

GSXR750 TEST: SUZUKI'S KING 750 GETS MEANER!

TWO LUCKY WINNERS!

WIN A ZR-1 CORVETTE!

TWO LUCKY WINNERS!

JANUARY 1990 \$2.50 • U.K. £1.50

MOTOR CYCLIST



**PREVIEW
1990!**



**YAMAHA
MORPHO
THE NEXT
GENERATION
OF STREET
BIKES**

**PLUS:
TOKYO MOTOR
SHOW, RIDING
AMERICA'S FASTEST
ROADRACERS,
WINTER RIDING
GEAR**



W I N N I N G

BY
NICK
IENATSCH

1

A number one plate reveals commitment, hard work, risks taken and money spent. A number one plate communicates at a glance that the wearer expended enough effort to outrun, outlast and outthink the competition, and that single black slash means a great deal to those who won it, those who lost it and those who covet it.

Number one bikes are special machines, bikes that survived the racing

PHOTO: CHRISTY JEWELL



MODIFIED
PRO TWINS
CHAMPION

PHOTO: CHRISTY JEWELL



PHOTO: LANCE HOLST



PHOTO: FRAN KUHN

WARRIORS

and emerged on top. We assembled three national champions—the
Mimura GSXR750 Superbike, the Honda Hawk Modified Production Pro
s bike—and the Honda RS750 Grand Prix Pro Twins bike, and asked Fea-
Editor Nick Ienatsch to give us his hands-on impressions of these superb
ines.

you wonder what it takes to capture a national roadracing championship,
on. >

ERBIKE
MPION



PHOTO: CHRISTY JEWELL

GRAND
PRIX
PRO TWINS
CHAMPION



PHOTO: LANCE HOLST

TWO BROTHERS RAC

DUCK HUNTER: The little Hawk that did

1 When you ride a bike with a number one on the front, you may as well have a target between your shoulder blades—everyone's gunning for you. Ask Eddie Lawson, Freddie Spencer or Wayne Gardner, three guys who couldn't carry the weight of the number one plate through two consecutive GP seasons until Lawson finally pulled it off in '88 and '89. Racing rewards those who work the hardest, and the racer's way is to work harder when behind and to cruise when out front, a pattern that explains the difficulty of retaining a number one plate.

In 1988, Kevin Erion of Two Brothers Racing hit the national scene and smoked the competition in Modified Production Twins on a Dan Kyle-prepared Ducati F1. Erion rode fast, and the bike was no slouch. The obvious results were his number one plate and the Modified Production national championship. Time to cruise.

The Two Brothers Racing crew, head-

ed by brothers Craig and Kevin Erion, was in a word, bored. "We didn't look forward to racing in '89 because it wasn't a challenge," Kevin relates. "We won everything our first year out, and I knew we could go faster in '89 but we weren't excited about it."

SOMETHING BORROWED, SOMETHING NEW

The Erion brothers eventually started playing with a Honda Hawk, and American Honda's Ray Plumb gave it a mild going-over. It became a good club racer, and soon the Erions had talked Mike Velasco into tuning the Hawk and were off to the second round of the nationals at Road Atlanta.

Kevin tells the Road Atlanta story: "My third lap around the track was as fast as I'd run during the race the year before. I knew we had something." What they had was a 304-pound motorcycle producing upwards of 75 horsepower in a package that was superbly easy to ride fast. What they had was an excellent motorcycle, made so by an excellent tuner, Mike Velasco.

Velasco learned his trade working under Pops Yoshimura in the late '70s, then moved to Honda to work on Fred-

die Spencer's four-stroke racers. In '84, he crewed for Fred Merkel to rack up three straight Superbike national championships, and he grabbed one more later with Bubba Shobert, plus three Grand National Championships. Erion didn't team with a slouch.

But Road Atlanta ate three engines, each failure teaching Velasco a valuable lesson and prompting solutions that would keep the Hawk running. The team left Road Atlanta with reams of information, zero points and a 36-point deficit to make up in the remaining five nationals. Finally, the Erions felt challenged.

"We had to win the remaining races and hope Craig Shambaugh [the Ducati-mounted Mod Prod point leader] finished worse than second," Velasco says with a smile.

