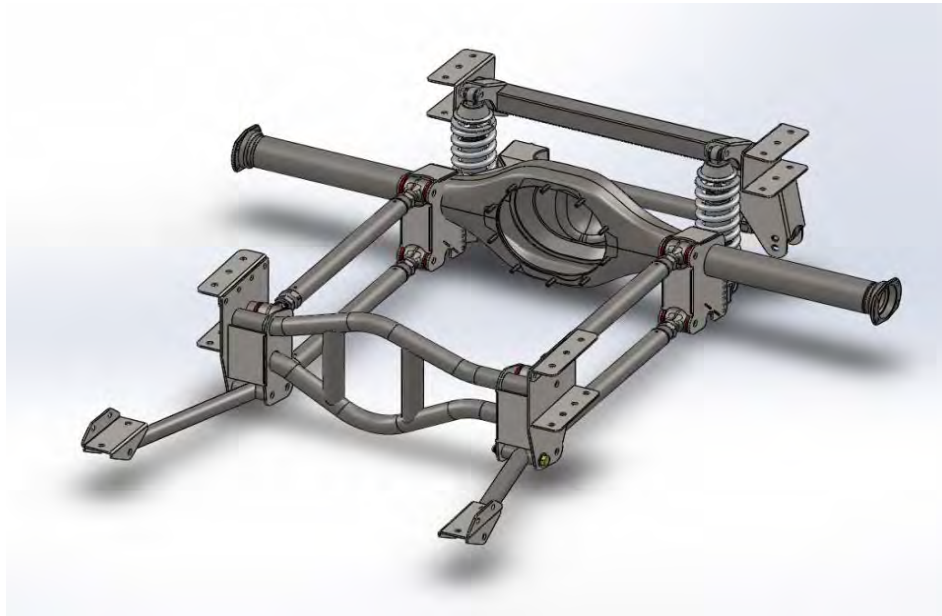




INSTALLATION INSTRUCTIONS

'65-72 F-100

4-Link Rear End



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) Forward Crossmember | 4) Control Arm Links |
| 1) Drivers Side Axle Bracket | 1) Passenger Side Axle Bracket |
| 1) Panhard Bracket | 1) Panhard Bar |
| 1) Upper Shock Crossmember | 1) Lower Shock Mount Drivers Side |
| 1) Lower Shock Mount Passenger Side | 2) Forward Struts |
| 2) Adjustable Shocks | 2) Chrome Springs |
| 2) Forward Strut Mounts | |

HARDWARE PACKAGE

- | | | |
|---|--|---|
| 10) $\frac{3}{8}$ Stainless Steel Washers | 44) $\frac{1}{2}$ -20 Nylock Nuts | 28) $\frac{5}{8}$ Washers |
| 12) $\frac{5}{8}$ -18 Nylock Jam Nuts | 4) $\frac{3}{8}$ -24 Nylock Nuts | 84) $\frac{1}{2}$ Flat Washers |
| 2) $\frac{1}{2}$ -20 x 2 $\frac{1}{2}$ Hex Bolt | 42) $\frac{1}{2}$ -20 X 1- $\frac{1}{4}$ Hex Bolts | 8) $\frac{5}{8}$ -18 X 3- $\frac{3}{4}$ Hex Bolts |
| 4) $\frac{3}{8}$ -24 X 3- $\frac{3}{4}$ Hex Bolts | 2) $\frac{5}{8}$ -18 Nylock Nut | 6) $\frac{5}{8}$ -18 x 4 $\frac{1}{2}$ Hex Bolts |
| 2) $\frac{1}{2}$ -20 X 3 12Pt. Flange Head | | 2) $\frac{1}{2}$ -20 12 Pt. Flange Nuts |

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



- 1) Start by jacking up your truck and supporting it on sturdy jack stands. Remove the rear wheels. Remove the bed. Disconnect the drive shaft from the rear end. Disconnect the brake lines and emergency brake cables. Remove fuel tank. Remove the shocks, rear end, springs and any other suspension parts. **BE SURE TO LABEL ALL HARDWARE FOR BED RE-INSTALLATION!** At this point the rear end of your truck should be stripped down to the bare frame.
- 2) Remove the rivets on the frame rails of the two cross members shown in **Figure 1** that needs to be removed. One method of doing this would be to use an air chisel and break the heads off of the rivet. Then use a punch and hammer out or impact drive out the rest of the rivet. The holes must be drilled out to $\frac{1}{2}$ ". See **Figure 1**.



