

FREE SAMPLE

The opening pages of

1980 Ducati Bevel-Drive Restoration Guide

Read these pages exactly as they appear in the full guide.
Nothing here is rewritten or summarised — it is the product itself,
so you can judge the depth before you spend a dollar.

The full guide: <https://ironheadguides.com/product/IH-DUCATI-BEVEL-1980>

IronHead — instant PDF download after checkout.

IronHead

Ducati Bevel-Drive Twins

1980

Model year 1980 only — one model year, one guide

Bevel models in production this year

- 900 SS
- 900 SD Darmah
- 900 SSD Darmah
- Mike Hailwood Replica

Era	1971–1986 bevel-twin period (Falloon)
Cam drive	Bevel gears + shafts (never belts)
This guide	Covers model year 1980 only

A source-backed restoration companion to the Ducati factory workshop manual. Every specification cites its published source; anything the sources do not confirm is flagged **[UNVERIFIED]** rather than guessed.

Companion to — not a replacement for — the factory workshop manual. Wiring: consult the factory manual's year-correct wiring diagram; this guide's electrical appendix is an inspection supplement only.

Read this first — what this guide is

This guide is a restoration companion to the Ducati factory workshop manual, not a replacement for it. It covers **model year 1980 only** — every bevel-drive twin Ducati built that year. It gives you what the manual doesn't: the correct sequence, the model-year change points, what to measure before cleaning, what not to do, finishes and markings, parts interchange, and honest value guidance.

The spec tables are the law of this guide: every numeric value carries its source. Where the literature is silent, the cell says **[UNVERIFIED]** instead of guessing. Procedures are written from the tables only.

Manufacturer history

Ducati's bevel-drive twins began with the 1971 750 GT — Fabio Taglioni's 90° V-twin ('L-twin'), the first Ducati with that configuration, which became the signature of everything that followed (en.wikipedia.org/wiki/Ducati_750_GT (citing Ian Falloon, The Ducati 750 Bible, Veloce)). The 'round case' 750s (GT, Sport, SS) ran 1971–1975; the 'square case' 860/900 generation (GT/GTE/GTS/900GTS, 900SS, Darmah, MHR, S2, Mille) ran 1974–1986 (en.wikipedia.org/wiki/Ducati_860_GT; Ian Falloon, Ducati Bevel Twins 1971 to 1986 (via motociclo.com.au: covers 750 GT/Sport/SS, 860 GT/GTE/GTS, 900 SS/GTS, SD, SSD, MHR, S2, Mille)). The desmodromic valve gear — positive mechanical closing of the valves, no springs — is the signature technology of the sporting bevels from the 750SS on.

Model history — 1980

What is unique about this model year: The line consolidates: 900SS, Darmah and MHR carry the bevel flag; the 1980 Darmah table shows Marzocchi 330 mm rear shocks and a 280 mm rear disc (was 260 mm) (motorcyclespecs.co.za (1980 900SS Darmah table)).

What this guide doesn't cover

- Factory torque values and full disassembly procedures — the factory workshop manual is the authority; this guide points at it.
- The year-correct wiring diagram itself — consult the factory manual's diagram for your exact model. The appendix here is a clearly-labelled **supplement**, never presented as the diagram.
- Other model years. A 1976 part on a 1975 bike is a mismatch until proven otherwise — check the year-change register.
- Belt-drive Ducatis (Pantah and later) — this guide covers bevel-gear cam drive only.
- Aftermarket performance modifications. This guide restores to factory-correct specification.

Model identification

Confirm exactly which bevel twin you have **before** ordering parts or stripping finishes. Engine-number and frame-number prefixes encode the model; round-case vs square-case crankcases are visible at a glance.

Check	What to look for	Why it matters
Crankcase shape	Round cases = 750 family (GT/Sport/SS); square/angular cases = 860/900 family	The two engine generations share almost no bottom-end parts
Valve gear	Desmodromic heads (positive closing, no springs) = SS/SS900/Darmah/MHR sport models; spring-valve heads = GT/860 tourers	Desmo heads need desmo shims and a different setting procedure
Carburettors	Body markings: Amal 930 (early GT), Dell'Orto PHF32 (Sport/GT), PHM40 (SS/SS900), PHF32 (Darmah/GTS)	Carb type is a year identifier — record before cleaning
Brakes	Lockheed (1971) → Scarab (1972–1973) → Brembo (1974–) calipers; drum vs disc rear	Brake generation marks the model year (Hagerty; motorcyclespecs.co.za)

- Photograph the frame-number and engine-number stampings before any blasting or painting. They are the bike's identity evidence.
- Round-case vs square-case is the first fork in every parts decision — confirm it before ordering.
- US-market bikes from 1975 carry the left-shift conversion (external crossover rod on 860s; internal on later 900SS) — verify which your bike has (en.wikipedia.org/wiki/Ducati_860_GT; motorcycleclassics.com (Ducati 900SS)).

Year-change register — 1980

Running changes that define this model year, and why each matters at the bench. Every entry cites its source.

