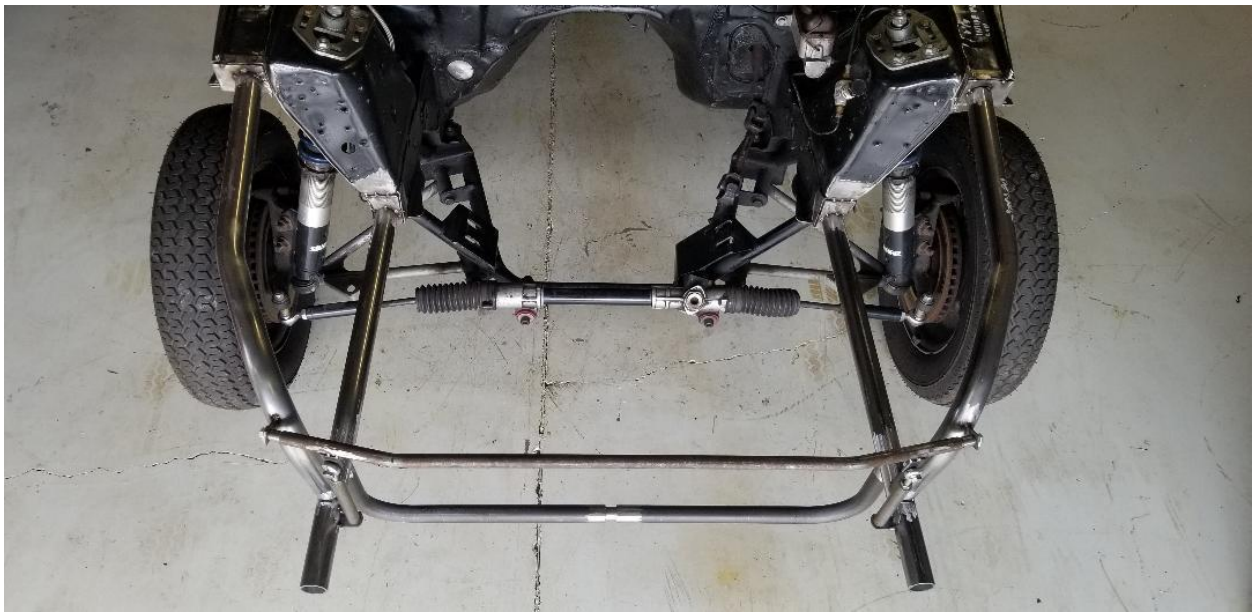




87-93 MUSTANG TUBULAR FRONT END INSTALL INSTRUCTIONS

Disclaimer- For Off-road Use Only



Reference picture of how the general final assembly will look, pending on the final position of the upper and lower core support bars on your particular setup

A) Start by removing the front bumper cover, fenders, and anything in front of the strut towers. This includes the front swaybar and all wiring

B) Get the car level. Use the existing bottom edge of the lower frame rail in front of the strut towers that is to be cut, or the preferred method is to use the pinch weld seam at the door rocker. It is easily accessed by temporarily removing the lower part of weather stripping inside the door jamb area

___-There are several points you can use for side to side leveling. It is preferred to use a bar/level along the bottom of the frame rails across the engine bay. Of course, if you are attempting this with the drivetrain in the car, a 4 ft level across the top of the frame rails above the strut towers works OK as well, just be aware that the rails slope down towards the front of the car



C) The following pictures are a visual reference for where to make your cuts. This particular car has had several different tube front ends installed, so the factory lower rails are cut back further towards the strut tower than typically would be at first.