Figure 1

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



- 3) Once the frame is down to bare metal and the cross members are removed, the main front cross member can be installed. There are existing frame holes approximately 8" from the body mount rivets for the cab. These holes will be utilized for the measurement of the cross member. See **Figure 2**.

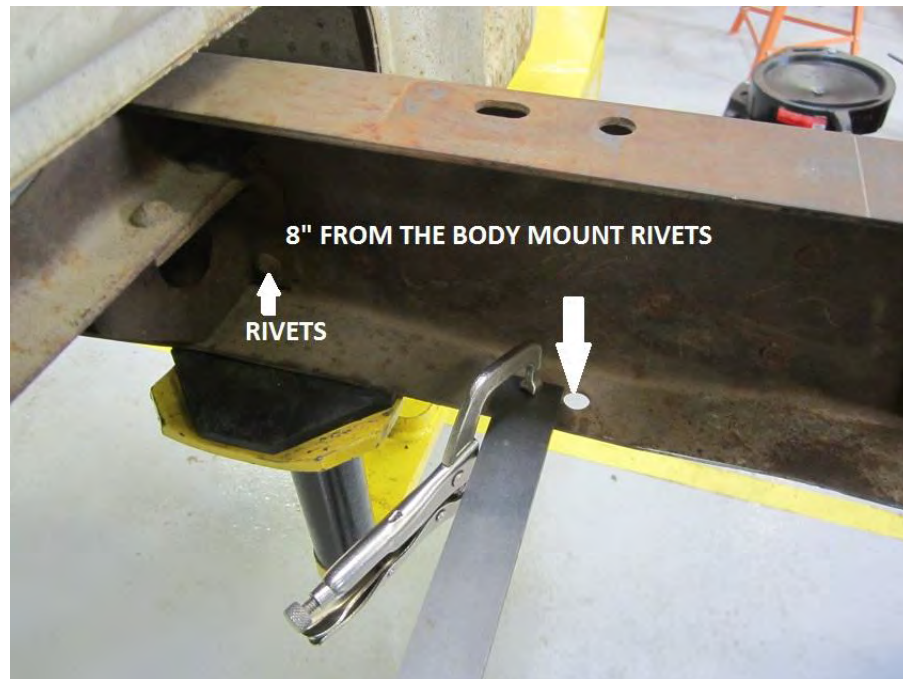


Figure 2

- 4) Place a straight edge at the very front of the holes using clamps to keep it in place. A straight flat piece work perfect for this step. **This is important for the placement of the cross member.** In this instruction we are using a 1 ¼" X ¼" thick flat stock. See **Figures 3 and 4**.

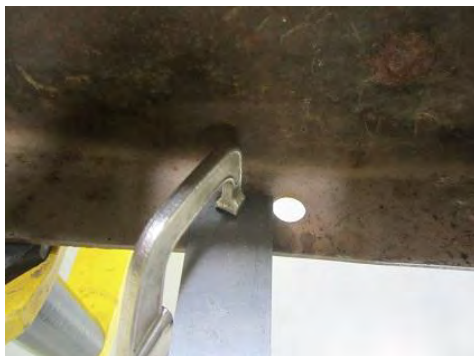


Figure 3



Figure 4

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

- 5) Place the Front Cross Member inside the frame rails behind the factory holes facing the rear of the truck. See **Figure 5**. Measure **2 1/8"** from the four link mount of the cross member to the start of the straight edge. Repeat for the passenger side. See **Figures 6-8**. Measure side to side using a ruler placed at the opposite four link mounting plate to the inside frame rail. Repeat for the passenger side. See **Figure 9 and 10**. The instruction measurement is 28 1/2", however your dimensions may differ due to factory tolerances. Maneuver cross member until it is symmetrical front to rear and side to side.



Figure 5



Figure 6



Figure 7

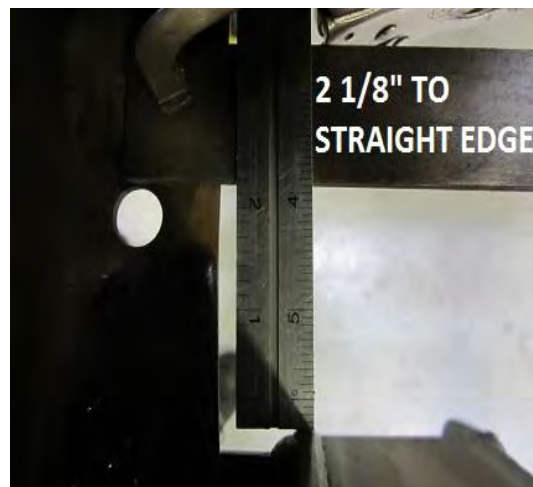


Figure 8

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





Figure 9



Figure 10

- 6) Once the cross member is symmetrical in the chassis, clamp the cross member brackets to the frame. **RE-CHECK THE MEASUREMENTS!** Center punch the $\frac{1}{2}$ " bottom holes to the chassis. After all eight holes are center punched, drill the holes to $\frac{1}{2}$ ". We recommend using a pilot drill prior to drilling $\frac{1}{2}$ ". See **Figures 11 and 12.**



