Chevy Truck Chassis Builders Guide





Thank you for your interest in a Fatman Fabrication frame for your Chevy truck. Before you begin there are a few things we would like to discuss and point out.

First, **PLAN YOUR PROJECT!!!** Know how you want it to look when it's finished. This will be repeated many times because it can't be said enough. Do you intend for it to be hi-tech or old style? Billet wheels or painted steelies? Pro street? Pro touring? Ground scrapping low? Who's going to drive the truck and where? Is it going to be a low mileage show truck or a freeway flyer for cross country cruising? Establish parameters based on *reality* and not just wishful thinking. Blown big block motors rarely make good long-distance cruisers. Big inch wheels look awesome on some trucks but tradeoff ride comfort for looks by requiring short sidewalls that don't absorb road shock. Remember, there is a tradeoff to everything, so save yourself time, money, and aggravation by planning your project.

Second, keep in mind <u>vou are building a truck</u>. Manufacturing processes of 50+ years ago were not very exact and there are minor variations in all these old trucks. Not everything is exact, and some minor modifications are likely on **every** step of the truck, so plan for that and <u>test fit everything</u> before you paint or powder coat anything. But, after building a couple hundred of these frames we have them dialed in pretty good.

All of our frames for the Chevy trucks are constructed of 2"x5"x.188" with the rear axle kick up being mandrel bent on the 47-59 frames. They are made to follow the original shape and form, and to fit with original cab and bed mounts. We include front and rear (55-59) cab mount outriggers, rear cab mount holes (47-54), radiator mount holes, bumper mount holes, running board holes (47-54), and bed mount holes. We have been accused of building our frames "too heavy duty", but we pride ourselves on a strong, rigid frame and besides, why build anything on a questionable foundation?

Front suspension

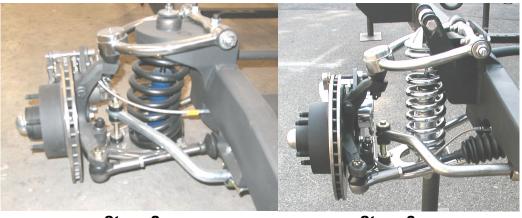
Most Fatman frames come standard with Stage 2 suspension, which uses coil springs and premium single adjustable MII-based shocks. The 60-66 Chevy PU frames require an upgrade to coilovers or shockwaves. The ride height is approximately 4" lower than stock height with a standard spindle. You can choose a 2" drop spindle for a lower ride height or our exclusive 1 $\frac{1}{2}$ " raised spindle for a more conservative ride height. Be aware, these frames will NOT maintain stock ride height no matter which option you choose. Track width comes 56 $\frac{1}{2}$ "on 47-54 trucks and 60 $\frac{1}{2}$ " on 55-72 trucks which is slightly narrower than original width. Tire to fender is adequate on these trucks, but attention should be paid to your wheel / tire sizes and spacing. 7" wheels work the best on these frontends.

Stage 3 coilovers are our most popular option for the frontend because slight height adjustment, an excellent shock, and good looks that match the electroless nickel plated steel tubular control arms that are standard on all frames. Premium single adjustable coilovers are now standard on all Stage 3 optioned frames.

Air ride comes in either "cool" ride (Stage 4) or shockwave (Stage 5). "Cool" ride has the air spring in place of the coil spring and the shock mounted behind the control

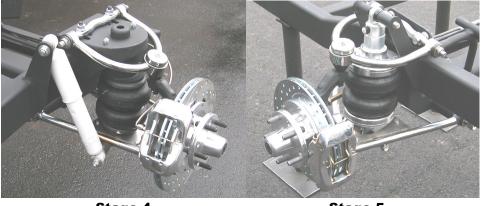
arms. Shockwaves are similar to how a coilover looks and mounts with the shock inside the air spring. A compressor system is needed with both options.

Manual rack and pinion steering is standard on "roller frames", but power steering is available as an option and is generally recommended.



Stage 2

Stage 3



Stage 4

<u>Stage 5</u>

Shocks are probably the biggest factor in ride comfort and handling of a car. Shocks are the 'brains' of the front suspension because it controls the velocity of the suspension. NASCAR teams take dozens of shocks to the track but only a couple pair of springs.

Brakes

Something to keep in mind as we discuss brakes is that some people use bigger brakes to "fill" their new big billet wheels or as a "dress up", without thinking about the safety aspect. Your truck does weigh slightly more than a stock Mustang II car (they weighed 3300 lb.) so we never use the tiny 9" Mustang brakes. All Fatman frames come standard with OE style brake kits that use early GM "big" piston calipers and provide 65% more braking capacity than the stock Mustang II, and twice as much as other kits that that use the small piston GM calipers. These 11" disc brakes use OEM parts that are easily serviceable units using parts that are available at your local auto parts store, should you need to make emergency repairs. 5 lug 4 $\frac{1}{2}$ "(Ford pattern) is standard. 5 lug 4 $\frac{3}{4}$ "(Chevy Pattern) is also available but use the above-mentioned small piston GM calipers.

