

During 1975 the 860 GT was offered with a lower seat option. Some of these later 860 GTs had electric start and dual front disc brakes. (Courtesy Ducati Motor)

pegs, were the same as those on the 750 GT, but there were new frame mounts that located the pedals further apart and forward. The conversion of the cable-operated rear drum brake to right-side operation was achieved by using a rod running below the swingarm, locating the brake lever directly underneath the exhaust pipe. During 1975 this shaft was modified, the cable connection was splined onto the shaft instead of being a one-piece unit. There was a rubber foot pad on the brake lever, and the brake light switch was still incorporated in the cable on the left-hand side. Another update during 1975 was the option of a lower seat similar to that of the 500 GTL parallel twin.

Although history has been unkind to the 860 GT, some of its misfortune was due to unfortunate timing. Its release coincided with a slump in motorcycle sales, particularly in the US, and this resulted in stockpiles of the 750, as well as the 860, during 1975. Other Italian manufacturers were also affected by this recession, notably Laverda, Benelli, and Moto Guzzi. Of the 5977 motorcycles Ducati manufactured in 1975, 1360 were 860 GTs and many of these remained unsold into 1976. Total 860 GT/GTE production was 2987, all manufactured between September 1974 and July 1975. Some 860 GTEs would be converted in 860 GTSs during 1976 and, as there was considerable overlap with the 860 GTS, engine and frame numbers continued to around 853600.

In the United States controversy erupted early in 1975 when the Indian Motorcycle Corporation displayed the Indian 860 at the Anaheim Trade Show. West Coast Ducati Distributor Bob Blair was incensed, claiming the Indian was a Ducati 860 GT with a larger rear wheel and new fuel tank, seat, and side covers. After Ducati's vice chairman Cosimo Calcagnile intervened it was ascertained the Indian 860 was built out of spare parts by Leopoldo Tartarini who had purchased 50 engines with the proviso they couldn't be sold in the US. The issue was eventually resolved and the Indian 860 didn't eventuate.



Another publicity picture of the 860 GT with the lower seat, this time with a single front disc brake. (Courtesy Ducati Motor)

1977 – 750 AND 900 SUPER SPORT, 860/900 GTS, 900 SPORT ‘DARMAH’

the mesh was wire as on the 1975 examples. The engine breather was also quite different for 1976, no longer venting through a flapper valve into the atmosphere. Underneath the fibreglass solo seat was a plastic engine breather chamber connected to the breather labyrinth.

The homologated exhaust system was also new for 1976. This comprised new header pipes, exhaust clamps, and Lafranconi mufflers. The Lafranconis were the same as for the 860, without a kick-start recess on the right. Conti mufflers were still available as an option, but with a larger bracket. The clamps were also different to earlier versions, with ‘Conti’ lettering and with hex bolts instead of special Allen bolts. To provide more clearance for the shock absorber mounts a 11.5x20x10mm spacer fitted between the muffler and the frame mount, requiring a longer muffler bolt ($\frac{7}{16}$ in x32mm).

