



MTF-101 INSTALLATION INSTRUCTIONS 65-70 Mustang Pro-G Front



Please read these instructions completely before starting your installation. Remember the basic rule for a successful installation: <u>**** Measure Twice, Weld or Bolt-in Once.</u> **** <u>****Do Not Paint or Powder Coat any suspension components before</u> <u>trial fitting all items ****</u> <u>**** This kit lowers vehicle approximately 3"-5" ****</u>



- Start by supporting the car on 4 jack stands. Place the front jack stands under the frame rails at the firewall, as the front frame will be cut open and will be temporarily very weak. It may bend and not support the car. The car should be sitting on approximately the same angle as it does on the ground. Verify the frame is straight before proceeding
- 2) Remove all the old front suspension components. The shock towers will also be removed. Draw the cut lines around the shock towers with a soapstone or other marker and cut them out as shown below. A plasma cutter works great here, but a torch or saber saw can be used. Cut them loose from the frame rails, also. HEIDTS has a panel filler kit, #PX-325, to enclose the openings.



Figure 1. Cut line around Passenger Side Shock Tower



3) Remove the lower control arm mounts. When you are done, you should have clean, bare frame rails, ready for the next step.



Figure 2. Driver Side Frame Rails ready for boxing plate installation

4) Trimming and boxing the rails is next. Measure back 18" from the rear (motor side) surface of the core support, to the notch in the upper/outer frame rail boxing plate. Grind or otherwise clean any rust from the rails, as the boxing plates should be welded to clean metal. Figure 3 shows how the boxing plates will completely enclose and strengthen the frame in this area. The upper/inner formed boxing plates are placed on the rails and clamped securely. The inner boxing plates have two holes them which align with holes in the frame rails - the driver side is shown below. Tack weld the plates to the rails. Next, clamp the lower plates in place. Tack weld them to the others. Remove the clamps and weld them to each other and to the frame. Weld short sections at a time in alternating locations to minimize warping. You may want to grind the welds smooth when done.



5) Measure back 22-1/2" from the rear (motor side) of the core support and scribe a line. This will be the center of your main crossmember, see Figure 4 below. Drop the cross member into the engine bay at an angle, then rotate in place fitting each notch around the boxing plates. Tack weld in place after making sure the center of the crossmember is level.



Figure 4. Cross Member Location (Driver Side Shown)

6) Use the spacer kit to locate the front crossmember, as shown in Figure 5 below.



Figure 5. Front Crossmember installed using supplied spacer kit

7) Tack weld in place. Now double, and triple check that the measurements from the rear surface of the core support are correct and equal on both sides of the car and that the cross members are straight and level. Finally, weld in place, welding the top, down both sides, and all around the bottom.

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 The upper shock mounts should be positioned so that they are exactly centered on the cross member as shown below. Tack weld in place, and double check dimensions before fully welding.



Figure 6. Fully welded Upper Shock Mount (Passenger Side)

- 9) Now assemble all the suspension components. Make sure the gusset plate on the upper control arm is facing up. It is easiest to install the steering rack before the control arms and sway bar. Note: The shim washers supplied may be needed to center the calipers on the rotors. Do not install the coil-over assemblies just yet. Prop up the lower control arms so they are level. This is the designed ride height of the suspension system.
- 10) On the rear lower control arm, make sure the supplied washer is installed between the bushing flange and the crossmember standoff, see below.





11) Now set the caster, camber and toe in. The settings are as follows:

Caster: 4° - 6° Positive Camber: ½° - 1° Negative Toe-In: 1/8" +/- 1/8"

- 12) Next, relax the suspension and install the coilovers. The spring seat rings should be in the bottom position, providing the least amount of preload. The car should now be placed on the ground. The spring seat rings should be adjusted to position the lower control arms level. Make sure that at this point you are working with a finished, fully weighted car. At this point do a quick double check of your alignment.
- 13) Also note that a **REAR SUMP OIL PAN** is required to clear the front crossmember and rack & pinion unit. **DO NOT** modify the rack & pinion mounts to relocate the rack to clear the pan, as that will ruin the geometry of the suspension and cause severe bump steer. Check the installation after 100 to 200 miles, including the alignment. If you have any questions during or after the installation, feel free to call us for technical assistance.

