YOUR FREE READER'S COMPANION

# The Ford Pickup Restoration Field Pack

*A companion to The Classic Ford Pickup Restoration Bible · by Hank Mercer*

Thanks for picking up the book. This is the companion you tape to the pegboard over the bench and carry out to the driveway before you buy anything: the frame-to-finish order sheet so you build in the sequence that actually finishes trucks, a rust decision guide that tells you when to grind and when to cut, an honest budget worksheet in 2026 dollars so the surprises don't sink you, a brakes-and-safety checklist for the systems you fix before you ever drive it, and a wiring and first-start checklist so you don't smoke a harness or a starter on day one. Print it, hang it up, and check the boxes in order.

*The trucks that get finished almost never get finished because somebody was a better welder. They got finished because they were built in the right order - bones before beauty, brakes before paint, rust cut out instead of hidden. A pretty truck on a rotten frame is just rust that shines. Do the ugly steps first and the fun ones take care of themselves. — Hank*

## 1. The Frame-to-Finish Order of Operations

This is the spine of the whole build, and it's the one thing that separates a truck that rolls out of the garage in two years from a tarp-covered project that ends up on Craigslist. You build from the ground up and from the structure out. Money and effort go in this order, and the chrome lives dead last. Buy the jewelry early if you want, but put it on the shelf and don't let it whisper at you to skip steps.

The reason the order matters is simple: every step you do out of sequence, you pay for twice. Paint before the rust is fixed and you're stripping fresh paint to weld. Drop a rebuilt engine in before you square the frame and you're pulling it back out. Do the fun parts first and you'll tear apart finished work to get at the boring parts you skipped.

| # | Stage | Do this first / don't skip |
|---|---|---|
| 1 | Assess & plan | Pick your level (driver / frame-up / concours) and write a number you can actually spend. Judge the truck honestly before you buy a single part. |
| 2 | Teardown & label | Bag, tag, and photograph every fastener by zone. The unlabeled coffee can of bolts is where restorations go to die. Document before you touch it. |
| 3 | Frame & chassis | Inspect for cracks, square the frame (diagonals within ~1/8 in / 3 mm), then blast and coat. Everything bolts to this - get it right first. |
| 4 | Brakes & running gear | Suspension, bushings, springs, then the brake and steering hardware. This is the safety layer, and it goes in before the truck ever moves. |
| 5 | Bodywork & rust | Cut out rot and weld in metal before any filler or paint. The most important structural work on the truck. Don't fill what you should cut. |
| 6 | Paint | Prep is 90% of paint. Primer, guide coat, block, seal, then color. Decide DIY vs booth before you mix anything. |
| 7 | Engine & drivetrain | Rebuild, refresh, or swap; then transmission, clutch, rear end, driveline. Test-run on a stand if you can before it goes in a painted truck. |
| 8 | Wiring | New harness, grounds to bare metal, fuse to the wire gauge. Do this before the interior goes in so you're not working around new upholstery. |
| 9 | Interior & glass | Seats, dash, glass and seals, headliner, trim. Restore what you can, replace what you can't. |
| 10 | Final assembly | Bed wood and skid strips, chrome and stainless, emblems - reverse of teardown. Re-torque lug nuts at 50 miles (80 km), then drive it. |

Notice where the chrome sits: last, in assembly, on a finished, sound, painted truck. That's not an accident. That's the whole lesson.

## 2. The Rust Repair Decision Guide

Rust is the chapter nobody does well, so slow down here. The metal isn't the expensive part - the labor to fix it right is. And the single biggest mistake I see is people painting over rust because the truck looks finished. It isn't finished. It's just rust that shines.

