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The opening pages of

1980 Harley-Davidson Shovelhead Buyer's Guide

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IRONHEAD

The 1980 Harley-Davidson Shovelhead Buyer & Restoration Guide

KEY FACTS AT A GLANCE

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Manufacturer History

The Shovelhead story starts in 1966. Harley-Davidson needed more power from its Big Twin to move the heavy Electra Glide dresser, and the answer was the Power Pac: new aluminum cylinder heads with larger valves and ports on the existing Panhead-style lower end, with the rocker boxes shaped like the business end of a coal shovel — the name every Harley fan knows today.

The first Shovelhead generation runs from 1966 through 1969: the generator (slabside) years. The generator hangs off the front of the engine cases, the ignition is breaker points, and ownership identification is the engine serial number. In 1970 the motor changed fundamentally — the alternator replaced the generator inside a redesigned cone-shaped timing case, the ignition points moved into the nose cone, and a nine-character VIN appeared. That cone motor is the second Shovelhead generation, and it runs all the way to 1984.

The model line grew with the motor. The 1971 FX Super Glide — Willie G. Davidson's factory custom combining the FL frame and 74-ci engine with a Sportster front end and the boat-tail rear — invented the cruiser category. The line expanded through the 1970s: electric-start FXE, the FXS Low Rider (mid-1977), the FXEF Fat Bob (1979), the belt-drive FXB Sturgis and FXWG Wide Glide and the all-new FLT Tour Glide (1980). Displacement grew from 74 cubic inches to an 80-ci option (mid-1978) and then the all-1340 line (1981). Carburetion moved from Linkert (1966) to Tillotson (1967–1970) to Bendix (1971–1975) to Keihin (1976 on). Breaker points gave way to Prestolite electronic ignition late in 1978. The 17-digit federal VIN arrived for 1981, and in June 1981 Harley's executives bought the company back from AMF. The FXR chassis (1982) brought rubber mounting and a 5-speed to the FX line, and in 1984 the Evolution engine arrived — ending the Shovelhead era that this guide covers.

Model History

This guide covers one model year only. The Shovelhead Big Twin line for the covered year is described in the key-facts section; model codes, carburetion, ignition, and chassis details are year-specific and must be verified against the year parts book. The through-line of the era is the cone motor introduced for 1970 (alternator, nose-cone points, nine-character VIN), refined year by year until the 1984 split between the final Shovelheads and the first Evolutions.

What Is Unique About 1980

FLT TOUR GLIDE — the all-new touring platform: rubber-mounted 80-ci Shovelhead, 5-speed gearbox, fully enclosed final chain, triple disc brakes, and a frame-mounted fairing. Cycle World’s January 1980 test called it an all-new motorcycle except for the engine. First-year FLTs are a distinct collectible — verify the 5G model code.

FXB STURGIS — TWIN BELT DRIVES — the limited-edition blacked-out Low Rider introduced belt drive to Harley-Davidson: toothed rubber belts for BOTH the primary and the final drive (Gates Aramid fiber), a rubber-damper compensator sprocket replacing the spring unit, and no primary tensioner. Black and orange/gold trim with red-trimmed cast wheels; about 67 hp. (One valuation reference describes the primary as still chain — the contemporary Cycle World road test and the National Motorcycle Museum’s spec sheet both document twin belts; see the corrections companion.)

FXWG WIDE GLIDE — the Fat Bob formula with wider triple clamps, a 21-inch front wheel, trimmed front fender, ducktail rear, forward-mounted foot controls, and a black finish with flame graphics.

80 ci standard on FLH — the 1,340 becomes the standard Electra Glide engine; the 74 continues on remaining 1200 models.

Last 9-character VIN year — 1980 uses the J0 year code; the 17-digit federal VIN follows for 1981.

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What 1980 Did Not Have

- No belt drive on any pre-1980 Harley (the FXB is the first); no 5-speed outside the FLT (1982 FXR); no 17-digit VIN (1981); no Evolution engine (1984).
- No rubber-mounted FX (1982 FXR) — 1980 FX models are rigid-mounted.
- **Model year covered:** 1980 only. The Tour Glide year; the Sturgis year; the Wide Glide year.
- **Engine:** 74 or 80 cu in Shovelhead; 80 ci (1,340 cc, 3.498 x 4.25 in, 7.4:1) standard on the FLH and all new models.
- **The FLT Tour Glide:** All-new touring chassis — rubber-mounted engine, 5-speed transmission, enclosed final chain, triple disc brakes, frame-mounted fairing.
- **The FXB Sturgis:** Limited-edition blacked-out Low Rider — the first Harley with belt primary AND belt final drive (Gates Aramid-fiber belts); “B” is for belt.
- **The FXWG Wide Glide:** Fat Bob formula with wider triple clamps, 21-inch front wheel, trimmed fenders, forward controls, black finish with flames.
- **Fuel system:** Keihin carburetor (38 mm on the FXB).
- **Ignition:** Prestolite breakerless electronic ignition; solid-state regulator.
- **Transmission:** 4-speed (FX line); 5-speed (FLT).
- **Identification:** 9-character VIN (5G = FLT-80, 7G = FXWG-80, 8G = FXB-80); year code J0.
- **Key 1980-only features:** First-year FLT, FXB, and FXWG — three first-year models in one year; last year of the 9-character VIN.