Figure 11



Figure 12

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



- 7) Bolt the bottom of the cross member to the frame using $\frac{1}{2}$ -20 x 1 $\frac{1}{4}$ " grade 8 bolts from the hardware kit. **Tighten all eight bolts.** See **Figure 13**. Using the frame mounting bracket, line up the bracket with the cross member, flushing the ends together placing the bracket on top of the frame. See **Figure 14**. Center punch the $\frac{1}{2}$ " holes, pilot drill and drill to $\frac{1}{2}$ ". Tighten all $\frac{1}{2}$ -20 x 1 $\frac{1}{4}$ " grade 8 bolts. See **Figure 15-18**.



Figure 13

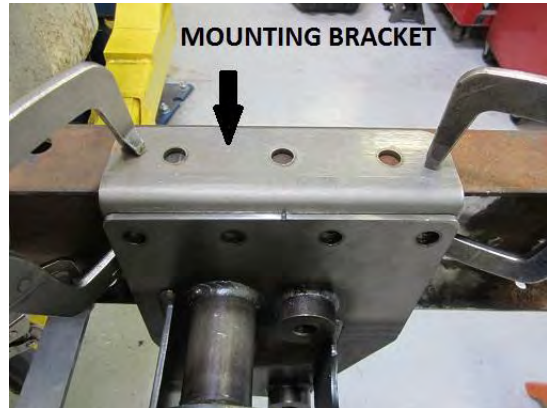


Figure 14



Figure 15



Figure 16

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





Figure 17



Figure 18

- 8) Tighten all cross member to frame bolts. You may remove the straight edge from the frame.
- 9) The two forward struts can be installed next. See **Figure 19**. Install one forward strut on the drivers side. Bolt the strut to the forward cross member using 5/8-18 x 4 1/2" grade 8 bolt, washers and nylock jam nut. See **Figure 20**. Bolt the forward strut frame mount using 5/8-18 x 3 1/4" grade 8 bolt, washers and nylock nut to the forward strut and clamp the frame mount to the chassis. See **Figure 21**. Center punch and drill the outer 1/2" holes. See **Figure 22**.

