

Tests: Kawasaki GPz1100, KX500,
Yamaha Virago 500 and IT490

Quarter-mile speed secrets

CYCLE WORLD

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Kawasaki GPz1100
A ride on the wild side



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*The Kawasaki GPz1100
Photographed by Steve Kimball*

DAYTONA

Three laps into the Daytona 200, Kenny Roberts was fighting not for the lead, but for control, his Yamaha sliding sideways on the banking at 180 mph. He'd planned to run the 200 miles as the endurance race it is, and his plan hadn't included trouble, again.

Trouble, again, is the story of Kenny Roberts at Daytona. Roberts was the fastest man at Daytona, again, had qualified on the pole, again, and was in trouble, again. He's started the race 10 times, been on the pole seven times and has won just once in all those tries.

He did nine laps last year before his bike seized; quit after two laps with a stuck throttle caused by a kinked cable in 1981; pitted after two laps in 1980 with a throttle stuck by sand in the carburetors; missed the race altogether in 1979 with injuries. He won, lapping the field, in 1978. He finished second in 1977 with clutch problems, and led until he wore his rear tire through the cords in 1976.

For Kenny Roberts, finishing, let alone winning, Daytona is a problem, and, as far as he could tell, here it was again. He thought he had blistered his rear tire, he would say later, because Dunlop technicians had told him not to go too fast in the early laps. His plan was to lay back, conserve his tires, then make his move after his second pit stop for fuel. But here he was, sideways, scared, puzzled. So Kenny Roberts pulled into the pits...

The fourth lap began as Roberts headed off the track, with Mike Baldwin leading Eddie Lawson and Ron Haslam, Steve Wise already eight seconds behind.

Roberts had come to Daytona as prepared as any man

could be. He and new teammate Eddie Lawson each had two OW69 Square Four two-stroke Yamahas, bikes proven reliable in 500cc Grands Prix. But these OW69s weren't 500s. Roberts had ridden a 500 at Daytona in 1982 and lacked power compared to the Honda FWS1000 V-Four four-strokes, so this time the Yamahas were big. How big, nobody would admit, but hints and educated guesses put them at about 670 or 680cc, and Roberts had engines built to three different specifications to choose from. He started with what team manager Ken Clark called "the tractor motor," built with a broad powerband and what Clark said was enough power to reach—given the room—195 mph. The tractor was strong enough to put Roberts and Lawson one-two in qualifying and one-two in radar-measured top speed, but if it hadn't, there were two more

engines ready to use, each with progressively narrower powerbands and more peak power.

Team Honda was as serious as Yamaha. Baldwin and Wise each had an FWS, the class of the 1982 field. Freddie Spencer and Ron Haslam were on three-cylinder two-stroke Grand Prix NS500s bored out, according to Team Honda P.R. man Stuart Rowlands, to 540cc. Roberto Pietri rode an air-cooled, CB900-based Honda in a Moriwaki aluminum frame.

Kawasaki entered one bike in the 200, a KR1000 using a 1982 Superbike engine in an all-new, single-rear-shock aluminum frame, ridden by Wes Cooley.

The Yamahas were the fastest, challenged by the NS Hondas in acceleration but pulling away in top speed. Next best were the FWS four-strokes, hampered by their own weight and bulk and

more prone to spin the tire off the corners than the lighter two-strokes. Cooley's Kawasaki lacked both the acceleration and top speed of the other works bikes, although it was, at 350 lb., lighter than the four-stroke Hondas.

By the time Roberts pitted on lap three, Cooley had already crashed on the banking, breaking his collarbone, when a connecting rod came through the Kawasaki's crankcase. Spencer had pitted on lap two while in third place, to have a loose face shield taped to his helmet.

Roberts rolled back onto the course, having inspected his tire and been assured by Dunlop technicians that it was fine, that maybe oil on the track caused his slide. Lawson led, having, in one lap, come from three seconds behind to one second ahead of Baldwin, who had his own tire troubles when he tried to keep up with Lawson, slipping and sliding



'83 *Big enough to do the job.*

With a big-bore kit in his tractor motor, Kenny Roberts wins the Daytona 200 enduro.

and correcting exiting infield turns, the compromise price of race-long tire life at Daytona being a limit to adhesion.

Spencer moved up and Roberts charged hard, mad at himself, he would say later, for having pitted at all. Robert's run through traffic was amazing, rapid, precise, Roberts' bright yellow Yamaha and bright leathers making him look, up on the banking, like a video game spaceship weaving through so many asteroids. Lawson's crew, meanwhile, signaled him to slow down—his lead was secure over the battle for second place between Baldwin and Haslam—from 2:01s to 2:02s to 2:03s to 2:04s, from a pace only four men could reach all the way down to a pace reached in qualifying by only six riders.