1980 Technical Specification

- **Models covered:** the FLH, the new FLT Tour Glide, FXE/FXS, and the new FXB Sturgis and FXWG Wide Glide
- **Engine:** 1,207 cc (74 cu in) or 1,340 cc (80 cu in); FLT and new FX models 80-ci air-cooled 45-degree OHV V-twin (Shovelhead)
- **Bore x stroke:** 74: 3.4375 x 4.00 in (87.3 x 100.8 mm); 80: 3.498 x 4.25 in (88.8 x 108 mm)
- **Compression ratio:** 74: 8.0:1; 80: 7.4:1
- **Power:** 80: about 65–67 bhp (67 hp documented on the FXB Sturgis, National Motorcycle Museum data)
- **Carburetion:** Keihin (38 mm documented on the FXB Sturgis)
- **Ignition:** Prestolite breakerless electronic ignition; solid-state regulator
- **Starting:** Electric starter (all models)
- **Transmission:** 4-speed (FX line); 5-speed (FLT)
- **Brakes:** Disc brakes at each wheel; FXB: 255 mm dual front discs / 255 mm rear disc (museum data)
- **Wheels:** Wire-spoked or alloy by model; FXWG: 21-inch front wheel

Identification: Engine Serial and VIN

For 1966 through 1969, ownership identification is the engine serial number stamped on the left engine case. From 1970, Harley-Davidson used a nine-character VIN: the first two characters identify the model, the next five are the production sequence, and the last two are the model year (H0–H9 = 1970–1979, J0 = 1980). From 1981, the federal 17-digit VIN applies (10th character = model year).

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Nine-character VIN model codes (1970-1980 era)

Code	Model	Years
1A	FL-1200	1966–1973 (74 ci dresser)
2A	FLH-1200	1966–1980 (74 ci Electra Glide)
2C	FX-1200	1971–1974 (74 ci Super Glide)
2D	FX-1200	1975–1976 (74 ci Super Glide)
2E	FX-1200	1977 (74 ci Super Glide)
9D	FXE-1200	1974–1977 (74 ci Super Glide, electric start)
2F	FXS-1200	1977–1978 (74 ci Low Rider)
4F	FXS-80	1979–1980 (80 ci Low Rider)
6F	FXEF	1979 (Fat Bob)
7F	FXEF-80	1979–1980 (80 ci Fat Bob)
5F	FXE-80	1979–1980 (80 ci Super Glide)
3G	FLH-80	1978–1984 (80 ci Electra Glide)
5G	FLT-80	1980–1983 (80 ci Tour Glide)
6G	FXE-80	1981 (80 ci Super Glide)
7G	FXWG-80	1980–1984 (80 ci Wide Glide)
8G	FXB-80	1980–1982 (80 ci Sturgis)

Nine-character year codes: 1970 = H0, 1971 = H1, 1972 = H2, 1973 = H3, 1974 = H4, 1975 = H5, 1976 = H6, 1977 = H7, 1978 = H8, 1979 = H9, 1980 = J0.

Federal 17-digit years: The 10th character of the 17-digit federal VIN is the model-year code: 1981 = B, 1982 = C, 1983 = D, 1984 = E.

What to Check Before You Buy

Sturgis belt originality. The twin-belt system is the FXB's reason for being — converted-to-chain Sturgis bikes lose the point (and the value); verify pulleys, belts, and the rubber-damper compensator.

First-year FLT parts. The Tour Glide's new chassis, enclosed chain, and fairing are 1980-specific in detail — the parts book is essential; later FLT parts do not all interchange.

Three first-year models. 1980 rewards specialists — buy the best-documented example of whichever model you chase; "1980" alone tells you almost nothing.

Paint and Finishes

- **FXWG:** black factory finish with flame graphics (documented).
- **FXB Sturgis:** blacked-out finish with orange/gold accents and red-trimmed cast wheels; heat-resistant wrinkle-finish black on the engine (documented).
- FLT/FLH/FX: verify against the year parts book (Painted Parts section); repaint in a non-factory color is the single biggest value deduction on a restored bike.

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- **Hidden original paint:** check under the seat, inside the side covers, and behind badges for the original finish before trusting any color claim.

Production

The FXB Sturgis was a limited edition (period reports put the run at about 1,500, weakly sourced — see the corrections companion). No reliable model-by-model production total for 1980 was found in the sources consulted.

The Technical Restoration Content

Casting and date codes

Engine cases, cylinders, and heads carry casting numbers and date codes. A factory-correct restoration matches casting numbers to the model year and checks date codes against the build date — parts cast months after the bike's assembly date are replacements. Photograph every casting number before disassembly; the year parts book lists the correct numbers.

