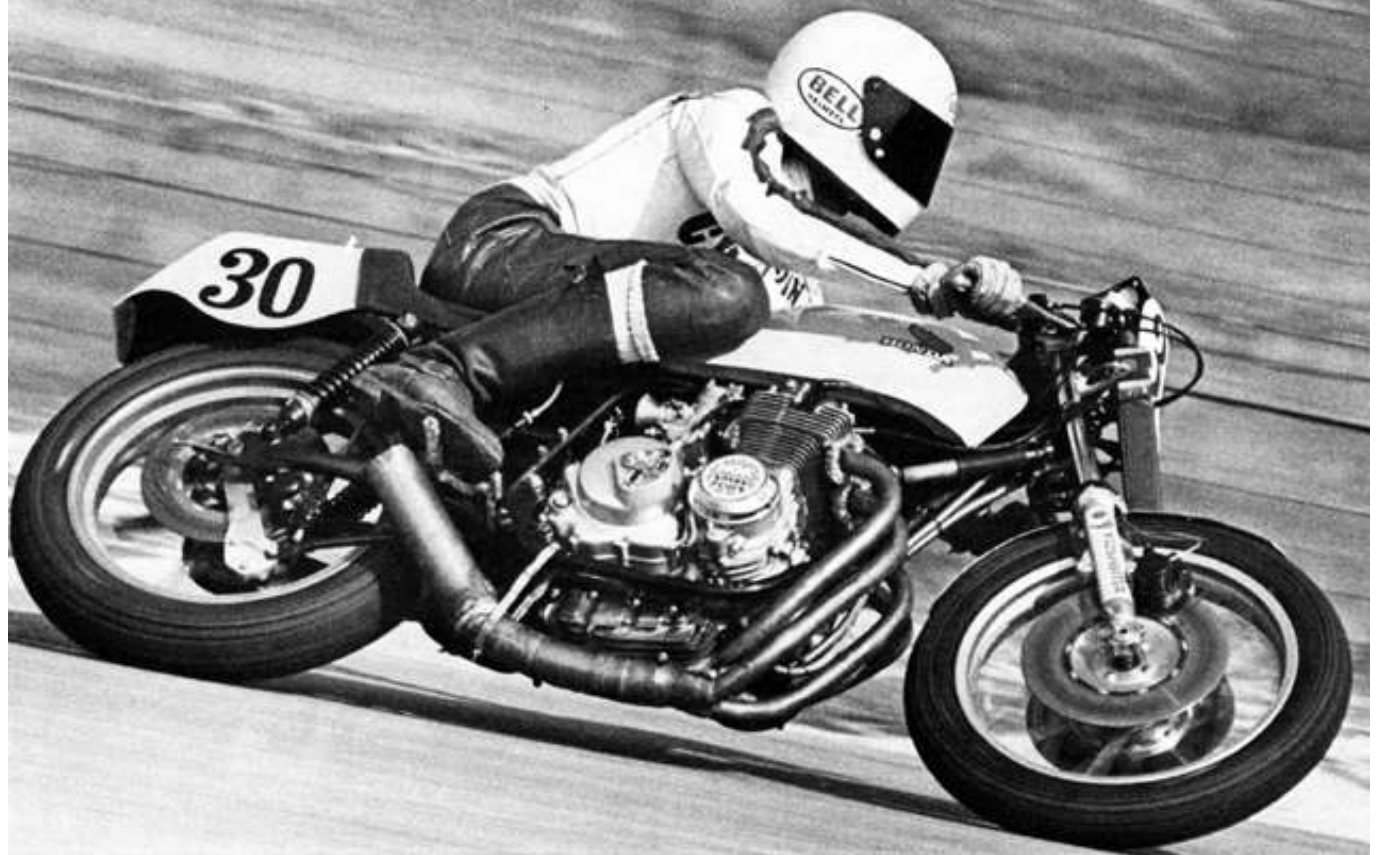
