





INSTALLATION INSTRUCTIONS 1966-1967 Ford Fairlane INDEPENDENT FRONT SUSPENSION

Please read these instructions *completely*before starting your installation.
Remember the basic rule for a successful installation:
Measure Twice, Weld Once.



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 pinch welds will be cut and the frame 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 at ride height. Remove all the old front suspension components. The shock towers will also be removed. See **Figure 1** which shows the cut lines used to remove them. Draw the cut lines around the shock towers with a soap stone or other marker and cut them out. You can use a spot weld removal drill bit, or a plasma cutter here as well, but a torch or saber saw can be used. Cut them loose from the frame rails. *HEIDTS* has a panel filler kit, #PX-327, to enclose the openings. Remove the lower control arm mounts. When you are done, you should have clean, bare frame rails, ready for the next step.

Boxing the rails is next. **Figure 2** shows how the boxing plates will completely enclose and strengthen the frame in this area. Grind or otherwise clean any rust from the rails, as the boxing plates should be welded to clean metal. The upper/inner formed boxing plates are placed on the rails and clamped securely. Tack weld them to the rails. Next clamp in place the outer boxing plates and tack weld them to the upper plates and to the frame. Lastly, clamp in place the lower plates. 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 warpage. You may want to grind the welds smooth when done.

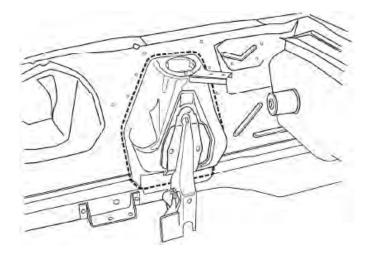


Figure 1- Removing Shock Towers

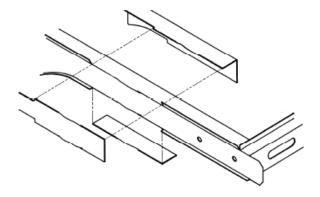


Figure 2- Boxing the Rails



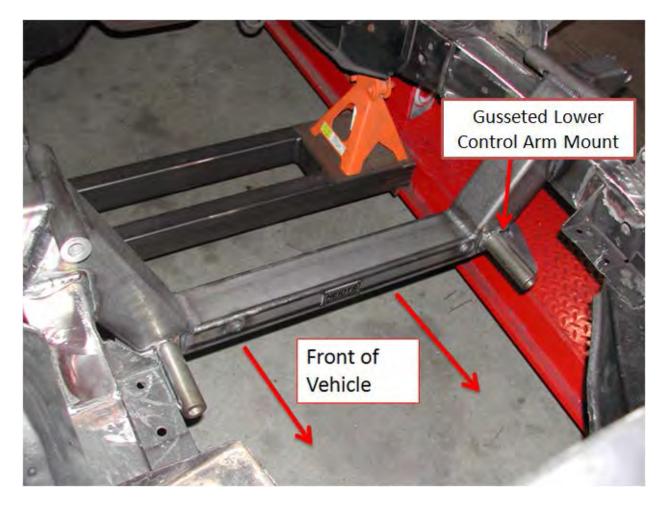


Figure 3- Crossmember Install

Now it is time to start fitting and installing the new crossmember. Measure 116" from the center of the factory installed rear end and mark this on the welded boxing plates. The Ford Fairlane has a wheelbase of 116". Slip the crossmember onto the frame rails diagonally, starting with one end over the frame rail, making sure the larger, gusseted lower control arm mount is facing towards the front of the vehicle (See Figure 3.) Then slide the other end onto the rails and into place to get it square on the frame rails, centering it on the scribed axle center lines. If it is tight when sliding it into the square position, a slight tap with a rubber mallet will help. The frame rails will usually spring out enough to allow you to do this. If it cannot be positioned to get it square, you may have to take it out and slightly grind the inner edges. Make sure that the crossmember is level side to side and front to back when the vehicle is positioned in final ride height. Then make sure the crossmember is fully seated on the underside of the actual lower boxing plate. Tack weld in place, double check location and that it is setting level, then weld in place, welding the top, down both sides, and all around the bottom.



Now assemble all the suspension components. 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 midpoint of the suspension system. Now set the caster, camber and toe in. The settings are as follows:

Caster 1°-3° positive - Manual Rack

Caster 3°-6° positive - Power Rack

Camber 0 - 1/2° Negative

Toe-In 1/8" ± 1/8"

The caster and camber settings are done with the adjusters in the upper control arms. Both adjusters are screwed in or out an equal amount to change the camber, and they are adjusted opposite each other to change the caster. Approximately 1° of caster is built into the crossmember already, so not much change is required there. The interesting thing about the caster setting is that you can experiment with different settings and actually "tune" the characteristics of the handling of your car to your driving style. 1° of caster will give a nice road feel and good low speed drive-ability. Increasing Caster from you initial setting will yield better high speed stability and tracking, putting a better self-centering characteristic in the steering wheel, but will tend to start to make parking slightly more difficult. Have fun with this one, as it truly makes your car your own car. Just be sure that both sides have equal caster settings, or the car will tend to pull to one side. 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.

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.