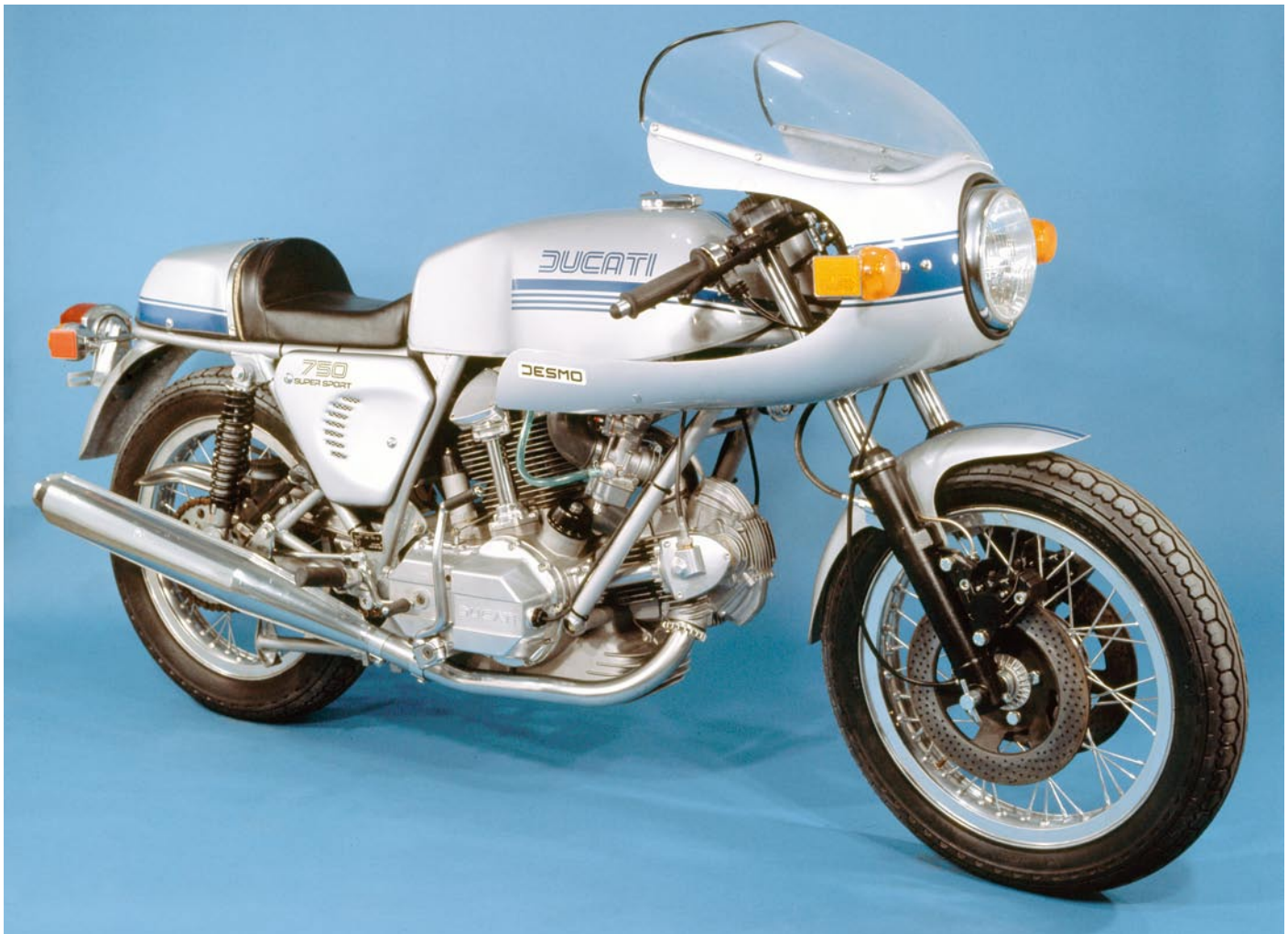
Chassis

While the basic dimensions of the silver-painted frame were unchanged for 1976, there was a

new series of frame numbers and new frame homologation number for the 900 (DGM 13715 OM). Frame numbers now carried a DM860SS prefix, beginning at 086001. The 750 Super Sport frame carried on with the earlier DM750SS number sequence (from 075912) and DGM 11871 OM homologation number. All Super Sports this year also received a new silencer homologation number, E3-9R-13716, the plate now positioned underneath the right side cover because the previous location on the frame was cut away for the left-side gearshift. The main changes to the frame were to the brackets for mounting the air filter boxes, regulator, fuel tank, ignition transducers, and the angle of the rear muffler mounting bracket to incorporate the right-side rear brake and master cylinder. To allow for the air filter underneath the left side cover, the regulator was moved to the right, on the rear frame tube next to the battery. The tank mounting bracket also included provision for fitting an optional fibreglass ‘Imola’ tank.

Although the colour scheme, fibreglass mudguards, and side covers remained as before, there were changes to the fuel tank and fairing for 1976. With fibreglass fuel tanks now illegal in

Only a small number of 750 Super Sports were built for 1977, still with the silver and blue fairing. (Courtesy Ducati Motor)



Racing during 1979

Apart from production events and Silhouette Class endurance racing, until 1979 most successful bevel-twin racing machines were based on the 750 round-case. The factory (NCR) endurance and TTF1 racers were both based on the round-case, but with special narrow, sand-cast crankcases with a spin-on oil filter in the sump. For 1979 the TT F1 regulations were changed, now requiring production-based engines. As the special sand-cast narrow crankcases with the oil filter were no longer allowed the engine was now based on the standard die-cast, square-case 900 SS, without a dry clutch, and remained at 864cc. Ducati was ecstatic after the 1978 TTF1 result and offered Mike Hailwood full factory support for 1979. An all new Formula 1 machine was produced, but was delayed, and it was only two weeks before the TT that the official practice session was held at Misano.



