INSTALLATION INSTRUCTIONS

1962-1967 Chevrolet Nova

Mustang II Independent Front Suspension

Please read these instructions *completely* ***before*** starting your installation.

Assemble suspension on vehicle before powder-coating to ensure proper fitment, and to make modifications if necessary.

For questions on installations please call 800-841-8188 In Illinois (847) 487-0150

PARTS LIST

1) Mustang II Nova Subframe
2) Spindles
2) Upper Control Arms
2) Lower Control Arms
2) Springs
2) Subframe to Firewall Support Tubes
1) Sway Bar
1) Power Rack & Pinion
2) Front Shocks
1) Wilwood Brake Kit

HARDWARE PACKAGE

2) Firewall Shim .047
2) Firewall Shim .135
8) ½-20 Nylock Nut
8) ½-20 x 1 ¼" Grade 8 Hex Bolt
16) ½" Washer
10) 3/8-16 x 1" Hex Bolt
10) 5/16 Washer
4) 7/16-20 x 1" Hex Bolt
4) 7/16 Split Lock Washer
4) 7/16-20 x 1 ¼" Hex Bolt
4) 7/16 Washer

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) Begin your installation by jacking up your vehicle and supporting it on sturdy jack stands. The stands must be placed on the flat section of the frame rails close to the front body mounts. First remove the front bumper grill and core support. Disconnect and remove the engine and transmission. SAVE AND LABEL ALL FASTENERS FOR RE-INSTALLATION! Remove the front wheels and shocks. Disconnect the brake lines and tie-rods . Unbolt the factory subframe from the firewall. The subframe can be removed as one whole assembly. See **Figure 1**.

Figure 1

Figure 2

2) After removing the factory subframe, the eight mounting holes on the firewall must be drilled to $^{1}/_{2}$". See **Figure 3**.

Figure 3

3) Install HEIDTS Mustang II Subframe (HEIDTS tag facing the front). Use a floor jack underneath the crossmember to align the mounting holes of the subframe to the drilled out ½" firewall holes. Use the ½-20 x 1 ¼" Grade 8 bolts, $^{1}/_{2}$"-20 nylock nuts and ½" washers to ***snug*** the subframe to the firewall. DO NOT TIGHTEN until the support tubes are installed. See **Figures 4 and 5.**

Figure 4

Figure 5

4) At this point the subframe is bolted snug to the firewall. The reason is for alignment of the subframe you are about to do next using the support tubes and shims provided in the kit. Begin this step with a level on the outer frame rail of the vehicle. See **Figures 6 and 7.** Level the vehicle to 0 using shims underneath the vehicle between the jack stands. Check Both driver and passenger sides. Now, level the subframe to 0 using the support tubes and shims. Use the 3/8-16 x 1" bolts and washers for the firewall, and 7/16-20 x 1" grade 8 bolts and lock washers for the subframe. Once the subframe is level tighten ALL bolts. See **Figures 6-11**.

Figure 6

Figure 7

Figure 8

Figure 9

Figure 10

Figure 11

5) After the subframe is level and secure to the firewall, the lower control arms can be installed. Install the lower control arms using the 5/8-11 x 13” hex bolts, washers and nylock nuts in the

control arm hardware kit. Sway bar tab should be towards the front of the vehicle. See **Figures 12 and 13**.

Figure 12

Figure 13

6) Install the upper control arms using the 12 mm T-Bolts and 12 mm flanged lock nuts from the control arm hardware kit. Ball Joint grease fittings may be also installed at this point. See **Figures 14 and 15.**

Figure 14

Figure 15

7) Install the spindles onto the lower ball joints. Use the stainless steel ball joint spacer in the hardware kit as shown in **Figure 16**. This is a good time to install the coil spring insulator shown in **Figure 17**.

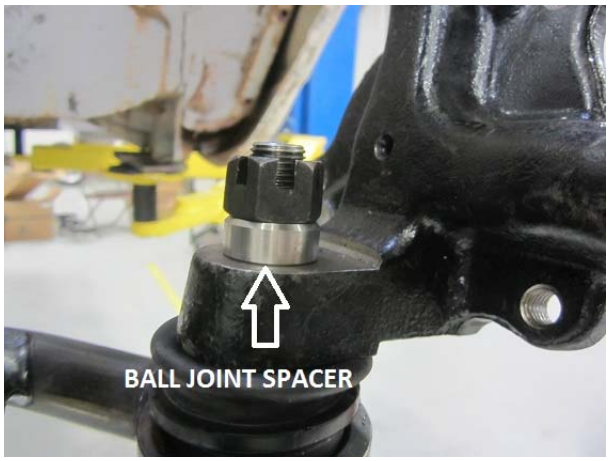

Figure 16

Figure 17

8) The coil springs may be installed next. Use a spring compressor to compress the coil springs to be installed in the spring pockets and squeezed in by the lower control arm. Once the compressed spring is seated in the spring pocket and lower control arm, raise the lower control arm with a floor jack and connect the upper ball joint to the spindle. See **Figures 18-20**.

The springs will be completely seated roughly around 500 miles of driving

Figure 18 **Figure 19**

Figure 20

9) Install the shock absorbers as shown in **Figures 21-24**. Place the washer and rubber grommet onto the shaft of the shock absorber. Use anti-seize on the lower shock mount 7/16-14 bolt. Install the shock absorber through the coil spring and install the grommet and washer on top of the spring hat. Tighten with the 3/8 lock nut. Compress the shock until the shock mounts are flush on the lower control arm. Thread the 7/16-14" bolt through the shock mounts to fully install the shock absorber. See **Figures 21-24**.

