

Installation Instructions

1948-1952 FORD F-1 PICKUP CROSSMEMBER KIT

*Please read these instructions completely **BEFORE** starting your installation!*

Remember the basic rule for a successful installation:
MEASURE TWICE, WELD ONCE!

1. Start by supporting the truck on 4 jack stands. The truck should be sitting on approximately the same angle as it does on the ground, or slightly lower in front.

2. Remove all the old front suspension components, including the leaf springs and the engine mounting rails. Also remove the spring perches from the frame rails. Leave the front crossmember in place.

3. Boxing the rails is next. The rails should be squared up as far as the flanges are concerned and made straight and true. The boxing plates are then laid up against the rails and clamped in place. Weld short sections at a time in alternating locations to minimize warpage. Grind smooth when done. See Figure 1.

4. Measure back 17 1/8" from the center of the front shackle pivot and make a mark. Now scribe those marks completely around the frame rails. Those scribed lines are the axle centerline for the new crossmember. See Figure 2.

5. If you purchased a complete I.F.S. Package from *HEIDTS*, it was supplied with Full Lower A-Arms. Begin by installing the Spacers onto the crossmember. The holes where the lower control arms attach to the Crossmember must be enlarged to 5/8". Mount the Crossmember Spacers and the Rear Spacers which were supplied with the Lower Control Arms onto the Crossmember as shown in Figure 3 using the supplied Inner Bushing Bolts, Nuts and a temporary spacer under the Nuts. **DO NOT** use the A-Arms for this operation as the welding heat will melt the rubber bushings. Tighten the Bolts and Nuts tight. Weld the Rear Spacers to the Crossmember all around. Weld the Crossmember Spacers as far as possible inside the crossmember on both ends. Position the Gussets horizontally, not vertically, against the Rear Spacers and the back of the Crossmember. Weld Gussets to Spacers and Crossmember. When it cools, remove the bolt.