Spencer retired with transmission trouble, joining Haslam, whose bike had seized, in the pits. Wise was

third although his front brakes had faded badly after 10 laps and would, by the end of the 52-lap race, be metal-to-metal with the linings gone. Baldwin was fourth, the declutcher in his FWS slipping on hard acceleration. Eventually it would fail altogether.

Roberts led, Lawson just behind, Roberts straightening up early exiting infield turns, Lawson rolling off the gas to stay behind Roberts, both lofting the front wheel here and there out of the slower corners. The game now was saving the tires, and the pace came down, Roberts slowing to 2:05s, Lawson staying just behind, a shadow, watching. Four times Lawson drafted past Roberts on the last banking and led across the finish line, testing then falling in behind as the pair entered the infield.

Until the 39th lap, when Lawson felt something wrong

as he powered onto the banking from the last infield turn. By the chicane, he knew his rear tire wasn't right, and he sailed into the pits. His mechanics replaced the rear wheel in less than a minute, the tire flat from a nail puncture, and Lawson re-entered the race still in second place, just ahead of Wise. A lap later Lawson pulled out his lead on Wise three seconds on one circuit, then three more. Roberts slowed again in the final laps, down to 2:07s and 2:08s, lapping fourth-place Gervais near the finish. The last laps for Roberts and Lawson were 2:10s, the suspense audible, the fact that Roberts might actually finish and win slightly incredible.

He did win, Lawson second, between them leading 49 of 52 laps, Roberts first across the line 30 times including the time it counted, the finish.

Aldana was fifth, followed by steady, self-employed,

unsponsored privateer Kurt Lentz on a six-year-old TZ750 tuned with help from friends Tom Malaska and Kim Burd. Hap Eaton was seventh on another privateer TZ750, John Long eighth on a TZ sponsored by Scott Guthrie Racing. Rusty Sharp rode to 9th on a 1980 Honda Superbike frame with a 1982 works F-1 engine and front-end supplied by Honda to former Team Honda mechanic Dennis Zickrick, just ahead of Doug Brauneck's TZ750.

Pietri's fairing came loose early on, requiring a quick pit stop and his engine blew up later. Between those two incidents, Pietri ran much of the race just behind Wolff and Aldana. Baron, who qualified 10th fastest, ran with and finally passed Pietri, but his bike's fuel tank cracked and sprung a leak. Baron lost four laps to finding a replacement tank in the pits, and finished 23rd.

Kenny Roberts led the race, Eddie Lawson staying just behind, a shadow, watching, testing...



DAYTONA 200 RESULTS

1. Kenny Roberts	Yamaha OW69
2. Eddie Lawson	Yamaha OW69
3. Steve Wise	Honda FWS1000
4. Steve Gervais	Yamaha TZ750
5. Dave Aldana	Yamaha TZ750
6. Kurt Lentz	Yamaha TZ750
7. Hap Eaton	Yamaha TZ750
8. John Long	Yamaha TZ750
9. Rusty Sharp	Honda CB900
10. Doug Brauneck	Yamaha TZ750
11. Boonie Knott	Yamaha TZ750
12. Henry DeGouw	Yamaha TZ750
13. Harry Klinzmann	Kawasaki KZ1000
14. Uri Bergbaum	Suzuki RG500
15. Dave Busby	Yamaha TZ350

DAYTONA

Freddie Spencer won the Daytona Superbike race, which ran pretty much the way it would have if Freddie had written the script. Freddie rode a superbike based on the VF750F Interceptor, and so did second-place Mike Baldwin, third-place Dave Aldana and fifth-place John Bettencourt.

Honda's preparations for their sweep at Daytona started last year, long before the opposition, which shrank from Suzuki and Kawasaki in 1982 to simply Kawasaki in 1983, even had a glimpse of the stock machines their superbikes would be based on. Honda did its homework and testing, the Honda mechanics working long hours and longer weeks, beginning early and staying at it until the start of the race, and it paid off.

There was the Honda factory team, riders paid a salary and riding bikes owned and built by American Honda's race team: Freddie Spencer, Mike Baldwin, Steve Wise. And there was the support team, riders paying their own way but receiving bikes and parts from Team Honda: Roberto Pietri, Fred Merkel, Dave Aldana, John Bettencourt and Sam McDonald.

The Hondas were tested and proven and ready for the race, Pietri losing an engine to dropped valves in practice but the rest of the bikes reliable and without problems before race day. Sam McDonald fell in final practice, his bike's engine over-revving as it lay on the ground, but it seemed fine before the start.

The biggest differences between the works bikes and the support bikes were the works dry clutches and declutchers (sprag clutches mounted on the crankshaft), but in early-week testing the support bikes were almost as fast as the works bikes.