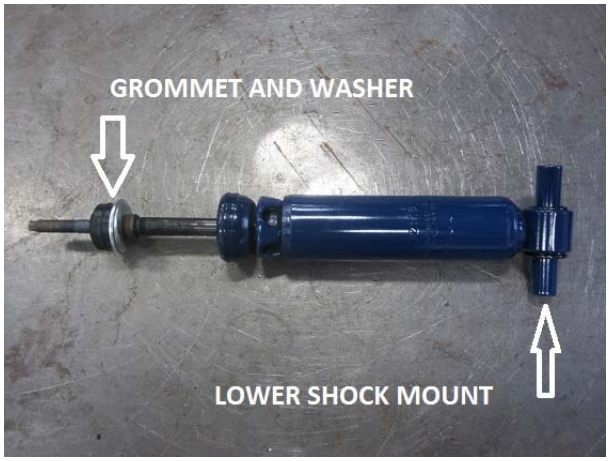

Figure 21

Figure 22

Figure 23

Figure 24

10) After the springs and shocks are completed, the rack and pinion can be installed. Use the 5/8-11 x 3” hex bolts, flanged lock nuts and rack mount spacers to mount the rack and pinion to the subframe mounts. Connect the outer tie rod ends snug to the spindle for wheel adjusting wheel alignment later. *** USE ANTI SEIZE ON OUTER TIE ROD THREADS***.See **Figures 25-27**.

Figure 25

Figure 26

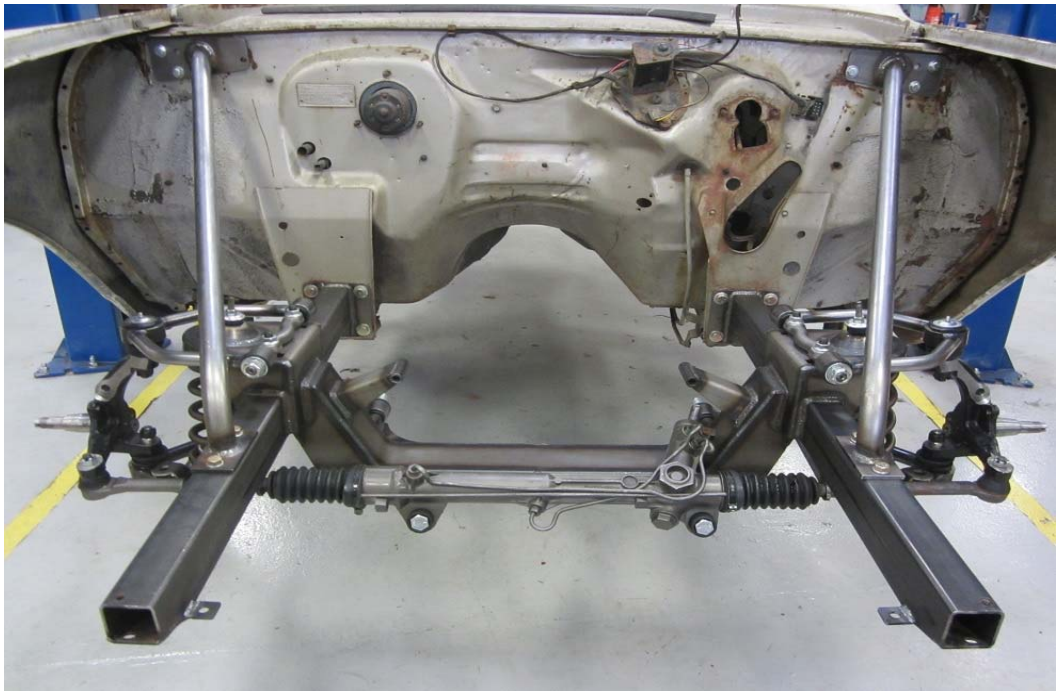

Figure 27

11) The front sway bar is the last part of this installation. Mount the sway bar using the end links and bushings provided in the sway bar kit. Install the sway bar frame bushings prior to the end links (**See Figure 28**). Attach the sway bar to the links and mount the links to the lower control arm mounts. See **Figures 28 and 29**.

Figure 28

Figure 29

12) Once the end links are bolted down, clamp the sway bar frame mount bushing to the frame as shown in **Figure 30**. Center punch the slotted tabs in the center with a 3/8" center punch *on the front slot only*. Center punch the hole, measure 2 7/8" back to punch the back mounting hole. This is for ease of the u-bolt installation. See **Figures 30 and 31**.

Figure 30

Figure 31

13) Use a pilot drill on the center punched holes and drill to 13/32". Repeat this step for the other side. Install the threaded U-bolts into the subframe. Connect the sway bar bushings to the threaded U-bolts and tighten down with the 3/8" locknuts. See **Figures 32 and 33.**

Figure 32

Figure 33

14) This completes the installation of the Heidts Mustang II Nova subframe. Make sure all nuts and bolts are tight before the wheels are installed and the car is on the ground. Lastly, you are ready to set the alignment of your vehicle. Be sure to do so with the lower control arms set at ride height (the lower control arms should be level). 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. 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. 3° of caster will give a nice road feel and good low speed drive-ability. 4° or 5° 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. Just be sure that both sides have equal caster settings, or the car will tend to pull to one side.

15) Refer to IN-078 to install the front core support, inner fender panels and hood hinge brackets.

Alignment Specifications:

Caster: 3° Positive (Power) 2° (Manual)

Camber: - .5° Negative

Toe: 0 - 1/16 Toe-In/Out

Since you are now to 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 the alignment. The springs may have settled, which would change the ride height and the camber setting. Readjust the ride height before changing the alignment. After this initial setting period, the springs and bushings should have taken their final set, so you should be on your way to many miles of cruising.