

FREE SAMPLE

The opening pages of

1979 Honda CB750 DOHC 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-HONDA-CB750-DOHC-1979>

IronHead — instant PDF download after checkout.

IRONHEAD

Factory-Correct Restoration Guides

Honda CB750 DOHC

Restoration Guide — Model Year 1979

Engine 743 cc DOHC 16-valve inline four (see displacement note)	Output 77-78 hp @ 9,000 rpm
Brakes Dual 275 mm front discs / 180 mm rear drum (K)	Weight / Tank 233 kg dry / 20 L tank (K, RC01)

*Single-year edition — covers the **1979** model year only (CB750K (RC01) + CB750F Super Sport (RC04) - DOHC launch year (US)). A companion to the Honda factory service manual, not a replacement: correct sequence, year-change points, measure-first checkpoints, finishes, fasteners and markings, parts interchange, and honest value guidance.*

US \$29.95 • ironhead.polsia.app

About this guide

This is a **restoration companion to the Honda factory service manual, not a replacement** for it. You need both: the manual gives the full teardown procedures, torque tables and the wiring diagram; this guide gives you the correct **sequence**, the **model-year change points**, what to **measure before you clean anything**, what **not to do**, the **finishes, fasteners and markings** that make a restoration factory-correct, parts interchange, and honest value guidance.

Every numeric value in this guide is cited to a source in the spec tables. Anything the cited literature does not give a number for is omitted or flagged [**UNVERIFIED — not in factory literature**]. We never invent specifications.

This is a **single-year edition**: it covers the **1979 CB750 DOHC** only. Do not apply its year-specific details to other years.

Scope: CB750 DOHC — model year 1979 (CB750K (RC01) + CB750F Super Sport (RC04) - DOHC launch year (US))

Honda Motor Co. — the context that matters

Honda Motor Co., Ltd. was founded in 1948 by Soichiro Honda — a mechanic who had designed his own piston rings in 1938 — and began building motorised bicycles before releasing its first true motorcycle, the Dream D-Type, in 1949. (autoevolution.com Honda background)

Through the 1960s Honda built its reputation on small, reliable motorcycles; the CB450 (1965) was Honda's first 'big' motorcycle, aimed at the British 500s (Wikipedia, Honda CB450). The 1969 CB750 then opened the superbike era.

For restoration purposes, Honda's pre-1975 naming matters: 'K0' marks the first version of a model, with K1, K2 etc. marking running revisions (American Honda Motorcycle Identification Guide, quoted on forums.sohc4.net). The K number does not always track the calendar year — check frame serials, not just the letter.

Model history — CB750 DOHC

Honda presented the DOHC CB750 at the 1978 IFMA in Cologne as the SOHC CB750 Four's successor - 'what happens when you keep winning races' - with the engine derived from the RCB943/RCB997 endurance racers: four valves per cylinder and separate chains driving the exhaust and intake cams (Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)).

US model-year shape: the K (RC01) and the F Super Sport (RC04) open the line for 1979; the C Custom joins for 1980-1982; the K and F continue through the period this guide covers; the SC Nighthawk derivative arrives for 1982 (Wikipedia, Honda CB750 (model/spec table)).

Family context: the same DOHC architecture scales up to the CB900F (US 1981-82, covered by its own IronHead single-year guides) and the CB1100F of 1983. Parts and specifications do not transfer between the three capacities - each has its own guide.

Period positioning: 77-78 hp at 9,000 rpm and a 125 mph top-speed claim for the K (Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)) - strong numbers that period tests

(Bennetts' fifty-years retrospective quotes 72 hp for the DOHC version) did not always reproduce; both figures are labelled where they appear in this guide.

