

# 1 THE 750 GT AND IMOLA

**D**ucati's 750 Super Sport originated from two sources: the 750 GT twin cylinder motorcycle, and Ducati's stunning victory in the inaugural Imola 200-mile (321.9km) race of 1972. Without either there would have been no 750 Super Sport and neither would have eventuated without a restructure of the company during 1969. The decade of the 1960s had been difficult for Ducati. A series of dubious business ventures nearly strangled the company, and it would have sunk into oblivion like many Italian motorcycle manufacturers, but for quasi-government management. During 1969, the financial situation was so precarious that Ducati was absorbed as part of the EFIM (Ente Finanziaria per gli Industrie Metalmeccaniche) group. At the end of 1969, new directors were appointed and Ducati Meccanica was given a new lease of life.

Ing Arnaldo Milvio was Managing Director, with Fredmano Spairani as Coordinating Director, and Cosimo Calcagnile as Commercial Director. While Calcagnile had been with Ducati since 1956, and was Sales Manager during the 1960s, Milvio and Spairani were new appointments. They came to Ducati Meccanica with a fresh approach, and somehow found the resources to develop the new 750 twin and instigate a racing program. Arnaldo Milvio stated in a press release late in 1970 that as soon as he took over Ducati he decided to do two things. One was to design and build a 750cc roadster, because big machines were the trend, and the other was to get back into racing to publicise the Ducati name and prove its products. He said, "The new machine had to be unmistakably Ducati and different from any other make; better if possible. We considered many layouts, but decided on the V-twin. It's not a new idea, but we've brought it up to date."

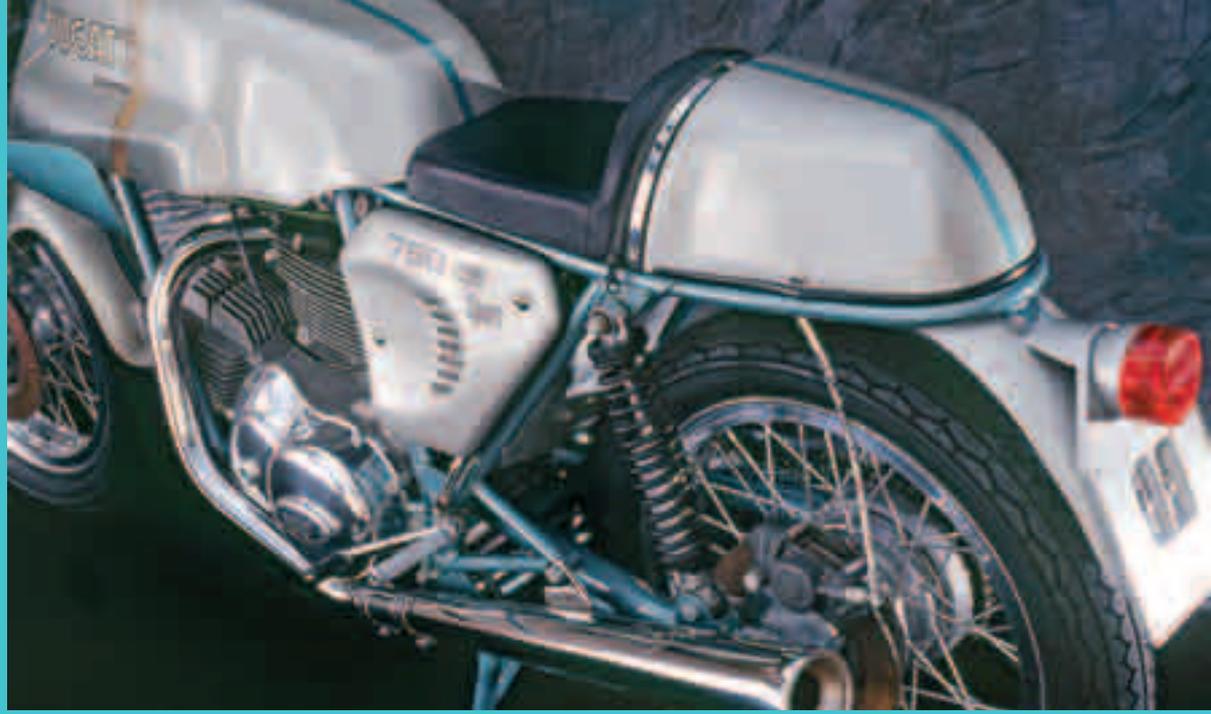
## THE 750 GT

When the 750 was conceived, Fabio Taglioni was 49 years old. But the father of desmodromic valve gear for motorcycles was virtually unknown outside Italy, and Ducati was still a minor motorcycle manufacturer in world terms. Despite the new management,

economic viability was essential, and Taglioni was instructed to utilise as much carryover technology from the existing range of singles as possible. On 20 March 1970, Fabio Taglioni made his initial sketches of an idea for a 90-degree V-twin. A V-twin made sense as many features of the existing overhead camshaft singles could be incorporated, and Taglioni liked the idea of an engine that was little wider than a single. Taglioni chose a 90-degree V-twin layout, a carryover from the V-four



