



WITH the second-generation CBX six repositioned as a heavyweight tourer, Honda turned its attention to forced induction as a showcase for its technical superiority. In typically quirky fashion, Honda chose the least likely option — the pedestrian 50hp CX500 pushrod V-twin — as the base, loading it with an IHI turbocharger and computerised engine management technology to come up with a futuristic 82hp road rocket. As then Honda R&D chief Kazuo Inoue told *Cycle World* on its launch, “We set out to make a little motor and measure it by the performance standards of a big bike.”

Forced induction on motorcycles wasn't new — it was all the rage in GP racing back in the 1930s before it was banned — but the CX500TC would be the world's first turbocharged production bike and the first to feature electronic fuel injection. Its top speed of 195km/h was incredible for a 500, and its chassis equally innovative, with Pro Link rear suspension and TRAC anti-dive front end which linked brake pressure to fork damping.

Contemporary road tests confirmed the bike's exhilarating performance but that power delivery was all or nothing,

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with pronounced turbo lag thrown in for good measure. Honda had dropped the CX's compression ratio from 10:1 to 7.2:1, making it even slower than a normally-aspirated CX500 off boost, but then overcompensated with nearly 17.5psi when it came on song. It was all good on the wide open road but difficult to ride fast in the twisty bits.

Honda addressed these issues the following year with the CX650 Turbo, by all reports a far superior ride to the 500. Not only was capacity increased by more than a third from 497 to 674cc, compression was bumped up to 7.8:1 and higher-lift cams operated larger valves, while maximum turbo boost was dropped a point to 16.4:1 despite a larger vane. Off-boost performance was much improved, the turbo pitched in earlier and lag was reduced as the revs rose, all of which made it an easier bike to ride fast, as did suspension upgraded with linked air-pressure adjustment for the front forks and rebound damping adjustment at the back. Gearing was also raised for a genuine 200km/h.

Inoue had achieved his goal, with mid-range power more than a match for contemporary 1100cc aspirated engines, as was its 100hp top end. Sadly, overall dimensions and weight were also similar

at around 260kg fuelled up and ready to run, which largely negated the advantage of using a smaller engine in the first place. As with the CBX (and the Suzuki RE5 we featured in issue 17), enthusiasts were also wary of the Turbo's perceived complexity.

Despite this, Yamaha, Suzuki and Kawasaki responded in very quick time with the Seca 650 Turbo, XN85 (also a 650) and GPz750 Turbo respectively. All were much simpler designs based on inline four-cylinder engines, but only the Kawasaki lasted more than a few years. Most commentators picked the Honda CX650TC as the best of the bunch but it mattered little to the buying public, who avoided all of them like the plague. Honda discontinued production at the end of 1983, with one unconfirmed report putting worldwide CX Turbo sales in the low thousands.

We got the 500 Turbo in Australia but never the 650. John Fretten found this one in America in 2010. It is of course a 1983 model. "It was in reasonable condition, but really grubby, covered in road grime," he says. "But all the bits were there. I had the bodywork and swingarm repainted, and sourced the decals in the States. One problem is they can burn out the stators, which requires pulling the

engine out to fix. So while I had the motor out, I redid all the connections.

"It's a great bike on the open road. It's a bit doughy down low until it comes on boost, but then it's really smooth and torquey. The suspension is good for the times and it has better brakes than the CBX. Best thing about it is its midrange, you don't have to rev it to enjoy its performance."

Retro Specs

ENGINE Four-stroke water-cooled 80-degree OHV V-twin; 82.5 x 63mm for 674cc; four valves per cylinder; IHI 51mm turbocharger; 7.8:1 compression; ECU-controlled EFI and ignition; electric start; wet clutch, five-speed transmission, shaft final drive; 100hp @ 8000rpm; 93Nm @ 6000rpm

CHASSIS Steel tube frame with engine as stressed member; 37mm Showa forks with Honda TRAC anti-dive system, adjustable for air pressure; 2 x 280mm rotors with twin-piston calipers on 18in rim; Pro Link rear suspension; Showa monoshock adjustable for air and rebound damping; 300mm rotor with twin-piston caliper on 17in rim

DIMENSIONS Wheelbase 1496mm; fuel 20 litres; wet weight 260kg

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