FREE SAMPLE

The opening pages of

1982 Honda CX500/GL500 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-CX500-1982

IronHead — instant PDF download after checkout.

IRONHEAD

Factory-Correct Restoration Guides

Honda

CX500 / GL500

Restoration Guide — Model Year 1982

Engine *497 cc liquid-cooled 80-degree V-twin, pushrod 4 valves/cyl*	***Output*** *48 hp CX500; 50 hp GL500 (claimed); 82 hp CX500 Turbo*
Brakes *Front disc(s) / rear drum (disc rear on Turbo)*	***Weight / Tank*** *17.5 L tank (GL500); shaft drive, ComStar wheels*

*Single-year edition — covers the **1982** model year only (CX500 Custom + CX500 Turbo; GL500 second year). 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

SAMPLE EXCERPT — full guide available at the link on the cover sheet

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 **1982 CX500 / GL500** only. Do not apply its year-specific details to other years.

Scope: CX500 / GL500 — model year 1982 (CX500 Custom + CX500 Turbo; GL500 second year)

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 — CX500 / GL500

The CX500 of 1978 was Honda's first V-twin: a liquid-cooled 497 cc longitudinal 80-degree V-twin with the heads twisted 22 degrees, four pushrod-operated valves per cylinder, electric-only starting, shaft drive and ComStar wheels - and the first production motorcycle with tubeless tyres (Wikipedia, Honda CX series).

The family grew by variant, not by redesign: the Standard of 1978 was joined for 1979 by the Deluxe and the Custom (smaller tank, buckhorn bars); the Deluxe ended after 1981 (Wikipedia, Honda CX series).

For 1981 the same engine became the GL500 Silver Wing tourer - transistorized ignition in place of the CX500's CDI, Pro-Link rear suspension, naked or Interstate (fairing, bags, trunk) (Wikipedia, Honda CX series).

1982 was the last CX500 year and its strangest: the one-year CX500 Turbo - programmed fuel injection (Honda's first on a production motorcycle), about 19 psi of boost, 82 hp, Pro-Link and TRAC, a different machine in frame, suspension, brakes and fairing that happens to share the engine architecture (Wikipedia, Honda CX series). The naturally aspirated 500 line was replaced by the 674 cc CX650/GL650 family for 1983, which is outside this guide's scope.

SAMPLE EXCERPT — full guide available at the link on the cover sheet

Model identification — confirm what you have

The standard CX500's frame serial begins CX500-: 1978 from CX500-2000001, 1979 from CX500-2100001 (CX/GL serial list (American Honda Identification Guide data, cx500gl500)). The Custom and Deluxe share the PC01 frame family: Custom 1979 from PC01-2000017, 1980 from PC01-2100018, 1981 from JH2PC010*BM200006, 1982 from JH2PC010*CM300001; Deluxe 1979 from PC01-400005 (note: single documented start - read the full stamp), 1980 from PC01-4100002, 1981 from JH2PC011*BM200001. GL500 Silver Wing 1981 from JH2PC0200BM000022, 1982 from JH2PC020*CM100001; Interstate (PC021) alongside. CX500 Turbo 1982 only, from JH2PC030*CM000017. The 10th VIN character on 1981-on 17-character numbers is the year code (B=1981, C=1982).

This 1982: CX500 Custom + CX500 Turbo; GL500 second year. Frame serial reference: CX500 Custom from JH2PC010*CM300001; GL500 from JH2PC020*CM100001; CX500 Turbo from JH2PC030*CM000017 (ID-guide data)

Year-correct equipment: Year colour names [UNVERIFIED - not in factory literature as cited] - confirm against the parts book for your VIN.

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.

> ***1982 at a glance:*** *Custom/GL500: front disc(s), rear drum. Turbo: dual front discs, rear disc, dual-piston calipers*

Year-change register — what changed for 1982

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.

