













One of our favorite bikes makes a glorious curtain call.

ALONG-LASTING LOVE AFFAIR

anada's love affair with the Yamaha RD series continued unabated, from the original 350 in '73 through the RD400 and RD350LC. And just when we thought there couldn't possibly be a better street stroker than the LC, along came the remarkable power-valve RZ350, and we fell in love all over again.

Introduced in '83, the RZ350 offered so much power and such well-mannered performance that bigger, flashier and more expensive bikes often became lost in a blue haze. And as the only street two-stroke available in Canada, it continued to attract a following of fervent sport riders.

But the little RZ's reign as King Squid is coming to an end. Last year Yamaha's own RZ500 boosted street two-stroke performance to previously unimaginable levels, and this year there's the Suzuki RG500 and even the four-stroke GSX-R750 to threaten the RZ's domain.

We fully expect to see another magic act performed on the 350 for next year to bring it up to date — most likely a transformation to a V-twin powerplant. In the meantime, though, Yamaha has refined the original RZ to a point where — in its present configuration — it's close to perfection. We can't help it; we're in love too.

The most apparent change with the '85 RZ350R is the addition of a full fairing, replacing the handlebarmounted quarter-fairing and small belly pan on last year's bike. Inside the fairing is a new instrument cluster similar to that on the RZ500, with a central tachometer flanked by a speedo on the left and an idiot-light cluster on the right. The change means that racers, who in the past had to run the whole expensive plastic instrument pod or no gauges at all, can now easily remove the speedo to store in a safe place.

The steel swingarm is now completely box section for added rigidity; last year's swingarm flattened out just before the axle. The swingarm also now uses needle roller bearings in place of bushings, which reduces the chance of developing evil play in the swingarm pivot. Rear tire size has been boosted to 110/80-18 from 100/80-18, and the tires are Dunlops instead of Yokohamas.

One of our main complaints with the original RZ was with its front fork, and Yamaha has answered by fitting this year's fork with the variable compression damping anti-dive feature shared with the FZ750. There's a new fork brace as well. New opposed-piston calipers at the front replace last year's single-piston grabbers, giving the little 350 state-of-the-art brakes at both ends.

Completing the changes are clip-on cast handlebars, a faired front fender like those on the FZ and FJ1100, and a new red-white-blue paint scheme to replace last year's garish, chopped-up stripe pattern.

The claimed dry weight of the 350R is 148 kg (326 lb) or just 3 kg heavier than the '84 RZ, attributable mostly to the larger fairing.

The number of changes to the YPVS, liquid-cooled engine is exactly zilch. It still puts out a claimed 55 hp at 9,000 rpm, and still is easy to start and civilized to operate below 6,000 rpm. Above 6,000 and especially between 8,500 and 10,000 the power is still sufficient to compete with most four-stroke middle-weights. Racers improve performance





and harder starting. The RZ350 is also one of the most reliable motorcycles on the market, and because it's a two-stroke it's easy to work on and relatively inexpensive to rebuild. We're in the process of putting this '85 RZ through a gruelling longterm test, to re-create the wear and tear the average owner might inflict in a season of hard use. We picked it up with 5 km on the clock, and 2,183 km later there's been only one minor problem. The steering stem was overly tight when we took delivery of the bike and it never loosened, causing it to handle erratically until the steering-stem nut was readjusted.

With the 350R we were particularly interested in how the handling is affected by the full fairing. At the high-speed test oval at Ste. Therese, Que., the RZ showed no signs of instability, even at its recorded top speed of 198 km/h [123 mph). Often a motorcycle equipped with a full fairing that it wasn't originally designed for will inherit handling problems, but not in the case of the RZ. The rigid chassis and spot-on suspension rates easily soaked up pavement irregularities at this surprisingly high top speed, and though the RZ has a relatively short wheelbase and larger frontal area with the bigger fairing, side winds don't seem to affect it adversely.

At the drag strip the RZ recorded a best of 12.93 seconds at 165.7 km/h (102.87 mph). In '83 we coaxed a 12.68 second, 171 km/h run from the RZ with a different rider, but the 12.93 is a more representative time.