Torque specs

Do not use torque values from memory or from generic charts. Head bolts, case bolts, and critical fasteners are torque-to-yield or angle-sensitive on these engines, and published values vary between sources. Use the year-correct Harley-Davidson factory service manual for every torque value, and follow its sequence. If you cannot verify a number, follow the factory manual procedure — a wrong torque value breaks cases.

Gaskets and seals

Shovelheads mark their territory. A restoration that aims at correctness uses the right gasket materials for the year (cork, paper, or composition as the parts book specifies), and a restoration that aims at riding replaces every seal in the primary, the rocker boxes, and the pushrod tubes as a matter of course. Budget for it; there is no cheap way around it.

The top end

The Shovelhead's aluminum heads are its glory and its weakness. Check valve guides, seats, and the head gasket surface before committing to machine work. Overheating history shows in discolored fins and pulled head-bolt inserts — both are repairable, both cost money, and both should be found before paint.

The bottom end

The 1966–1969 generator lower end and the 1970-on cone lower end share the Shovelhead top end but differ in the timing chest, oiling, and charging system — parts do not freely interchange between the generations. Verify the case casting against the model year before buying a "rebuilt" engine.

Rust-prone areas

Check the frame at the steering head and swingarm pivot, the inside of the gas tanks, the fender mounting points, and the floorboard/forward-control brackets. Chrome that looks tired is usually telling the truth about the metal underneath — budget for re-chroming, not polishing.

Restoration sequence

1. Verify numbers (engine serial / VIN, title, model codes) before spending anything.
2. Assess the engine: compression, leak-down, oil pressure history.
3. Frame and sheet metal: straighten, repair, then paint — never paint before the mechanical assessment.

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4. Rebuild the engine and transmission to the year-correct specification.
5. Re-chrome and re-plate to the year-correct finish.
6. Reassemble with the year parts book open — fasteners, clamps, and finishes are year-specific.
7. Final verification: every number, every code, every finish against the book.

Shop the Supplies

The parts and tools for this restoration are covered in the IronHead parts-and-tools box at ironheadguides.com. Buy the year-correct factory service manual first — it is the single most valuable tool in a Shovelhead restoration.

Sources

- Rider Magazine — Retrospective: Harley-Davidson Shovelhead 1966–1984 (Power Pac heads; 1966 FLH 60 hp @ 5,500; generator 1966–1969; alternator/points-in-timing-case from 1970) —
  `http://ridermagazine.com/retrospective-harley-davidson-shovelhead-1966-1984`
- Bonhams — documented 1966 FLH, first Shovelhead year (engine no. 66FLH2575; second-year electric start; fiberglass saddlebags) —
  `https://cars.bonhams.com/auction/24509/lot/156/1966-harley-davidson-1200cc-flh-electra-glide-engine-no-66flh2575/`
- Linkert reference — DC-7 for 1966 FL/FLH —
  `http://www.linkertcarbs.com/linkert.html`
- Lowbrow Customs — Harley-Davidson motorcycle VIN lookup/decoder chart (1970–1980 nine-character VIN; model codes; H0–H9/J0 year codes) —
  `https://www.lowbrowcustoms.com/blogs/motorcycle-how-to-guides/harley-davidson-motorcycle-vin-lookup-decoder-chart`
- Zodiac/INOA — Harley model years explained (17-digit federal VIN from 1981; 10th character = model year: B = 1981, C = 1982, D = 1983, E = 1984) —
  `https://zodiac.nl/docs/instructions/Harley`
- Cycle World, January 1980 — FLT-80 Tour Glide test (all-new except engine; rubber mount; 5-speed; enclosed chain; triple discs; frame-mounted fairing) —
  `https://magazine.cycleworld.com/article/1980/1/1/1980-harley-davidson-flt-80-tour-glide`
- Cycle World, September 1980 — FXB-80 Sturgis test (twin belt drives; rubber-damper compensator; no primary tensioner) —
  `https://magazine.cycleworld.com/article/1980/9/1/harley-davidson-fxb-80-sturgis`
- National Motorcycle Museum — 1982 FXB Sturgis (first belt-drive Harley; Gates Aramid belts; full spec sheet: 82 ci, 67 hp, twin belts, 255 mm discs) —
  `https://nationalmcmuseum.org/2018/09/21/1982-harley-davidson-sturgis`
- Mecum — 1980 FXB Sturgis (all-black with wrinkle-finish engine paint; first Harley with primary + secondary belt drives; limited edition) —
  `https://www.mecum.com/lots/489424/1980-harley-davidson-sturgis-fxb`
- Hagerty valuation — FXWG Wide Glide (1980; wider triple clamps; 21-inch front wheel; black with flames) —
  `https://www.hagerty.com/valuation-tools/harley~davidson/fxb/1981/1981-harley~davidson-fxb`

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