Talk to the Fatman rep. about the options that are available for bigger brakes if using Chevy pattern. 5 on 5 and 5 on 5 $\frac{1}{2}$ patterns are also available.

We have several options from Master Power, CPP and Wilwood. CPP front kits use a Corvette style sealed hub (no bearings to pack!) and 13" Corvette drilled/slotted rotors with matching calipers. These kits are available in 5 on 5 and 5 on 5 ¹/₂ pattern. Master Power brakes all include drilled/slotted hub style 1-piece rotors and either late model OE calipers or their billet 4-piston calipers. Complete Wilwood big brake kits are available that use aluminum hubs, 4 or 6 piston aluminum calipers with 11 through 14-inch rotors. Drilled rotors and polished calipers are options on these kits.



Wilwood drilled and polished brakes Standard brakes

Keep in mind that larger brake kits require larger wheel/tire combinations. Talk to the Fatman rep about what will fit. **Remember** bigger brake options are cheaper than a new fender or grill that you will have to buy because a new Honda that you rear ended during a panic stop has better brakes than you! Above all, think safety first.

Master cylinder and power brake options

Manual brakes come standard on 34-59 frames and work well with common disc/drum combination brakes. They leave extra room for exhaust routing also. Power assist brakes are a great option and are recommended with disc/disc applications. To make it easier to service the master cylinder, remote filling kits are available as is a 'cooler' looking aluminum reservoir kit. Chromed and polished booster/master cylinder kits are also available. 60-66 pickups use a firewall mounted master cylinder, so we do not provide a frame mounted pedal assembly. We do expect you to upgrade to a safer dual reservoir master cylinder/ power booster assembly available through one of the many suppliers out there.

We use standard automotive steel brake lines for brake plumbing. These are D.O.T. approved, show quality looking and will last a lifetime. When you see the bent lines you'll swear a machine did it. We also use braided stainless flex hoses from the frame to the calipers. Metering valves are used with disc/drum applications. 2 psi residual pressure valves are used between master cylinder and discs, and 10 psi residual pressure valves are used with drums.

Rear Suspension

A 4-bar with premium single adjustable coilovers are standard on the Chevy truck chassis and provide excellent ride quality, looks, and serviceability. If the truck will be used to carry a load in the back or maybe pulling a trailer, then we often recommend the air ride on the rear due to the flexibility afforded with the variable pressure. Coilovers do not accommodate changes in load well as they have a given spring rate that may be comfortable in an empty truck, but not heavy enough in a truck loaded with extra stuff. The air ride can be set for a comfortable ride and proper ride height at the push of a button, regardless of the load. Don't forget a compressor fill kit is required with an air ride suspension so there is an extra cost. Because truck frames are quite narrower than a car frame putting air ride in the back does reduce exhaust routing area, so some planning is required.





Sway bars

We recommend a front sway bar on truck chassis since they tend to be nose heavy. If using a big block engine, then one is most definitely recommended. Also, if you want a "G" machine that has excellent cornering qualities, then choose this option. Plus, if the "mid life crisis" guy with the new Corvette thinks that your "old" truck is no match for his, you will have something for him. Beware; some ride quality may suffer slightly to make it handle better. Again, this all goes back to what kind of truck you are building.

Rearends

Fatman standard 'roller' frames include a new 9" Ford rear housing and 31 spline axles now supplied by Moser Engineering in Portland, IN

You can get brand new gear sets also supplied by Moser Engineering. Available in Trac Loc, Tru-trac or Wave-trac configuration. All new gearsets feature their lightweight nodular case (good up to 600HP), aluminum bearing support and new non-billet 1350 series yoke.

New drum brakes or disc brake conversions are available. We generally use rear disc brake kits that use O.E.M. parts. Kits from MP, CPP and Wilwood are also available to match front brake assemblies or also for better frame clearance issues.

8" wide wheels, regardless of the diameter, will fit under the rear fenders with the proper backspacing. 10" or wider wheels may require the bed to be tubbed and on 47-54 trucks the rear frame rails to be narrowed. We will have a 9" rearend made per your exact measurements of your mounted tire and wheel combination. We cannot go by what the tire manufacturer says the inflated tire size is, those dimensions will vary dependent on the rim size chosen.

Engine/Transmissions

We can set up the chassis for small block Chevy engines. The small block with a short snout water pump fits the best and is easily customized. We recommend a front sway bar with big blocks due to the extra weight. Any other engine other than a Chevrolet will require us to have it in hand for placement. GM LS and the new LT series engines may require an aftermarket accessory drive system, dependent on the taper of your frame. A note regarding the new GM LT-4 engines, these engines are not equipped with hydraulic power steering and will require the fitment of an aftermarket power steering pump/ pulley system.