Rust comes in three grades, and you treat each one differently. Grind a soft spot with a wire wheel and let the metal tell you the truth: clean steel is bright silver. If it grinds and grinds and stays brown, pitted, and thin, that section is coming out.

| What you see | Grade | Verdict |
|---|---|---|
| Brown, fuzzy, sits on top, grinds off to bright steel | Surface rust | Clean it, treat it, move on. That's nothing. |
| Eaten in, flakes off in layers, panel left thin but still there | Scale rust | Judgment call. Sound structure can be encapsulated; a thin, structural panel gets cut. |
| Gone clean through - daylight, or a screwdriver pushes through | Perforation | You are no longer cleaning. You are cutting and replacing. |

On F-1s and F-100s the rot hides in the same places every time: cab corners (just behind the door), the lower 6 inches (150 mm) of the doors, the floor pans (especially under the seat where the foam holds water for forty years), the rocker panels, the lower front fenders behind the wheel, the inner and outer bed sides, and the cab mounts. Anywhere two panels are spot-welded together traps moisture and rusts from the inside out - that's why a cab corner looks fine outside and crumbles the second you touch it.

### Patch vs. patch-panel vs. replace

- Small, common spots - buy the stamped patch panel. Cab corners, lower door skins, rockers, floor pans, and bed sides are all reproduced for 1948-79 Ford pickups (Dennis Carpenter, LMC, Mid Fifty, National Parts Depot). Dry-fit before you strike an arc - quality runs from excellent to "needs a lot of massaging."
- Odd shapes - cut your own from 18-gauge (0.048 in / 1.2 mm) cold-rolled steel, which matches what Ford used. Never galvanized for weld-in patches; the zinc gasses up your weld and your lungs both.
- Butt-weld visible panels, lap-weld hidden ones. Butt joints (edge to edge, ~1/32 in / 0.8 mm gap) belong on every exterior panel - cab corners, fenders, doors, bed sides. Done right and planished flat, you can't find them. Lap joints trap moisture, so they only belong on hidden structure that gets seam-sealed and never seen.
- Tack, don't run a bead. Sheet metal warps from heat, and heat is cumulative. Skip around the seam like you're torquing a head, let the steel cool between tacks, quench if it wants to oil-can. A seam you rush looks like a dropped tarp.

Then treat the backside so it never comes back: cavity wax inside doors, rockers, and bed sides, and a rust encapsulator on any light surface rust you can't fully remove. Two rules I won't bend on - never seal moisture in (keep the factory drain holes open), and never undercoat over active rust. That's just hiding

the funeral.

[Note: Old Ford seam sealer and undercoating on pre-1980 trucks can contain lead and, on some jobs, asbestos. Wire-wheel and wet-sand under a P100 respirator, not an N95, and don't dry-grind that dust into the air you breathe.]

## 3. The Realistic Cost & Budget Worksheet

Here's the honest math in 2026 dollars, assuming you supply the labor yourself and you started with a solid project truck - not a basket case from a creek bottom. Pro shop labor runs $75 to $135 an hour, and a frame-up is 800 to 1,500 hours, so doing it yourself is the only thing that makes the numbers work for most folks.

Pick your lane on the first page and stick to it. These are three different trucks, three different budgets, three different chunks of your life:

| Tier | DIY parts & materials | Farmed out | Timeline |
|---|---|---|---|
| Driver / Refresh | $4,000 - $9,000 | $12,000 - $25,000 | 3 - 12 months |
| Frame-Up | $12,000 - $30,000 | $45,000 - $90,000+ | 2 - 4 years |
| Concours | $35,000 - $70,000+ | $90,000 - $200,000+ | 3 - 6 years |

Where the money actually goes on a typical pre-'80 F-series, DIY:

| Line item | Realistic 2026 range | Notes |
|---|---|---|
| Buying the truck | $2,000 - $15,000+ | A solid, mostly rust-free driver is worth paying for. A cheap rusty one costs more in the end. |
| Reproduction steel cab (if needed) | $4,500 - $7,000 | Before you hang a single panel. Budget-killer if the original is lace. |
| Rust / sheet metal | $500 - $3,000 | Patch panels are cheap; a pair of cab corners is $90-$160. The cost is your time. |
| Bodywork & paint (DIY spray) | $1,200 - $2,500 materials | 3-4x that in a booth. Prep is 90% of the job. |
| Engine | $4,000 - $6,500 | A correct flathead rebuild in machine work and parts; a crate/EFI swap varies. |
| Brakes (front disc + dual master) | $700 - $1,200 | The single best safety money you'll spend. |
| Interior | $1,500 - $4,000 | Seats, upholstery, glass, seals, headliner, trim. |
| Chrome / trim | $1,500 - $4,000 | Bumpers, grille, stainless. The fun stuff - and it goes on last. |
| Wiring | $250 - $1,100 | Repair to a full harness with a 6V-to-12V conversion. |

It always costs more. Build a 10 to 15 percent contingency into the budget, then a second one on top of it - the first for the surprises you can imagine, the second for the ones you can't, like a cracked frame rail hiding under undercoating. In thirty years I've never once seen a frame-up come in under its first estimate. Write the number you can spend, then add 30 percent before you turn a wrench.