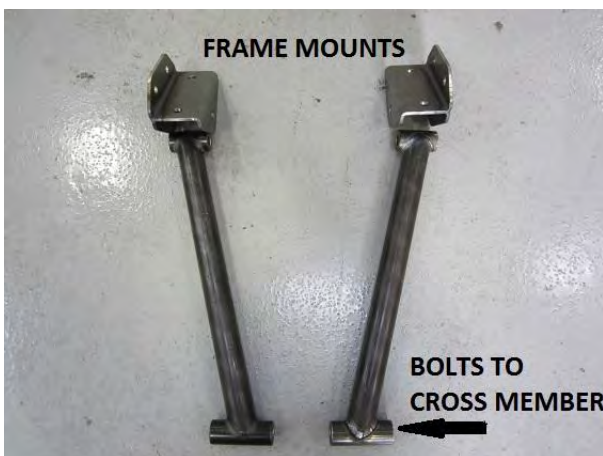


Figure 19



Figure 20

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



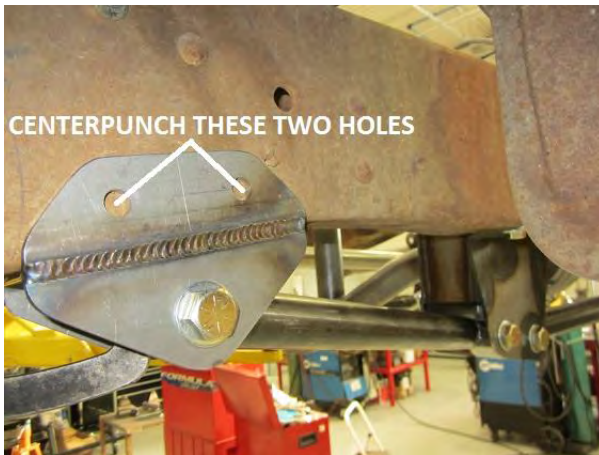


Figure 21



Figure 22

10) Once holes are center punched pilot drill the punched holes $\frac{1}{8}$ " and $\frac{3}{8}$ " before final drilling to $\frac{1}{2}$ ". See **Figures 23 and 24**. Bolt the frame mount to the chassis using two $\frac{1}{2}$ -20 x $1\frac{1}{4}$ " grade 8 bolts, washers and nylock nuts. Uninstall the forward strut from the frame mount and center punch the bottom two holes. See **Figure 25**. Repeat the drilling steps and bolt the frame mount to the chassis **FINGER TIGHT** using $\frac{1}{2}$ -20 x $1\frac{1}{4}$ " grade 8 bolts, washers and nylock nuts. See **Figure 26**.

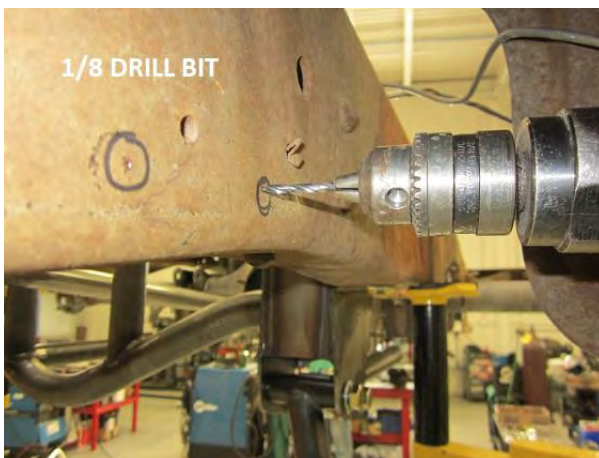


Figure 23



Figure 24

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





Figure 25



Figure 26

- 11) Re-install the forward struts to the frame mounts. Tighten all bolts to the frame mounts and the forward cross member. The forward struts are now installed. See **Figures 27 and 28**.



Figure 27

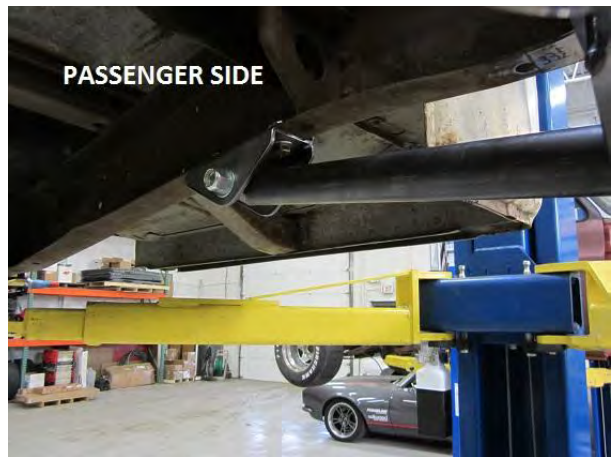


Figure 28

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



12) After the forward struts are completed the rear upper shock mount can be installed. See **Figure 29**. Place the shock mount inside the frame clamping the shock mount a little loose for maneuvering. See **Figure 30**.

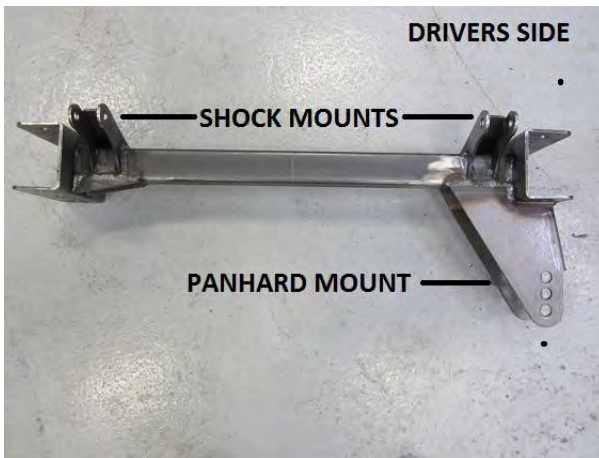


Figure 29



Figure 30

13) Using a ruler measure from the face of the forward cross member to the face of the shock mount. See **Figures 31-33**. This dimension is 31 1/4". Measure both sides until the shock mount is symmetrical. Clamp the shock mount tight against the chassis, check dimensions, and center punch all six bottom 1/2" holes. See **Figure 34**.

