

## Competition Engineering 8 Point Roll Bar (94-04 Mustang)

### Required tools:

- Socket set / Hand tools
- Welder of choice
- Welding blankets
- Welding safety gear
- Heat gun
- Putty knife
- Bar notching tool
- Adjustable clamps
- Marker

### Included in the package:

- (1) main hoop
- (1) main hoop crossbrace
- (2) rear struts
- (2) front door bars
- (2) diagonal hoop supports
- (6) weld joint gussets



#### Installation Instructions:

##### 1.) Remove seats –

- a. Unplug electronics from under the front seats. Use a 13MM socket to release the bolts holding the front seats in.
- b. Rear lower seats pop out by pulling up, back of rear seat is removed by pulling (2) 13MM bolts out of the bottom and the 10MM bolts along the top



##### 2.) Remove trim –

- a. Remove all plastic trim from around the doors jams, kick panels, rear seat area. These are held in with plastic push pins.



- 3.) Remove carpet –
  - a. Pull carpet from under center console. Carpet is one piece, cut carpet under shifter / center console if you do not want to remove center console. Roll carpet and remove from car.



4.) Remove trunk liner

- a. Pull plastic trim and trunk pieces from the trunk. These will come out with plastic push pins.
- b. Remove spare tire and jack





5.) Remove rear speakers

- a. Pull carpet panel off with speaker cover by rear glass
- b. Remove rear speaker box / amp box by the 10MM screws on top next to back glass. Unplug from the driver side connector at the back glass. The speaker box will fall down in to trunk so hold while removing screws.

6.) Prep cage

- a. Lay all parts out to make sure you have what you need
- b. Clean all the cage tubes to pull shipping oil / stickers off (This will help you later when the cage is in the car and you want to paint it)

7.) Install cage Hoop

- a. Set main hoop in place behind rear seats where you want the bar to sit, mark floor where flat panels will sit
- b. Cut base of hoop to desired height (Remember you will need some space up top if your headliner is going back in)
- c. Use heat gun and scrape tool to remove gunk on the floor pan where your brackets are going to be welded
- d. Place flat panels on floor pan where cage will sit (the floor pan is not flat so I built small boxes under the flat panels to make them level)
- e. Level hoop up and down, spot weld the hoop on to the flat panels
- f. Remove hoop and panels from car, fully weld around the tube to the flat panel
- g. Put hoop back in car and check fit

- h. Weld flat panels to floor (make sure you check under car for fuel lines and wiring)





8.) Install rear bars



- a. Place rear bars where you would like them to land in the trunk. Measure and cut bars to fit from the main hoop to the trunk floor
- b. Clean trunk floor where mounting plates are going to sit
- c. Cut the bars at an angle to match the angle needed to reach your hoop
- d. Notch the top part of the bars to fit tight against the main hoop
- e. Set bars back in place to check fit
- f. Spot weld the rear bars to the mounting panels like before
- g. Remove bars and mounting panels, weld all the way around the tube on the mounting panel
- h. Place back in car to check fit (I held the top bars to the main hoop with adjustable clamps)
- i. Weld the top of the rear bars to the main hoop











9.) Install main hoop side bar

- a. Measure and adjust where you would like the lower bar to go on the main hoop
- b. Cut to fit
- c. Clean the main hoop where the side bar will land. This helps with the welding process
- d. Hold in bar in place, weld bar all the way around the tube / main hoop.



10.) Install front bars

- a. This will be the same as the rear bars just notice the front bars have a slight kick out to get around your front seats.
- b. Please seats back in the car
- c. Cut one bar to the length you want
- d. Place front bar where you want it to land on the floor and main hoop
- e. Close door to make sure the bar will not keep the door from closing
- f. Clean and prep floor where the bars will mount. Heat gun works great on this
- g. Place floor plates where you want them on the floor
- h. Mark where the bar lands on the floor plate
- i. Pull bar and floor plate out. Weld all the way around the bar to the floor plate (Like you did with the rear bars)
- j. Weld the floor plates with the bar attached to the floor (Check underside of car for line and wires)
- k. Weld the side bar to the main hoop (Check fit first)
- l. Do the same on the other side of the car
- m. Remove the seats again so you can get to the other bars with the welder.