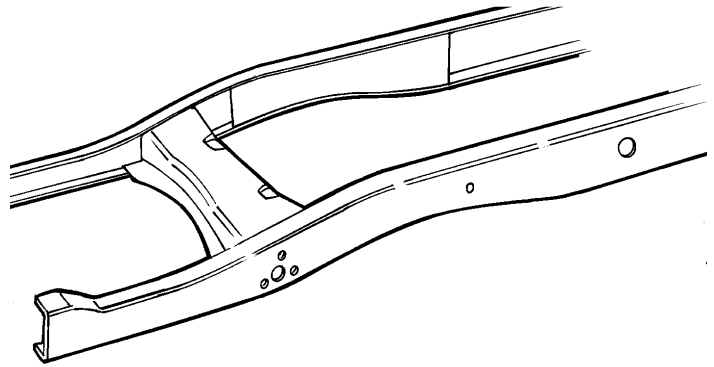


Figure 1

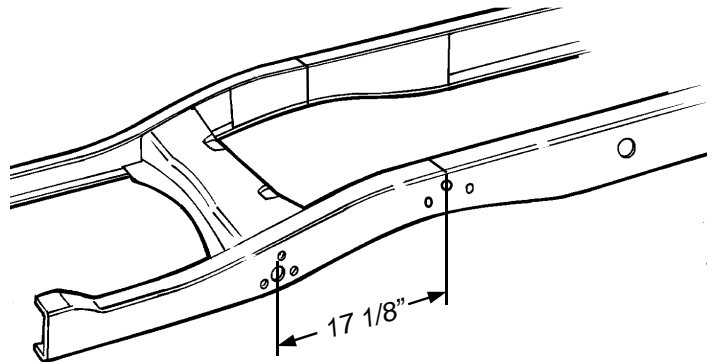


Figure 2

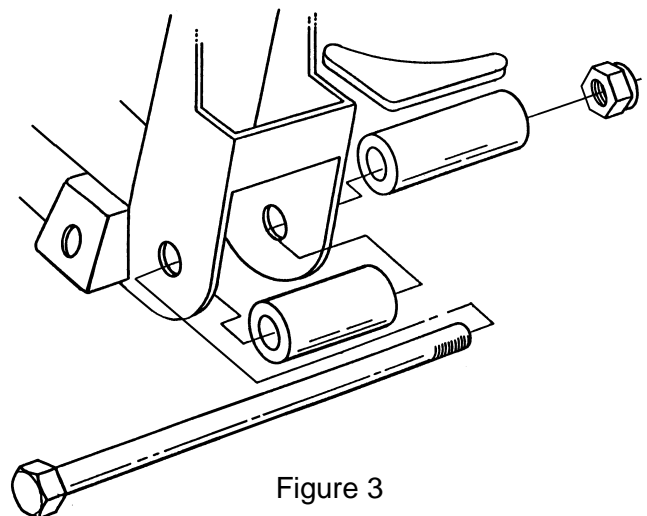


Figure 3

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6. Now it is time to start fitting and installing the new crossmember. Slip it up into the frame, center it on the scribed axle center line. See Figure 4. If it does not fit, grind the sides of the crossmember until you can get the crossmember up in place, as shown. Make sure the crossmember is fully seated on the underside of the actual frame lower surface. Figure 4 shows this clearly. Tack weld in place, check location, then weld in place, welding all around both ends, top, sides, and bottom.

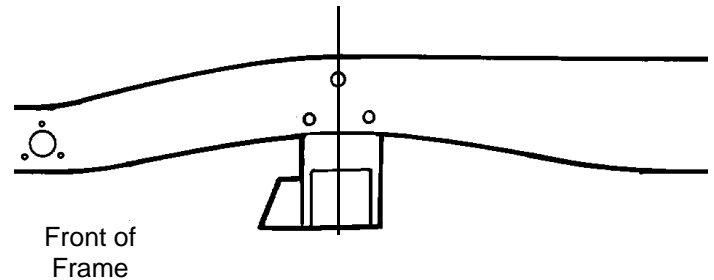


Figure 4

7. Next are the spring towers. They sit on top of the frame rails, and are located $1 \frac{3}{4}$ " forward of the crossmember, as shown in Figure 5. Clamp in place, double check your dimensions, then weld all around, including the gusset flanges on the sides of the rails. For added strength, you can also weld the inside of the gusset flanges.

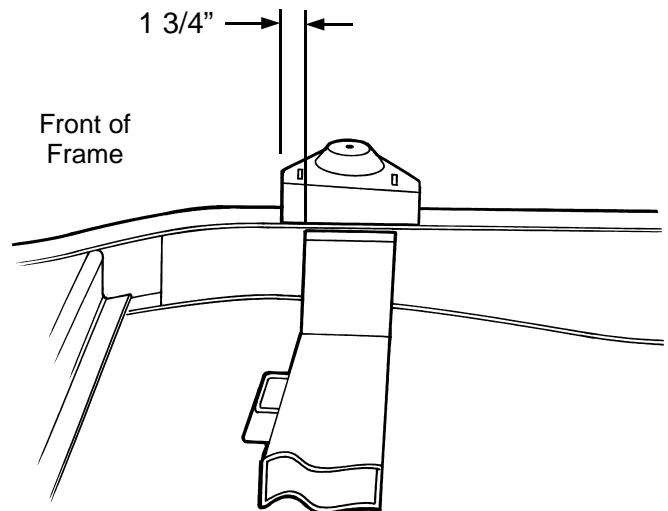


Figure 5

If you are using stock components, you will need to install strut rod brackets, part no. MP-003, purchased separately. Continue on to Step 8. If not, then you are finished and proceed on to the assembly and alignment of your suspension.

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OPTIONAL STOCK STRUT ROD INSTALLATION

8. If you are using factory lower control arms and strut rods you will continue here. Use the lower control arm and strut rod for locating the rear strut rod supports and gussets. Using a 2 x 4 and a C-clamp, install the control arm as shown in Figure 6.