Past RDs have closely resembled the factory's own two-stroke race bikes, and today's RZ still incorporates a number of race-bred components, the most obvious being the YPVS system. On closed courses around the world the RZ350 has been a dominant production racer, and at some tighter tracks like Shannonville it can be more than a match for RZ500s and other larger bikes. In the novice ranks the RZ350 is still hands-down the best bike on which to learn to go fast. It's got a high powerto-weight ratio, quick and precise steering, rigid frame and - as important it's cheap to buy and maintain.

None of that has changed with the 350R. The steering was the trait that most impressed riders after testing at Shannonville. With 26 degrees of rake, a trail of 96 mm and an all-up weight of only 192 kg it's no wonder that the RZ responds immediately to the rider's commands. The variable damping feature of the front fork works well to limit dive during braking. The rear suspen-



Front end gets clip- on bars, new fork and opposed-piston caliper brakes.



SPECIFICATIONS

Model 1985 Yamaha RZ350R
Price \$3,399
Engine type Transverse twin
cylinder, liquid-cooled two-
stroke with reed valves and
exhaust port power valves, six-
speed transmission
Displacement 347 cc
Bore and stroke 64 mm x 54 mm
Horsepower 55 at 9,000 rpm
(claimed)
Torque 44.1 N-m (32.5 lb ft) at
8,500 rpm
Carburetion Two 26 mm Mikunis
Ignition
Suspension Air assisted front fork
with 35 mm stanchions and
140 mm travel; single rear
shock adjustable for preload
and rebound damping, 100
mm travel
Tires Dunloo F14 90/90-18 front

110/80 -18 rear Weight... 192 kg(378 lb) with full tank

.... 12.93 seconds at Quarter mile 165.7 km/h (102.97 mph) Top speed 198 km/h (123 mph)

Distributed by Yamaha Motor Canada Ltd., 480 Gordon Baker Rd., Willowdale, Ont., M2H 3B4, (416) 496-1911.

sion is unchanged this year, and though its damping was sufficient during a day at the track, the shock is notorious in racing circles for becoming pooched quickly. Many racers switch to Fox. Ohlins, Spax or other aftermarket replacements. We should know more about the shock's lifespan with mostly street use after our long-term test is complete.

It's a popular misconception that bigger is always better when it comes to tires. Riders who squeeze the absolutely largest rubber possible between fork and swingarm often end up with tires that don't heat up properly and steering that is suddenly truck-like. The RZ comes with 90/90-18 front and 110/80-18 rear Dunlops, and only racers will need stickier tires. Tire width - with the increase to 110 from 100 at the rear this year—should now be just right for a bike of this weight and power.

The opposed-piston front brakes are an improvement over the former singlepiston, floating calipers, although the old set-up was excellent. They are powerful without being overly sensitive and didn't fade at all during race track use. The good traction of the front tire and the progressive action of the brakes allowed even non-racers to brake deep in corners. From our experience there isn't a production bike made that can out-brake the new RZ.

There's not much we can say about the liquid-cooled, two-stroke engine that we haven't covered before. It's surprisingly powerful in the upper rev range, civilized at lower rpm, and with a fairly gentle transition between the two. The combination of prodigious power and wide powerband stems from the use of reed-valve induction and the servomotor-controlled exhaust power valves, which alter exhaust port height according to rpm. We also expect to find the engine running as-new at the end of our thrash...oops, make that long-term

The clip-on handlebars have altered the riding position, forcing the rider to crouch lower and lean farther forward. The old RZ's ergonomics were a good compromise between sporting cant and everyday comfort, and the latter has suffered little in the change. The full fairing offers better weather protection, with a trade-off being amplified noise from the motor.

The improvements to an already outstanding motorcycle have raised the ante only \$150. At \$3,399 the '85 RZ350R is \$1,700 cheaper than the RZ500, and yet has almost as much to offer the sport rider.

We'll find out at the end of the season if the love affair lasts after the newness **13** has worn off.