Model identification — confirm what you have

Model code RC01 for the CB750K - frame and engine numbers carry the RC01 family. The DOHC bike is not a SOHC CB750 with a new head: it is a new engine (two cam chains - one per cam - 16 valves, alternator moved to the right side) in a new double-loop frame with a removable right-side support for engine removal (Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)). Displacement is printed as 743 cc (62 x 62 mm) in the RC01-specific literature citing Honda's 1978 press release and the CB750K Service Manual; Honda's general CB750 table lists 748 cc for the same models - the conflict is carried in this guide's Sources, never silently resolved. Plain IH-HONDA-CB750- SKUs in the IronHead catalog are the SOHC buyer's guides - a different motorcycle and a different product.

This 1979: CB750K (RC01) + CB750F Super Sport (RC04) - DOHC launch year (US). Frame serial reference: RC01 family numbers (K). F models carry the RC04 type code (Honda CB750 model table).

Year-correct equipment: K(Z) base colours: Candy Muse Red / Candy Burgundy (R-104C-U), Candy Tanzanight Blue (PB-107C-U), Black (NH-1); Candy Bayard Brown (YR-106C-U) is Canada-only (RC01 colour table).

Confirm the serial block **before ordering parts** — especially brakes, wheels, carburettors and electrics, which are year-specific on this model. A bike titled as one year but carrying another year's major parts is common after 40–60 years; trust the stampings, not the title.

***1979 at a glance:** Dual 275 mm front discs, 180 mm rear drum (K)*

Year-change register — what changed for 1979

Running changes across the model run, with why each matters to a restorer. Rows marked for this year are the ones that affect **your** parts ordering.

- Launch year of the DOHC line in the US: K standard and F Super Sport on the new 16-valve twin-cam-chain engine (Wikipedia model table lists the F as 1979-1980 RC04).
- New-machine checklist for restorers: transistorized ignition, H4 headlamp, twin rear brake-light bulbs, taper-roller steering-head bearing, increased suspension travel - all advertised new features of the RC01 (Wikipedia, RC01).
- K specification anchor: double 275 mm front discs, 180 mm rear drum, 4-into-4 exhaust, ComStar tubeless wheels (RC01 technical details).
- Swingarm runs in plastic bushings this year - the needle-roller change is an end-of-1980 running change (see 1980/1981 entries).

Verified spec tables — 1979 CB750 DOHC

Every row cites its source. Rows flagged [UNVERIFIED] are printed as found, not as factory-verified. Year band: CB750K (RC01) + CB750F Super Sport (RC04) - DOHC launch year (US).

ENGINE

Spec	Value	Unit	Source / notes
Engine type	Air-cooled DOHC inline four, 16 valves (4/cyl), two cam chains (one per cam), tappet actuation		Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)
Displacement	743 (RC01 literature) - Honda general table lists 748; conflict carried, see Sources	cc	Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual) / Wikipedia, Honda CB750 (model/spec table)
Bore x stroke	62 x 62	mm	Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)
Compression ratio	9:1		Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)
Max power (claimed)	77-78 @ 9,000	hp @ rpm	Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual) (77 in technical details; 78 in infobox and Honda table)
Max torque (claimed)	66 @ 7,000 (49 lb-ft)	N-m @ rpm	Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)
Carburettors	4 x 30 mm Keihin constant-pressure (CV)		Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual) (Service Manual data)
Lubrication / crank	Pressure-circulation; one-piece steel crankshaft on five plain bearings		Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)

ELECTRICAL

Spec	Value	Unit	Source / notes
Ignition	Contactless transistorized with centrifugal advance; electric start		Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)
Alternator / battery	Three-phase alternator 260 W at 5,000 rpm; 12 V / 14 Ah battery; alternator on the RIGHT side (moved from the SOHC layout)		Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)

CHASSIS

Spec	Value	Unit	Source / notes
Frame	Double-loop tubular steel; right-side support unscrews for engine removal		Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)
Front suspension	35 mm telescopic fork, 160 mm travel	mm	Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)

Spec	Value	Unit	Source / notes
Rear suspension	Twin shocks, 5-position preload; swingarm in plastic bushings - needle-roller bearings from end of 1980		Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)
Front brake	2 x 275 mm discs, single-piston calipers (K)		Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)
Rear brake	180 mm drum (K)	mm	Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)
Wheels / tyres	ComStar aluminium, tubeless: 3.25-19 front / 4.00-18 rear (K)		Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)
Wheelbase	1,520	mm	Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)
Seat height	800	mm	Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)
Dry weight	233	kg	Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)
Fuel capacity	20	L	Wikipedia, Honda CB750K (RC01) (Honda press release 1978-12-12; Honda CB750K Service Manual)