The 1979 factory F1 bike featured a box-section swingarm and special exhaust. This was the first form, as it appeared at the test at Misano. (Courtesy Ducati Motor)

The 1979 F1 machine featured a new Daspa frame, altered fairing shape, and a revised tail section. This frame not only raised the engine to give more ground clearance but the steering head angle was steepened to 29½°. The bikes also had a square-section swingarm to allow for a wider rear tyre, and a high routed left exhaust pipe. At the official practice session at Misano Hailwood's bike was fitted with a reverse direction gearshift by mistake and he crashed towards the end of the two-day test session after inadvertently selecting the wrong gear. Escaping with two cracked ribs, his crash made front page news in Italy and Ducati's director Scafetti decided not to send the bike to the Isle of Man. Worried about insurance liability he agreed to sell the bike to Steve Wynne of Sports Motorcycles in Manchester.

As Hailwood damaged one of the two F1 machines in a crash during testing at Misano, only one F1 (with a spare engine) was sent to the Isle of Man for Hailwood. It arrived only a few days before the race, along with factory mechanics Franco Farnè, Rino Caracchi, and development engineer Renzo Neri. Despite this factory involvement, the 1979 F1



When Hailwood next tested the factory bike he found the handling unsatisfactory. (Courtesy Ducati Motor)

machine was vastly inferior to that of the previous year. Not only down on power, it handled so poorly that Steve Wynne sent for Roger Nicholls' 1978 machine, then on display in the Coburn and Hughes showroom. Although not strictly legal, at the instigation of Ducati, Wynne installed the 1978 model frame with narrower round-section swingarm.

Even with the 1978 frame the F1 bike was disappointing. In practice Hailwood could only manage a lap at 105.88mph, although he felt he was going much faster than the previous year. In the Formula 1 race he lost fifth gear, the battery carrier broke, and an exhaust pipe began to fall off. Hailwood stopped at Hilberry to reconnect the battery and still finished a creditable fifth, at an average speed of 106.06mph with a fastest lap of 109.45mph. So disillusioned was Hailwood with the F1 machine he decided not to race it at any of the post-TT meetings. Hailwood said later that he felt Ducati had let him down in 1979.



Hailwood on his way to fifth place in the 1979 TT F1 race.



The 900 SSD frame featured a revised mount for the rear brake master cylinder and a different routing for the brake hose. This 1981 900 SD has Speedline wheels.

inconsistency in the type of Paioli fuel tap fitted. Some fuel taps were the grey plastic type, and others with a black plastic coated lever without a plastic chamber. The first 900 SDs for the 1981 model year were fitted with gold FPS wheels with 6-bolt drilled discs with aluminium carriers. These wheels were fitted between frame number 951261 and 951376, and after that featured a four-bolt disc. Also after frame number 951376 two 8mm dowels were fitted to the FPS cush drive flange. The tyres were either Pirelli Phantom or Michelin M45.

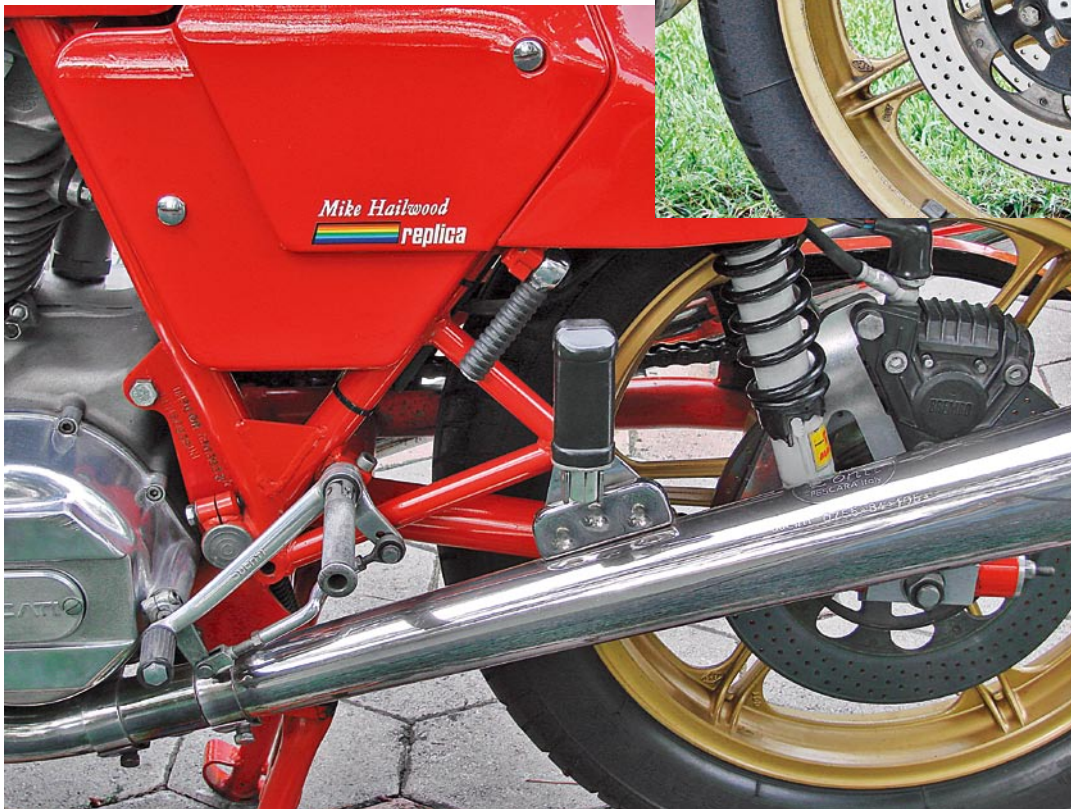
During 1981 production of the 900 SSD ceased and after frame number 951821 some SSD components were used on the 900 SD. There was obviously an oversupply of 900SSD frames as they were now used on the 900 SD. The 900 SSD frame included the revised rear master cylinder mount and there was a new right-hand side cover. This had a diagonal cut at the rear for the brake line and no longer had three round holes. The black plastic rear mudguard was blanked off where the