700R4 and 4L60 overdrive transmissions are popular due to the stoplight friendly first gear and the overdrive for the highway. With the 700R4 we do need to know if it is casemount or tailshaft mount. We also will need the measurement from front face of the transmission to the rear transmission mount on the Chevy 4L60E as they do vary. With manual shift transmissions, we will need the measurement from face of the bellhousing to transmission mount, and the width at the widest point. We set up the clutch pedal assembly using a Wilwood hydraulic clutch master cylinder. You will set up the transmission with whichever style of hydraulic clutch slave cylinder you desire.

Finish of frames

All frames come completely assembled (except air ride compressor systems) and coated with a rust inhibitor. As an option *Reflections Paint and Body Shop, Inc.* (located in the same complex) has a frame priming service that includes the following steps:

- 1. Alcohol wash
- 2. Orbital sanding
- 3. Phosphoric acid wash
- 4. Etch priming
- 5. Epoxy priming

Epoxy primer is great rust inhibitor but will fade in the sun and will eventually absorb water, so it should receive at least a coat of semi-gloss clear to seal it. When catalyzed and sprayed, the black epoxy gives the same "satin" appearance as any new sheet metal parts right out of the factory. This primer can be left as is but will hold up best if scuff sanded and topcoat painted. This paint system is recommended by the paint manufacturer and is the best undercoat system available on the market today. Remember, not everything is exact, and some minor modifications are likely on **every** step of the car, so plan for that and **test fit everything** before you paint anything.

Other options

The power steering hose kit is a must have if going with power steering. This kit supplies 4 different fittings to connect to nearly any power steering pump with integral reservoir. The braided stainless hose can be cut to length for a custom fit.

The 3 U-joint steering hookup kit supplies Borgeson U-joints, ³/₄" steel rod, and heim joint. Use ³/₄" wood dowels or plastic pipe in place of the steel rod to mockup with.

34-59 Chevy Truck Builders Special Frame

Standard Items include:

- 2"x5"x.188" main frame rails, 2"x4"x.188" mandrel bent rear kick up rails on 47-59.
- Radiator mount holes, bumper mount holes, cab mount holes, and bed mount holes
- Mustang II based front crossmember made of 3"x4"x .312" tubing and upper mounts for Stage 2 to Stage 5
- Engine and transmission mounts for small or big block Chevy

Add your own bolt on front suspension parts, rear suspension, and brake pedal assembly-(N/A on 60-66 CPU)

Builder special \$ 8,295 -+\$800.00 for 60-66 CPU

Builder special options:	
front bolt on suspension parts	from \$2,300
single pedal brake assembly with master cylinder installed	add \$550
_above with power booster	add \$850

34-59 Chevy Truck Roller Chassis

Standard Items include Builder Special items plus:

- Fatman stage 2 front suspension including electroless nickel plated steel tubular control arms, coil springs, single adjustable shocks, mustang II-based spindles with 11" disc brake assembly, and manual rack and pinion steering
- Single pedal brake assembly with manual master cylinder
- 4 bar rear suspension with diagonal bar and Ridetech coilovers
- New 9" Ford rear housing with late big bearing ends and 31 spline axles
- Shipped coated with a rust inhibitor
- Assembled

Roller price \$13,299

<u>60-66 Chevy C-10 Roller Chassis</u> <u>\$14,899- with coilover front suspension</u> Standard items same as above with the exception of:

No brake pedal or master cylinder assembly Stage 3 (coilovers) or Stage 5 (shockwave) upgrade required

Options

Front upgrades:

coil springs (Stg 2)	no charge	N/A on 60-66 Chevy C-10
coilovers (Stg 3)	add \$800	
"cool" air ride (Stg 4)	add \$995	N/A on 60-66 Chevy C-10
shockwave (Stg 5)	add \$1,500	-
power steering	add \$200	
2" drop spindles	N/C option	
1 ¹ / ₂ " raised spindles	add \$295	

Front upgrades (cont.)

