45 gallons] the crankcase and the gearbox separately, an oil cooler holds the oil temps low.



TRUE OR FALSE

The very first six cylinder street bike Honda made was not the CBX, but a Goldwing.

Answer: True - The very first prototype goldwing in the mid-70s was a six cylinder

• • •

It's 4 to 5 inches long, and about 1.5 inches or so in diameter...what CBX part is this?

Answer: Counter Balancer inside the CBX clip ons

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