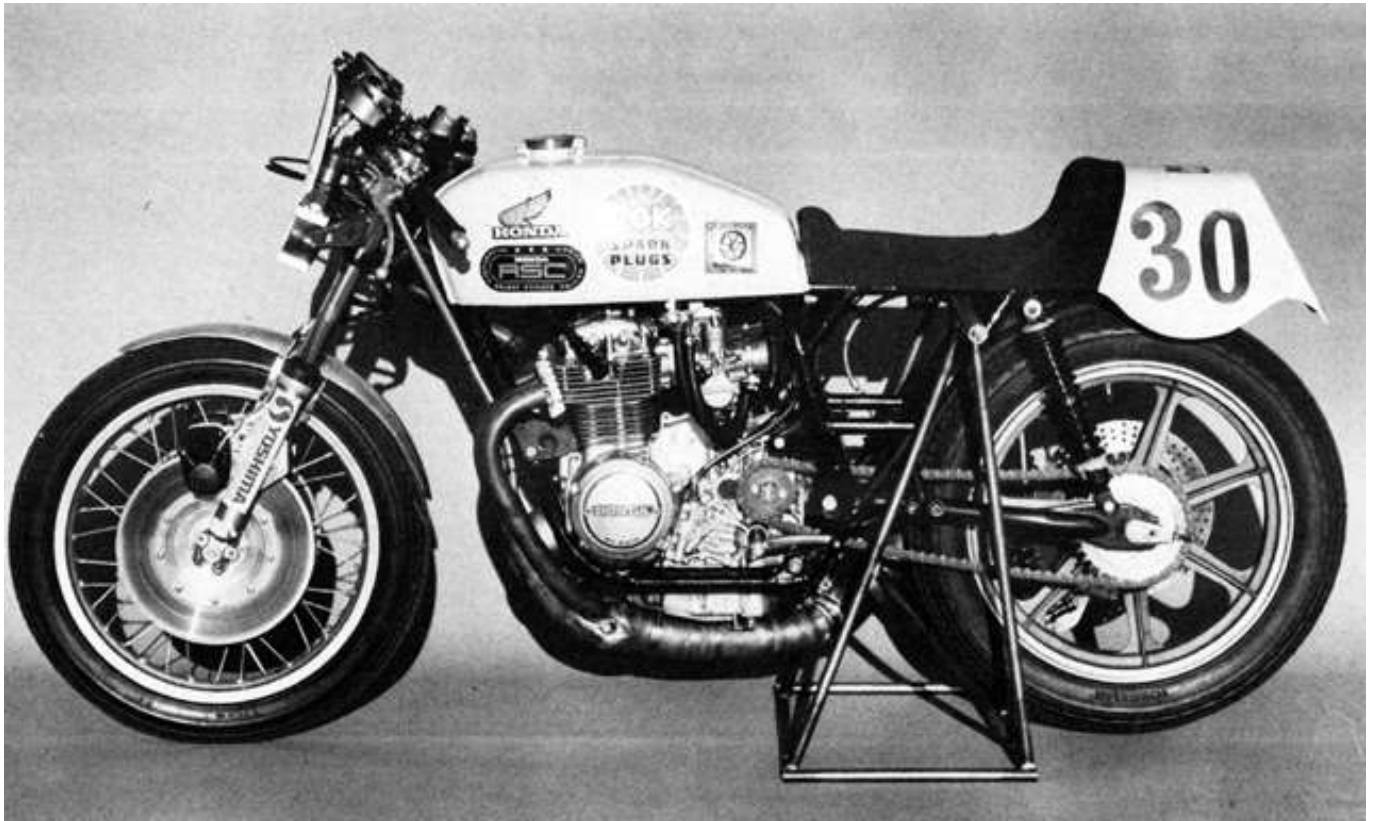