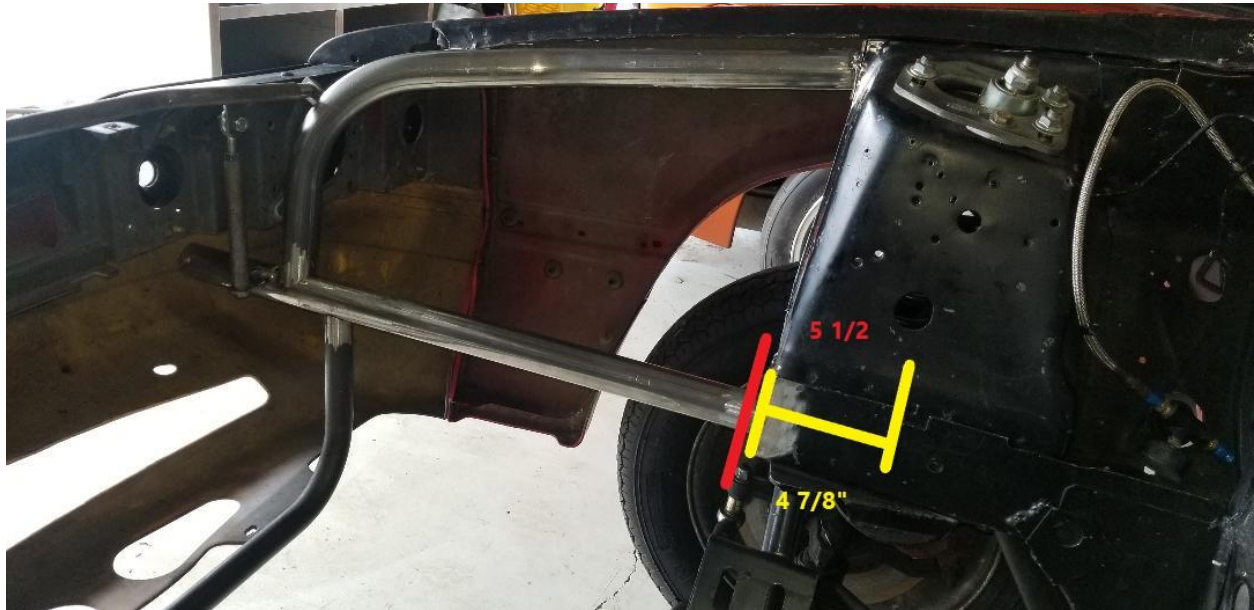
- 1. For the upper cut, pull your measurement from the front outside edge of the cowl box area. It is recommended to make your initial cut at 16 3/8", as this will be a bit long, and allow you to creep up on the final fit, which will typically be in the 16 1/8" area (Refer to the following pictures)**





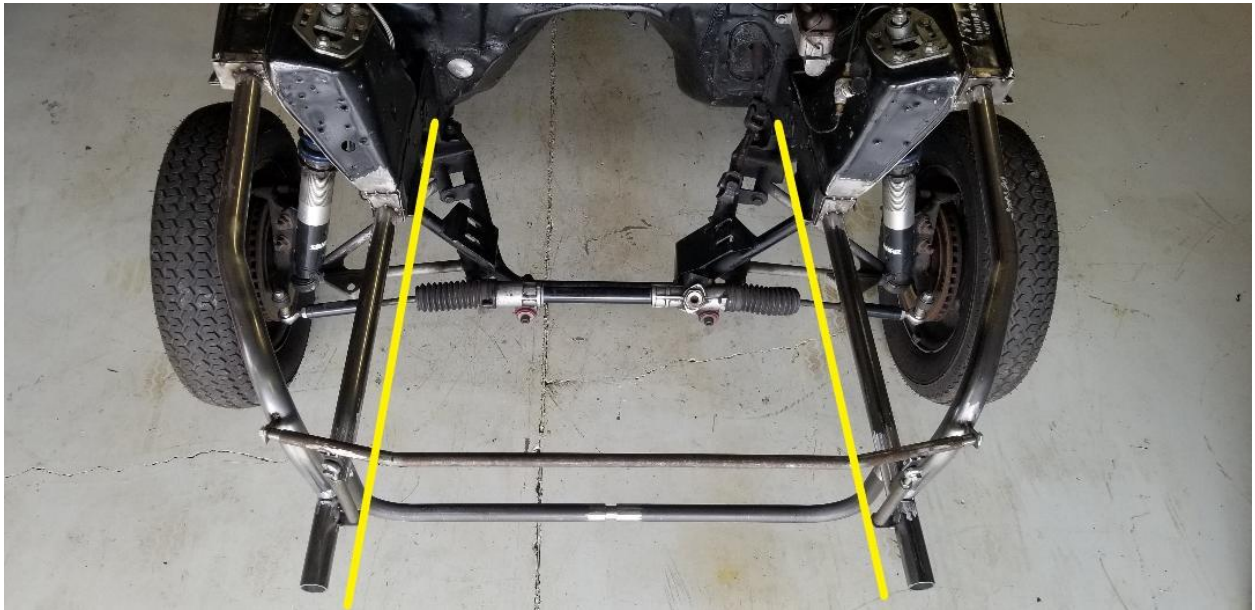
2. For the lower cut, pull from the front of the recess that's in the factory lower frame rail. Your dimension here will end up being $4 \frac{7}{8}$ " area from this point, but again it is highly recommended to cut it long to begin with, $5 \frac{1}{2}$ is a good number to start, as this can be easily trimmed once you get the bulk cut off and can see what you are working with.