Front upgrades (cont.)				
5	\$425 recommended for better handling			
	\$540			
Chevy bolt patt. N/	1			
	\$100 Big bore metric GM caliper for metric GM bks			
	\$525 hub style, large caliper, avail Ford or GM pattern			
	\$625 " " ,13" rotor, " " " " "			
	\$800 Corvette style sealed brgs w 13"D/S rotors, Vette calipers			
	\$649 11" D/S rotor- OE big GM cal – Hawk pads			
	\$1,000 11" D/S rotors-4 piston cal- 15" wheels OK			
	\$1,836 13"D/S rotors- 4 piston cal- 17" or larger wheels			
	\$495 black or red powdercoat- includes pins			
	\$925 4 piston, alum. hub, fits 15" or larger wheels			
	80 4 piston, alum. hub, fits 17" or larger wheels, some 16's			
Wilwood 12" kit add \$1	,275 5 on 5 patt -4 piston, alum. hub, fits 16" or larger wheels			
Wilwood 12" kit add \$1	,140 6 piston, alum. hub, fits 17" or larger wheels, some 16's			
Wilwood 13" kit add \$1	,455 6 piston, alum. hub, fits """"""			
Wilwood 14" kit add \$2	,120 6 piston, alum. hub, fits 18" " " "			
above Wilwood kits drilled rot	ors add \$225			
above Wilwood kits red caliper	rs N/C			
above Wilwood kits polished c	alipers add \$255 4 piston, 6 piston N/A			
5° or 5 $\frac{1}{2}$ "bolt circle ad	d \$350 OE GM PU rotor & caliper			
Engine upgrades:				
Small Block Chevy	N/C			
any other motor add \$500	including BBC/ LS/LT engine			
Chevy LS1/LT add \$125	motor mount adaptors			
Power brake upgrades:				
power brakes add \$325				
"show" p/b add \$650	stainless steel booster, chrome master cylinder			
remote fill add \$355				
alum remote fill add \$550				
brake lines add \$895	D.OT. approved steel hard lines and braided steel hoses			
clutch pedal add \$750	includes Wilwood clutch m/c for hydraulic hookup			
Rear Suspension upgrades:				
"Cool" air ride add \$1,200				
Shockwaves add \$1,000				
Stainless steel bars add \$980	4 link bars in polished stainless steel			
pro street rails add \$2,500				
raised rails add \$1,500	to gain rear clearance if using drop spindles on front			
pro street sway bar add \$550				
reg. rear sway bar add \$425	if possible- fitment must be checked			
Rearend upgrades:				
new Trac Loc 9" gearset	add \$1,995			
Tru-trac upgrade from Trac-loc	add \$250 to Trac-loc option			
Wave-trac upgrade from Trac-loc add \$340 to Trac-loc option				
new HD Nodular case -35 spline Tru-trac gearset add \$850 to trac-loc gearset new drum brakes for 9" add \$625				
OE style rear disc add \$850 11" Trans-Am rotors, Cadillac calipers w/ parking brake				
	9030 11 Trans-Am rotors, Caumac campers w/ parking brake			

Rearend upgrades: (cont)

CPP 11" rear disc	add \$950 11" 7	T/A rotor- D/S, C	BM caliper w parking brake	
CPP 12" rear disc	add \$1050 12" rotor- D/S, GM caliper w parking brake			
MP Legend ser. 11"	add \$950 11" rotor- D/S, OE caliper w parking brake			
MP Pro Driver 12"	add \$1,570 12" D/S rotor, 4-piston caliper, internal shoe p.b			
Wilwood 11" rear disc	add \$1,170 11" rotors, 4 piston-will fit most 15" disc brake wheels			
Wilwood 12" rear disc	add \$1,175 12"	rotors, 4 piston	with internal shoe parking brake	
Wilwood 13" rear disc add \$2,075 13" rotors, 4 piston with internal shoe parking brake				
above Wilwood kit drilled rotors add \$225				
above Wilwood kit red calipers N/C				
above Wilwood kit polished calipers add \$255 on 11" & 12" and \$425 on 13" brakes				
Other options:	_			
epoxy primer		add \$1,650		
Borgeson 3 joint steering hoc	okup	add \$395		
Power steering hose kit	1	add \$155		
² way Air ride comp. kit w ta	ink	add \$995		
4 way Air ride analog system		add \$1,375	manual operation, dial gauges	
4 way Air ride digital system	•	add \$2,425	Ridepro E5	
4 way Airpod comp kit-3 gal	U U	add \$2,775	Ridepro E5	
Ride height sensor kit add on to E5 systems		add \$525	*	
_ 0	5			

Total price \$_____

1/2 deposit required with order. Personal check ok for deposit. Balance due prior to shipment in cashier's check. Shipping cost will be added to the final balance once a shipping quote is received from one of our freight carriers. No credit cards on frame orders. Shipped frames require a \$375.00 pallet fee. Shipped frames may require applicable sales tax charges for their respective states. No refunds on completed frames. Frames picked up are subject to North Carolina sales tax currently 7.25%

Once our sales team has worked with you on a basic plan, we will connect you with our frame shop specialist. He will assist you in verifying and dialing in the final version, then we'll send a written proposal for your approval. A signed copy must be returned to us before the frame is ready to be built and will ensure that both parties clearly understand the chassis specifications, the way you want it! (704)545-0369 phone (704)573-0401 fax 1/24



34-36 CPU



47-54 CPU



55-59 CPU



63-66 CPU