

Installation Instructions

1949-1954 Chevy 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 your installation by supporting the car on 4 jack stands. The car should be sitting on the approximate angle that it does on the ground, or slightly lower in front.
 2. Begin by removing all the old suspension components from the frame, including the front suspension crossmember. The radiator crossmember should be left in place.
 3. Measure back from the hole at the front of the frame 16" and scribe a mark. See figure 1. Scribe a line around the frame rail at the scribed mark. This scribed line is the spindle centerline.
 4. If you purchased a complete I.F.S. Package it was supplied with Full Lower A-Arms. Begin by installing the Lower A-Arms 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 2 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.
 5. Remove the U-bracket that is welded to the outside of the frame at the centerline. Next, trim off the outer flange of the frame flush with the side of the frame for a section of 3-3/4" (1-7/8" forward and rearward of the centerline). See figure 3.
 6. Next start fitting the crossmember. Slip the crossmember up onto the frame, centering it on the scribed spindle centerline. See figure 4. If it does not quite fit onto the frame, slightly grind the upright ends of the crossmember until you can get it into place. Make sure that the crossmember is fully seated on the underside of the frame. Tack weld in place, double check the location and weld in place, welding all around both ends, top, sides, and the underside of the bottom of the frame.
 7. Next are the spring towers. They sit on top of the frame rails. They are prefitted for your frame and are located as shown in figure 5. They are 1-7/8" forward from the front of the crossmember, measuring as shown in figure 5. The high side of the spring tower goes towards the front end of the frame. Clamp in place, double check your dimensions, and 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.
- If you are using stock components, you will need to install strut rod brackets, 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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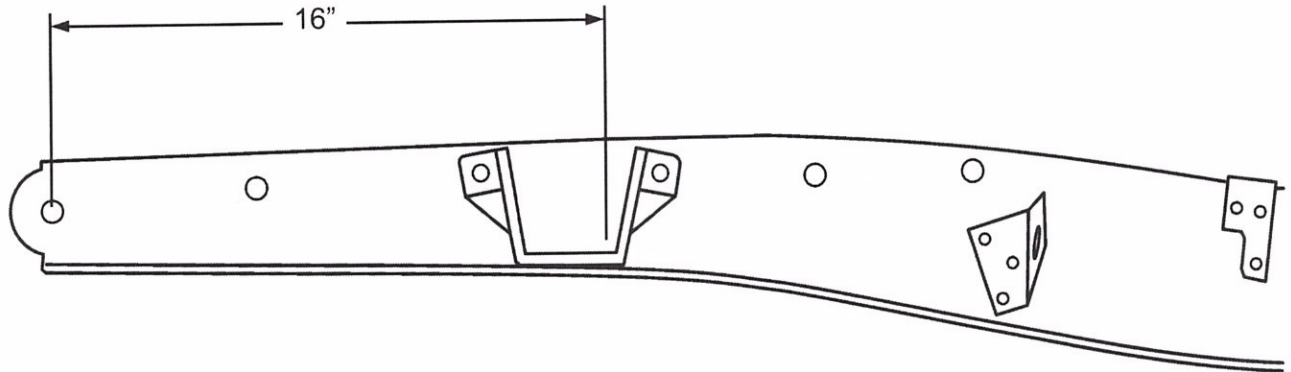


