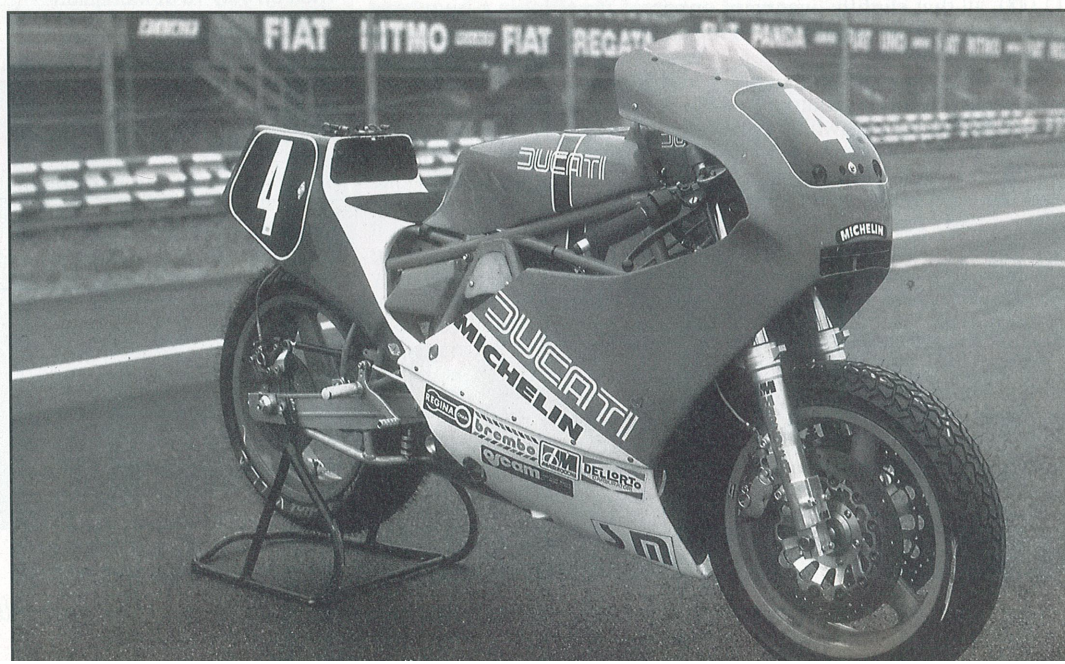


PANTAH POWER

over even the machines which carried Rutter to third place in the '84 TTF1 series. Apart from the externally mounted Bosch electronic ignition and dry clutch, each necessitating special magnesium castings, the engines looked outwardly similar.

Inside though, BMW-type U-shaped conrods made in the USA out of special steel were used: but titanium rods were fitted to one engine and gave no trouble. Oversize 44mm inlet and 40mm exhaust valves were fitted, though the latter were reduced to 38mm in size after the Suzuka race to try to resolve the thermal difficulties which led to the bike's retirement there. There were two types of camshafts, one an outright racing type that gave more power but at the expense of tractability and was thus less rarely used than the second type, was fitted to the test bike, to give improved torque and reliability.

After the problems with Mahle pistons the team reverted to two ring Borgo components, in spite of increased oil consumption which was simply resolved in endurance racing by topping up more frequently during fuel stops. There was an alloy oil catch tank under the seat, with return feed to the wet sump.