9. Install the strut rod onto the control arm. Now, assemble onto the strut rod the large rubber bushings, including the cupped washers, and the strut mount plate. Be certain to fully tighten the nut on the strut rod to its' fully seated position. See Figure 7. There are two rubber bushing sets available; the standard replacement and the improved set. We recommend the improved set, as it provides more stability to the front suspension. The Pinto and Mustang strut rods are different lengths. We recommend the use of Pinto strut rods, as they are bent less than the Mustang strut rods. You will find that with either strut rod the strut rod plate does not line up with the bottom of the frame rail. The strut rod must be heated in the elbow area and bent outward. The rod is bent outward until the strut mounting plate lines up with the frame rail. You will find that because the Pinto strut rod is initially bent less and requires much less bending. The strut rod will act as an alignment fixture while you tack weld the mount plate in place, then tack weld the gusset in place. Remove the strut rod, bushings, and arm, and finish welding to the frame and each other.

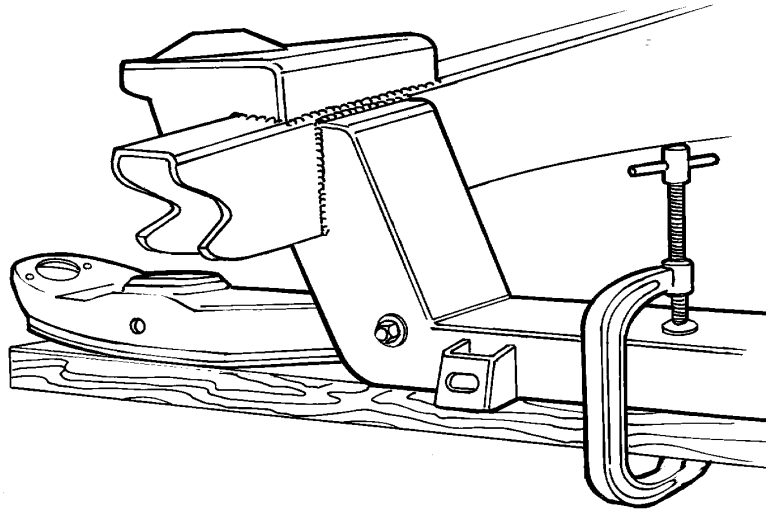


Figure 6

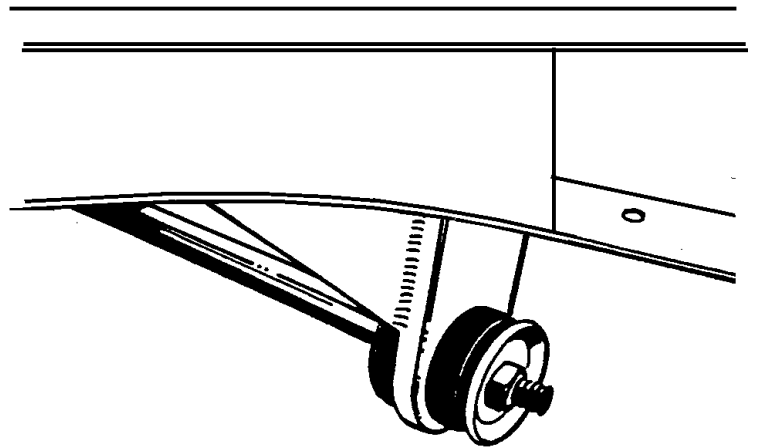


Figure 7

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That's all there is to it. Go ahead and finish the assembly of the suspension components using the instructions included with those kits. **NOTE:** This kit requires the use of 2" rack extensions under the boots on both ends of the rack and pinion, as this truck has a 4" wider track width than the Mustang II (Heidt's Hot Rod Shop has these extensions available for both power and manual rack and pinions). **DO NOT** use a single 4" extension on one end of the rack, as the crossmember is designed for a centered rack. **DO NOT** use longer tie rod ends either, as they do not do the same thing and will upset the geometry which will cause bump-steer. After the rest of the truck is assembled and back on the ground, do your front end alignment as follows:

Caster 1° Positive
Camber 1/2° Positive
Toe-In 1/8" ± 1/8"

Check the installation after 100 to 200 miles, including the alignment. The springs should have settled down by now, so the lower control arms are parallel to the ground. If not, we recommend that you change to softer springs, or you can cut up to one coil off the bottom of the springs to get the lower arms horizontal. If it sits too low, stiffer springs or *HEIDTS* new Spring Spacers are available. If you have any questions during or after the installation, feel free to call us for technical assistance.