Figure 1

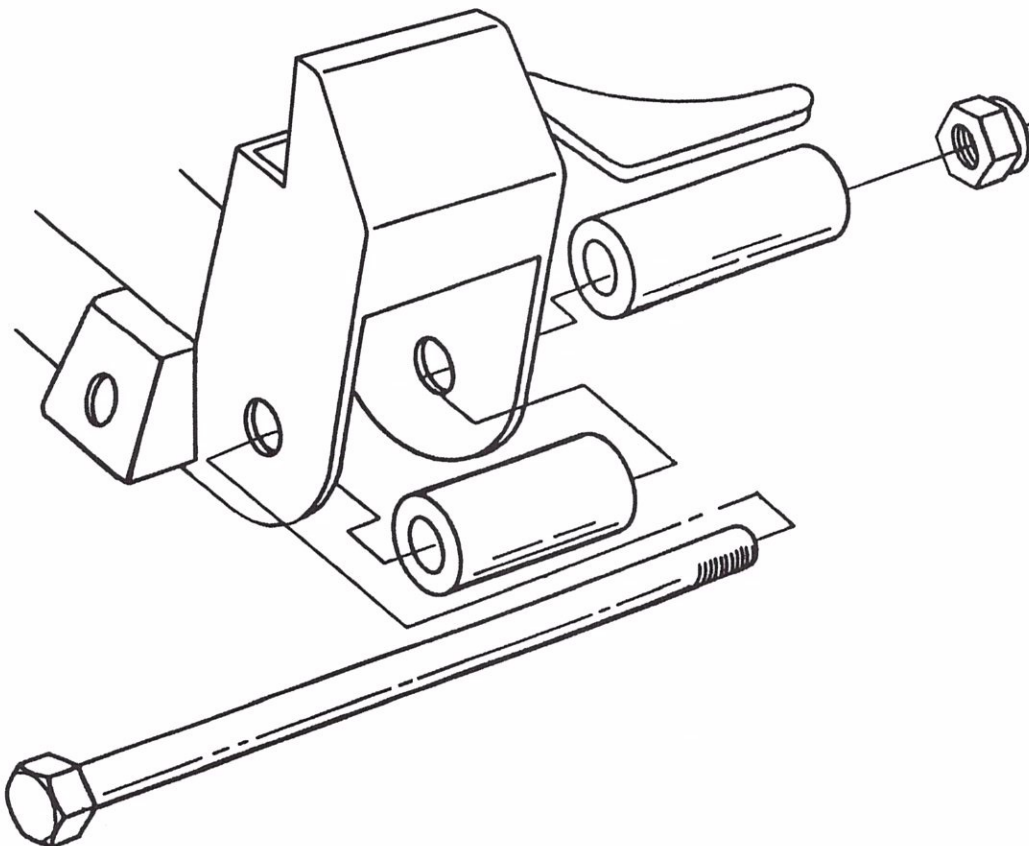


Figure 2

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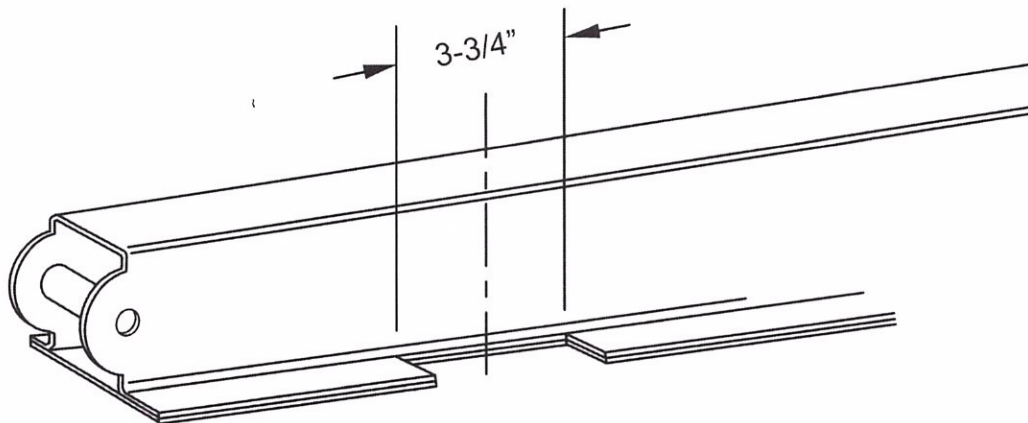