- Last CX500 year. US naturally aspirated offer centres on the Custom; the Deluxe ended in 1981 (Wikipedia).
- CX500 Turbo (1982 only): programmed fuel injection - Honda's first on a production motorcycle - about 19 psi boost for 82 hp, larger CX650-type crankshaft bearings, and a chassis that differs significantly from the standard CX500: Pro-Link, TRAC anti-dive, rear disc, full fairing (Wikipedia). It is scoped in this guide as its own machine: almost nothing chassis- or fuel-system-related interchanges with the carburetted bikes.
- GL500's second year: the small 1981 tail trunk is replaced by a larger trunk (Wikipedia / autoevolution). Overproduction meant some 1982 GL500s sold new as late as 1984 - a late first-sale date is not evidence of a wrong year.
- Non-US note: the CX500EC Sports (1982) shares Turbo hardware (TRAC, Pro-Link, rear disc, automatic cam-chain tensioner) without the turbo - a different market's model, not a US variant (Wikipedia).

Verified spec tables — 1982 CX500 / GL500

Every row cites its source. Rows flagged [UNVERIFIED] are printed as found, not as factory-verified. Year band: CX500 Custom + CX500 Turbo; GL500 second year.

SAMPLE EXCERPT — full guide available at the link on the cover sheet

ENGINE

Spec	Value	Unit	Source / notes
Engine type	Liquid-cooled longitudinal OHV 80-degree V-twin, heads twisted 22 degrees, 4 valves/cyl via stubby pushrods and forked rockers		Wikipedia, Honda CX series
Displacement	497	cc	Wikipedia, Honda CX series
Bore x stroke	78 x 52	mm	Wikipedia, Honda CX series
Compression ratio	10.0:1		Wikipedia, Honda CX series
Max power (claimed)	48 (CX500); 50 (GL500); 82 (CX500 Turbo)	hp	Wikipedia, Honda CX series (GL500 figure: GL500/GL650 Silver Wing data)
Redline	9,650	rpm	Wikipedia, Honda CX series
Starting	Electric only - no kick starter		Wikipedia, Honda CX series

FUEL

Spec	Value	Unit	Source / notes
Carburettors	2 x CV Keihin (34 mm on GL500 per autoevolution GL500 data); Turbo is fuel-injected, no carburettors		Wikipedia, Honda CX series / autoevolution, Honda GL500

ELECTRICAL

Spec	Value	Unit	Source / notes
Ignition	CDI (CX500); transistorized (GL500 - stator carries charging windings only, more output for touring loads)		Wikipedia, Honda CX series

CHASSIS

Spec	Value	Unit	Source / notes
Final drive	Shaft - enclosed splined shaft, single universal joint, bevel drive in oil bath		Wikipedia, Honda CX series
Frame	Steel tube backbone, engine as stressed member; single-tube backbone (twin-shock), triple-tube (Pro-Link models)		Wikipedia, Honda CX series
Rear suspension	Twin shocks (CX500); Pro-Link monoshock (GL500, Turbo)		Wikipedia, Honda CX series
Front brake	US CX500: single front disc (dual on GL500/GL500I and Turbo); dual-piston calipers replace single-piston after 1980		Wikipedia, Honda CX series
Rear brake	Drum (CX500/GL500); disc with dual-piston caliper (Turbo)		Wikipedia, Honda CX series
Wheels	ComStar modular wheels - CX500 was the first production motorcycle on tubeless tyres		Wikipedia, Honda CX series
Fuel capacity	17.5 (GL500)	L	Wikipedia, Honda CX series (GL500 data table; CX500 Standard capacity not verified in cited sources)

SAMPLE EXCERPT — full guide available at the link on the cover sheet

Restoration sequence

The CX/GL is a tall, dense engine in a backbone frame - documentation and order matter more than strength. Its known ownership jobs are the cam-chain tensioner, the cooling system, the shaft splines and (CX500) the CDI/stator electrics. Bench order: document and identify the variant, cooling system, engine, carburettors (or Turbo injection - specialist territory), electrics by ignition type, shaft drive, chassis, brakes, finishes.

Step 1 - Document and identify

PREREQUISITE: the factory service manual for your year. System: whole bike. The frame prefix settles the variant (CX500- Standard; PC01 Custom/Deluxe; PC02 GL500; PC03 Turbo). Photograph the engine's rear cover area and the cam-chain tensioner hardware before stripping - tensioner type (manual vs later automatic) is a parts-order fork.

