

Mberglo is tasked to restore 65 6cyl/3spd convertible for friend.



Plan is for V8 conversion/5spd, with improved brakes and steering.
Car is disassembled and sandblasted



Rusty areas are cut out and patch panels welded in.



Right front fender is replaced with better used one.
Rear valance is replaced with new reproduction.
Bodywork goes on forever.



8" Ford rear is purchased and completely rebuilt and detailed with new 3.55s and bearings.



Rear disc brake kit from Ultrastang is assembled on rear.

Roller302 is found and work begins to build fun little motor.



Once I was satisfied with the block sanding, it was time to apply the semigloss black. Since this is a Dearborn built car, the undercarriage primer would have been a blackish color. The engine compartment is of course black, as is the dash and interior doors, as well as several brackets and accessories. I could have ordered a "chassis black" that was ready to spray, but they are lacquer based and aren't very durable. This car is getting Acrylic Urethane throughout, so I had a semigloss black custom mixed.

I masked off portions of the body and sprayed the black.





The black turned out nice. Now it's time to apply some red. I want to use single stage urethane to paint the backsides of the fenders, hood, decklid, valances, inside trunk, portions of the interior, and all of the areas that might get missed when concentrating on the final bc/cc application. I can use single stage because Rangoon Red is a non-metallic color. You should NEVER try to apply metallic paint with single stage.

It's also time to say goodbye to the rotisserie. I'm finished with the undercarriage, and the main support posts are in the way of painting the body. Another good friend had fabricated a rolling cart that is made specifically for painting Mustang bodies. Man it's good to have friends!

Again, I masked off the areas that I don't want to paint, arranged the panels around the shop and started spraying. It was sleeting outside, but it was 70 degrees in the paint booth. Two wet coats did the trick. The overspray on the bottom and outside of the engine compartment is intentional to duplicate a factory appearance.







Did some more sanding on the main body to remove overspray from the single stage, cleaned the booth one more time, and got ready to spray the bc/cc. It was going great. Everything was laying down beautifully and I was mixing my last cup of clear. It was 28 degrees outside and a nice 70 inside the booth. Went back in to apply the last coat and found a fat fly struggling in the sticky paint on the quarter panel! Where the f*&k did he come from? He had made 3 inches of mess in his struggle. I pulled him off, sent him to fly heaven, and applied the last coat. Anytime you know you're going to have to sand/buff, you try to apply a heavy coat to ensure you won't sand through. Well, that caused a run. No real problem, it can be sanded out too.

Saturday the paint cured while we had our car show.

Sunday, Jan 21

The paint turned out surprisingly good. I did spend 4 hours buffing and polishing the body, but I am quite pleased with how it turned out.





I spent the next week preparing the hood/trunk/fenders/valances and small parts for paint. Again, gave everything a final wash-sand and cleaned the booth. Let everything completely dry and applied the bc/cc to those pieces. No bugs this time, but I did have more issues with dust/dirt this time. I have no idea why. What happens is that a dustnib settles on the panel and the clearcoat forms a cone around it and you end up with something like this /\ and it has to be cut/buffed flat. Spent all Friday evening and half of Saturday working those panels.





My buddy Art is building the engine for this car. Andy got us a great roller 5.0 from a 94 Mustang GT that must have been low miles. We had originally decided to build a 331 stroker, which requires new crank, connecting rods and pistons. But this roller motor was so nice, it didn't even need boring. We saved a bunch of money by just honing the cylinders and rebuilding with existing rotating assembly. Clearances all came in very tight. Art is a master at building engines and knows all the little tricks. He installed an E303 cam, Edelbrock RPM heads, Harland Sharp 1.7 roller rockers, a Boss302 windage tray, Cloyes timing set, and a Milodon aluminum water pump. It's gonna be a sweet motor. Isn't it purty?



Time to start bolting new shiny parts onto the body. Here's the front suspension so far. New upper and lower control arms, new Grab-A-Shock 620 1" lowering springs, and V8 spindles. Originally, the ends of the upper and lower control arms were left unpainted. A common practice in concours restoration is to paint the ends with Cast Iron looking paint to simulate that and to avoid rust. This certainly isn't a concours restoration, but what the heck.



