

CBX Team Extreme

*Team Leader: Mark Miller (photo at right)
Team Member(s): Mark Sproul*

To join this team or submit an article please contact Mark Miller at markmcbx@earthlink.net

GOAL: CBXs to the Xtreme, no rules or definitions

SUBMISSIONS due for next Express 4/2/2003. Current article format/content, but be creative. 250-500 word count in MS Word or Email format preferred. Jpeg pictures please. Regular mail/photos acceptable.



Jim Hall's 400hp CBX

Fast forward about 25 years or so from the inception of the sweet little Honda 250cc six cylinder road racer.

Fly on the Wall

It's late September, 1989.

Picture yourself as a fly on the wall in a very plush room at Honda motor company. Two guys named Soichiro, one old, one not so old, hunched over the latest issue of Cycle World, looking at the picture of a CBX coming out of an immense cloud of smoke. Since you're a bilingual fly you understand the conversation. "Holy Shit!!!! Look what he's done to our baby!!!!!!!"

What they were looking at was Jay Gleason at the helm of Jim Hall's CBX, and they were certainly right. Six times more displacement than their 250 cc racer and almost 7 times the horsepower!!!!!!

It's a good thing they didn't look too close. Much of their baby was gone. No dainty stuff here. About all that was left of their handywork was the cam cover, and the crankcases. Everything else was either replaced or modified.

What we are pleased to present in this very first Team Xtreme article is the latest reincarnation of Jim Hall's 400hp CBX and

warn you that other unbelievable Xs will be in future Xpresses!!!!



Jim Hall

Specifications

The head? Ported by Yoshima Racing Service. Valves? 27mm Manley stainless intakes and 23mm Manley stainless exhausts and special exhaust seats. Guides? Bronze. Shim under bucket cam followers, titanium retainers, chrome moly keepers and R/D h.d. springs.

Cams? Secret profile Megacycle Turbo grind with .410" lift.

Block? Fully finned, carved from a big hunk (62 lbs.) of T 6061 T6 aluminum billet, sleeved with 79mm o.d., 75mm i.d. high nickel content CBX Racing Enterprises ringed sleeves. Only took three weeks and about \$2000 to machine the block!!

Pistons were MTC modified Honda 1100 F forgings dished to lower the compression ratio to 9.00:1 and pocketed for valve clearance, then coated with Swain-Tech Cerametallic coating to resist heat transfer to the piston crowns. Ring end gaps are critical and set at .014" for the top ring and .017" for the second.

Rods? Carrillo chrome moly steel with 17 mm dia. Orient Express H-11 tool steel wrist pins that have .140" thick walls. The small end was beefed to .900" width.

Crankshaft? Fallicon Supercrank, stroked 5mm, balanced, fluted, lightened, knife-edged and micro-polished.

Bearings? Special Honda R & D trimetal Head and Base gaskets? Copper by CBX Racing.

All held together by CBX racing 10mm Chrome Moly studs.

And It Doesn't Stop There

Neatly hung on the outside is an EF40 Rajay turbo with a variable boost control (7-35psi) It's fed by a 1 Ω" primary exhaust system that has been coated with an HPC cerametallic coating to retain heat. Its outlet is a typical weedburner. The sound it makes has been said to be capable of raising the hairs on a statue's arms. The motor is fed by a fully modified S & S Super B turbo carb with a 1.75" inlet and a 42mm venturi.

Spark is supplied by a 70,000 volt Vertex magneto.

The oil sump was modified to prevent oil cavitation during acceleration, and the pump was modified to provide higher pressure and to keep the turbo bearings lubed and cool.

Redline oil handles keeping things lubed and it's kept cool by a 13 row Earls cooler. Plumbing is also handled by Earls.

All the power it makes is transferred by a Barnett clutch in a stock basket that has been banded and has a MRE lockup unit installed on it. The stock countershaft wouldn't take the pounding either so it's been replaced by a piece of 9310 double vacuum remelted gear steel fabricated by Orient Express. The gears in the transmission have been undercut by RC Engineering.

The chassis got its share as well. The frame was modified by Gary Pena, owner of "The Shop" in San Bernardino,



signals and the slick, **this thing is street legal.** It starts pretty easy hot or cold, idles pretty fair and has been known to return 25mpg on occasion.

It's still a work in progress, although now more cosmetic. The bodywork was upgraded in 1993 with hand hammered aluminum, funny bike style that enclosed the frame and took best in class and best in show at the Mikuni Calendar Bike Show in Santa Monica.

Recently it was restyled again and now has the fuel tank under the seat, has a futuristic looking fairing with twin projector beam headlights.

Here it is in the nude, and unlike most of us, it's still nice looking.

a frame builder for the drag bike circuit for many years. It was lengthened to 68 inches with the addition of a swing arm that doesn't. It's welded solid to the frame with the X member section parallel to the countershaft. The crown section was cut off and rewelded with chrome moly tubing set at a new rake angle of 32 degrees.

With it's present gearing and an 11,500 rpm redline it's speed through the gears is: First 77mph; Second 108mph; Third 136mph; Fourth 157mph, and Fifth 182.

Just One More Minor Detail We Were Saving Until Last

The real kicker is that except for turn

Mark Miller
Team Leader: ICOA
Team Xtreme

The frame is now 75% chrome moly and fitted with a lightweight Kosman triple crown and Ceriani 35 mm tool steel tubes. Total frame weight is 40 lbs.

It rolls on a Kosman WM 15 rear wheel with an aluminum hub, PM 8.5" rotor and PM caliper. Sprocket is a Kosman 30 tooth. Front wheel is PM 16" with a 10.5" disc brake. Up front is a 14 tooth sprocket with an outboard bearing support by Patrick racing. Chain is a high performance RK.

Well, now to the real question.

Is It Fast??????

First time out at the drags Jim turned a 9.69 quarter mile at 150 mph. With Jay Gleason aboard it ran a 9.58 and 148. That's with a slipping clutch, turbo boost of 19psi, a misfire on top, and leaks in the turbo system. The turbo is capable of 35 lbs. boost and this translates into nearly 400hp.

There's room for a bottle of laughing gas. (That's for the engine, not the rider, since the rider probably already has an ear-to-ear grin.)

