

FREE SAMPLE

The opening pages of

LS/LT Conversion: GM Squarebody 1973-1987

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Nothing here is rewritten or summarised — it is the product itself,
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Factory-Correct Restoration Reference

LS/LT Conversion Guide — 1973–1987 GM Squarebody Trucks

Model Year 2026

Recipient trucks	Chevrolet/GMC C/K pickups, Blazer/Jimmy, Suburban (1973–87)
Donor engines	Gen III/IV LS truck donors · crate LS3 · Gen V LT
Highlights	Dual saddle-tank fuel plan; 4WD notes; worksheets included
Price	\$29.95 — PDF download at checkout

Every specification in this guide was checked against factory literature, marque references, period road tests, and documented survivor cars. Where sources disagree or the record is silent, this guide says so rather than guessing.

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Inside This Guide

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Chapter 1 — The Decision: Donor, Crate, or Gen V LT (Read This First)

The 1973–87 GM truck — the squarebody — is the easiest LS swap in the classic-vehicle world, which is exactly why the most money gets wasted on it: 'easy' makes people skip the planning chapter. The engine bay is huge, the mounts are a solved problem, and the wrecking yards are full of donors. What still goes wrong, in order, is budget shock (the engine was the cheap part), the saddle tanks, and a truck that runs but has gauges, fans, and a speedometer living in three different decades. This chapter prices the whole job before the first bolt turns, the way the family does it for every body.

- **Donor-first (the default, and this guide's main road):** a salvage truck 5.3 or 6.0 (LM7/LQ4/LQ9 family) with its harness, PCM, and accessories. A truck donor into a truck recipient is the swap gods' gift: the accessory drive and intake were packaged for this exact engine bay shape. The unknowns are mileage, maintenance, and accessory completeness — audited in Chapter 2 before money moves.
- **Crate:** a new LS3 or a controller-package crate with its wiring and calibration. You are buying certainty about the engine and nothing else — the tanks, the pump, the cooling, the gauges are the same bill either way. Do the arithmetic in Worksheet C before romanticizing either path.
- **Gen V LT:** the direct-injected L83/L86 truck engines. Better efficiency, real low-end, and a different job: high-pressure fuel hardware, VVT/AFM behavior, and packaging that chapter 4 covers on its own. Swapping an LT like it was an LS is the expensive way to learn the difference.

The line items first-timers miss (planning ranges, not promises — salvage and parts prices move): mount plates; the transmission crossmember question; an EFI fuel system end to end — and on a dual-tank truck that means TWO pumps and a selector valve that can take LS pressure; a radiator and fan decision; the harness (reworked donor vs standalone) and the PCM edits; exhaust from the manifolds back; a driveshaft measurement; gauge-drive adapters or an electronic speedometer; and the tune. If the honest total busts the budget, the endorsed alternative is to finish the truck with the drivetrain it has — a running squarebody at a cruise night beats a torn-apart one in the garage, every time.



Note. If you only have \$X: spend it in this order — (1) mounts that keep the crank centerline honest, (2) the fuel system done once at full pressure spec, (3) cooling, (4) the PCM edits, (5) cosmetics. A swap that starts, cools, and charges on day one can be dressed up for a decade. A polished engine that boils in traffic is yard art with insurance.

Chapter 2 — What You Start With: The Squarebody Baseline

Inspect the recipient truck before buying the donor. Pass/fail criteria, not vibes:

- **Frame at the steering box:** the box mounts inside the driver's frame rail, and that mounting area cracks on these trucks. Wire-brush it and look. Cracked = repair (plates/welding by someone who welds) before more power arrives. **Go/no-go.**
- **Crossmembers and mounts:** stock clamshell frame mounts present and sound on V8 trucks; 2WD vs 4WD crossmember condition. Rusted-through = replace, not plate-over.
- **Which tanks do you actually have?** Single or dual saddle tanks; steel condition inside (drop a light in through the sender hole); sender year — 1987 sending units are the EFI swap's best friend (Chapter 6).
- **Tunnel hump:** high-hump or low-hump cab floor. Measure what you have (Worksheet B) — it decides whether a 4L80E is a bolt-in or a sheet-metal project.
- **4WD trucks:** which transfer case (NP203 full-time, NP205, NP208 by year) and its crossmember — the transmission pairing plan depends on the answer.
- **The donor audit** (same discipline as the car guides): compression or a running demonstration, oil condition, and a signed accessory inventory — alternator, starter, MAF, throttle pedal (drive-by-wire donors), PCM, harness completeness. 'Complete pullout' is a sales phrase; the checklist is the contract.

Chapter 3 — Fitment: Putting an LS in a 1973–87 GM Truck

Mounts. Adapter plates bolt the LS to the stock clamshell frame mounts, and the established kits keep the crankshaft centerline and bellhousing face where the small-block had them. That single decision is why this swap is 'easy': a transmission that stays in its stock position keeps the stock tunnel, driveshaft length, and linkage geometry. Slotted plates buy fore-aft adjustment — useful, and a temptation: every inch forward is an inch the fan, the steering, and the firewall re-litigate.

Oil pan. The truck donor pan was shaped for a truck chassis and generally clears the 2WD crossmember where car pans hang low — 'generally' is doing work in that sentence. Mock it up, turn the steering lock to lock, and measure (Worksheet B). A retrofit pan exists if yours doesn't clear; find out at mock-up, not at final torque.

- **Accessory drive:** the truck drive (alternator high on the driver's side, tall intake) fits this bay the way it fits the donor's. Low-mount truck A/C compressors clear published plate kits but limit rearward engine adjustment — decide A/C before the final position, the way you decide everything else: on paper first.
- **Transmission and crossmember:** 4L60E/4L80E go behind the LS with the crossmember repositioned; whether the tunnel clears depends on the hump you measured in Chapter 2. 6-speed manuals and the 6L80 get measured, never assumed.
- **4WD:** transfer-case adapter or donor-paired case, crossmember under it, and front driveshaft clearance at full droop — a mock-up measurement, flagged in the gotchas.
- **What does NOT need cutting:** the firewall, the inner fenders, the core support. A squarebody LS swap that needs a torch is a plan that skipped this chapter.