This car is also getting the Unisteer Rack & Pinion. Unisteer has been doing R&P in the streetrod industry for a long time, but is new to the Mustang crowd. All indications so far are that it will install and work great.



I've now got the front suspension installed for good and was able to assemble the rotor/braking assembly. These are stock 4 piston Kelsey-Hayes disc brakes from the 65-67 Mustang, and the same ones I have on my convertible. These brakes were

used on Mustang GTs and Shelbys, and are still used on the vintage racing circuit, so I saw no reason to engineer a modified solution.





Had to lift the body off of the cart and lower it down onto the rear suspension. Car is now finally sitting on it's own legs. Also installed new gas tank and the 1 inch front sway bar.





Since this car is getting a T5 five speed and power brakes, I had to make some mods. The T5 uses a cable clutch, so the clutch pedal has to have a quadrant attached to the top. The stock brake booster on the old Mustangs won't allow a modern double bowl master cylinder, so we have to use a Foxbody booster. MustangSteve.com offers a really nice pedal setup that incorporates the quadrant, relocates the brake pivot pin for better brake performance, and replaces the sloppy pedal bushings with roller bearings. He also sells a firewall cable brace that has an integrated cable adjuster. I had to drill a few holes in the firewall, but it all went together smoothly.



The more interesting mod was the rack n pinion steering setup. The old steering utilized a recirculating ball type steering box, and is prone to excessive play. Flaming River makes a new box, but they're not cheap, and the Unisteer R&P is a lot cooler. 🛠️ The R&P installs right where the crossover brace used to go. The steering column and shaft are cut to length, and the new u-joints and shaft are integrated. It took a bit of fabrication work, but it's all in and working great. A few other R&P kits have problems with increased turning radius or bumpsteer. This one doesn't appear to suffer from either of those issues. There's no more play in the wheel, and despite the large angles for the u-joints, there is no binding feeling.



Been working on getting the engine compartment ready so we can install the 302/T5. I ran stainless brakelines, installed a proportioning valve, a new SVO 4 wheel disc master cylinder, and a modified original distribution block, along with a new fuel line run back to the tank. It will need to be modified to incorporate electric fuel pump and filter, but the fuel line and brake line run together on these cars, so I went ahead and installed it.



The proportioning valve is to make small adjustments to the brake biasing to the rears. You have to make sure the rear brakes don't lock up before the fronts, or you'll spin. This is most prevalent on cars with front discs and rear drums, as drum brakes require less fluid to operate and will actuate before discs. This car is 4 wheel disc and may not require it, but it doesn't hurt to have it inline, and may be necessary to get it all fine tuned.

I bled the brakes and now have a good brake pedal!

I rebuilt the heater box by repainting the metal parts, replaced the rusted heater door with a good used one, installed a new heater core with concours correct heater hoses, and replaced all of the inner foam in the box. I found an old shop rag inside the heater box as well as a good sized rat's nest. The firewall is just about ready for engine install.

I'm concentrating on the functioning parts of the car, but when I run into a stumbling block, or just want a change of pace, I bolt on some shiny stuff. Here's the rear of the car, where I've installed the fuel filler pipe and gas cap, the trunk lid with new lock, new taillights and new backup lights.



I removed 20 year old window tinting, buffed the stainless and chrome on the windows, and installed all new rubber. I ended up installing a brand new passenger side window regulator for \$30. Adjusted everything until it was perfect. Also installed new locks and door handles.



Big day! Art showed up with the new powerplant: fresh 302 with Edelbrock Performer RPM heads, B303 cam, 1.7 roller rockers, Boss302 windage tray, etc. etc. bolted to the brand new Z spec FRPP T5 transmission, through a Centerforce dual friction clutch. Engine and transmission mounts are bolted to the assembly before we slide it in.





Isn't it purty? By the way, that's a Mass-Flo fuel injected intake sitting on top. They make a slick port fuel injection system that looks carbureted. More to come on that later.



I almost got a woody when I saw how well the T5 shifter lines up with the OEM shifter hole.



Since last post, I've installed some wiring, fabricated and installed parking brake, and some other odds and ends. It's getting time for a real assembly session. I ordered over \$4000 worth of parts from Mustangs Unlimited, Summit, Tony Branda, and JME Enterprises. Also picked up a T5 yoke from Gullatt's Mustang. It's not all here yet, but this should get me started.

