

Anglia / Morris Chassis Builders Guide



Thank you for your interest in a Fatman Fabrication frame for your Anglia/ Morris Minor. 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 it and where? Is it going to be a low mileage show car 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 vehicle 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 **you are building an old car**. Manufacturing processes of 50+ years ago were not very exact and there are minor variations in all these old vehicles. Not everything is exact, and some minor modifications are likely on **every** step of the build, so plan for that and **test fit everything** 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 Anglia/ Morris are constructed of 2"x 3"x.188" with the rear axle kickup being a modular design. They are made to allow you to fit your choice of wheel and tire within reason. We will need to know the REAL measurements of the wheels and tires you are going to use (going off a specification sheet in a catalog or website will not be an accurate guide) and whether you plan on using standard or widened rear fenders.

Since these vehicles are an early unibody design, you will need to fabricate a new floor and rocker area to fit the new frame, then fabricate a set of mounts to join the two.

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?

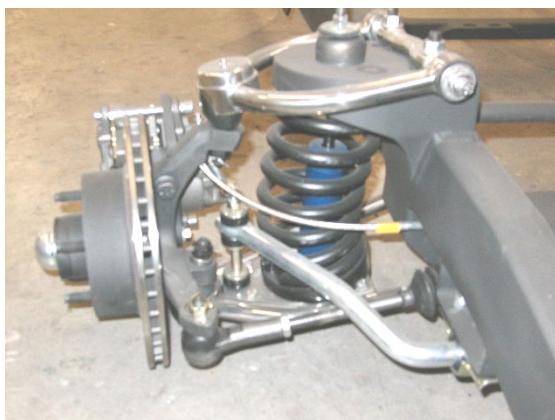
Front suspension

Fatman frames come standard with Stage 2 suspension, which uses coil springs and single adjustable MII based shocks. The ride height is approximately 4" lower than stock height. Track width comes 45 ½ "on 39-53 Anglia's and 48 ½" on 48-53 Morris Minor's which is slightly narrower than original width dependent on your choice of brakes. Tire to fender is adequate on these vehicles, but attention should be paid to your wheel / tire sizes and spacing.

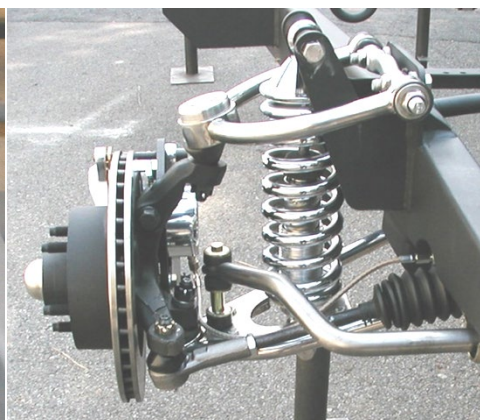
Stage 3 coilovers are our most popular option for the frontend because slight height adjustment, excellent shock, and good looks that match the electroless nickel plated steel tubular control arms that are standard on all frames. Premium single adjustable coilovers are standard on all Stage 3 optioned 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 required on "roller frames", power steering is not an option nor recommended.



