



Total Cost Involved Engineering Inc.

'48-'52 Ford Pickup Mustang II Front End

Parts:

- | | |
|--|--------------------------------|
| (2) boxing plates | (2) shocks |
| (1) cross member | (1) left spindle assembly |
| (1) upper spring mount, right | (1) right spindle assembly |
| (1) upper spring mount, left | (2) tie rod ends with jam nuts |
| (1) rack and pinion with internal extensions and mounting hardware | (2) springs |

Optional Parts

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|---------------------------------------|
| (2) upper control arm assemblies |
| (1) lower control arm assembly, left |
| (1) lower control arm assembly, right |

1. Remove the motor. While it may be possible to install this kit without removing the front-end, it is recommended that you do so, as it is much easier. Support the front and rear of the chassis on jack stands. Be safe! Avoid pulling and pushing on the vehicle while it is off the ground.

2. Mark the axle centerline on the chassis (should be 18" in front the front cab mounting hole). Remove the original front suspension, steering components, and front cross member braces/motor mounts. To remove the rivets holding the brackets, grind the rivet heads flush. Center punch the rivet and drill through using progressively larger drills up to a 5/16" drill. The rivet should be relatively easy to punch out. If it is not, then continue drilling with 3/8" drill.

3. Before welding in the boxing plates, clean and prep the top and bottom inner edges of rails. Tack weld cross bars across the top and bottom of the rails to avoid warpage as you weld in boxing plates. The crossbars can be removed once the plates are welded in.

4. Clean and prep the area on the top and underneath, in front of and behind the axle centerline mark you made earlier, as this is where the cross member will be welded. Slide the cross member in the chassis from underneath by lining up the center of the cross member with the axle centerline mark (the rack and pinion brackets identify the front of the cross member). In some cases you may need to grid the cross for it to fit. Check that the center of the cross member leans back about 1.5-2.0

degrees relative to the top of the frame rails measured at the center of the chassis, tack weld in place. if you think you may be running more or less chassis rake than 1.5- 2.0 degrees, then adjust the cross member so that it will be level to the ground at ride height.

5. The cross member can be welded if the above checks out. Tack weld the upper spring mounts to the top and outside of the rails by lining up the centerline of the cross member with the centerline of the spring mounts. The spring mounts will lean back when placed on the correct rail side.

6. Assembly. Bolt the lower control arms on with the ball joint pointing up. The stainless steel washers go on the outside of the bushings. Attach the shock and fasten to the upper spring mounts by sandwiching the mount between the shocks mounting hardware. The use of a spring compressor is required to perform these steps. Be careful when working with compressed spring as it contains stored energy that can cause severe injury if mishandled.

7. Install the upper control arms and attach the spindles to the control arms. The steering arms go in front with the calipers on top.

8. Mount the rack and pinion to the cross member. The assembly order is: 5/8-18x4.0-4.5" bolt, 5/8" stainless steel washer, through the rack and pinion with the bushing flange on the underside, 5/8" space (if using a power rack), cross member bracket, and 5/8" nylox nuts. Center the rack by turning all the way to the left and measuring from the end (when it is straight) to a fixed point like the bracket on the cross member. Turn the other direction and measure from same points. Take the difference of these numbers, divide by two, and add this to the last measurement you took and this is where the tie-rod end will be when the rack is centered. Thread the tie-rod jam nuts on followed by tie-rod ends and attach to the steering arms from underneath. Be careful not to bump the rack once you have centered it!

9. Tighten all suspension fasteners and return the vehicle to the ground with all components reinstalled (motor, body work, etc.) The vehicle can be taken to an alignment shop to properly set the alignment to the specification below.

10. After 100 to 200 miles, check the suspension. The springs should have settled by now and allow the control arms to become parallel to the ground. If they are not, cut off up to one coil to allow the control arm to be parallel to the ground.