Some people carry them in their wallets.
Kaz Yoshima brings his to the
races and uses it to beat Z-1s.



YOSHIMA'S BUSINESS CARD



Imagine you're riding a modified Z-1 at Ontario, driving hard out of Turn Nine onto the back straight. Suddenly a bright yellow form materializes at your shoulder, shoots past, and is gone with a howl.

Was the motorcycle that flew past another, faster Z-1? A faired GP machine? A turbo-charged GS750? Nope. It was a Honda CB400F.

Image Hard to believe? Plenty of riders and spectators at club road races in Southern California have a hard time believing the horsepower put out by several 492cc CB400Fs built by Kazuo Yoshima, the owner, manager, mechanic and sole employee of Yoshima Racing Service (YRS) in North Hollywood.

Yoshima, 28, arrived in the United States in 1972, after a broken back suffered in a light sedan race crash in Japan ended his career in the small engine R&D Department of Honda Motor Corp., Ltd. Kazuo, or "Kaz" worked as a commission mechanic in a Honda shop until he learned enough English and saved enough money to open his own tiny storefront racing shop on Burbank Boulevard in August of 1975.

The obvious question is, why did Yoshima pick modifying the CB400F as his specialty?

"Some people around this business told me that there was no way to make the 400 go, because of valve angle and other things inside", answers Yoshima. "Because I'm just kind of new to this business, I needed a 'business card.' I picked the hardest one to make it go, to prove myself. I must make it go even faster."

It's hard to compare Yoshima's hottest version of the CB400F with other motorcycles in absolute terms. Last year, a 458cc version turned in a 12.7-second elapsed time at the drags, with stock gearing and no wheelie bar. Every attempt to get the ETs down resulted in broken connecting rods - from polished stockers to trick replacements - splitting the engine cases.

Now, with YRS 492cc engines using Carillo connecting rods, the case-splitting days seem to be over. At Ontario on March 27, Yoshima's product test bike went from a second-wave start in the combined Super Cafe (Open) and Cafe (under 600cc) race to second overall in six laps, turning a 2:17.5 lap time on the 3.19-mile long course and finishing with the winning 845cc GS750 in sight Yoshima's bike turned 13,000 rpm with no problems.

Besides the Carillo rods built to Yoshima's specifications (the smallest rods Carillo has ever made, according to the company foreman), the YRS CB400F is packed with performance modifications and parts, including: YRS balanced and matched 56mm pistons and cylinder liners (stock bore is 51 mm); balanced and matched wrist pins and rocker arms; YRS "Hot Street" camshaft; modified cam chain tensioner; modified S&W CB500 valve springs; 27.5mm intake valves (26.5 valves are stock); Keihin 29mm CR sandcast aluminum carburetors (20mm carbs are stock); YRS hand-bent exhaust System; lightened and balanced crankshaft with polished journals; Honda Racing Service Center (RSC) CB350 magneto ignition system, with a hand-made adaptor; RSC close-ratio six-speed transmission; larger capacity oil pump rotor; Earl's Supply oil cooler; Lockhart oil cooler adaptor plate; turned-down CB750 front discs and CB750 calipers, with 1976 CB750F caliper carriers and hand-made aluminum disc carriers; RSC CB750 racing master cylinder; DID WM-3 aluminum front rim with Michelin 3.25 x 18" PZ-2 tire; aluminum front fender; shimmed fork springs, RSC racing steering damper; Custom Canyon Racers instrument panel with Stewart-Warner oil temperature and pressure gauges and RSC CB500 racing tachometer; Tommaselli clip-on handlebars and RSC quick-throttle; Morris WM-5 magnesium rear wheel with Michelin 4.25 x 18" PZ-2 tire; turned-down and drilled CB500 front disc mounted on the rear wheel with a hand-made carrier; CB200 mechanical caliper; YRS aluminum-bronze swing arm bushings; S&W shock absorbers; frame bracing; and a modified Rickey Racer Laverda custom seat. Yoshima started out running Castrol-R (castor-based) oil in his engines, but recently switched to AmsOil 10w-40 synthetic racing oil when he found that oil pressure under racing conditions stayed higher with the synthetic.

Ready-to-race, Yoshima's Honda weighs 275 pounds, and is marginally legal for street-based Cafe classes. On the racetrack, the motor pulls evenly and strongly from 8,000 rpm up to 13,500 rpm. With plenty of horsepower, relatively light weight and unlimited ground clearance, it is easy to pass machines twice as large entering, in the middle of, and exiting turns.

The price. According to Yoshima, he'd build another CB400F like this one for \$2,600-for the engine alone. Asked about the price of the complete package, Yoshima looked at the work piled up in his cramped shop, shook his head, and said, "Just like this one? You've got to be kidding..."