earlier brake line went. Also new for the 900 SD with the SSD frame was a straight rear brake rod with a balljoint linkage instead of the clevis type. Other SSD frame features included the rear-set footpeg mounts but sometimes the front fairing mount on the steering head. The Bosch 180mm headlight was also the 900 SSD type.

Other updates that occurred after the implementation of the 900 SSD frame included new rear shock absorbers, now sometimes oleo-pneumatic Marzocchi with black springs and non-finned, silver-painted reservoirs. As an alternative to the Marzocchi shocks, Paioli shock absorbers were also specified but rarely fitted as standard equipment. Some of the Marzocchi fork legs were painted black and had revised castings for the four-bolt front mudguard attachment. There was a yellow 'Marzocchi' decal on the lower left fork leg, and a revised threaded spring retaining plugs in the top of the fork tubes. These required a 30mm hexagon spanner for removal instead of the

THE DUCATI 860, 900 & MILLE BIBLE

The front disc rotors featured larger holes where the discs met the alloy carrier. (Courtesy Nico Georgeoglou)



By 1983 all foot levers were aluminium. 1983 900 MHRs also retained the lifting lever on the left. (Courtesy Nico Georgeoglou)

1983 900 Mike Hailwood Replica distinguishing features (from engine number approx. DM860 094600-096313, frame number approx. DM900R 903300-904600)

Cast-iron valve guides and modified ignition pickup plate
Bosch coils and KLG spark plug caps.
New gear selector drum after engine number 095742
No noise-reducing rubber blocks between the cylinder and head fins
Saprisa alternator rotor (and regulator) from engine number 096142
Red-painted frame with DM900R designation and DGM 50235 OM homologation

Most with black ABS mudguards
No chrome rings fitted to the front fork caps
FPS wheels with six-bolt discs
Drilled discs now featured larger cut outs
Red-painted steel chain guard
New seat decals
Earlier CEV headlight and taillight

also quite large and these wide gearbox ratios compromised the Mille as a sporting motorcycle. As the gearbox rotated faster the gear selector forks featured hard-chromed ends to minimise wear. Accompanying this was a redesigned selector detent mechanism with a ball and stronger spring, and a new secondary shaft bearing in the left crankcase. A gutter in the left crankcase casting, just in front of the layshaft bearing, now collected oil splashed from the primary drive. This was routed to the gearbox layshaft where it provided additional lubrication for the selector forks.

Taglioni and Bordi obviously expected problems with the 900 MHR's electric start mechanism as, while retaining the small Nippon Denso starter motor, they revised the drive gears to provide an improved starting ratio. This still wasn't enough to overcome the additional friction of the

plain bearings and larger cylinders, and the Mille often remained a reluctant starter. The Mille also included a cap over the electric start motor bearing, and a slightly different primary drive cover.

The Dell'Orto PHM 40B carburetors featured identical jetting to those on the 1984 900 MHR along with an identical air cleaner system. The air filter boxes were also painted red on earlier examples, later changing to black. Because the jetting was the same as for the 900, some Milles exhibited a tendency to hunt on partial throttle. Apart from new clamps, the exhaust system with Silentium mufflers was also identical to that of the final 900. Contis were no longer listed as an official option, although they were an easy installation. The Mille engine provided only a modest increase in power over the 900, to a claimed 76 horsepower at 6700rpm, but a massive increase in torque. Torque increased from the 7.9 kilogram meters at



The tall and narrow profile presented by the Mille MHR was beginning to date by 1985. (Courtesy Two Wheels)