11.) Install down bars

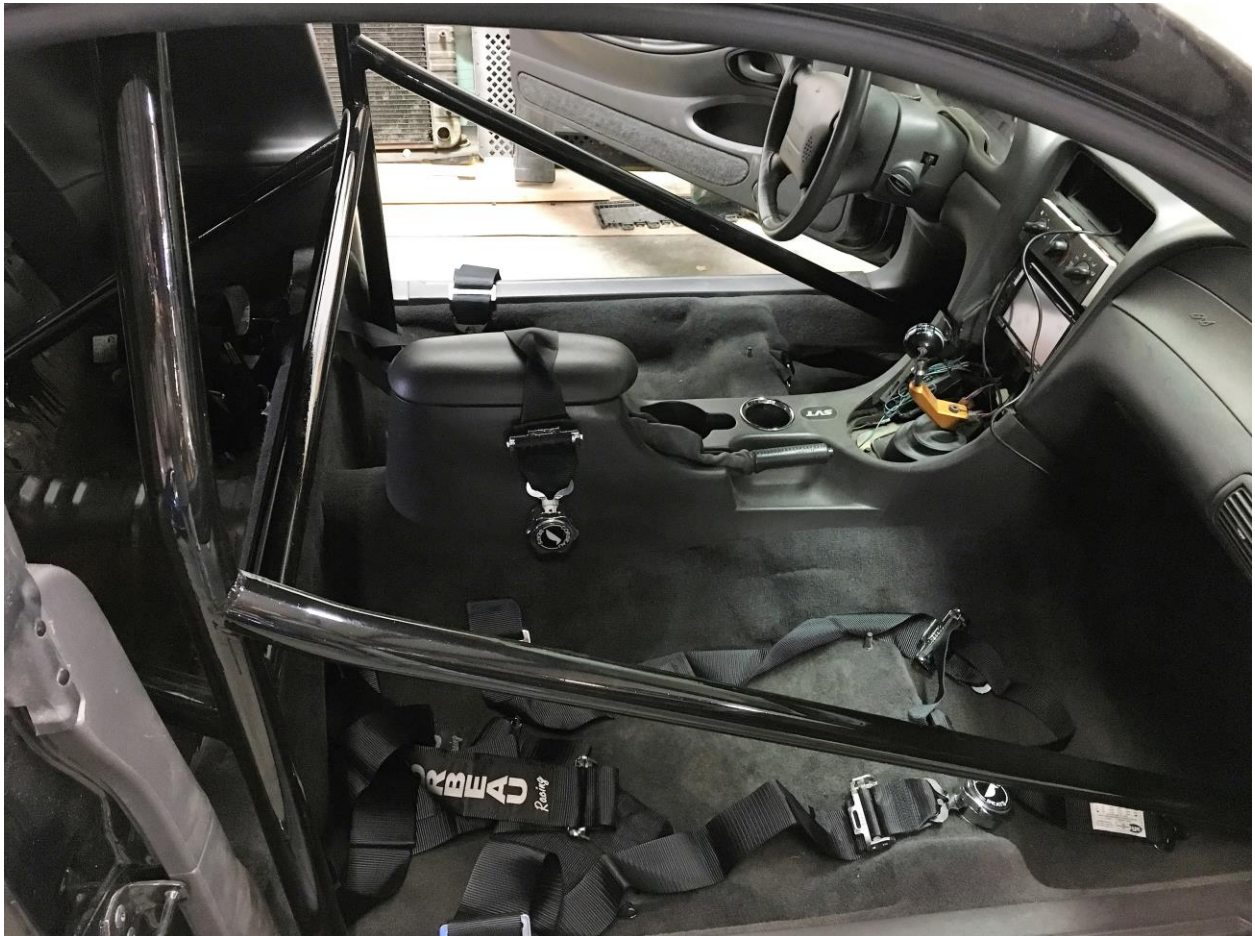
- a. Measure and cut down bar from main hoop to floor on transmission tunnel
- b. Prep floor where floor plate will go
- c. Cut bar at the right angle to weld to transmission tunnel
- d. Mark where the bar will land on the floor plate
- e. Weld bar to the floor plate (The same as with the other bars)
- f. Notch bar to mate up with the main hoop (Use a tube notching tool with the good drill bit)
- g. Check fit then weld down bar to the main hoop

12.) Check

- a. After the cage is installed, check to make sure you have not burned any fuel lines, wires, plastic pieces. Replace or repair as needed.

13.) Paint

- a. After the cage is installed you will need to paint it. This can be done by a paint shop or you can do it. Make sure to mask off the whole car so you do not get over spray.



14.)Install interior

- a. Put the interior back in the reverse order it came out.
- b. You will need to cut and notch the panels you took out to make room for the new bars. I found this to be easy to do with a hole saw.
- c. You will need to cut the carpet to go around the bars. A razor knife works.



15.)Finished

- a. Enjoy