Again, it makes for a much cleaner looking installation in the end if everything is trimmed up nice a square



D) At this point, once you are satisfied with your fit-up and dimensions in front of the strut towers, you are ready to install the lower tubular rails. Of course, you should have all paint removed and clean metal to weld to

- 1. Start with small tacks so you can still manipulate the bar slightly if need be. It is best to set up both bars at the same time, so you can verify they are level with each other, and can make changes as needed. Keep in mind, looking from the top, the bars come out at an angle, matching the factory path, and NOT 100% parallel with each other**



- 1. The notches in the upper bars will get your outward angle on the lower bars correct, but the following pictures will show where to pull measurements in an "X" pattern to verify the**

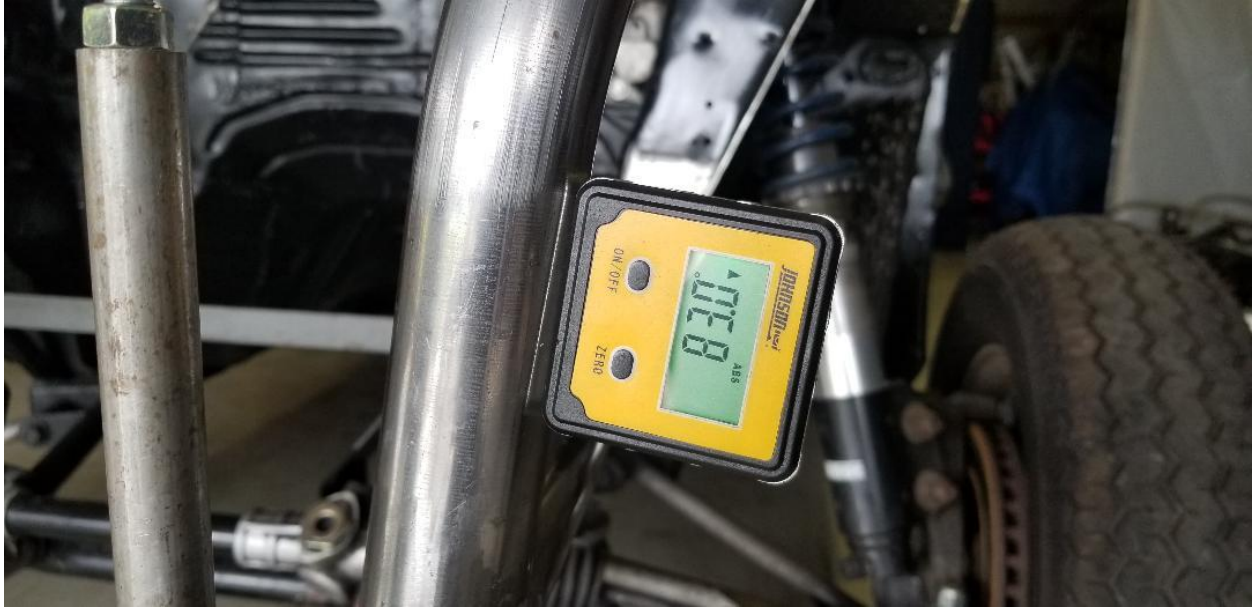
assembly is square, and to account for minor differences from install to install. Dimensions noted in the pictures as well





2. On to the upper bars, a digital angle gauge was used to set these up as accurate as possible, but a simple analog needle type angle gauge will work well too. Attached are pictures to note the angles the upper bars should be at.