I took Friday off to work on the vert. I wanted to get the fuel system installed. The fuel injection system I'm installing requires a return line, electric fuel pump, inline filter, and pressure regulator which the 65 wasn't equipped with originally. I bought the Mallory pump and regulator that MassFlo recommended, and bought new 3/8 line, braided hose and AN fittings from SECO.

First thing is to gain a return access point to the tank. I drilled a hole in the sender and bent a new line to run next to the supply line. It was a nice tight fit, but I couldn't solder it like I wanted to. I think I needed silver solder and didn't have any. I checked JB Weld's website and it indicated it would survive contact with gasoline, so I sealed the unit and put a few reinforcing bonds on the inside. I was really pleased with the way it turned out, but when I installed it after sitting for several days, the JB Weld cracked on every joint. So now I'll order another sender, bend another tube, and have it soldered or find some silver solder.



I decided to move on and install the pump, filter, and line to the front of the car. I decided to use a stock fuel line for the return, and fabricate a new supply line. I used a handheld tubing bender and worked my way from the back to the front. I pop-riveted hose clamps all along the underside, and it turned out great. I made a bracket to hold the external pump near the bottom of the tank, and mounted the filter up near the frame rails, out of the way of everything.



I installed the fuel injectors, fuel rails, brackets, and fabricated a crossover tube at the front with the AN fittings and the braided fuel line. I also fabricated and installed a braided line that connects to the new fuel line I ran to the back. The other side will go to a pressure regulator, but no one had the AN fittings I needed to do that part.

The distributor wouldn't seat all the way down, so I called MassFlo. They told me that I had to cut 3/8 inch off the bottom of the distributor shaft because of the heavy duty ARP oil pump shaft that we used. "OK, I'll just cut this new billet Mallory distributor and hope for the best". It worked just fine, and distributor fell into place. I installed the new Cobra valve covers, and set the new valve body in place just for temporary eye candy.



The rack & pinion steering cleared the engine just fine. The problem is finding headers that play well with the steering shaft from the firewall to the rack. The shaft actually runs between tubes of the headers. Unisteer claims to have used Hooker Comps, but installers have tried with no success. One installer noted that the Hooker SuperComps were a close fit, but of course they are twice the price. I noticed that Flowtech makes a header that seems to be a copy of the Hooker SuperComps, so I ordered those. After struggling to install the header, it didn't clear the shaft. I removed it and took it to Clanton muffler, but he wouldn't bend the tube because he was afraid it would distort the mounting flange. I decided to order a set of shorties, hoping they would fit. They came in, and as you can see in the photo, the outlet is exactly in the middle of the two U-joints for the steering shaft.



I quickly removed the shorties and packed them up for return to Summit. I reinstalled the Flowtechs and decided that if it were mounted to the head before I did any "adjusting", the flange wouldn't move. I used pry bars, hammers, c-clamps, straps, blocks of wood, etc. and actually made some progress, although it wasn't quite enough. What I needed was a cylinder head that I could mount the header to (outside the car on a bench). I struggled once again to remove the header from the car. Andy had one, so I ran out to his place. After discussing the situation, he offered up his hydraulic portapower, and suggested I install the header before using the portapower to spread the tubes. Crap, I just pulled it off! I reinstalled the header (getting pretty good at this by now) and used the portapower. Wow, what a great tool. I easily gained the clearance I needed to route not only the steering shaft, but also the cable for the clutch.

View from under the car. Header is ugly, but none of the "adjustment marks" are visible from above. I now hate headers and all that is associated with them.

