

A Half Century of Yamaha Motorcycle racing

# Moto Column



Road Racing  
World Championship  
Grand Prix  
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1986 RR World Grand Prix

**The V-twin YZR250  
takes its first Championship**



## 1986 RR World Grand Prix

# The V-twin YZR250 takes its first Championship

With four laps to go, Carlos Lavado went for broke with a wild last spurt from 3rd position.

It was the final of the 10th round of the 1986 World GP250 series in Sweden. Lavado knew this was not the time to take chances. If he could just hold on to the finish line in his current 3rd position, he would win his second World GP250 title.

Even so, he had no intention of ending the season with an uninspired performance. As long as there was a chance of winning,

he would always go all out. That was his style. Now that he'd roused himself to the challenge, he focused his attention and prepared to

Win or withdraw? Lavado, who hailed from Venezuela, had a passionate racing style, and as long as he stayed on his bike he was usually uncatchable

accelerate out of the corner.

His machine had evolved dramatically from the TZ250s that had first dominated the GP250 back in 1983. He was on a YZR250 (0W82) featuring the newly developed V-twin engine.

In the next lap, he used the machine's outstanding handling performance to move up to 2nd place and soon had Sito Pons, up ahead on a Honda, in his sights. When the moment came, Lavado went full-throttle and shot into the lead.





The roots of the Yamaha V-engine can be traced back to the 250cc air-cooled V4 engine RD05, which appeared in 1965 to replace Yamaha's first championship winning machine — the in-line, two-cylinder RD56. This eventually evolved into the liquid-cooled RD05A, which won the 1968 World Championship. However, a change in the regulations that had hitherto limited the number of cylinders and number of gears saw its niche in the racing world eliminated. After that, the TD-2, TD-3 and TZ250 in-line two-cylinder production racers became entrenched as Yamaha's main machines in the 250cc class, and the V-engine was sidelined for some time.

In 1982, however, Yamaha was in need of an advanced engine to replace its in-line and square fours for the GP500, where the pace of technological innovation was relentless. That led to the development of the YZR500 (0W61) with a V4 engine. Two years later, Eddie Lawson took the title on an advanced version of that machine — the 0W76.

In the GP250, the Kawasaki KR250 won four years in a row from 1978 to 1981. To compete, Yamaha shortened the stroke of its existing in-line two-cylinder engine to convert it to a high-revving, high-output version. At this time, Yamaha also added technology fed back from the YZR500,

including a Monocross suspension and the Yamaha Power Valve System (YPVS), to heighten race competitiveness. From 1982 to 1984 Yamaha won three consecutive titles as a result.

At this point, Honda, which had previously shown virtually no interest in the 250cc class, developed its V-twin RS250RW factory machine. In the GP250 class of the 1984 All Japan Road Race Championship, this machine came out of nowhere to take the championship. Then, in 1985, it was entered in World GP250 factory racing, piloted by Spencer. The RS250RW had overwhelming power.

Yamaha responded by quickly starting development of a YZR250 (0W82) factory machine. This was a V-twin with the latest YZR500 (0W81) V4-type engine mounted vertically. A simultaneous firing system was adopted to reduce vibration. The engine was well-balanced with its high-rigidity, lightweight frame. In the final round of the 1985 World GP250 where it was introduced as a test, Lavado rode it to victory, beating Anton Mang on a Honda. The high potential of the model was obvious.

In the opening round of the 1986 series, Lavado stood on the starting grid in third place behind Martin Wimmer and Tadahiko Taira, also on YZR250s.



When the signal turned green, the machines roared into action, only to meet a major accident. Taira had bungled his start and riders behind piled into him, one after the other. The course was a mass of confusion. Up ahead, Lavado, who had gotten off to a safe start, suddenly crashed!

However, Lavado was saved from dropping out when the red flag and the race was restarted. Switching to a spare bike, he rode to victory in torn racing leathers, beating Mang on his NSR250. While he was 2nd in the second round of the series, 0.13 seconds behind the

winner, Lavado won the following West German and Austrian rounds. This put him on top of the ranking as the series came to the Swedish GP in Anderstorp.

Now, in the closing stages of this race, it was finally time for the front-running Lavado, to make his move. He extended his lead over Axel Pons in 2nd place to four seconds and crossed the finish line an ecstatic winner! It was the first time since the RD05A 18 years earlier that a Yamaha factory machine with a 250cc V-engine had won the championship.

NEXT ISSUE

1986 RR World Grand Prix

**A breakthrough first GP win  
for Tadahiko Taira  
in a challenging year**