## 4. The Brakes & Safety-First Checklist

Of every system on these old Fords, the brakes are the one I'd fix first - before the engine, before the paint, before anything. A 3,400-pound (1,540 kg) truck at 55 mph (89 km/h) doesn't care how shiny it is. Brakes are boring; nobody photographs their brake job for the forum. But this is the most important safety work in the book, and it happens before the truck earns the right to move under its own power.

The worst sin on trucks built before about 1967 is the single-circuit master cylinder - one line, one chamber, no backup. Pop a line or a wheel cylinder and you have zero brakes, not weak brakes, none. Federal law required dual-circuit brakes on new vehicles starting in 1967 for exactly that reason. If your truck is older and still wears its single-bowl master, replacing it is non-negotiable, even if you keep the drums.

### The non-negotiables before you drive it

| | Item | Why it's non-negotiable |
|---|---|---|
| | Dual-circuit master cylinder | Split front/rear hydraulics so one leak doesn't leave you with no brakes. Mandatory on pre-'67 trucks ($90-$180). |
| | Front disc conversion | The #1 safety upgrade. Discs shed heat (no fade), self-adjust, and shrug off water. Bolt-on kits from ECI/CPP/Master Power run $550-$950/axle. |
| | Match the master to the brakes | Discs want more fluid volume and a different bore. A drum-spec master on discs gives a low, mushy pedal. Most kits include the right one. |
| | Bench-bleed the master | Before it goes on the truck. Skip it and you'll fight air in the lines all afternoon and still have a soft pedal. |
| | All new lines, hoses, wheel cylinders | Sixty-year-old lines rust from the inside. Stainless braided flex hoses are worth the upcharge. Fresh DOT 4. |
| | Adjustable proportioning valve | $45 of cheap insurance. Dials rear braking down so the fronts don't lock first or the back end doesn't step out. |
| | Power assist sized to the engine | Discs need more pedal effort. A vacuum booster works on a stock cam pulling steady vacuum; a lumpy cam wants hydroboost off the power steering pump. |
| | Tight steering, no slop | Check the drag link, tie rod ends, pitman arm, coupler, and king pins before you blame the box. Often it's $40 of tie rod ends, not a bad box. |
| | Alignment - toe-in set | 1/16 to 1/8 in (1.5-3 mm) of toe-in on the solid front axle. Set it yourself or, after a front-end rebuild, pay $60-$100 for a real rack. |

Rear discs are a luxury, not a need. On a light classic pickup, good rear drums paired with front discs stop fine, and the rear drum doubles as your parking brake. Spend the rear-disc money on the front kit and a proper master instead.

## 5. The Wiring & First-Start Checklist

Electrical is the system people fear most and understand least. It doesn't have to be. A truck this simple has maybe a dozen circuits - you can hold the whole thing in your head if you take it one wire at a time.

The harness reality: if the truck still has cloth-insulated wiring (anything pre-1960, and a lot of early '60s trucks), replace the whole harness - don't repair it. That cotton-over-rubber insulation goes hard, cracks, and puts bare copper against bare metal, and that's a smoldering dash waiting to happen. A reproduction harness runs $300-$650; a universal 12-circuit kit (Painless, American Autowire) with a modern fuse block is $250-$400 and is my pick for a 6V-to-12V build.

6V vs. 12V: every F-1 and early F-100 left the factory positive-ground 6-volt. Converting to 12V negative ground is the right call for a driver, but you can't do it halfway - the truck that "only cost $200 to convert" is the one that comes back smoking. A complete, honest conversion is $700-$1,100 and changes all of it: battery and downsized cables, generator to alternator, a 12V coil (add a ballast resistor if it's not internally resisted), a 12V starter, voltage-safe gauges, wiper/heater motors and horn, and every bulb.