**Without this group (Spairani, Calcagnile, Milvio and Taglioni) the 750 Ducati would not have eventuated. Here they are with one of the pre-production examples in July 1971. (Courtesy Ducati Motor)**

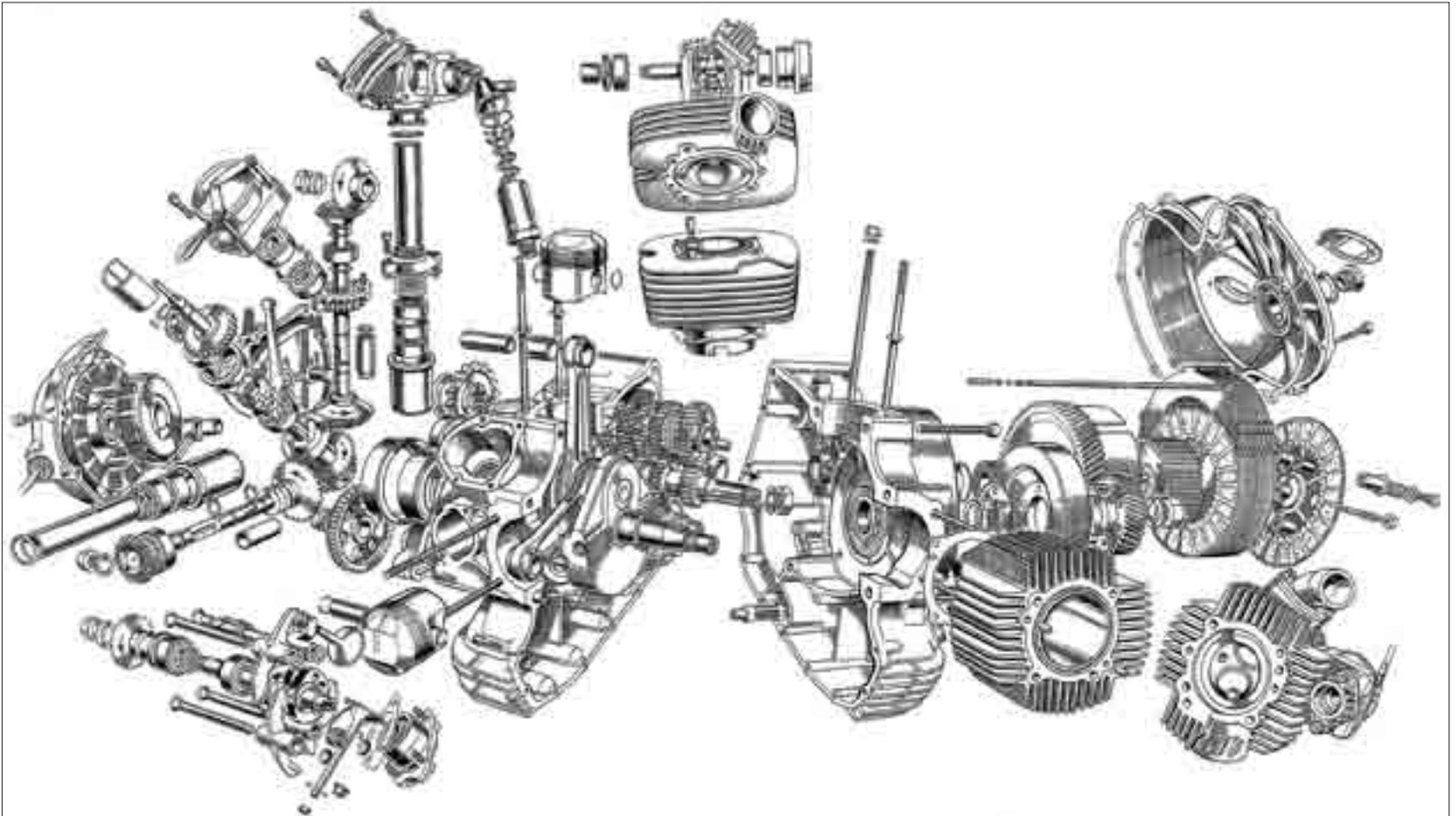


Standard 750 engine fasteners were this Allen type, zinc-plated with a diagonal knurl.



and normal mufflers, and 9200rpm with racing camshafts and a megaphone exhaust. Certainly, the 750 Super Sport engine appears to have been assembled with more care as they were arguably the smoothest of all Ducati twins.