Restoration sequence

A DOHC CB750 restoration is won or lost in the head: 16 valves, two cam chains and shim-era service discipline. Bench order: document and identify the variant (K/F/C), compression, head and cam chains, bottom end, carburettor bank, electrics, chassis (note the swingarm-bearing split), brakes, finishes.

Step 1 - Document and identify

PREREQUISITE: the factory service manual for your year. System: whole bike. Variant first (K, F or C) - tanks, bars, seats, exhausts and trim are variant property. Record RC01-family numbers; photograph the swingarm pivot: bushing vs needle-bearing specification splits at the end of 1980.

Step 2 - Head, valves and cam chains

PREREQUISITE: the factory service manual for your year. System: engine. Two chains drive the cams (exhaust cam chain, then intake) - inspect both chains, guides and tensioners on any teardown. Measure all 16 valve clearances cold and record before changing anything; clearance figures come from the factory manual.

Step 3 - Bottom end

PREREQUISITE: the factory service manual for your year. System: engine. One-piece crank on five plain bearings - plastigauge before ordering shells. Nominal bore 62 mm (RC01 literature); measure before honing.

Step 4 - Carburettor bank

PREREQUISITE: the factory service manual for your year. System: fuel. Four 30 mm Keihin CVs (Service Manual data for the K). Strip as a bank, keep each body's parts together, inspect diaphragms, bench-sync then vacuum-sync.

Step 5 - Electrics

PREREQUISITE: the factory service manual for your year. System: electrical. Contactless transistorized ignition with centrifugal advance - test the advance mechanism as well as the electronics. The alternator sits on the RIGHT of the engine (the SOHC bike's is on the left) - SOHC-era parts and habits do not transfer.

Step 6 - Chassis

PREREQUISITE: the factory service manual for your year. System: chassis. Taper-roller steering-head bearings; 35 mm forks (160 mm travel). Swingarm: plastic bushings (to end of 1980) wear oval - needle-bearing bikes need bearing inspection instead. FVQ rear dampers are period units; rebuild or replace in pairs.

Step 7 - Brakes and wheels

PREREQUISITE: the factory service manual for your year. System: brakes. Dual 275 mm front discs with single-piston calipers and a 180 mm rear drum on the K - measure rotor thickness and drum ID before ordering. ComStar wheels carry tubeless tyres; inspect for cracks at the spoke roots.

Step 8 - Reassembly and commissioning

PREREQUISITE: the factory service manual for your year. System: whole bike. The frame's right-side support unscrews for engine installation - use it rather than fighting the loop. Bench-verify cam timing twice, frame-up assembly, fluids, carb sync, brake bleed, heat-cycle break-in.

Finishes, fasteners & markings — the concours details

This is what separates a restoration from a repair. Get these right and judges notice; get them wrong and the bike reads as 'refreshed'.

- K(Z) colour chart is verified (see 1979 entry): candy colours are base-plus-tint systems - a single-stage respray will not match. Canada-only brown on a US bike is a tell.
- Variant equipment is identity: F Super Sport and C Custom trim are not K trim. Restore the variant the frame says it is.
- ComStar wheels: modular aluminium - inspect and refinish carefully; never powder-coat over cracks.
- Fasteners: metric JIS - use JIS screwdrivers. Preserve RC01-family stampings; never re-stamp.
- Exhaust: the K's 4-into-4 is part of its identity (later megaphone-style mufflers noted for 1981) - aftermarket 4-into-1 systems are modifications.

Wiring

No generated wiring diagram appears in this guide — a text table is not a wiring diagram, and a wrong diagram is worse than none. Use the **factory service manual's year-correct wiring diagram** as your primary reference.