Figure 3

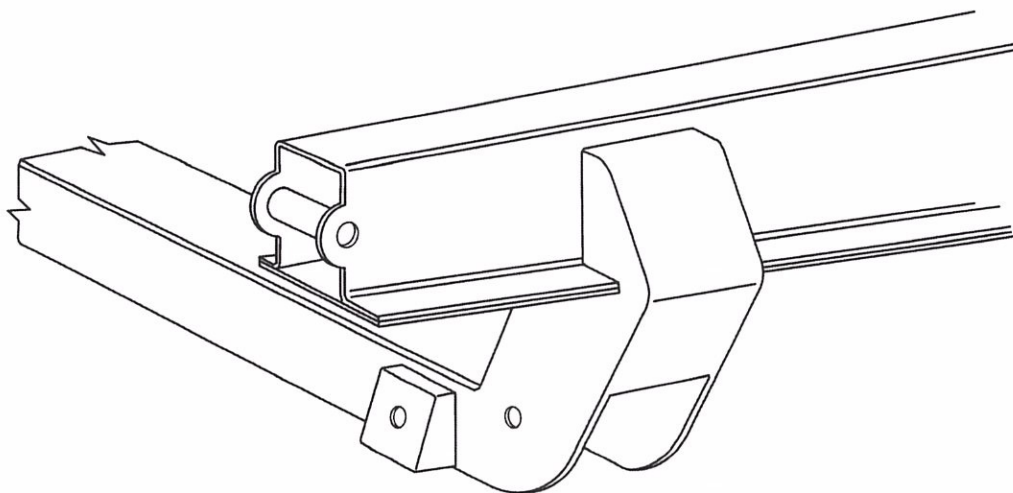


Figure 4

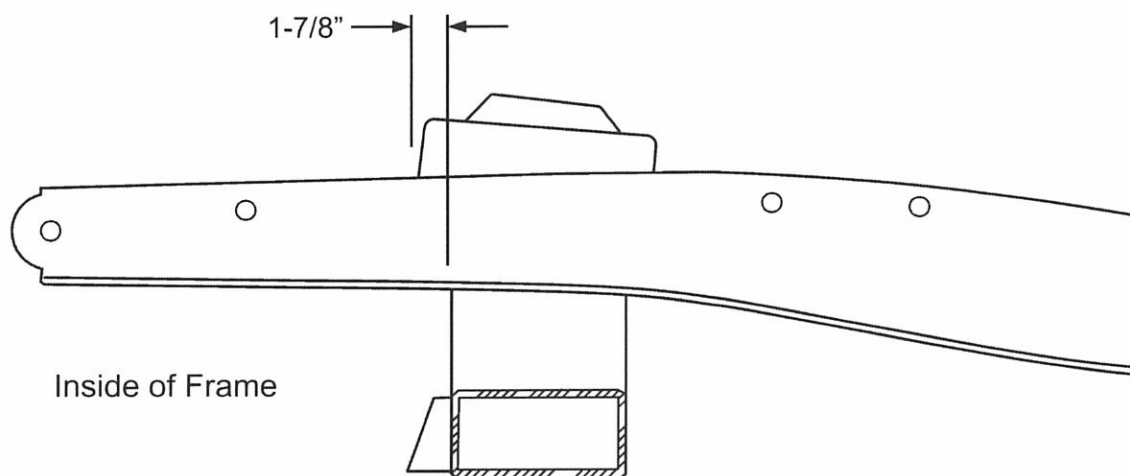


Figure 5

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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.

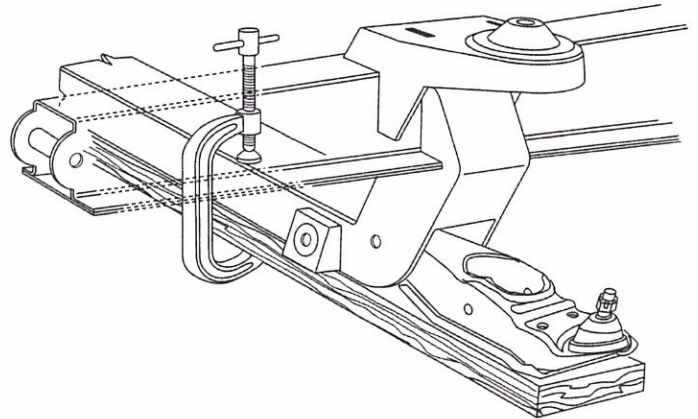


Figure 6

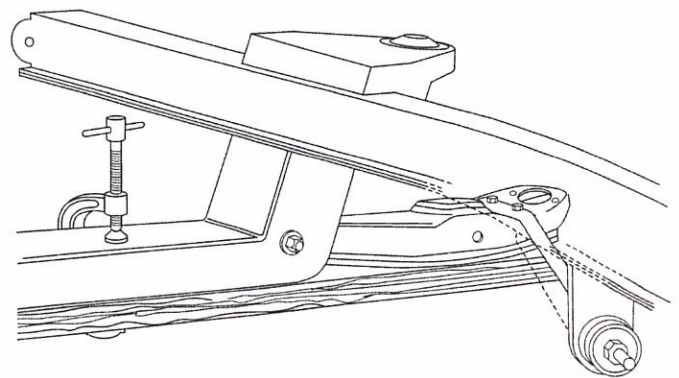


Figure 7

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 to 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.

That's all there is to it. Go ahead and finish the assembly of the rest of the suspension components. After the rest of the car 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 the car still sits too high, you may need to 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 are available. If you have any questions during or after the installation, feel free to call us for technical assistance.