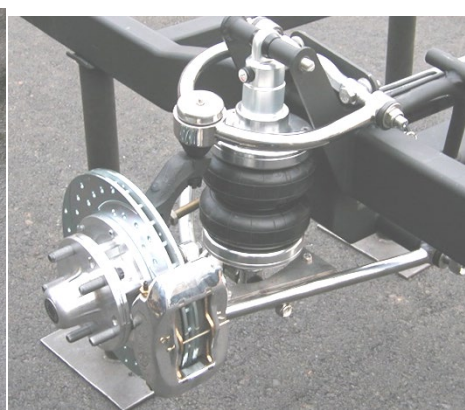
Stage 2



Stage 3



Stage 4



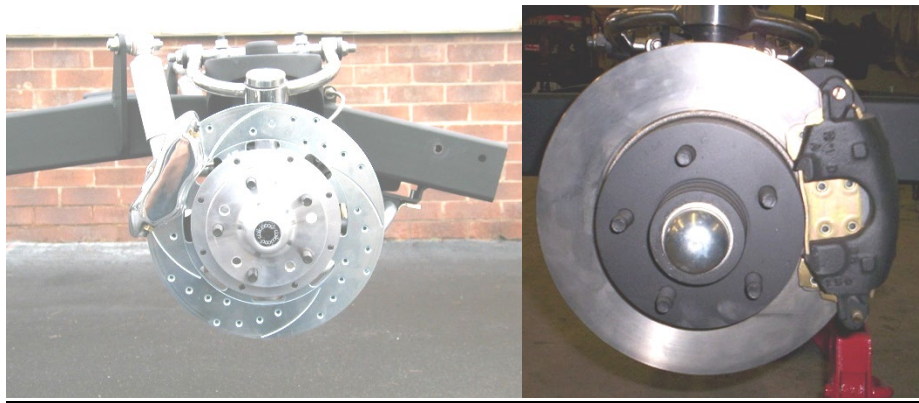
Stage 5

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. We never used the tiny 9” Mustang brakes nor will we ever. 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 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 ½ “(Ford pattern) is standard. 5 lug 4 ¾ “(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.

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. 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.

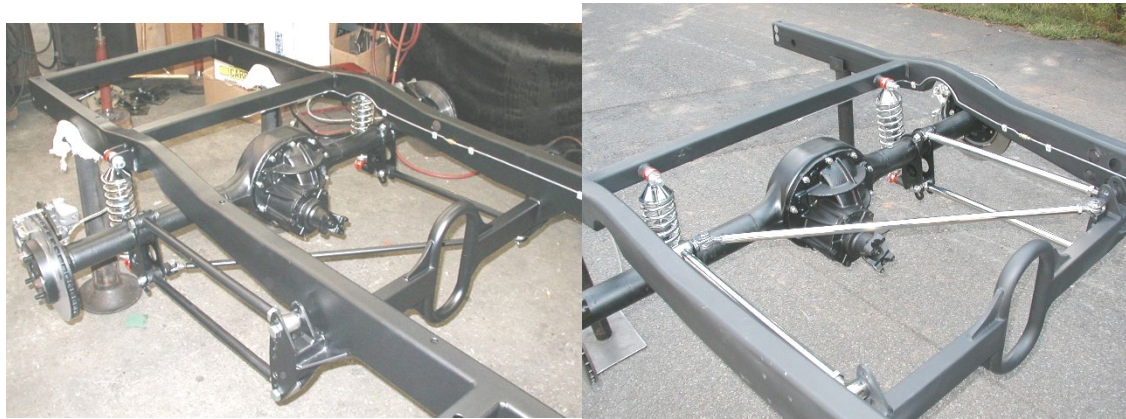
Master cylinder and power brake options

A manual brake pedal and master cylinder come standard and work well with common disc/drum combination brakes. They leave extra room for exhaust routing also. We do not install the brake pedal/ master cylinder assembly on these chassis. With the small size of these vehicles and the “variable” sizes of drivers it is much better to let you set the pedal where it will be most comfortable for you. To make it easier to service the master cylinder, remote filling kits are available as is a ‘cooler’ looking aluminum reservoir kit.

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. Brake lines will be terminated to an area under the floor, you would then have to finish the hookup to the master cylinder once you’ve welded the pedal assembly to the frame.

Rear Suspension

A 4 bar with premium single adjustable coilovers are standard on the Anglia/ Morris chassis and provide excellent ride quality, looks, and serviceability for the ‘street rod’ type vehicle. If the vehicle may be pulling a small trailer, then we often recommend the use of air ride on the rear due to the flexibility afforded with the variable pressure. 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 these are quite narrower than a typical car or truck frame putting air ride in the back does reduce exhaust routing area, so some planning is required.



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.

For our Anglia chassis we will have a 9" rear end made per your exact measurements of your mounted tire and wheel combination (No, we're not going to go by what the tire manufacture says the inflated tire size is. We have yet to see the right measurement in those pamphlets).

Engine/Transmissions

We can set up the chassis for small block Chevy engines. The small block with a short snout water pump will fit the best and is easily customized. LS/LT series engines may require aftermarket accessory drive systems.

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 case mount or tail shaft mount. We also will need the measurement from front of transmission to the trans mount on the Chevy 4L60E as they do vary. With manual shift transmissions we will need the measurement from bellhousing to transmission mount, the width at the widest point, and if you will use hydraulic or mechanical clutch linkage.

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 packaged in a few 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. 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 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.