RPM track test

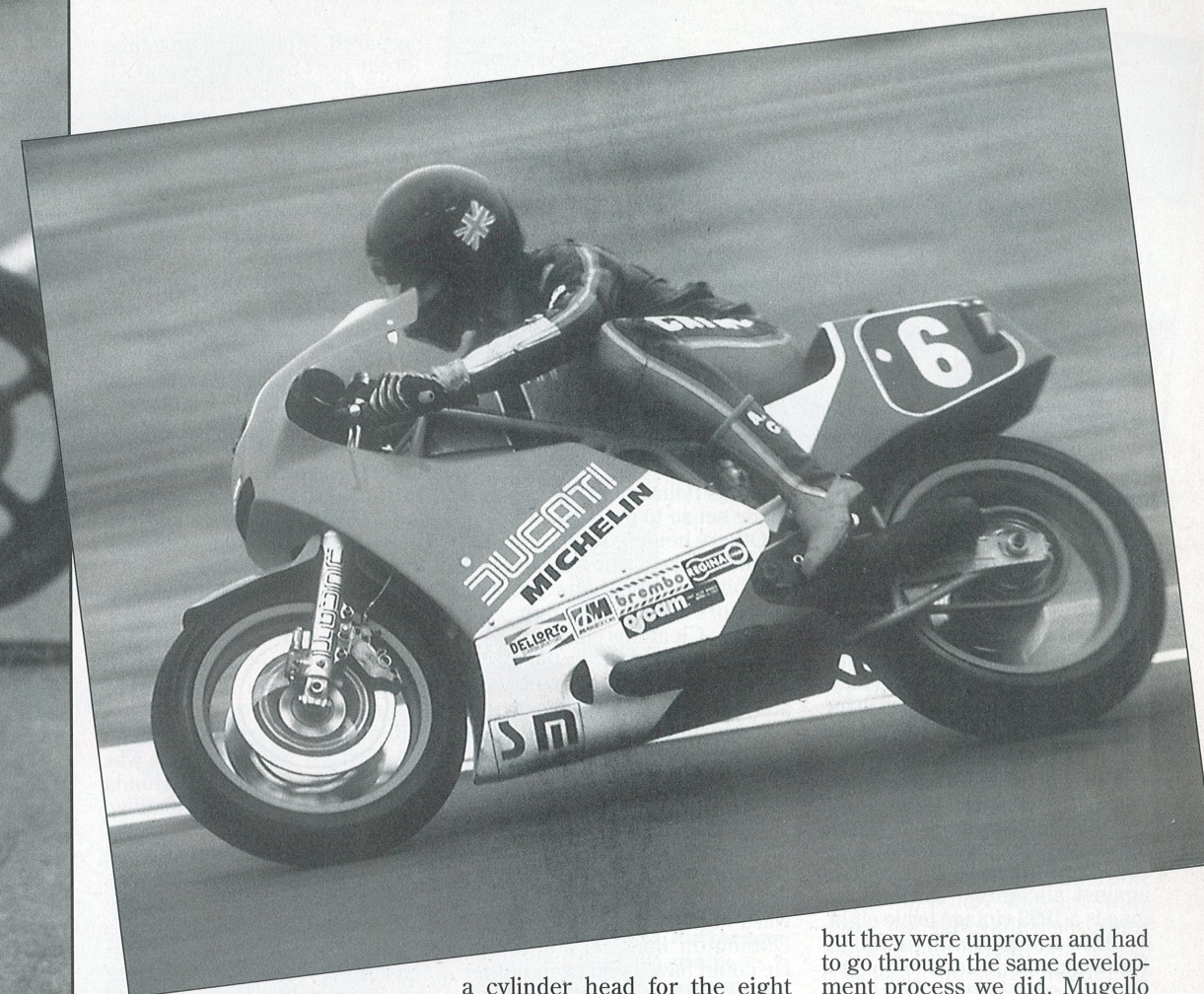
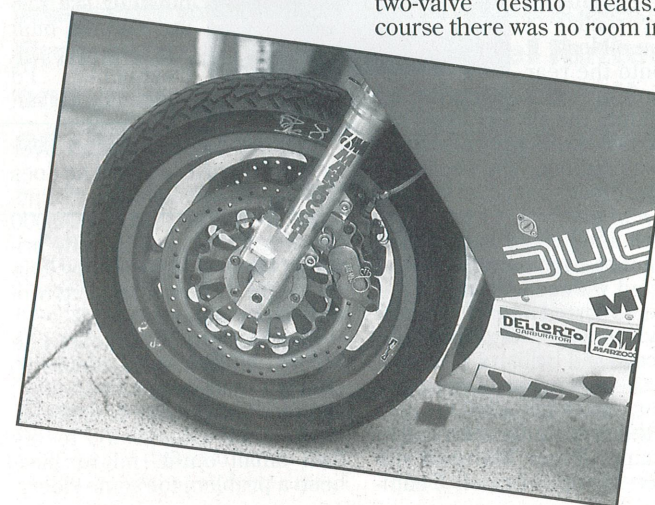
1985 DUCATI 750F1

Winter development centred around long-distance bench testing to ensure component reliability – plus one interesting major new step for Ducati. Or rather, a return to an experiment that was last conducted over ten years previous on the abortive 350cc triple and rarely-seen 500cc Vee-Twin GP racer: four-valve heads.

On the latter bike, the twin overhead camshafts were belt-driven in a way later used on the sohc Pantah roadster, but Ing.

Taglioni discovered the use of paired valves gave no appreciable increase in power

Taglioni discovered that the use of paired valves gave no appreciable increase in power at the expense of a narrower powerband and higher revs, so good was the breathing and combustion of the two-valve desmo heads. Of course there was no room inside



a cylinder head for the eight rockers necessary for a four-valve desmo engine, so the revised four-valver that Farne admitted the Ducati Experimental department was working on again in the light of new technology on this front was a valve-springer.

But back in '85, even without this new development, Walter Villa was convinced the bike would be challenging for honours. "Sure, there were new bikes from Suzuki and Yamaha,

but they were unproven and had to go through the same development process we did. Mugello showed that with properly made components we were competitive with the more powerful but also much heavier and thirstier Hondas, especially in endurance racing. We got 90 minutes of racing out of a 24 litre tank of fuel – the Hondas only got 40 minutes. Our bike was easier on tyres and less strenuous to ride hard, as well. As we say in Italian – many drips will fill the glass." ♦

Alan Cathcart
Photos: Kel Edge

SPECIFICATIONS

DUCATI 750F1

Engine:	Sohc 90 vee-twin desmodromic four-stroke
Dimensions:	88 x 61.5 mm
Capacity:	748cc
Output:	92 bhp at rear wheel @ 10,000 rpm
Compression ratio:	10.5:1
Carburation:	2 x 42mm Dell'Orto
Ignition:	Bosch Electronic
Gearbox:	Five-speed
Clutch:	12-plate dry (6 fibre/6 steel)
Frame:	Triangulated tubular spaceframe
Suspension:	Front: 41.7 mm Marzocchi telescopic with hydraulic anti-dive Rear: Swinging fork with vertical Double System monoshock
Wheelbase:	1370 mm
Brakes:	Front: 2 x 300mm floating Brembo discs with four-piston calipers Rear: 1 x 230 fixed Brembo disc/caliper
Wheels/tyres:	Front: 12/60 – 16 Michelin intermediate radial. Rear: 18/67 – 17 Michelin intermediate radial
Weight:	255 kph
Top speed:	255 kph
Year of manufacture:	1984
Owner:	Ducati Meccanica SpA, Bologna, Italy