Step 2 - Cooling system

PREREQUISITE: the factory service manual for your year. System: cooling. Liquid-cooled with the radiator high and the engine tall: flush the system, replace hoses, test the cap and thermostat, and verify fan operation (mechanical fan on the 500s - the electric fan arrives with the GL650, outside this scope). Coolant neglect corrodes the water-pump mechanical seal - the classic CX weep-hole leak.

Step 3 - Engine: cam chain and tensioner

PREREQUISITE: the factory service manual for your year. System: engine. The early bikes use a manually adjusted cam-chain tensioner; a loose chain saws at its guides and, neglected, at the engine cases. Adjust per the factory manual and inspect guide wear on any teardown. The automatic tensioner arrives only on the late Sports/Turbo-era engines - do not assume it is fitted.

Step 4 - Valves and top end

PREREQUISITE: the factory service manual for your year. System: engine. Four valves per cylinder worked by stubby pushrods and forked rockers because of the 22-degree head twist. Measure clearances cold per the factory manual; record per cylinder - the two heads are mirror work, not identical access.

Step 5 - Carburettors (naturally aspirated bikes)

PREREQUISITE: the factory service manual for your year. System: fuel. Two CV Keihins as a matched pair - strip together, keep each body's jets and diaphragm with it, bench-sync then vacuum-sync. Turbo bikes: the programmed injection system is a specialist recommissioning job - diagnose from the dashboard fault lights (Fuel System / TURBO indicators) and the factory manual before replacing anything.

Step 6 - Electrics by ignition type

PREREQUISITE: the factory service manual for your year. System: electrical. CX500 CDI bikes: the ignition is separate from the rest of the electrical system and the stator carries ignition windings - test stator and CDI before condemning coils. GL500 transistorized bikes: the stator is charging-only with more output for touring loads. The two systems' stators and parts do not interchange - order by variant.

Step 7 - Shaft drive and chassis

PREREQUISITE: the factory service manual for your year. System: drive/chassis. The shaft runs in an oil bath with a grease nipple for the shaft bearing - service both. Inspect splines and the cush drive. Twin-shock

SAMPLE EXCERPT — full guide available at the link on the cover sheet

CX500s: rebuild shocks and forks conventionally. Pro-Link bikes (GL500/Turbo): linkage bearings and the monoshock are the wear items.

Step 8 - Brakes, reassembly, commissioning

PREREQUISITE: the factory service manual for your year. System: whole bike. Caliper type is year-split (single-piston to 1980, dual-piston after) - rebuild what is fitted, with new hoses. Reassemble engine-first on the bench, frame-up, fluids (coolant bled carefully - air locks overheat these engines), 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'.

- ComStar wheels are finish- and type-specific: silver on the 1978 Standard, black reversed ComStars on the Deluxe and later Standards - wheel finish is an identification point, not a styling choice.
- The Custom's smaller tank and buckhorn bars, and the GL500 Interstate's factory fairing/bags/trunk, are variant equipment - correct only on their own variant.
- 1983-on CX650/GL650 engines are black-finished; the 500s in this guide are plain aluminium - a black 500 engine is a swap or a repaint.
- Fasteners: metric JIS - use JIS screwdrivers. Preserve frame stampings; never re-stamp.
- Turbo bodywork and fairing are one-year, one-model parts - reproductions and repairs must be judged against 1982 Turbo references only.

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.

> *SUPPLEMENT — not a wiring diagram. Trace the factory service manual's year-correct wiring diagram for your bike. The table below maps the major circuits as an inspection aid only; wire colours vary by year and market.*

From	To	Purpose
Battery (+)	Main fuse	Feed - electric-only starting; a weak battery strands the bike
Main fuse	Ignition switch	Switched feed
Stator (CX500: incl. ignition windings)	CDI unit / coils	CX500 ignition - separate from the main electrical system
Stator (GL500: charging only)	Ignition unit / coils	GL500 transistorized ignition feed
Alternator windings	Regulator / rectifier	Charging
Regulator	Battery (-) / frame	Ground return

Inspection checklist: battery terminals, main fuse holder, ignition switch contacts, coil connections, ground strap to frame/engine, charging connectors. Clean and dielectric-grease every connection you touch.

SAMPLE EXCERPT — full guide available at the link on the cover sheet