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1977 Honda CB750 Restoration Guide

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Honda CB750 SOHC

Restoration Guide — 1977

CB750K7 + CB750F2 · Single-Year Guide

Key specifications at a glance

Item	This year	Source
Model designations	CB750K7 / CB750F2 Super Sport	
Engine	736 cc air-cooled SOHC inline four	M, spec rows 22–25
Bore × stroke	61 × 63 mm	M, row 24
Power / torque	63 BHP @ 8,000 rpm / 42.6 lb-ft @ 7,000 rpm	M, rows 133, 137
Brakes	K7: front disc / REAR DISC. F2: front disc / rear disc	M, rows 143–144, 173–174
Exhaust	K7: four-into-four. F2: four-into-one	M, architecture
Ignition	Battery + coil, points (no distributor)	M, row 55

Scope: Covers the 1977 model year only: CB750K7 and CB750F2 Super Sport. (The 1977 CB750A Hondamatic is NOT covered.) The CB750A Hondamatic and post-1978 DOHC models are not covered.

What this is: a restoration companion to the Honda CB750 Shop Manual 1969–1978 — not a replacement for it. The factory manual carries the full wiring diagram and complete service procedures; this guide gives the correct sequence, model-year change points, verified specifications, and finishes and markings the manual does not document.

How to use this guide: identify your bike (page 2), read the running-change register for this year, then work through teardown, specifications, and reassembly. Every number is cited to its source.

About this guide

Covers the 1977 model year only: CB750K7 and CB750F2 Super Sport. (The 1977 CB750A Hondamatic is NOT covered.)

IronHead publishes one guide per model year because adjacent CB750 years do not fully interchange: tanks, seats, brakes, electrics, and even engine internals changed year to year. Working from the wrong year's data is the most common cause of wrong parts and wasted money.

Conventions used in this guide: **M** = the Honda CB750 Shop Manual 1969–1978 (factory service manual), cited by spec-table row or manual page. Any figure that could not be verified in factory literature is marked **[UNVERIFIED — not in factory literature]** and must not be used as an ordering specification.

Caution: The Honda shop manual's publication/revision number is recorded in the source ledger where confirmed; where a revision is unspecified the manual is cited by its exact title and the PDF/spec-table locator.

Model identification

Confirm the bike matches this guide before ordering parts.

Item	This year	Source
Frame number (K7)	CB750-2600001 and up	Honda Shop Manual foreword, PDF p.2 — agrees with VintageCB750, cb750.com, Carpy's
Engine number (K7)	CB750E-2600001 and up	Honda Shop Manual foreword, PDF p.2 — agrees with VintageCB750, cb750.com, Carpy's
Frame number (F2)	CB750F-2100003 and up	Honda Shop Manual foreword, PDF p.2 — agrees with VintageCB750, cb750.com, Carpy's
Engine number (F2)	CB750FE-2525947 and up	Honda Shop Manual foreword, PDF p.2 — agrees with VintageCB750, cb750.com, Carpy's
Not covered	CB750A Hondamatic (1977) — different model, outside this guide	Identification practice

VIN decoding

- Frame numbers are stamped on the steering head; engine numbers on the crankcase.
- On US bikes the frame and engine numbers of the same bike do not exactly match — they are separate sequences.
- K models: frame prefix **CB750-**. F Super Sport: frame prefix **CB750F-**; engine prefix **CB750FE-**.
- A bike wearing parts from another year is a parts bike or a modified bike — restore to the year the frame identifies, not the year the parts suggest.

Year-change register — what changed for this year

Every entry below is a change FROM the previous model year, with the restoration consequence stated plainly. If a part is not listed here, assume it carries over — and verify against the specification tables.