Kawasaki, on the other hand, had suffered through engine failure after engine failure, using up a huge stock of spare parts in testing before and during Speed Week, finally settling for a little less power in exchange for a greater chance to win. There were two Kawasakis entered, both based on the GPz750, one ridden by Wes Cooley and the other piloted by Wayne Rainey.

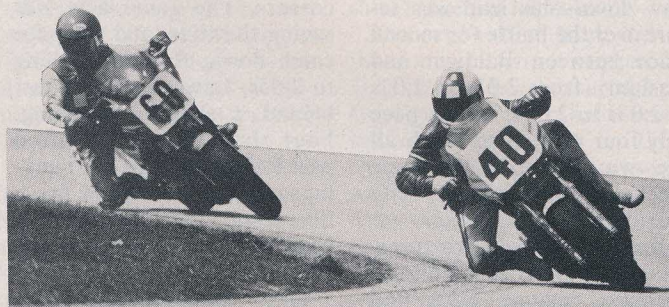
Baldwin jetted into the lead off the grid, Spencer close behind, and that became the race, Spencer passing early, gaining a few seconds, Baldwin making it up and re-passing, Spencer sitting back and waiting, always within striking distance, waiting, the pair pulling farther and farther away from the field, in a race all their own.

Behind, first a few seconds back, then 18 sec. then 20 sec. adrift by the 10th lap, came Aldana and Rainey. Rainey

ran it in harder in the infield, and Aldana used his Honda's power to pass on the banking while looking for traffic to cut through in an effort to shake Rainey out of his draft. Cooley raced Pietri for five laps without a clutch, which wouldn't disengage after the start, until he lost fourth gear. Merkel moved up past Jimmy Adamo's 1000cc Ducati to race Pietri, while McDonald and Bettencourt raced behind Adamo.

McDonald's bike dropped a valve and he pitted. Merkel collided with a lapped rider in Turn One and fell, taking Pietri with him. Adamo broke.

Baldwin's quick-fill fitting, hidden under his Honda's gas tank, stuck partially open after his refueling stop, and when Baldwin charged deep into Turn Two, still leading Spencer, a fog of gasoline shot up into his face, raw fuel sloshing over the tank. Bal-



Photos by John Ullrich

Wayne Rainey (60) runs it in hard, making up time lost on the banking to Dave Aldana.

At the finish, Freddie Spencer was alone out front, just like last year.



'83 *Fast enough to do the job.*

Freddie Spencer and the Honda Interceptor overwhelm the Superbike competition. By John Ulrich

dwin sat up and drifted wide, Spencer drove underneath and was gone. Baldwin poked and prodded the fitting, but it wouldn't close and he concentrated on finishing and losing the least amount of gas, braking gently and trying to stem the geyser gushing out of his tank at every corner.

Aldana finally got away from Rainey, and Bettencourt, still carrying a steel rod in the thigh he broke last year, rode around alone in fifth,

lapped by Spencer and Baldwin. All the time, Wise watched from the pits, his bike's chain having broken in Turn One off the start.

Spencer won, Baldwin second, Aldana third, Rainey fourth, Bettencourt fifth. Behind came the privateers, Joey Mills on a Ducati, Ricky Orlando on a Suzuki prepared by Dennis Zickrick, Lynn Miller on his KC Racing CB750F.

Honda did its homework. Honda won.

How Do The 750s Compare

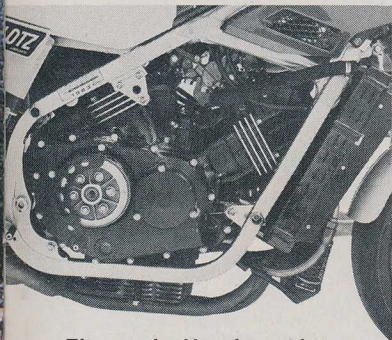
This year four cylinder Superbikes are limited to 750cc, down from the 1025cc limit established in 1977. The size change affected lap times and average speeds, the fastest Daytona Superbike laps being about 2:04 in 1982 and about 2:08 in 1983.

Freddie Spencer's winning average speed, included a refueling pit stop, over the 100-miles of the race was 108.796 mph in 1982 and 106.085 mph in 1983.

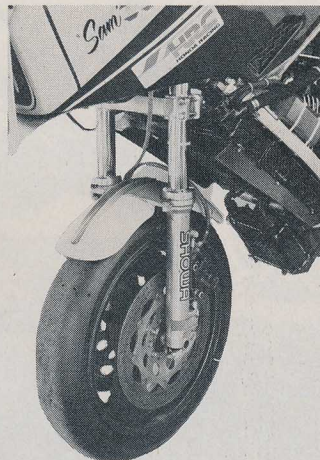
While the new 750cc Superbikes have smaller engines, they're also lighter, with the rule-designated minimum weight down to 390 lb., from 1982's 416. The 750s

make less horsepower, around 118 bhp to a 1982 front-running 1025's 145 bhp, but the 750s can put more of their horsepower to good use. That's because the street 750s used as basis for the racing Superbikes were designed with racing in mind. The chassis components are better, a good example being the Honda Interceptor swing arm, which doesn't even require bracing for racing use.

