



Yes, the bike that was made in 250cc form from 1964-67, and as a 297cc between 1966-67, would probably take the gold medal.

TT spectators first heard a 250cc six soaring to its 18,000rpm redline in 1965, when Jim Redman won the Lightweight race. Mike Hailwood then won the 1966 Lightweight race and the Lightweight and Junior contests in '67. It must have been amazing to hear the revs zipping skywards as the rear wheel skipped over the bumps of the Cronk-y-Voddy and Sulby straights at 150mph, or riders clutch-slipped the bikes out of the Ramsey Hairpin.

Now, 50 years on, a six will scream on the Mountain Circuit once again. New York's Team Obsolete is bringing a 250cc RC165 to the Classic TT in August, with plans to run it at the Jurby Festival and complete a demonstration lap of the TT course. The

Jim Redman rode in the 1964 Italian GP at Monza. It never raced on the Island, but it is the predecessor of the bikes on which Redman and Hailwood won those TTs in 1965-67.

"We acquired the RC165 in 1993 with a broken crankshaft," Team Obsolete chief Robert Iannucci explains. "We rebuilt the bike, initially at Roberto Gallina's Grand Prix workshop in Italy, and then completed the job in the US with Team Obsolete staff. We ran it 32 times, with riders who included Redman, Dave Roper, Don Vesco, Miguel Duhamel and John Cronshaw.

"Redman did not like the bike's handling when the six made its debut at Monza, so for the next Grand Prix at Suzuka, the engine was installed in an RC164 chassis from his four-cylinder 250, where it remains. The frame and swingarm have extensive

Exquisite miniature components are exemplified by tiny spark plugs (shown with American quarter-dollar coin for comparison)

"Now we're carrying out a complete disassembly of the entire motorcycle. We've replaced the fork seals and fitted Avon tyres. We're using Black Diamond valves made in California, pistons from Klaus Wahl in Germany and conrods from Arrow in England. An Italian Formula One company is making two new crankshaft assemblies by a reverse-engineering process.

"Reverse engineering involves extracting design knowledge from existing parts. We supplied the original Honda crank; the components are then measured, and metallurgical studies are performed. Hardness is tested and assembly sequences are established.

"Titanium components include the fork tubes, axles, lower yoke and stem, engine mounting bolts, the swingarm spindle and miscellaneous hardware. We obtained a large

SIX EDUCATION

In 1964 Yamaha's RD56 disc-valve twin was beating Honda's four in the 250 class. Honda's response was to design one of the boldest gambles in the history of Grand Prix racing – a six-cylinder across-the-frame four-stroke. But Honda's engineering genius made the six a winner.

When factory rider Jim Redman went to Japan to test it in 1964, his reaction was: "'How the f*** do you ride this thing?' I jumped on it and went down the road; it was in a tiny frame barely bigger than the 125."

Fourteen days later, the bike was on its way to the Italian Grand Prix. With no time to arrange conventional air freight, the team bought five seats on a passenger flight from Japan and carried the bike as hand luggage. Redman was eager to debut the bike in Italy, despite its unsorted handling. "There's only five corners at Monza – I can do this," he told Honda. "I'll blast them so fast on the straights, and take it easy in the corners."

At Monza Honda removed the two outer megaphones and outer carbs, and kept the bike under wraps to keep the opposition guessing until the final seconds before practice. When the covers were removed and the engine fired up, the paddock was stunned.

Almost inevitably, given the lack of development time, the six ran into problems at Monza; it overheated and Redman finished third. He did, however, win the final GP of the year at Suzuka, and the sixes went on to win four world titles in 1966-67.

Honda named the original 250 six an RC164 (the same code as the four-cylinder bike). But Redman didn't like the handling of the original bike, so a modified chassis was fitted for Suzuka and the bike was renamed the RC165. lannucci believes his bike (frame number 1005, engine number RC165 E102) is this original prototype.

Stuart Graham took over the bike in early 1966 until he was given an RC166 later in the season. The Honda museum in Japan has a display RC165 engine, but lannucci believes that his is the only example of a complete surviving motorcycle.



'A FORMULA ONE COMPANY IS MAKING NEW CRANKSHAFT

stash of spares from Mike Hailwood's Honda operation in South Africa, and these have been extremely helpful."

Very few Honda sixes exist - they're either the factory 250 and 297cc originals or replicas of the 297. And when they appear at events, they're usually given just a handful of laps on a short circuit. Iannucci, however, has always challenged the orthodox, and he's confident that his rebuilt Honda six can survive the 37.73 miles of the Mountain Circuit.

"We've run our RC165 at more than a dozen venues, including Daytona, Assen, Laguna Seca, Brands Hatch, Cadwell Park, Scarborough, Mallory Park and the Nürburgring," he says. "It last ran at the 1998 Centennial TT at Assen, in 1998. The bike has done 248 miles in our hands. It's a brilliant piece of engineering and design, and is reliable and not at all fragile. It expands on the engineering of European multi-cylinder engines by simplification and by following the same basic principals. It's a triumph of compact packaging."

Many collectors specialise in one make or model, but Iannucci owns British singles (Matchless G50 and AJS 7R), Italian multis (MV and Benelli), Japanese exotica and Harley V-twins. Does he identify patterns in the engineering approach of these four nations?

"British bikes tend to be under-engineered, overweight, but truly beautiful and not difficult to work on," he replies. Italian bikes are a true art form - a blend of art and engineering, with great passion applied. Japanese bikes, in particular the Grand Prix bikes of the '60s, are brilliantly engineered and very easy to assemble. And American bikes especially the Formula 750 Harley-Davidson XR750TT - are a challenging combination of 1930s engine technology and 1970s chassis design."

SPECIFICATION

HONDA RC165 Engine: Air-cooled 247cc 24-valve six

Bore and stroke: 39 x 34.5mm Carbs: 6 x 17mm Keihin flat-slide Ignition: Kokusan magneto Output: 60bhp @ 18.000rpm Gearbox: Seven speed Frame: tubular steel (engine stressed member)

Forks: 35mm Showa Shocks: Showa

Brakes: Front: 220mm tls drum. Rear:200mm sls drum

Tyres: Avon 3.00 x 18in/3.25 x 18in Weight: 260lb (118kg) Top speed: 150mph+

HONDA SIXES AT THE TT

1965 250cc LIGHTWEIGHT TT

2hr 19m 45.8s 98.18mph 1 Jim Redman (Honda) Record lap: Redman 100.09mph

Phil Read takes an early lead, but Rhodesian Redman says: "You beauty, she's blown," as he sees Read grabbing the Yamaha's clutch lever.

1966 250cc LIGHTWEIGHT TT

1 Mike Hailwood (Honda) 2hr 13m 26.0s 101.79mph Record lap: Hailwood 104.292mph

The first of the Hailwood victories. Mike's team-mate Stuart Graham has bike troubles but finishes second, as the Yamaha V4 RD05s of Phil Read and Bill Ivy retire.

1967 250cc LIGHTWEIGHT TT

1 Mike Hailwood (Honda) 2hr 11m 47.6s 103.07mph Record lap: Hailwood 104.50mph

Phil Read on the RD05 is only 13 seconds down on Hailwood at the end of the first lap, but finishes the race nearly 20 seconds behind him.

1967 350cc JUNIOR TT

1 Mike Hailwood (Honda) 2hr 9m 45.6s 104.68mph Record lap: Hailwood 107.37mph

Mike wins on the 297cc version of the six. Giacomo Agostini (MV) finished second, but was never in the race for

1964 250cc Italian GP:

Jim Redman, 3rd FIRST WIN

1964 250cc Japanese GP: Jim Redman











