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?

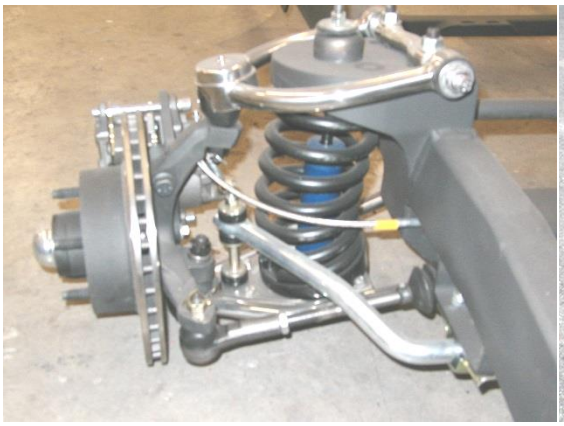
Front suspension

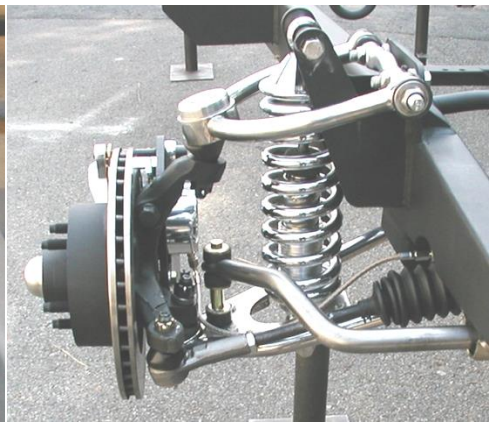
Fatman frames come standard with Stage 2 suspension, which uses coil springs and Ridetech MII shocks. The ride height is approximately 4" lower than stock height. Track width comes 45 ½ "on 39-53 Anglia's and 48 ½" on 48-53 Morris Minor's which is slightly narrower than original width dependent on your 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 is standard on all frames. Ridetech HQ series adjustable coilovers are standard on all Stage 3 optioned frames.

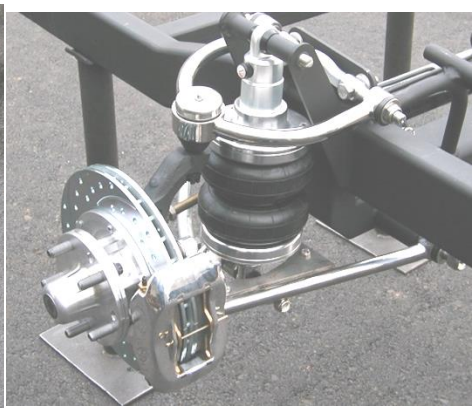
Air ride comes in either "cool" ride (Stage 4) or shockwave (Stage 5). "Cool" ride has the air spring in place of the coil spring and the shock mounted behind the control arms. Shockwaves are similar to how a coilover looks and mounts with the shock inside the air spring. A compressor system is needed 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**



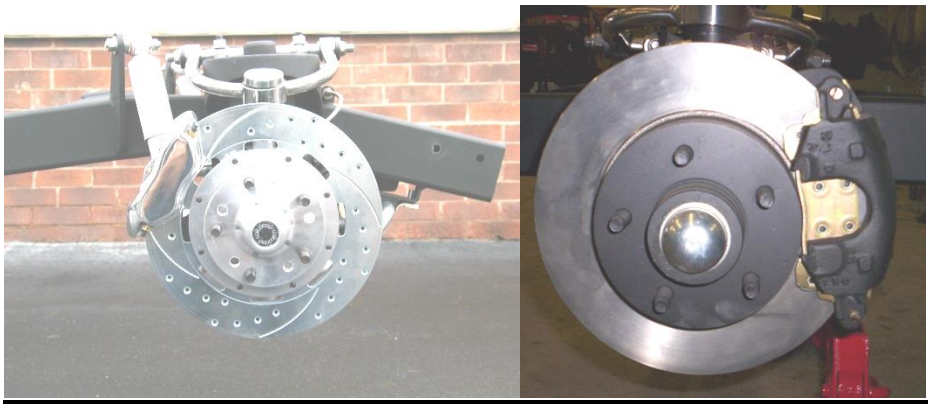
Stage 4 **Stage 5**

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. Ridetech shocks are now standard and allow you to fine tune your ride comfort and handling of your truck.

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 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 Wilwood. Wilwood has an aluminum GM big piston replacement caliper that still uses OEM brake pads. Complete Wilwood big brake kits are available that uses aluminum hubs, 4 piston aluminum black calipers with 11-inch, 12-inch, or 13-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

4 bar with Ridetech HQ series 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 than we often recommend the 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 truck these are quite narrower than a typical car 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 28 spline axles supplied by The 9” Factory in Caspian, MI.