Velasco rose to the pressure, as did Kevin Erion, and they won the remaining races, putting the championship on ice when Shambaugh fell at Sears Point chasing the Hawk. The Hawk was protested twice, once for its titanium connecting rods and once for an aluminum subframe. The first protest was upheld by officials, but Two Brothers appealed and won. The second protest was denied. In short, some Ducati guys didn't



ING HONDA HAWK

like what Two Brothers was doing with the Hawk, but the AMA eventually deemed everything legal and the number one plate went back to California.

We wrangled a ride when the bike returned to SoCal for the winter, meeting Craig, Kevin, Mike and Henry Lu, the bike's owner, at Willow Springs Raceway for a few hot laps. Velasco had definitely cured the Hawk's earlier finickiness, and the bike I rode at Willow had the same engine Erion used to win the Heartland Park Topeka Modified Production Twins race and to finish third in the Pro Twins class. Erion entered the Pro Twins class with instructions to rev the daylight out of the twin—spin it to 11,000 rpm rather than the usual 10,200—and see if it would break. It didn't, and after 20 laps at Willow, the Hawk still ran strong.

TRACK HAWK

The first two laps serve to scrub in the new Michelin slicks, and I'm at street speeds, keeping the tach below 8000 rpm and enjoying the light, tight feel of the Honda. The Spondon clip-ons combine with RS250 footpegs to put my 5-foot-9-inch frame (the same size as Erion) in a perfect position to control this minute motorcycle. The bike's NSR400 fairing contributes to the overall smallness; the fairing bubble will increase in size next year to better hide the rider from the wind. The diminutive appearance transfers to the racetrack as light, quick response.

I first notice the bike's size braking for turns one and three. The two Nissin calipers grab the front ventilated discs with such force that the rear slick gets airborne. The Nissins' strength is almost braking overkill, especially at Willow, but Erion no doubt used all of their capabilities at Loudon and Sears Point, two tracks requiring frequent arrester-hook braking.

While the front brake takes some ad-

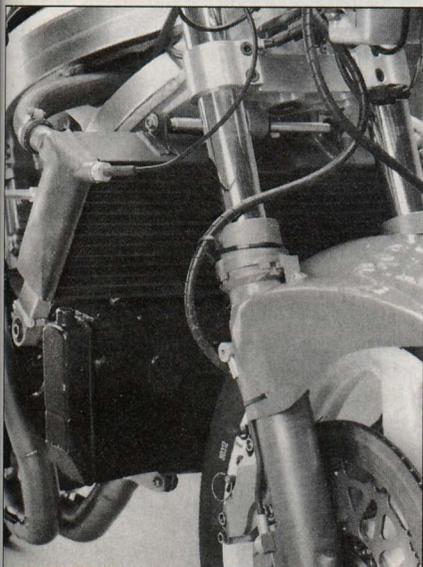


PHOTO: LANCE HOLIST

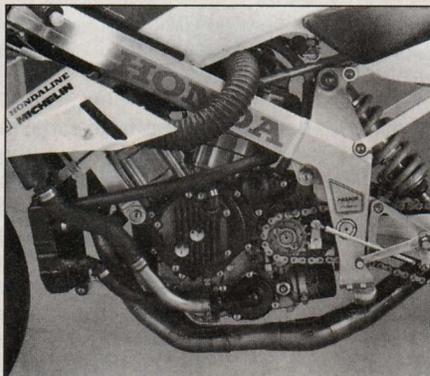
justment, the steering characteristics can't be faulted; the twin is surprisingly neutral for such a short motorcycle riding on wide tires. The new Michelin slicks get some credit for the steering, offering a triangulated profile that encourages the bike to roll up on their edges. Once in a corner, such as Willow's long, sweeping turn two, the little Honda changes lines and directions easily. Velasco and Honda have created one of the easiest race bikes to just jump on and start going fast. By the fourth lap I'm turning times that would put me in the hunt in the super-competitive, FZR600-dominated ARRA 600 Superstreet class.

The engine complements the steering, getting serious at about 7400 rpm and flexing hard around 9000. The engine feels a bit flat over 9600, but that's probably due to the Topeka jetting and Willow's 2400 feet of elevation. In any case, I begin to shift the bike at 9600, counting on the Hawk's midrange to pick up the next gear. I'm not disappointed.