1. Looking from the front of the car, the angle of the forward down bar should be angled out at 83 degrees. The other angles are not very important in the general setup, they are just used to verify a mirror image on both sides





- 2. From the very front of the lower bar, to the front edge of your upper bar where the 2 bars tie together, should be very close to 5 1/8, preferred to keep it + or - within 1/8 ** Don't get**

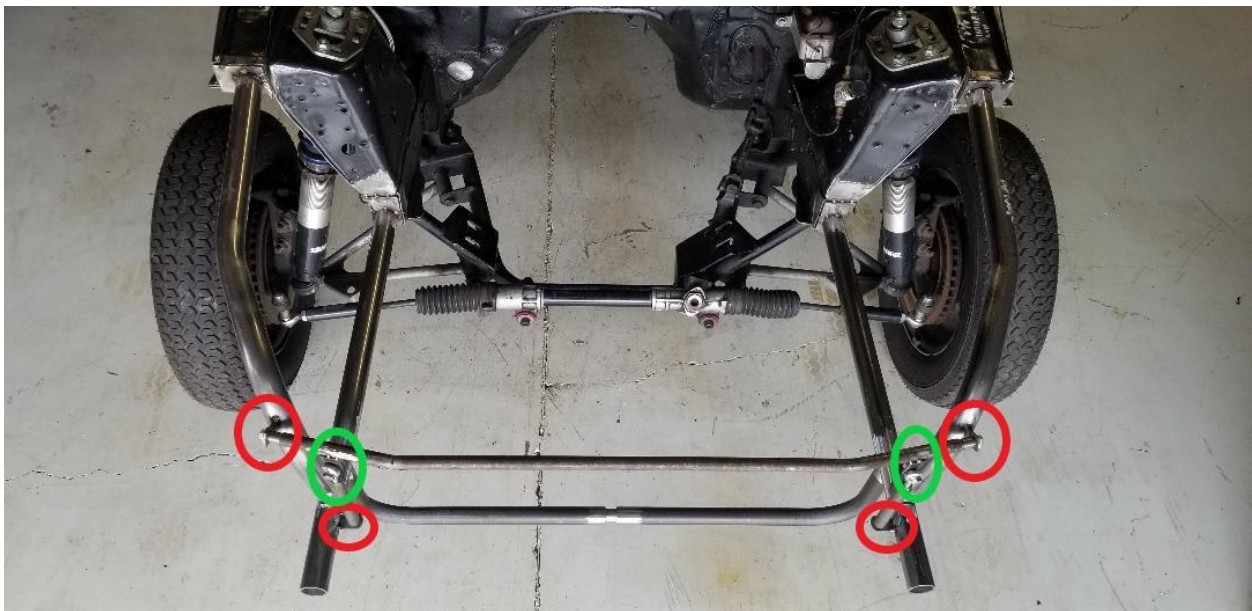
too hung up on this exact dimension, as it will be dependent on your upper and lower bar placement on the body side. The more important aspect of this dimension is that it is the same on both sides



3. The following picture notes where the headlight bucket anchor needs to be trimmed to clear the down bar.



4. There are 12 tabs included in the kit. (6) 2 3/8" tabs for fender and bumper cover mounting. Only the front mount is used on the fenders, the other 4 tabs are used for the upper mounting of the bumper support, and lower area if your particular radiator support placement will allow it
1. (2) 1 1/2 tabs are used for heim joint to upper core support bar (green circles)
 2. (4) 1 1/4 tabs are used for mounting the base of the heim joint bar, and the outer upper core support mounts (red circles)





- 5. There is not a whole lot to cover in reference to mounting the radiator support and upper core support bar, as they are designed with quite a bit of adjustability, and likely will not be the same between setups. Just be sure to mount the two lower support halves on its correct side, as the notches follow the angle of the lower frame bars, and are not at a true 90 degree angle.**

Mount them to where they work best for your setup, but generally speaking, roughly 19" from where the radiator sits in its lower support bar, to the upper core support will get you close.

- 6. At this point, before any final welding is done, it is typical to double check all measurements, and make sure everything is still square and level. Verify the upper core support placement doesn't interfere with hood closure, etc**

*****In closing, a few final pictures will follow for reference to how it should look all finished up and done. Take your time, and enjoy your new setup!**