Grounds cause half of all electrical gremlins. Most weird problems are bad grounds, not bad wires. Seventy years of paint, rust, and POR-15 (great stuff, but it insulates) break every factory ground. Run dedicated straps: battery negative to the block, block to frame, frame to cab, frame to bed - all cleaned to bare metal. When a taillight is dim or a gauge reads low, check grounds before you touch a fuse.

### Before you turn the key - pre-first-start checklist

| | Check | What right looks like |
|---|---|---|
| | Grounds clean and tight | Every strap to bare metal. Battery polarity correct for negative ground. |
| | Coil wired right | + to switched 12V, - to distributor. Ballast resistor in place if the coil needs one. Polarize nothing - alternators don't get polarized. |
| | Fuses sized to the wire | The fuse protects the wire, so it must blow before the wire melts. 14 ga / 15 A for headlights, 10 ga / 30 A for main feeds. Blade fuses, not glass. |
| | Gauges & senders matched | Feed original 6V gauges through a voltage reducer, or fit 12V/modern units. A mismatched sender is the #1 reason a "new" gauge reads wrong. |
| | Fluids in | Oil to full, coolant filled and bled, fuel fresh (old fuel and cracked lines get tossed, not reused), brake system bled. |
| | Prime the oil system | Spin the oil pump (or crank with plugs out) until you see pressure before the engine fires. A dry first start eats a fresh rebuild. |
| | Cooling ready | Radiator full, no leaks, fan and belt on, thermostat in. Watch the temp gauge climb on that first idle. |
| | Charging checked | Engine running, meter at the battery: 13.8 to 14.4 volts is healthy. Below 13 it's not keeping up; above 15 the regulator's failing and you'll boil the battery. |

| | |
|---|---|
| Fire extinguisher within reach | First starts find fuel leaks. Have it in your hand, not across the shop. |

Draw a simple one-page diagram, color-code it (red for constant hot, pink for switched, and so on), label both ends of every wire, and keep a copy in the glovebox. Future you, troubleshooting in a dark garage in five years, will thank present you.

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## Field Card — Tape It to the Pegboard

Before you buy anything: pick your level and write an honest number, then add 30%. Judge the truck's bones first - sound the frame, push a screwdriver at the cab corners and floors. Walk away from a cracked frame unless you can weld.

Order of work, top to bottom: assess to teardown (bag & tag by zone) to frame to brakes & running gear to rust/metal (cut, don't hide) to bodywork to paint to engine/drivetrain to wiring to interior/glass to final assembly. Chrome goes on last.

Never skip: dual-circuit master on any pre-'67 truck · front disc conversion · P100 respirator for old paint & lead dust · fuse to the wire gauge · grounds to bare metal · prime the oil before first start · fire extinguisher in hand.

### Myths That Sink Restorations

- "Paint it and it's done." No. Paint over rust is just rust that shines. Cut the rot out and weld in metal first.
- "I'll buy the chrome now to feel like it's moving." The jewelry goes on dead last. Buy it early if you must, but shelve it and don't skip steps to justify it.
- "I saved a month doing my own teardown." Only if you bagged, tagged, and photographed everything. An unlabeled coffee can of bolts costs you far more days than it saved.
- "12-volt is just a bigger battery." It's the whole system - coil, starter, gauges, motors, every bulb. Halfway conversions come back smoking.
- "The old drums are fine, it stopped in 1957." Single-circuit brakes have zero backup. Fix the brakes before you drive it, every time.
- "A cheap rusty truck saves money." It doesn't. A basket case blows past the top of every budget range. Pay for solid bones up front.

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That's the pack. Your first job, before you spend a dollar on parts: decide your level honestly, write a number you can live with, and get under the truck to read the frame and the rust. Do the ugly structural work in order - frame, brakes, metal - before you ever touch the shiny stuff, and you'll back a truck out of that garage that you built with your own hands. There's nothing in this hobby that feels better. When you've got yours sorted and driving straight, I'd love to hear about it - and in a couple of emails I'll tell you

how a few honest words from you help this book reach the next person standing in their driveway staring at a rusty F-100.

Bones before beauty,

Hank Mercer