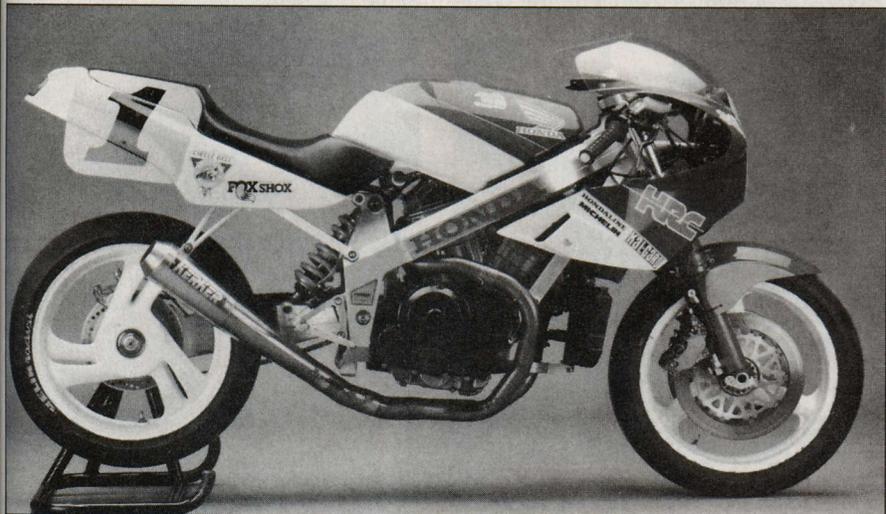
You don't win a national championship



Perhaps Velasco's best work, the dual radiators and revised cooling system contain the heat produced by the 700cc Hawk, dropping coolant temp over 70 degrees.



The massive RS750 dirttrack ignition eliminates the Hawk's battery and allows the engine to rev to 12,000 rpm. The stock footpegs are replaced with RS250 items.



Air Tech's fiberglass NSR400 fairing combined with the stock tank and seat give the stubby Hawk a sleek, aerodynamic look. That's a slip-fit Kerker stainless exhaust.



Erion runs Michelin slicks, and a pair of vented rotors with Nissin calipers do their best to get him stopped. The front end came from a factory Superbike.

without horsepower, so the Hawk obviously hits hard, but I'm even more impressed with the smoothness of the delivery. The handlebars buzz at about 6500 rpm, but everywhere else the engine remains remarkably smooth, doling out power without punishing the rider through the bars, seat or pegs. This engine is smoother than those of the majority of street bikes we test each month.

EXOTIC INTERIOR

Velasco's engine bristles with hardware that transforms the Hawk's engine from street to race, components that stay together at warp-nine rpm, weigh less and cost more. Costa Mesa Balancing balanced the crank, titanium Crower connecting rods and Wiseco pistons with a 56 percent balance factor to reach the level of smoothness Velasco sought. The 82mm Wisecos necessitated a 3mm bore job, done by Vance & Hines, and Velasco finished the piston domes to achieve a 12.0:1 compression ratio. Titanium Del West valves with titanium retainers and stock valve springs (a Velasco secret) work in a head ported by Velasco and Sports Afield, a Canadian company.

A Honda RS750 dirttracker ignition that allows a 12,000-rpm rev limit found its way onto the left side of the engine; the ignition eliminated the battery and required a bunch of work to mount. Two Brothers Racing now offers an updated stock ignition unit that allows a high rev limit, so the RS ignition (and the work that goes with it) is no longer necessary.

Like the ignition, the cooling system flaunts the Velasco touch with two radiators, one from a VFR750, the other from an RC30. The rear cylinder usually receives the hot water that has already circulated through the front cylinder, so it doesn't stay as cool. Since the front and rear cylinder castings are the same, Velasco routed a second hose to the rear cylinder to get it cool water, then ran the water exiting both cylinders to the top radiator. From there, the water heads to the water pump and back to the bottom half of the second radiator, then through the top half, giving the water more exposure time to the cooling air. All in all, Velasco has realized a 25-degree Centigrade (77-degree Fahrenheit) reduction, the work involved certainly contributing to the Hawk's longevity.

Honda's Hawk always handled well, accelerated slowly and looked good. The Two Brothers Racing Hawk improves on everything Honda started, raising the level of Modified Production Twins racing beyond the reach of current Ducatis. Kevin Erion rides intelligently, smoothly and quickly, a combination that usually yields championships. And like champions before him, Erion arrives at the track with a strong pit crew and an excellent tuner, who created not just a fast motorcycle but a motorcycle easy to ride fast.