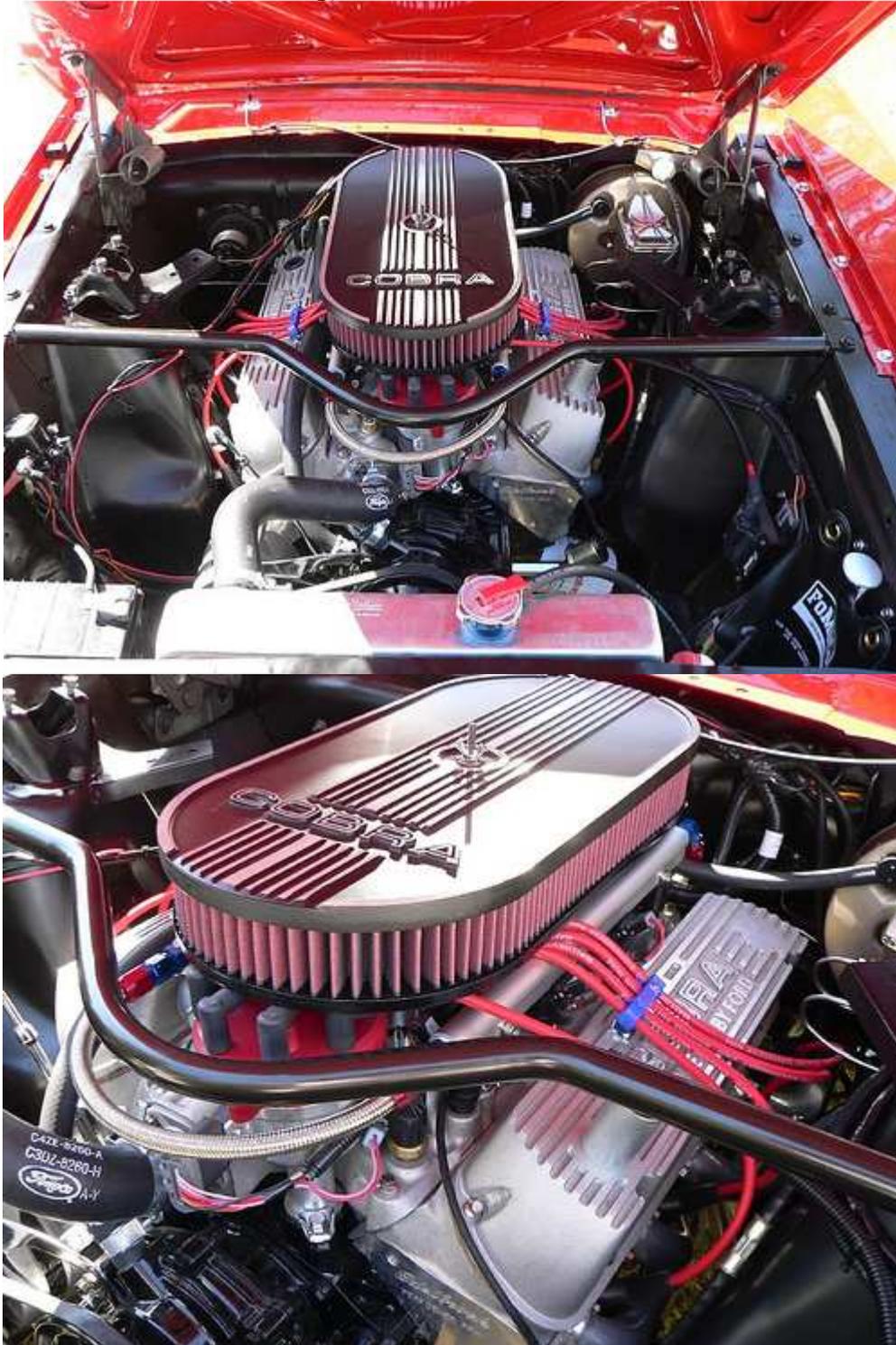


Here's a picture of the undercarriage looking back to front. You can see the foxbody parking brake cables going to the modified parking brake actuator, the header collectors, the new T5, the fuel lines and the rear brake line. I ordered a new driveshaft and should have that early next week.



Tri-Y is a proven failure with the Unisteer R&P. So far, only the Flowtechs and Hooker SuperComps have had any success. Of course, if you want to cut tubes and do that kind of custom work, you can get anything to fit. But then you have to have the

header recoated, if you're in to that sort of thing. If this car didn't have aluminum heads and a bunch of bling, I would have tried stock cast iron manifolds.



Finished!!! Exactly one year to the day, I delivered the car to the family. For reasons beyond control, Billy hasn't seen the car yet, but I'm sure he'll be shocked when he does. It turned out pretty nice.

Again, I want to thank everyone that helped on this project. Building a car like this in

one year of evenings and weekends was almost too much. And without your help, it would not have been completed on time.