The 1025cc Superbikes used power as much as anything to turn good lap times. The new 750cc Superbikes rely more on superior chassis than brute power.



The works Honda engines differed from the support bike engines by using a dry clutch and crank-mounted declutcher. All the racing Hondas, works and support, had beefy Showa front forks with TRAC anti-dive, Nissin calipers and floating iron discs.



Before the pit stops, Freddie Spencer followed Mike Baldwin, sitting up slightly on the banking to avoid passing.



DAYTONA SUPERBIKE RESULTS

- | | |
|---------------------|----------|
| 1. Freddie Spencer | Honda |
| 2. Mike Baldwin | Honda |
| 3. Dave Aldana | Honda |
| 4. Wayne Rainey | Kawasaki |
| 5. John Bettencourt | Honda |
| 6. Joey Mills | Ducati |
| 7. Ricky Orlando | Suzuki |
| 8. Lynn Miller | Honda |
| 9. Ruben McMurter | Kawasaki |
| 10. Glenn Berry | Honda |

DAYTONA '83

Return of the native. The Battle of the Twins goes to Jay Springsteen and the Harley XR1000. By Allan Girdler

Officially Daytona's Battle of the Twins took place on Friday, and Jay Springsteen and the GP version of the XR1000 gave Harley-Davidson its first win at the speedway since 1969.

Actually, the battle took place during Thursday practice. Springsteen came into the infield hairpin in front of Jim Adamo, two-time BOTT champion and rider of a Reno Leone-tuned Ducati. Adamo, Leone and Ducati have won the Daytona Twins race twice, while racking up 13 BOTT victories in 19 starts and were obviously the team to beat.

Springsteen and Adamo swept around the turn and on the way out Adamo gassed it, getting his front wheel even with the Harley's back wheel. Springsteen looked down. His right arm dropped, so far and fast that the motion could be seen from the other side of the track.

The Harley jumped ahead, gaining a length each second until it was out of sight. Springsteen never looked back again.

One could say Springsteen and Harley-Davidson have instead been looking forward to this for a long time. The racing department's enthusiasm for the production XR1000 may have begun with the knowledge that a high performance Sportster would put them back into road racing on an equal footing with the other small factories if not the Big Four and their Big Fours.

Harley's racing XR1000 isn't the usual sort of works bike. Builder Carroll Resweber (yes, the four-time national champion Resweber) came up with a frame that was part production XR750, part 1972 Cal Rayborn XR

road racer and part what's been learned since 1972. The frame was given road race dimensions, as in steering head angle, with rear shocks from Moto-X Fox and forks by Marzocchi, into which the builders put Harley's patent-pending anti-dive, as seen on the FXRT. Brakes are three Brembo discs, and Jay's bike ran the race with a Goodyear slick on the back, a Michelin slick in front.

The engine is a similar combination: XR1000 cases, barrels and heads, naturally handworked and carefully assembled. Builder Don Habermehl used camshafts from the XR750 catalog, a pair of monstrous 40mm carbs, the dirt-track-proven Dyna dual ignition and modified XR750 exhaust pipes.

Team chief Dick O'Brien says the major change was moving the oil tank in front of the engine for better cooling. O'Brien cheerfully says no-

body had the nerve to actually weigh the bike, but that it's probably close to 385 lb. ready to race. The engine got lots of dyno time, where it recorded 106 bhp and 85 (!) lb.-ft. of torque. The week before Daytona the team went to Talledega for the racer's first time on a track. Springsteen was timed through the traps at 167 mph and enjoyed himself hugely.

The BOTT race was more like a demonstration. Adamo is no slouch, Leone knows Ducatis, they qualified both a 600 Pantah and the older 900, yet when the flag dropped Springsteen swept past the 900 on the second lap and pulled away, to the tune of a 26-sec. lead at the finish of the 13-lap race. No contest, in other words.

Leone expects things won't be quite so one-side when the series moves to tighter tracks. O'Brien hopes the factory will invest in the BOTT despite its

not counting toward the Camel Pro/AMA Grand National championship. He reckons the team could build an XR-based Formula One bike that would earn national points, but that would take money. Meanwhile, the Harley team is back in road racing.

After the heat races Adamo was quoted as saying Springsteen got into trouble that only his dirt track training could get him out of.

Funny. The Europeans used to say that about Kenny Roberts. □



Photo by John Ulrich

Jay Springsteen salutes the crowd after winning the Battle of the Twins on his XR1000-based racer. Off the track, Springsteen doesn't say much. On the track, his riding speaks volumes.



Photo by Patrick Behar