

# Fatman Fabrications

## Chevy Pickup Truck Chassis Builders Guide



Thank you for your interest in a Fatman Fabrications chassis for your Chevy pickup. Before you begin there are a few things we would like to point out.

First, **Plan Out Your Project!** Knowing how you want it to look when it is finished is just as important as when you start. Do you intend for the build to be hi-tech or old style? Billet wheels or painted steelies? Pro street? Pro touring? Ground scraping as low as you can go? Who is going to drive the pickup and where will it be driven to? Is it going to be a low mileage show pickup 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 cars but tradeoff ride comfort for looks by requiring short sidewalls that do not absorb road shock. Remember, there is a tradeoff to everything, so save yourself time, money, and aggravation by planning your project from start to finish.

Also, keep in mind you are building a pickup truck. You might be using an old steel body, which is great, but General Motors was not very exact in the manufacturing process over 60 years ago and there are minor variations in all old pickups.

Take comfort in knowing that after building a thousand plus chassis, we have them dialed in and know all the ins and outs.

All our chassis for the Chevy trucks are constructed of 2"x 5"x.188" with the rear axle kick up being mandrel bent on the 47-59 chassis. 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 heard it all including being accused of building our chassis "too heavy duty", but we pride ourselves on a strong, rigid product which you will find is an extra big benefit.

### **Front Suspension**

Fatman Fabrications chassis come standard with Stage 2 suspension, which uses coil springs and premium single adjustable MII-based shocks. The 60-66 Chevy pickup chassis requires 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 ½" raised spindle for a more conservative ride height.

Take note that these chassis will NOT maintain stock ride height no matter which option you choose. Track width comes 56 ½" on the 47-54 trucks and 60 ½" on 55-72 trucks which is slightly narrower than original width.

Fatman Fabrications Inc., 8621-C Fairview Road, Mint Hill, NC 28027  
Office: (704) 545-0369 Website: [www.fatmanfab.com](http://www.fatmanfab.com) Email: sales@fatmanfab.com

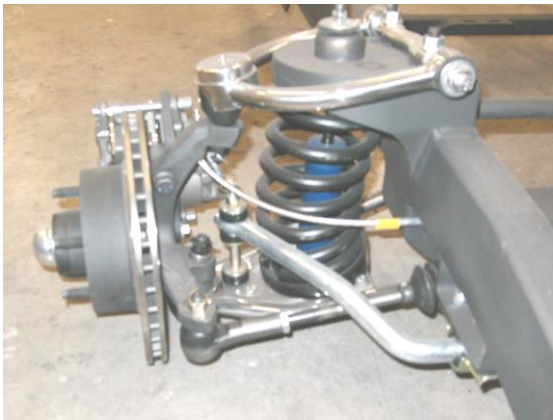
Tire to fender spacing is adequate on these trucks, but attention should be paid to your wheel/tire sizes and spacing. We have found that 7" wheels work the best on these frontends.

Stage 3 coilovers are our most popular option for the frontend because of the slight height adjustment, an excellent shock, and good looks that match the heavy duty .188 wall mild steel tubular control arms that are standard on all chassis. Premium single adjustable coilovers are now standard on all Stage 3 optioned chassis.

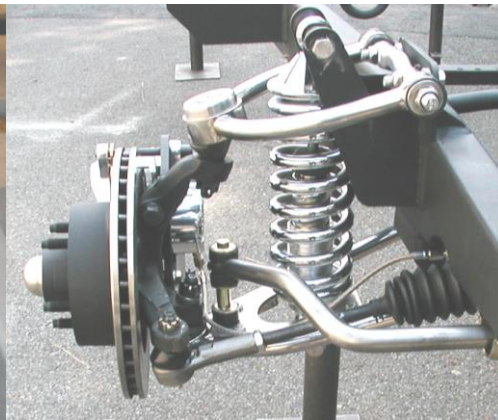
Air ride comes in either Cool Ride Stage 4 or Shockwave Stage 5. Cool Ride has the air spring in place of the coil spring and the shock mounted behind the control arms.

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 our roller chassis, but power steering is available as an option and is generally recommended.



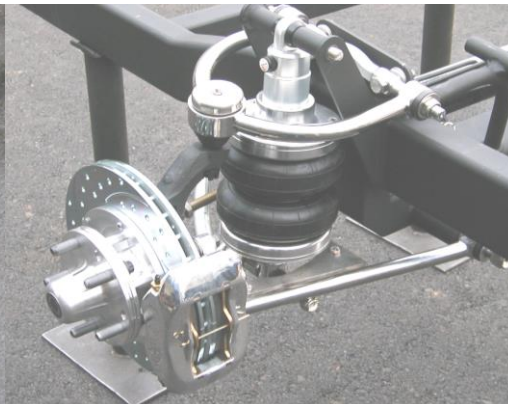
**Stage 2**



**Stage 3**



**Stage 4**



**Stage 5**

Shocks are probably the biggest factor in ride comfort and handling. Shocks are the brains of the front suspension because it controls the velocity of the suspension.

As an example of this, NASCAR teams take dozens of shocks to the track but only a couple pair of springs. Single adjustable shocks are standard on Stage 2 and Stage 4 which will allow you to fine tune your ride comfort and handling of your car. Stage 3 and Stage 5 have single adjustable shocks that are also standard.