Running change	Restoration impact	Source
K6→K7: compression ratio 9.0:1 → 9.2:1; valve timing changed to 0° / 40° / 40° / 0°; camshaft revised	Engine parts (cam, pistons) differ — do not interchange K6 internals.	M, rows 132, 118–121
K6→K7: 17-in rear wheel; rear tire 4.50H-17; wheelbase 1,495 mm; fork rake 27°; ground clearance 135 mm; trail 5.04 in / 128 mm	Chassis geometry differs — wheels, forks, and swingarm parts are K7-specific.	M, rows 138–148
K6→K7: rear brake becomes a DISC (swept area 104.2 sq in); rear drum brake assembly discontinued	Rear brake parts differ — K6 drum parts do not fit.	M, rows 143–144
K6→K7: final drive 2.667 → 2.733 (15T drive / 41T driven); gear ratios revised (1st 2.769, 2nd 1.882, 3rd 1.500, 4th 1.208, 5th 1.022)	Drivetrain parts differ — sprocket/gear sets are K7-specific.	M, rows 123–127, 128
K6→K7: max power 67 → 63 BHP @ 8,000 rpm; max torque 44.12 → 42.6 lb-ft @ 7,000 rpm; idle 950 → 1,000 rpm	Tune specifications differ — set to the K7 figures.	M, rows 133–137
K6→K7: tank 4.5 → 5.2 US gal (17 → 19.5 L); dry weight 479 → 500 lb; tire pressures 32/34 psi front, 40 psi rear	Bodywork and service figures differ.	M, rows 129–130, 139, 140–141
K6→K7: front brake master cylinder changed; caliper piston 38.1×0.2 mm; disc thickness 6.8–7.2 mm; brake pads non-asbestos	Brake hydraulics differ — rebuild kits are K7-specific.	M, rows 218–222
K6→K7: spark plug D8ES-L → PD8ES; carburetor 7A → 7D (F: 064A → 086A for F2); main jet #120 → #105 (K7); air screw 1 ± 3/8 → 1 1/8 ± 3/8 (K7)	Fuel/ignition parts differ — order by K7 marking.	M, rows 115–117, 92
K6→K7: condenser 0.24 → 0.22–0.26 µF (K7), 0.24 (F2/F3); tail/stop 3/32 CP → 8/27 W (K7/F2/F3); turn signal 32/32 CP → 23/8 W	Electrical parts differ — bulbs and condenser are K7-spec.	M, rows 93–96
K6→K7: tachometer now with red zone at 8,500 rpm (K7, F2/F3); speedometer increments 20 mph	Instruments differ.	M, rows 97–99
F1→F2: compression 9.2 → 9.0:1; timing 5/35/35/5 → 5/40/40/5; carbs 064A → 086A; #110 main; final reduction 2.824 → 3.071 (17T/52T)	F2 engine/drivetrain parts differ — do not interchange F1 sets.	M, rows 189–193, 195–199
K7/F2 maintenance: chain lubrication now part of maintenance (was splash-type, discontinued 1976); chain DID630DL or RK630SD; joint tool 07975-3000002	Use the riveting tool — clip links are not the factory method.	M, p.250; K7 schedule p.261

Engine specifications (fully cited)

Specification	Value	Year band	Source
Type	Air-cooled 4-stroke OHC, 4-cylinder in line	K0	M, rows 22–23
Bore × stroke	61 × 63 mm (2.401 × 2.480 in)	K0–K8, F/F1/F2/F3	M, row 24
Displacement	736 cc (44.93 cu in)	K0 (unchanged K0–K8 per register)	M, row 25
Compression (K7)	9.2 : 1	K7/K8	M, row 132
Compression (F2)	9.0 : 1	F2/F3	M, row 195
Carburetor (K7)	Setting mark 7D	K7/K8	M, row 115
Carburetor (F2)	086A	F2/F3	M, row 189
Valve train	Chain-driven OHC, rocker arms, screw-and-locknut tappets	K0	M, row 28
Max power (K7)	63 BHP @ 8,000 rpm	K7/K8	M, row 133
Max torque (K7)	42.6 lb-ft @ 7,000 rpm	K7/K8	M, row 137
Lubrication	Forced pressure, dry sump; engine and gearbox share oil	K0–K8, F	M, rows 31–33
Oil capacity	3.5 L total incl. oil tank (oil tank 2 L)	K0–K8	M, rows 31–32
Valve clearance — intake	0.05 mm (0.002 in)	K0–K8, F/F1/F2/F3	M, row 35
Valve clearance — exhaust	0.08 mm (0.003 in)	K0–K8, F/F1/F2/F3	M, row 36
Valve timing (K7)	In 0° / 40°; Ex 40° / 0°	K7/K8	M, rows 118–121
Valve timing (F2)	In 5° BTDC / 40° ABDC; Ex 40° BBDC / 5° ATDC	F2/F3	M, rows 190–193
Main jet (K7)	#105	K7/K8	M, row 117
Main jet (F2)	#110	F2/F3	M, row 199
Slow jet	#40	All (band as printed)	M, row 87
Float height	26 mm (as printed)	All	M, row 89
Air screw (K7)	1 1/8 ± 3/8 turns (as printed)	K7/K8	M, row 116
Idle speed	1,000 rpm	K7/K8, F/F1/F2/F3	M, row 134
Compression pressure	Normal tune-up range 150–170 psi (10.5–12 kg/cm ²)	All	M, row 214
Clutch / transmission	Wet multi-plate; 5-speed constant mesh, left-foot return	K0–K8, F	M, rows 45–46, 54
Primary reduction (K7)	1.708	K0–K7 (exc. K8/F3)	M, row 47
Gear ratios (K7)	1st 2.769 / 2nd 1.882 / 3rd 1.500 / 4th 1.208 / 5th 1.022	K7/K8	M, rows 123–127
Final reduction (K7)	2.733 (15T drive / 41T driven)	K7/K8	M, row 128
Final reduction (F2)	3.071 (17T drive / 52T driven)	F2/F3	M, row 198
Final drive chain (K7/F2)	DID630DL or RK630SD; joint tool Honda 07975-3000002	K7/K8, F2/F3	M, rows 136, 194

Electrical specifications (fully cited)

The factory wiring diagram itself is in the Honda shop manual. The table below is a supplementary inspection map — it does not replace the factory diagram.