- Darmah: 1980 table — 2 x Dell'Orto PHF 32C, Bosch WM7B plugs, electric start, 65 hp @ 7,500 rpm, Marzocchi fork, Marzocchi 330 mm rear shocks, 2 x 280 mm front discs, single 280 mm rear disc, 216 kg dry, 15 L, 205 km/h claimed (motorcyclespecs.co.za (1980 900SS Darmah table)).
- 900SS: continues the 1978– spec (Bosch ignition, 38 mm crankpin, Speedline wheels); dual seat optional.
- MHR: continues as the cosmetic flagship of the bevel line (en.wikipedia.org/wiki/Ducati_L-twin_engine).

What came next

For 1981–1982 the 900SS gets its final polish: dual seat standard, FPS alloy wheels, Silentium mufflers; the SSD ends in 1981 (motorcycleclassics.com (Ducati 900SS); autoevolution.com (Ducati 900SD Darmah 1977)).

Interchange rule: a part that differs between these year entries is not interchangeable until the factory parts book for your exact model says so.

Verified specifications — 1980 only

Every number below cites the published marque reference it came from. Rows marked **[UNVERIFIED]** are numbers the consulted sources do not confirm — they are omitted from procedures, not guessed.

900 SS

SPEC	VALUE	UNIT	SOURCE
Engine	Air-cooled 90° V-twin ('square case'), SOHC bevel drive, desmodromic 2-valve heads		en.wikipedia.org/wiki/Ducati_Super_sport
Displacement	864	cc	en.wikipedia.org/wiki/Ducati_Super_sport
Bore x stroke	86 x 74.4	mm	motorcyclespecs.co.za (1979 900SD Darmah table)
Max power	Claimed 70 (1975, 40 mm carbs); 57 rear-wheel (1976–1977, 32 mm); 65–70 (1981–1982)	hp	motorcycleclassics.com (Ducati 900SS); hagerty.com (1982 900SS past sales)
Induction	2 x 40 mm Dell'Orto (1975; optional Australia/SA later) → 2 x 32 mm (1976–1977, with air cleaners)	mm	motorcycleclassics.com (Ducati 900SS)
Ignition	Ducati Elettrotecnica electronic (1975–1977, crude) → Bosch (1978–)		motorcycleclassics.com (Ducati 900SS)
Starting	Kick (redesigned kick-starter from 1976: no longer knocks the bike into first)		en.wikipedia.org/wiki/Ducati_Super_sport
Transmission	5-speed; 1978–: gearshift crossover through the engine cases		motorcycleclassics.com (Ducati 900SS)
Crankshaft	1978–: crankpin diameter increased to 38 mm (ends big-end failures)	mm	motorcycleclassics.com (Ducati 900SS)
Wheels	1975–1977: Borrani rims/spokes; 1978–1979: Speedline alloy; 1981–1982: FPS alloy		motorcycleclassics.com (Ducati 900SS)
Fuel tank	1975: fibreglass (no fuel gauge) → 1976–: steel		motorcycleclassics.com (Ducati 900SS)
Shift	Right-side 1975; left-side from 1976 (US DOT rule)		en.wikipedia.org/wiki/Ducati_Super_sport
Dry weight (1975)	See 750SS lineage; [UNVERIFIED as a 900 figure]		en.wikipedia.org/wiki/Ducati_Super_sport

SPEC	VALUE	UNIT	SOURCE
Mufflers	1975: Conti; 1976–1977: Lafranconi; 1981–1982: Silentium		motorcycleclassics.com (Ducati 900SS)
Production	1975–1982		hagerty.com (1982 900SS past sales)
Valve clearance / torque values	[UNVERIFIED — not in factory literature]		Set only from the factory workshop manual.

900 SD / SSD Darmah

SPEC	VALUE	UNIT	SOURCE
Engine	Air-cooled 90° V-twin ('square case'), SOHC bevel drive, desmodromic 2-valve heads		motorcyclespecs.co.za (1979 900SD Darmah table)
Displacement	864	cc	motorcyclespecs.co.za (1979 900SD Darmah table)
Bore x stroke	86 x 74.4	mm	motorcyclespecs.co.za (1979 900SD Darmah table)
Compression ratio	9.4:1		motorcyclespecs.co.za (1979 900SD Darmah table)
Max power	65 @ 7,500 (1979 table); 69 @ 7,000 (1977 autoevolution)	hp / rpm	motorcyclespecs.co.za (1979 900SD Darmah table); autoevolution.com (Ducati 900SD Darmah 1977)
Max torque	83 (61 lb-ft) @ 4,000 (1977)	Nm / rpm	autoevolution.com (Ducati 900SD Darmah 1977)
Induction	2 x Dell'Orto PHM 40 A/B/C (1979 table) / PHF 32 (1977)	mm	motorcyclespecs.co.za (1979 900SD Darmah table); autoevolution.com (Ducati 900SD Darmah 1977)
Spark plugs	Champion L88A / Bosch WM7B		motorcyclespecs.co.za (1979 900SD Darmah table)
Ignition	Bosch electronic		motorcyclespecs.co.za (1979 900SD Darmah table)
Starting	Electric (kick also fitted)		mecum.com (1978 Darmah SD900 lot notes)
Clutch	Wet multiplate		motorcyclespecs.co.za (1979 900SD Darmah table)
Transmission	5-speed; primary 2.187:1 (32/70); final 2.533:1 (15/38)		motorcyclespecs.co.za (1979 900SD Darmah table)