The easiest way to determining engine performance compared with other motorcycles of the day is to examine period road tests. But as the 750 SS was never widely available, and this was an era before lavish press releases, only a few authoritative tests were undertaken. The Ducati factory did provide a 750 SS for magazine testing in 1974 (registration BO 15 9520), which was tested in detail by *Moto Sport* (Italy) in November that year. Obviously an early example, it differed to production versions in small details, notably, Veglia instruments and green spark plug leads. In this comprehensive test, the top speed achieved was an indicated 220kph (136.7mph) on the optimistic Veglia speedometer, translating to an actual 209kph (129.9mph). Standing start acceleration over 400 metres (1312.3ft) was 12.6 seconds at 174.3kph (108.3mph). Braking from 120-0kph (74.6-0mph) took 62 metres (203.4ft).



An exploded diagram of the 750 SS engine. Most components were shared with the 750 GT. (Courtesy Two Wheels)

## DUCATI 750 SS

if the engine is run without air cleaners. The wire gauze bell mouths also look splendid, but they contribute to carburettor (and cylinder and piston ring) wear. For any extended road use a set of pod-style air cleaners is essential to avoid excessive carburettor and cylinder wear. Excellent results have been evident with K&N filters (RC-1202), but any similar style of filter should be acceptable.

Another difficulty facing the modern user is the choice of fuel. With 4 star leaded fuel no longer readily available (except for racing and aeronautical use) the best alternative is high octane unleaded (98 RON) with a lead replacement additive. As with most similar era engines, hardened valve seat inserts prevent valve seat recession from unleaded fuel. The fibreglass fuel tank was always of dubious quality and several decades on, most original tanks are very likely to leak. If regular use is anticipated, the safest option is

a replacement aftermarket fibreglass or aluminium fuel tank. Any ethanol-enhanced fuel should be avoided as ethanol is corrosive and will dissolve fibreglass. Evidence from the boating industry in the US indicates that the use of ethanol in fibreglass tanks resulted in a structural strength loss of up to 40 per cent. This was particularly evident in fibreglass tanks built before the mid-1980s that were not designed for use with ethanol-blended fuels, but evidence suggests ethanol is so corrosive it is unsuitable for all fibreglass and aluminium tanks. As it absorbs water and separates, ethanol is also unsuitable for vehicles etc.

## CHASSIS, SUSPENSION, AND BRAKES

By the standards of modern suspension the Marzocchi fork and shock absorbers provide a stiff, under-damped and uncompliant ride.

Even by modern standards the 750 SS is an exciting motorcycle to ride.  
(Courtesy Steve Mammana)





**Franco Uncini starred on the Spaggiari-entered 750 SS in the 1975 Italian production racing series.**

the important Magnani Trophy race at Misano on 2 June, Uncini led home a 750 SS clean sweep with Sabattini and Faccioli filling out the podium. At Pergusa (the third Southern Trophy race) Raoul Martini won with Saltarelli third.

Carlo Perugini joined the Spaggiari team alongside Uncini for the Vallengunga Kawasaki Trophy race on 7 September, comfortably winning the final from Sabattini. But it was Uncini that dominated 750cc production racing in Italy that year. He won the Magnani Trophy race at Misano on 14 September, and the Biaschelli Cup at Vallengunga ahead of Sabattini on 28 September. He then went on to seal the Magnani Trophy with a dominating victory at Vallengunga on 19 October. The three Spaggiari Ducatis filled the podium, with Perugini second and Sabattini third. Confirming the dominance of the 750 SS in this series of production racing were the private entries of Faccioli, D'Angelo, and Tiriticco filling out the top ten.

Although Ducati released the square-case 750 Super Sport during 1975, the round-case example continued as the preferred choice in the 1976 Italian championships,

and with more development it was even more successful, Adelio Faccioli, riding for Scuderia Tre Denare (prepared by NCR) won the Trofeo Nazionale Maximoto and Trofeo Gino Magnani. The Ducati 750 SS was totally dominant in both these series, and this year was a high point in the racing history of the round-case 750 SS. In the first race of the Trofeo Nazionale Maximoto at Vallengunga on 11 April, Saltarelli won ahead of Faccioli. Saltarelli also won at Vallengunga on 2 June (ahead of Venanzi on another 750 SS), but it was Raoul Martini who led the field at Misano on 29 June.

Faccioli stamped his authority towards the end of the 1976 season. At the Magnani Monza meeting on 19 September Faccioli won ahead of D'Angelo on another 750 SS, while a week later at Vallengunga in the Junior Championship final Faccioli led home a trio of 750 Super Sports (D'Angelo, Tiriticco, and Battaglini). Faccioli sealed the Magnani Trophy at Vallengunga on October 10, Ducatis again filling the top four places. This time the winner was Martini, ahead of Faccioli, Baccante and Storchi. In the final championship standings Ducati filled the first four places. The final race in the Trofeo Nazionale Maximoto was also at Vallengunga (24 October), Giorgio Baccante winning from Faccioli, but not denying him the championship. By 1977 the Japanese competition had improved markedly, and while the twin cylinder Ducati 750 Super Sport was still



**Uncini and Venanzi line up at Vallengunga in 1975. Sometimes the entire front row was made up of 750 Super Sports.**