Specification	Value	Year band	Source
Ignition system	Battery and ignition coil (points); no distributor	K0–K8, F (all SOHC)	M, row 55
Alternator	Three-phase AC, 12V 0.21 kW @ 5,000 rpm	K1–K8, F	M, row 90
Battery	12V 14 AH	K0–K8, F	M, row 58
Spark plug (K7)	NGK PD8ES or ND X24ES-U	K7	M, row 92
Spark plug gap	0.6–0.7 mm (0.024–0.028 in); thread 12 mm, reach 12.7 mm	All	M, rows 63–64
Condenser (K7)	0.22–0.26 μ F	K7/K8	M, row 93
Condenser (F2)	0.24 μ F	F2/F3	M, row 94
Tail/stop (K7/F2)	12V 8/27 W	K7/K8, F2/F3	M, row 95
Turn signal (K7/F2)	12V 23/8 W	K7/K8, F2/F3	M, row 96
Indicator (K7/F2)	12V 1.7 W	K7/K8, F2/F3	M, row 97
Position (K7/F2)	12V 7 W	K7/K8, F2/F3	M, row 98
Tachometer (K7/F2)	Red zone at 8,500 rpm	K7/K8, F2/F3	M, row 99
Speedometer (K7)	Increments 20 mph	K7/K8	M, row 100
Turn signal buzzer	Installed K2+ with buzzer stop button	K2+	M, p.207; PDF p.201
Starting interlock	Safety unit + clutch switch (K3+)	K3+	M, p.209; PDF p.203
Contact breaker	Hitachi; point gap 0.3–0.4 mm (0.012–0.016 in)	All SOHC	M, rows 65, 67
Spark advancer	Starts 1,000–1,150 rpm; full 2,300–2,500 rpm; 35°	All	M, rows 70–72
Firing order	1-2-4-3 (two breakers 180° apart: 1&4, 2&3)	All	M, row 73

Chassis specifications (fully cited)

Specification	Value	Year band	Source
Frame	Double cradle tubular steel	K0	M, row 10
Dry weight (K7)	500 lb / 226 kg	K7/K8	M, row 139
Fuel capacity (K7)	5.2 US gal / 19.5 L	K7/K8	M, row 129
Overall (K7)	86.7 in L × 32.5 in W × 46.3 in H (2,202 × 825 × 1,176 mm)	K7/K8	M, rows 122, 124, 125
Wheelbase (K7)	58.9 in / 1,495 mm	K7/K8	M, row 138
Rake (K7)	27°	K7/K8	M, row 142
Trail (K7)	5.04 in / 128 mm	K7/K8	M, row 143
Ground clearance (K7)	5.3 in / 135 mm	K7/K8	M, row 146
Seat height (K7)	32.2 in / 818 mm	K7/K8	M, row 147
Front suspension (K7)	Telescopic fork, 5.5 in / 139.7 mm travel	K7/K8	M, row 140
Rear suspension (K7)	Swing arm, 3.5 in / 89 mm travel	K7/K8	M, row 141
Tires (K7)	Front 3.50-19 (4 PR) @ 32/34 psi; rear 4.50-17 (4 PR) @ 40 psi	K7/K8	M, rows 144–145
Front brake (K7)	Disc; swept area 106.2 sq in (685.2 cm ²); pads non-asbestos	K7/K8	M, rows 149–150
Rear brake (K7)	DISC; swept area 104.2 sq in (672.3 cm ²)	K7/K8, F/F1, F2/F3	M, rows 143–144, 174
Master cylinder (K7)	Bore 14.0–14.043 mm (limit 14.055); piston 13.957–13.984 mm (limit under 13.940)	K7/K8	M, rows 220–221
Caliper piston (K7)	38.1 ± 0.2 mm; piston-to-bore clearance limit 0.005 in (0.12 mm)	K7/K8	M, rows 218–219
Brake disc thickness (K7)	6.8–7.2 mm; service limit 6.0 mm	K7/K8	M, row 222
F2 chassis dims	2,200 × 860 × 1,160 mm; wheelbase 1,470 mm; rake 27°; trail 128 mm; clearance 135 mm; seat 818 mm	F2/F3	M, rows 200–208
F2 fuel / reserve	18 L (4.3 US gal); reserve 5 L	F2/F3	M, rows 175–176
F2 tires	Front 3.25H-19-4PR @ 32 psi; rear 4.00H-18-4PR @ 40 psi	F2/F3	M, rows 171–172
F2 front/rear brake	Disc / DISC	F2/F3	M, rows 173–174