- Camber 0 degrees
- Caster 1-1 1/2"
- Toe-In 1/16" +/- 1/16"

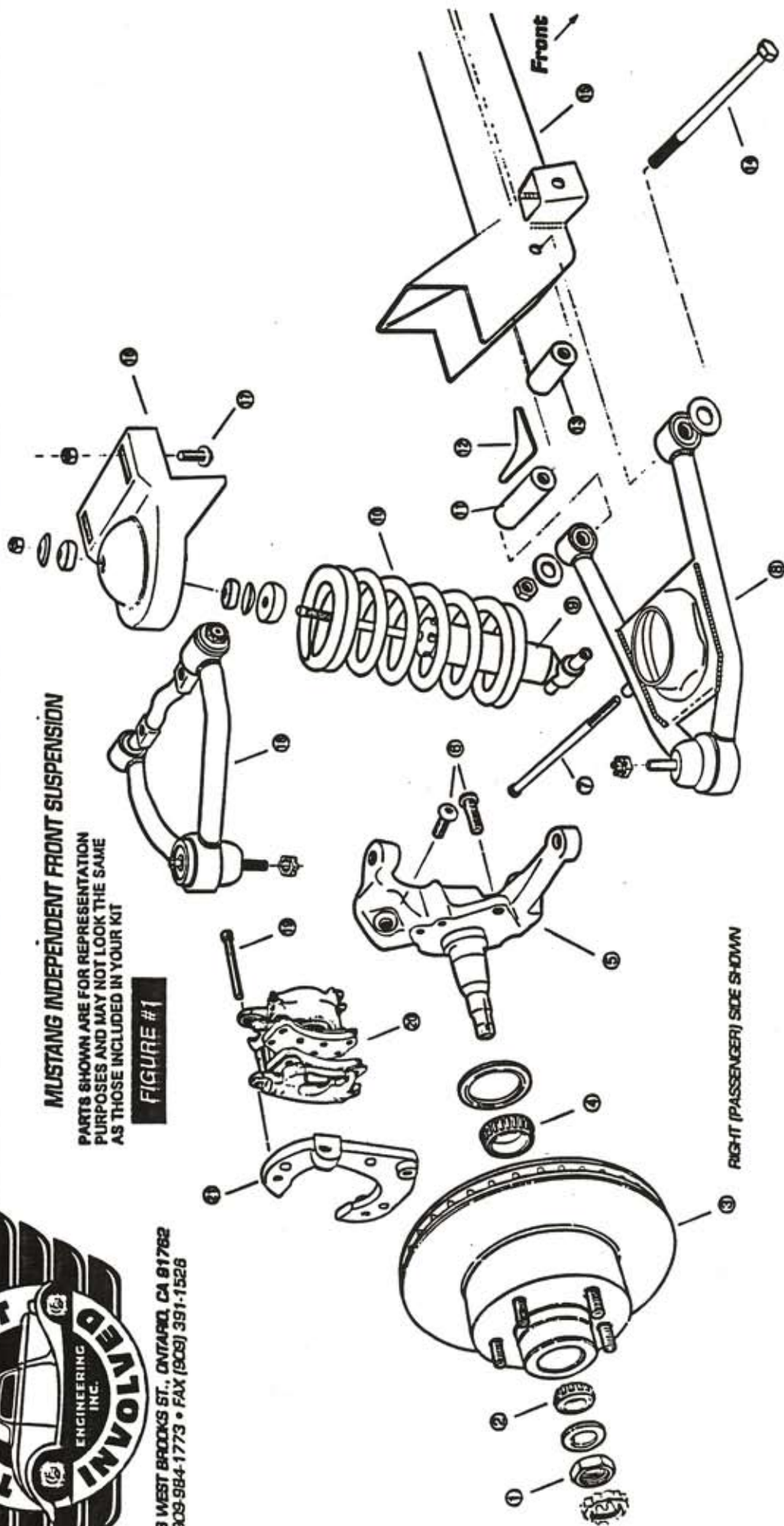


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MUSTANG INDEPENDENT FRONT SUSPENSION

PARTS SHOWN ARE FOR REPRESENTATION PURPOSES AND MAY NOT LOOK THE SAME AS THOSE INCLUDED IN YOUR KIT

FIGURE #1



PARTS LIST

1	Spindle Nut	2	Lower Shock Bolt	2	Short Lower Arm Spacer	2	GM Caliper Mounting Bolt
2	Outer Bearing	2	Standard Tubular Lower Arm	2	Lower Arm Mounting Bolt	2	GM Caliper
3	Brake Flare	2	Shock Absorber	2	Crossmember	1	GM Caliper Bracket
4	Inner Bearing	2	Coil Spring	2	Upper Spring Mount	2	
5	Spindle (Drop Style Shown)	2	Long Lower Arm Spacer	2	Upper Arm Mounting Bolt	4	
6	Caliper Bracket Bolt	4	Spacer Gasket	2	Tubular Upper Control Arm	2	