Builders Special \$8,395

Builders Special standard Items include:

- 2”x3”x.188” main frame rails, 2”x3”x.188” rear kick up rails
- Mustang II based front crossmember made of 3”x4”x .250” tubing and upper mounts for Stage 2 to Stage 5
- Engine and transmission mounts for small block Chevy

B/S options:

Front bolt on suspension parts from \$2,550.00
Manual brake pedal & bracket included add \$500.00
but not installed

Rolling Chassis \$13,499.00

Standard Items include Builder Special items plus:

- Fatman stage 2 front suspension includes 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- included but not installed.
- 4 bar rear suspension with diagonal bar and single adjustable coilovers
- New 9” Ford rear housing with late big bearing ends and 31 spline axles
- Shipped coated with a rust inhibitor
- Assembled

Options

Front upgrades:

<input type="checkbox"/> coil springs (Stg 2)	no charge	
<input type="checkbox"/> coilovers (Stg 3)	add \$800	
<input type="checkbox"/> “cool” air ride (Stg 4)	add \$995	
<input type="checkbox"/> shockwave (Stg 5)	add \$1,500	
<input type="checkbox"/> 2” drop spindles	N/C option	
<input type="checkbox"/> 1 ½” raised spindles	add \$295	
<input type="checkbox"/> Chevy bolt patt.	N/C	82-92 Camaro rotor and caliper
<input type="checkbox"/> Big bore metric caliper	add \$100	Big bore metric GM caliper for metric GM bks
<input type="checkbox"/> Zero offset brake kit	add \$525	hub style, large caliper, avail Ford or GM pattern
<input type="checkbox"/> Zero offset-13 kit	add \$625	“ “ ,13” rotor, “ “ “ “ “
<input type="checkbox"/> Zero offset brake kit	add \$525	hub style, large caliper, avail Ford or GM pattern
<input type="checkbox"/> Zero offset-13 kit	add \$625	“ “ ,13” rotor, “ “ “ “ “
<input type="checkbox"/> CPP Vette brake kit	add \$800	Corvette style sealed brgs w 13”D/S rotors, Vette calipers
<input type="checkbox"/> MP Legend ser. 11”	add \$649	11” D/S rotor- OE big GM cal – Hawk pads
<input type="checkbox"/> MP Ralley ser. 11”	add \$1,000	11” D/S rotors-4 piston cal- 15” wheels OK
<input type="checkbox"/> MP Pro Driver 13”	add \$1,836	13”D/S rotors- 4 piston cal- 17” or larger wheels
<input type="checkbox"/> Wilwood caliper only	add \$495	black or red powdercoat- includes pins
<input type="checkbox"/> Wilwood 11” kit	add \$925	4 piston, alum. hub, fits 15” or larger wheels
<input type="checkbox"/> Wilwood 12” kit	add \$980	4 piston, alum. hub, fits 17” or larger wheels, some 16’s
<input type="checkbox"/> Wilwood 12” kit	add \$1,140	6 piston, alum. hub, fits 17” or larger wheels, some 16’s
<input type="checkbox"/> Wilwood 13” kit	add \$1,455	6 piston, alum. hub, fits “ “ “ “
<input type="checkbox"/> Wilwood 14” kit	add \$2,120	6 piston, alum. hub, fits 18” “ “ “
<input type="checkbox"/> above Wilwood kits drilled rotors	add \$225	
<input type="checkbox"/> above Wilwood kits red calipers	N/C	
<input type="checkbox"/> above Wilwood kits polished calipers	add \$255	4 piston, 6 piston N/A

Engine upgrades:

<input type="checkbox"/> Small Block Chevy	N/C
<input type="checkbox"/> any other motor add \$500	including Ford Coyote engine
<input type="checkbox"/> Chevy LS1/Ford mod add \$125	motor mount adaptors

Brake upgrades:

- remote fill add \$355
 - alum remote fill add \$550
 - brake lines add \$895
 - clutch pedal add \$750
- D.O.T. approved steel hard lines and braided steel hoses 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

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
- CPP 11" rear disc add \$895 11" T/A rotor- D/S, GM 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 hookup add \$395
- 2 way Air ride comp. kit w tank add \$995
- 4 way Air ride analog system-3 gal. add \$1,375 manual operation, dial gauges
- 4 way Air ride digital system- 3 gal. add \$2,425 Ridepro E5
- 4 way Airpod comp kit-3 gal. w/ cover add \$2,775 Ridepro E5
- Ride height sensor kit add on to E5 systems add \$525

Custom options available, if you have an idea let's discuss it.

Total options \$ _____
 Roller frame + \$13,499
 Total price \$ _____

Date: _____
 Name: _____
 Street: _____
 City: _____
 Phone _____
 Email _____
 Engine/Trans: _____
 Bolt Pattern: _____
 Notes: _____

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

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