You can get brand new gear sets supplied by the 9” Factory. Available in Trac Loc, Tru-trac or ‘open’ configuration. All new gearsets feature a nodular case, aluminum bearing support and new non-billet 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 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 setup the chassis for small or big block Chevy engines. The small block with a short snout water pump fit the best and is easily customized. Any other engine other than a Chevrolet will require us to have in hand for placement. LS 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, ¾" steel rod, and heim joint. Use ¾" wood dowels or plastic pipe in place of the steel rod to mock up with.

Builders Special $7,495

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 or big block Chevy

B/S options:
Front bolt on suspension parts from $2,045.00
Manual brake pedal & bracket included add $400.00
but not installed

Rolling Chassis $12,200.00

Standard Items include Builder Special items plus:

- Fatman stage 2 front suspension including electroless nickel plated steel tubular control arms, coil springs, Ridetech shocks, mustang II 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 Ridetech coilovers
- New 9" Ford rear housing with late big bearing ends and 28 spline axles
- Shipped coated with a rust inhibitor
- Assembled

Options

Front upgrades:
__coilovers add $750 triple adjustable add $1,170.00 to option
__"cool" air ride add $895
__shockwave add $1,200 triple adjustable add $1,200.00 to option
__2" drop spindles N/C option
__1 ½" raised spindles add $275
__Chevy bolt patt. N/C
__Zero offset brake kit add $450 hub style, large caliper, avail Ford or GM pattern, 11" rotor
__Zero offset-13 kit add $550 " " " " " " " " " 13" rotor
__Wilwood caliper add $365 black or red powdercoat., includes pins
__Wilwood 11" kit add $640 4 piston, alum. hub, fits 15" or larger wheels
__Wilwood 12" kit add $695 4 piston, alum. hub, fits 17" or larger wheels, some 16's
__Wilwood 13" kit add $1,130 6 piston, alum hub, fits 17" or larger wheels
__above Wilwood kits drilled rotors add $100
__above Wilwood kits polished calipers add $115 for 4 piston, 6 piston N/A
__above Wilwood kits red calipers N/C
Ask representative about recommended brake options for air ride suspension

Engine upgrades:
__SB Ford or Chevy no charge
__any other motor add $500
__Chevy LS1 add $75 includes motor mount adaptor

Brake upgrades:
__remote fill add $225
__Alum remote fill add $385
__brake lines add $895 D.OT. approved mild steel hard lines and braided steel hoses
__clutch pedal add $450 includes Wilwood clutch m/c for hydraulic hookup

Rear Suspension upgrades:
__ triple adj. C/O add $1,170
__"Cool" air ride add $1,200
__Shockwaves add $1,025 triple adjustable add $1,200.00 to option
__Stainless Steel bars add $750 4 link bars in polished stainless steel

Rearend upgrades:

__31 spline axles on new 9” add $390
__new open 9” gearset add $1,795
__new Trac Loc 9” gearset add $1,850
__Tru-trac upgrade from Trac-loc add $450 to Trac-loc option-requires 31 spline axles
__new HD Nodular case -35 spline Tru-trac gearset w 1350 yoke add $750 to trac-loc gearset
__new drum brakes for 9” add $590
__ OE style rear disc add $775 11” rotors, OE GM parts with parking brake
__Wilwood 11” rear disc add $870 11” rotors, 4 piston w parking brake-will fit most 15” rims
__Wilwood 12” rear disc add $875 12” rotors, 4 piston with internal shoe parking brake
__above Wilwood kit drilled rotors add $100
__above Wilwood kit polished calipers add $115
__above Wilwood kits red calipers N/C

Other options:

__epoxy primer add $1,550
__Borgeson 3 joint steering hookup add $355
__2 way Air ride comp. kit w tank add $900
__4 way Air ride analog system-3 gal. add $1,225 manual operation, dial gauges
__4 way Air ride digital system- 3 gal. add $2,225 Ridepro E5
__4 way Airpod comp kit-3 gal. w/ cover add $2,680 Ridepro E5

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

Total options $_____
Roller frame + $12,200
Total price $_____

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

1/3 deposit required with order. Personal check ok for deposit. 1/3 payment required once your frame goes into our frame jig. Balance due prior to shipment in cashier’s check. Shipping cost will be added to final balance once a shipping quote is received from one of our freight carriers. No credit cards on frame orders. Shipped frames require a $330.00 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 assure that both parties clearly understand the chassis specifications, the way you want it!