

INSTALLATION INSTRUCTIONS 1955-1959 CHEVY PICK-UP INDEPENDENT FRONT SUSPENSION

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



You are about to install your *HEIDTS* suspension system. You are probably wondering how complicated installing a complete I.F.S. system really is, with all those pieces, all the angles, anti-dive, geometry ...Don't worry. The *HEIDTS* I.F.S. kits are designed so all that is taken care of for you. Just follow the instructions step by step, reading each step completely, and in a very short time your car will be sitting on the nicest riding I.F.S. kit available.

1. First, remove all stock components. Any suspension brackets, steering or shock brackets that are welded to the frame should be taken off and the rails ground smooth.

2. Boxing the rails is next. The flange on the left rail should be flattened where the old steering box was mounted and made straight and true. The boxing plates are to stand square on the lower rail flange. The frame rail top edge should be ground straight so the boxing plates fit tight to the rail edge. Do not grind too much off the rails. The boxing plates are then clamped in place, with the front end of the plates against the back of the stock crossmember. Weld short sections at a time in alternating locations to minimize warpage. It is also a good idea to clamp a bar clamp across the rails to hold them in position during welding. Grind smooth when done.

3. Measure back 20-7/8" from the center of the front spring shackle hole in the frame and scribe a line around the rails. See Figure 1. This will be the spindle center line, where the front wheels will be. As a final check, just to be safe, you could temporarily place a fender on the frame and stand a wheel in place in the opening, centering the wheel in the fender opening. Slide a bar or broom handle through the wheel center hole. It should fall on your correct axle center-line. If the crossmember is installed in the wrong place now, it can not be compensated for later. REMEMBER THE BA-SIC RULE-MEASURE TWICE, WELD ONE.

4. Trial fit the new crossmember onto the rails. It should be located with its centerline on the marked spindle centerline. See Figure 2. During boxing, the rails may have a tendency to bow outward slightly, if they were not clamped across the frame during welding. If there is a small gap, center the crossmember and fill with weld. If there is a large gap, the rails may be undersize from grinding too much material off the edges of the rails fitting the boxing plates. If this is the case, a spacer or filler plate may be required. If the crossmember is too wide and does not fit in, grind it to fit snug. It should be seated flat on the top of the frame rails. Clamp in place, double check your measurements, making sure crossmember is squared on the frame, then weld in place. Tack weld the top and bottom of the crossmember at this point. Proceed to step 5 & 6, trial assembling all the stock components and checking the alignment. If all goes well, then remove the parts and finish weld the crossmember in place. Be sure to fully weld the crossmember and upper shock mounts to the frame rails, as the front end weight of the truck is supported by the upper shock mounts and the crossmember helps to keep the front frame rails from twisting and flexing, so good strong welds are required.

5. The rack and pinion must now be fitted to the frame. The rails will need to be C-notched to clear the rack boots, see Figure 3, and the rear portion of the factory crossmember will also need to trimmed to clear the rack housing. Do not cut too much off the factory crossmember as it provides much strength to the front of the frame rails. This is a trial

and fit process, so take it in small increments, cutting the rails first to fit the boots and then the crossmember until the rack can be placed up to the mounts on the crossmember. The C-notch pieces supplied with the kit can then be used to close in the C-notch.

6. Now assemble the rest of the suspension components. Some inner fender modification may be required. (Note: The shim washers supplied may be needed to center the calipers on the rotors if you purchased the Polished Caliper upgrade). Do not install the coil-over assemblies just yet. Position the truck at approximately the ride angle or rake that the truck will sit at when finished. 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° positive CAMBER 1/4° positive TOE-IN 1/8 +/- 1/16

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 caster. Approximately 1° of caster is built into the cross member 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 truck to your driving style. 1° of caster will give a nice road feel and good low speed driveability. 2° or 3° 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 truck your own truck. Just be sure that both sides have equal caster settings, or the truck will tend to pull to one side.

7. Now relax the suspension and Install the coil-overs. The spring seat rings should be in the bottom position, providing the least amount of preload. The truck should now be placed on the ground. The spring seat rings should be adjusted to position the ride height of the suspension so the lower control arms are back to level again. Make sure that at this point you are working with a finished, fully weighted truck, not just a frame, or a frame and body, as it does make a difference. At this point do a quick double check of your alignment.

8. Since you are now to the point where you have a finished, running truck (we hope!) it is time to test drive it. After a few hundred miles, double check the ride height and the alignment. The springs may have settled, which would change the ride height and the camber setting. Re-adjust the ride height before changing the alignment. After this initial setting period, the springs and bushings should have pretty much taken their final set, so you should be on your way to many miles of cruising in style, independently.











Figure 3



1-800-841-8188 Illinois (847) 487-0150

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