## HEIDTS

## INSTALLATION INSTRUCTIONS `67-`69 CAMARO SUBFRAME

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



Start by removing the engine, transmission, radiator and all front end sheetmetal. Retain all body shims for reuse in aligning body panels. Support body on jackstands allowing clearance for removal of stock subframe. Remove body mount bolts and pull subframe out from under body. Now is the time to give the firewall and floor pan some cleaning and detailing.

Install new subframe using new body mounts. See Figure 1. Final alignment of subframe to body will be performed later when sheetmetal is installed.

Following Figure 2, assemble the components onto the PRO-G Subframe. Install lower control arms using  $5/8 \times 9$ " (rear) and  $5/8 \times 4$ " (front) bolts, washers and nylock nuts. Install upper control arms using  $5/8 \times 10-1/2$ " bolts, washers and nylock nuts. Install spindles to control arms using castle nuts and cotter pins. Attach steering arms to spindles using  $1/2 \times 1-3/4$ " grade 8 bolts. Steering arms should face to the front of the car. The rack and pinion can now be mounted using the  $5/8 \times 3-1/2$ " bolts and flanged lock nuts. Install outer tie rod ends and jam nuts to rack and attach to spindles with supplied castle nuts. Final alignment will be performed later.

Attach sway bar assembly to front of crossmember using mounting blocks and 3/8 x 2-1/2 socket head cap screws. Attach sway bar end links to control arms with 1/2" bolts and nylock nuts (supplied with sway bar kit). Install the brake caliper brackets onto the spindles using the 5/8" and 1/2" bolts supplied, using Wilwood instructions supplied with brake kit. Assemble and install brake rotors and calipers to spindles. The billet calipers use the supplied shim washers to center them on the rotors. Use some type of thread Loctite on the caliper bracket and caliper bolts. Brake lines should be routed and fastened at this time.

Temporarily prop up the lower arms so they are level. A fabricated link with 1/2" holes drilled 11-1/2" apart in place of the coil-overs works best for this operation. This is the designed ride height of the suspension. Center the rack travel, then you can rough in the alignment at this point. Set the caster, camber and toe in to the following alignment settings:

Caster 4<sup>°</sup> Positive Camber 1/4<sup>°</sup> Positive Toe In 1/8" ± 1/8"

The caster and camber are set with the adjusters in the upper arms. Screw both adjusters in equally to change camber, or opposite to change caster. There is  $4^{\circ}$  of caster built into the crossmember. This caster setting is for normal street driving. For high performance driving, you can use  $5^{\circ}$  or  $6^{\circ}$  caster. Swing the control arms down and install the coil-overs using  $1/2 \times 2 \cdot 1/2^{"}$  bolts and nylock nuts at top and  $5/16 \times 1 \cdot 1/4^{"}$  bolts and nylock nuts in the lower arm mounts. The spring seat adjustment nuts should be in the bottom position, providing the least amount of preload. It is a good time to install your steering column and headers now, as it is easier to work on the steering column connection to the rack & pinion before the sheet metal is in place. *HEIDTS* has available a Steering Column Hook-Up Kit which has everything you need to complete this connection.

Engine and transmission can now be installed. Locate the trans crossmember to line up to the trans mount. Bolt crossmember in place with the 3/8" x 1" bolts and lock nuts supplied. Reinstall front sheetmetal and core support and align all body panels. Readjust alignment of subframe to body as required and tighten all bolts when alignment is complete. Install the front wheels and place the car on the ground. The springs will need a little time to settle out. The lower control arms should be level. If the car is too low, you can adjust the spring seat adjustment nuts upward. If the car is still low, you may have to change springs.





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

Rev. 12-20-07

© HEIDTS Hot Rod Shop 2007 IN-140