## HEIDTS SUPERIDE II

## INSTALLATION INSTRUCTIONS 1937-1939 CHEVY 1940-1948 CHEVY 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 IFS system really is, with all those pieces, all the angles, anti-dive, geometry... Don't worry. The *HEIDTS* IFS kits are designed so all that is taken care of for you. Just follow the instructions step by step and in a very short time your car will be sitting on the nicest riding IFS kit available.

## Please note: If you are installing the SUPERIDE I.F.S. in a 1937-1939 Chevy, start at step 1. If you have a 1940-1948 Chevy, you can skip to step 4.

- 1. Start by supporting the car on 4 jack stands. The car should be sitting at approximately the same angle as it does on the ground, or slightly lower in front.
- Remove all the stock components. Note that on the underside of the frame are the two rubber axle snubbers. Directly above the snubbers are two holes in the top of the frame. Mark these upper holes for later reference and remove the snubbers.
- 3. The stock front crossmember must be trimmed next. Refer to Figure 1 to see what to trim off. A cutting torch works best for this; however, a saw or plasma cutter could be used. In addition, the flanges on the underside of the frame rails which were attached to the trimmed off crossmember section should be trimmed off also. Note that the frame shown is a parallel leaf, solid axle type front end. The knee action front crossmember should be trimmed in a similar manner. See Figure 2.
- 4. On a 1940-1948 Chevy, simply unbolt and remove the entire front suspension assembly from the frame, including the stock crossmember. There are the snubber holes under the front crossmember for the next step.
- 5. Using the rubber snubber holes from the previous step, make a line mark on the frame 1/2" back. Scribe those line marks around the frame rails. Those scribed lines represent the centerline for the new crossmember, which is the axle centerline. See Figure 3.
- 6. The flange on the inside of the frame rails must be trimmed off in the area of the new crossmember. Trim off the flange for a 3" length, 1 1/2" forward and rearward of the of the centerline mark. See Figure 4.
- 7. Trial fit the new crossmember up into the rails. It should be centered on the marked axle centerline. See Figure 5. If it does not fit, grind the sides of the crossmember until it fits in place. Make sure it is fully seated on the underside of the actual frame lower surface and not the remaining flange of the old front crossmember section you trimmed out. It should be seated flat against the bottom of the frame rails. Clamp in place, double check your measurements, making sure the crossmember is squared to the frame, then weld in place. Weld all around, top, sides and bottom. This crossmember keeps the front frame rails from twisting and flexing, so good strong welds are required
- 8. The upper control arm mounts are next. See Figure 6. They are positioned with the anti-dive angle of the upper arms higher in front, as shown. The upper mounts should line up with the main crossmember and should contact the entire top of the main crossmember. If the upper mounts do not fit up to the crossmember, grind the edges of the mounts where they sit on the frame. If there is a gap between the frame and the upper mounts, grind the edge where the upper mounts contact the crossmember. Care must be taken, however, to grind an equal amount off the entire edge so the angle of the upper mounts is not changed. Again, they should appear to be an extension of the crossmember. Now check the dimension across the upper mount tubes. That dimension should be 28 <sup>1</sup>/<sub>8</sub>". It is more im-

- portant that the tubes be parallel and square as viewed from the top than exactly that dimension. See Figure 7. Again, cross measuring, squareness and accuracy cannot be overstressed at this stage, as the closer the installation is at this point, the easier your final wheel alignment will be. Good strong welds are also required here, as the weight of the car hangs on the upper coilover mounts.
- 9. 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. Position the car at approximately the ride angle or rake the car 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"+/-1/8"

- 10. 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 driveability. 28 or 30 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.
- 11.Next, 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 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, not just a frame, or a frame and body. At this point do a quick double check of your alignment.
- 12.Since you are now at the point where you have a finished, running car (we hope!) it is time to test drive it. After a few hundred miles, double check the ride height and alignment. The springs may have settled, which would change the camber setting. Readjust the ride height before changing the alignment. After this initial settling 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.

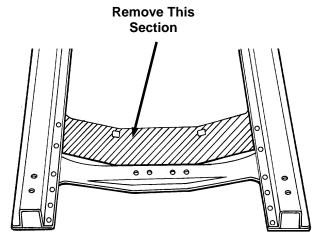


Figure 2 Snubber Hole

Figure 1

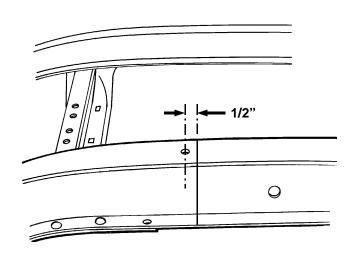


Figure 3
Outside of Frame Rail

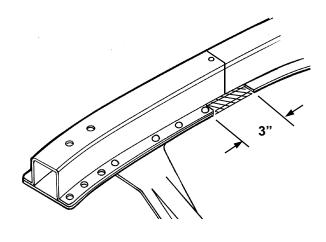
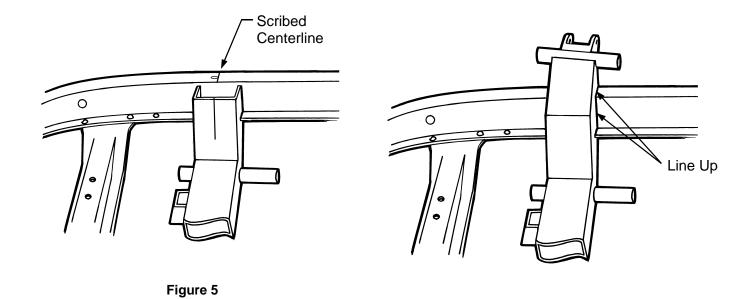


Figure 4
Inside of Frame Rail



28 1/8" ±1/8"

Figure 7



Figure 6