YOSHIMURA S

RECAPTURING THE CROWN: Hot laps on the bike that brought back the national Superbike Championship after nine years

1

Wes Cooley and Jamie James achieved what no other Yoshimura rider in the 1980s could: they won the national Superbike Championship, Cooley in '79 and '80, and James in '89. Kevin Schwantz, Doug Polen and Scott Gray, among others, took a run at the championship for Yosh, but it wasn't until the Georgian James charged through the pack on this Suzuki GSXR750 that the crown returned to the Chino, California, performance firm.

It wasn't for lack of trying that Yosh went without a championship during most of the '80s; a combination of crashes, mechanical malfunctions, a scrappy Team Kawasaki and a strong Team Honda kept Yosh in the runner-up positions.

The Superbikes Wes Cooley, Eddie Lawson and Reg Pridmore tell stories about did little but accelerate—usually sideways and rarely with both tires touching the ground at the same time. Superbikes used to be monsters, bikes with minimal chassis rigidity and maximum horsepower that roared, wobbled and slid their way around racetracks as much like dirttrackers as roadracers. Horsepower always overcame the chas-

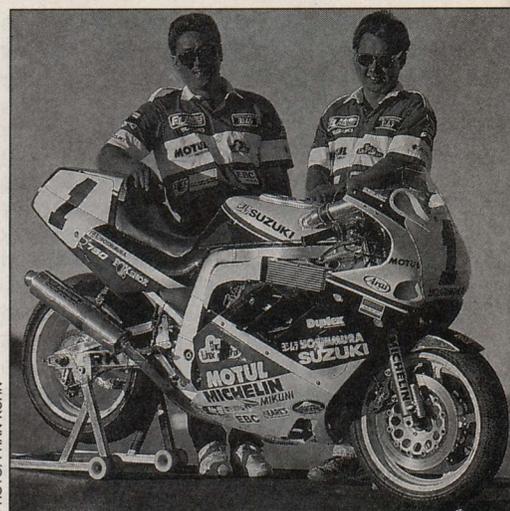


PHOTO: FRAN KUHN

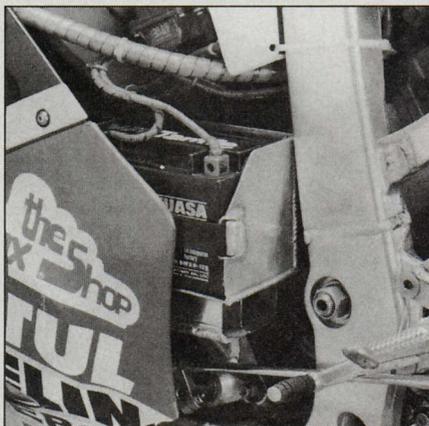
Don Sakakura and Zenta Sugimura recapture the AMA Superbike crown.

sis, be it a BMW twin or Kawasaki four-cylinder, and Superbike races earned the nickname "Dinosaur Wrestling."

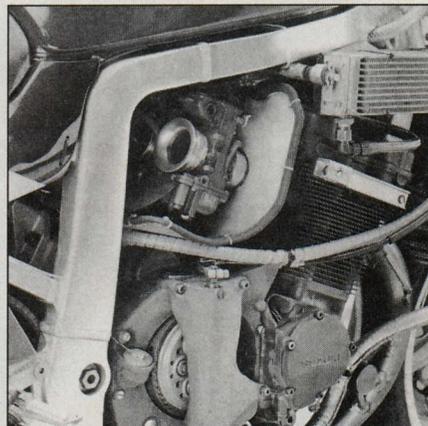
But since Superbikes are based on production machines and production machines have grown in leaps and bounds this decade, the dinosaur wrestling days are over. As the technology of street bikes advanced, so did the quality of America's Superbike racing, until the chassis and tires have finally caught up with the ponies. Jamie James' Yoshimura GSXR750 produces 137 horses on the Yosh dyno and puts most, if not all, of that power to the ground through the 5.5-inch-wide Technomagnesio wheel and Michelin slick. After years of evolution, Superbikes have finally become racing bikes.

THE SURPRISE

The race bike I find lurking beneath the stock blue and white paint has a decidedly different feel than I expected. I came to Willow Springs Raceway ex-



Tucked inside the left fairing lower, just outboard of the countershaft sprocket, is a downsized battery that has only one job, powering the ignition system.



Yosh's Superbike motor puts out 137 horsepower with a 5000-rpm-wide powerband. The racing dry clutch is similar to the '86 GSXR750 LTD's unit but lighter.