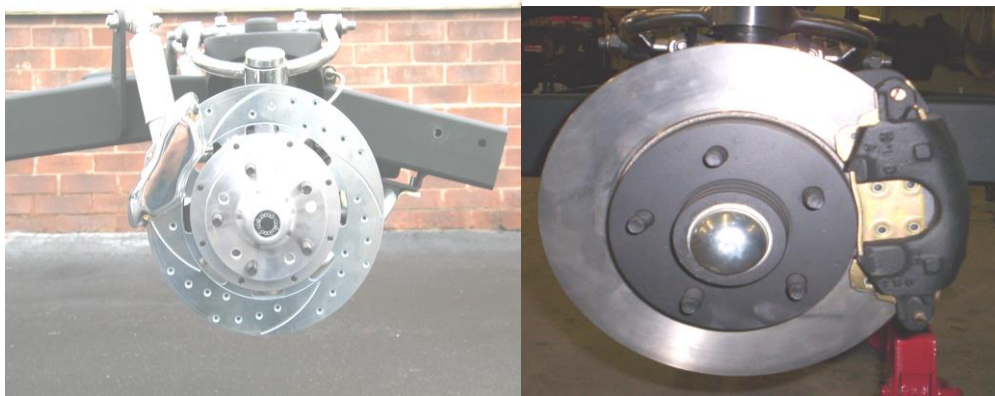
## Brakes

Something to keep in mind as we go over brakes is that sometimes people use bigger brakes to fill the space behind big billet wheels or just for dress up, without thinking about the safety aspect. Your truck does weigh slightly more than a stock Mustang II car which weighed 3300 lb. so we never use the small 9" Mustang brakes.

Fatman Fabrications chassis all come standard with OE style 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 use the small piston GM calipers. The 11" disc brakes use OEM parts that are easily serviceable using parts that are available at your local auto parts store in case you need to make an emergency repair.

5 lug 4 ½" Ford pattern is standard. 5 lug 4 ¾" Chevy pattern are also available but use the above-mentioned small piston GM calipers. 5 on 5" along with 5 on 5 ½" patterns are also available. Give us a call to talk about the options that are available for bigger brakes if using the Chevy pattern.

We have several options from Master Power, CPP and Wilwood. CPP front kits use a Corvette style sealed hub which means no bearings to pack and 13" Corvette drilled/slotted rotors with matching calipers. Master Power brakes all include drilled/slotted hub style 1-piece rotors and have 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" to 14" 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. Make sure to let us know what you plan on using. Always think safety first!

### **Master Cylinder and Power Brake Options**

Manual brakes come standard on the 34-59 chassis and work well with common disc/drum combination brakes. They also leave extra room for exhaust routing. Power assist brakes are a great option, and we recommend them with disc/disc applications.

To make it easier to service the master cylinder, remote filling kits are available as are a better-looking aluminum reservoir kit. Chromed and polished booster/master cylinder kits are also available.

The 60-66 Chevy 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.

Fatman Fabrications use standard automotive steel brake lines for brake plumbing. They are D.O.T. approved, show quality looking and will last a lifetime. We also use braided stainless flex hoses from the chassis to the calipers.

Metering valves are used with disc/drum applications. 2 psi residual pressure valves are used between the 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 very 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 chassis are quite narrower than a car chassis, putting air ride in the back does reduce exhaust routing area, so some planning is required.



**Rear Suspension Examples**

### 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. Keep in mind that 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 Fabrications standard roller chassis includes a new 9” Ford rear housing and 31 spline axles now supplied by Moser Engineering.

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, which is 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 Master Power, CPP and Wilwood are also available to match front brake assemblies and offer 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 the 47-54 trucks, the rear chassis rails need to be narrowed.

We will have a 9" rearend made per your exact measurements of your mounted tire and wheel combination. One thing to keep in mind, we are not going to go by what the tire manufacturer says the inflated tire size should be as they are not always correct.

### **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.

Any 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/front drive system, dependent on the taper of your frame. As 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.

The 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 the 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 Chassis**

All chassis come assembled and coated with a rust inhibitor. As an option, Reflections Paint and Body Shop of Mint Hill, NC has a chassis priming service that includes the following steps, and we will take the chassis to & from the body shop for you:

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

Epoxy primer is packaged in a variety of different colors. The black epoxy is the most popular of all the colors but will fade in the sun and eventually absorb water, so it should receive at least a coat of semi-gloss clear to seal it.

Fatman Fabrications Inc., 8621-C Fairview Road, Mint Hill, NC 28027  
Office: (704) 545-0369 Website: [www.fatmanfab.com](http://www.fatmanfab.com) Email: sales@fatmanfab.com

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 every step of the car build, so plan for that and **test fit everything** before you paint anything.

**Notes**

---

---

---

---

---

See our Builders Price Guide and Order Form for additional information and pricing.

When you are ready, give us a call to talk with our chassis shop specialist. They will assist you in verifying and dialing in the final version of your chassis, then they will send you a detailed written proposal for your approval.

Call us at (704) 545-0369 or email [tim@fatmanfab.com](mailto:tim@fatmanfab.com)





**47-54 Chevy Pickup Chassis Example**



**63-66 Chevy Pickup Chassis Example**

Revised 10-2024

Fatman Fabrications Inc., 8621-C Fairview Road, Mint Hill, NC 28027  
Office: (704) 545-0369 Website: [www.fatmanfab.com](http://www.fatmanfab.com) Email: [sales@fatmanfab.com](mailto:sales@fatmanfab.com)