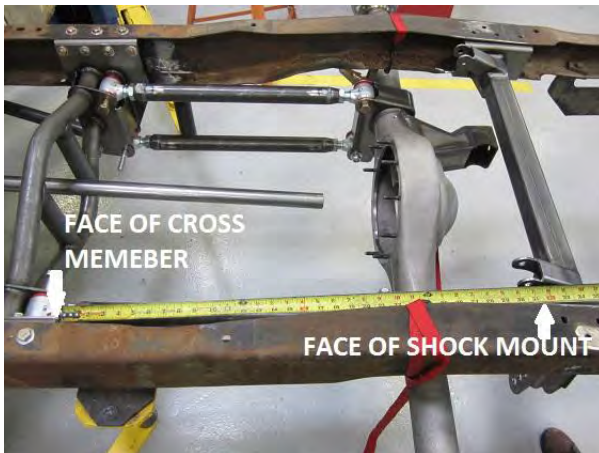


Figure 31



Figure 32

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





Figure 33



Figure 34

14) After all six lower holes are all punched the upper shock mount can be removed. Pilot drill then drill to ½". See **Figures 35-37**.



Figure 35

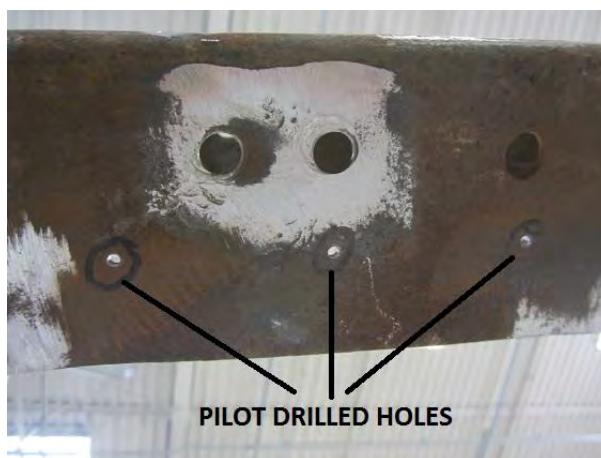


Figure 36



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



- 15) Use the upper shock mount as a templet for drilling the top holes in the chassis. Flip the shock mount upside down so the panhard bracket is now on the passenger side of the chassis. See **Figure 38**. The holes on the bottom of the chassis should line up with the holes of the shock mount. Bolt the lower holes snug and center punch the upper holes. See **Figures 39 and 40**.



Figure 38

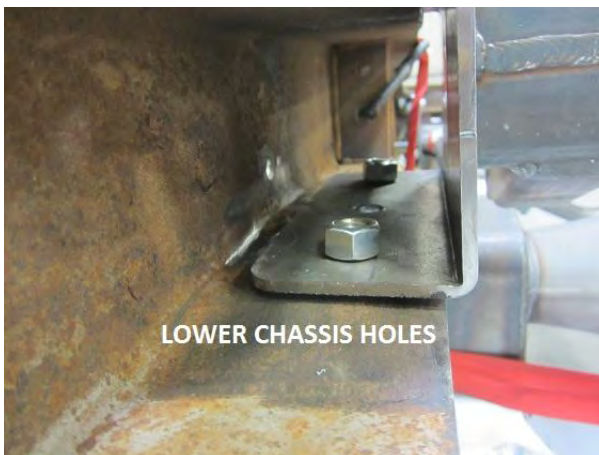


Figure 39



Figure 40

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



16) Pilot drill and drill the top six holes in the chassis for the upper shock mount. See **Figures 41 and 42.**



Figure 41

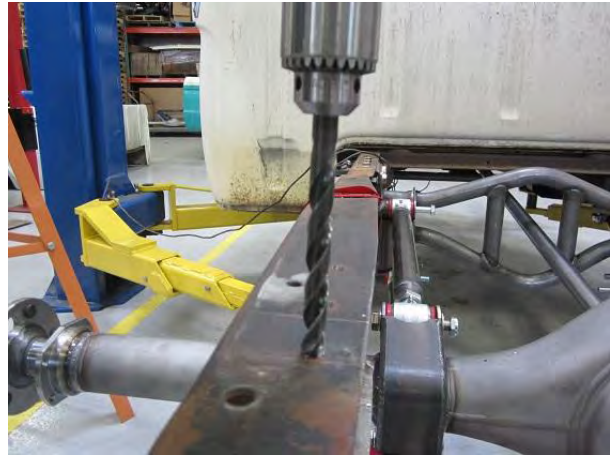


Figure 42

17) After all twelve $\frac{1}{2}$ " holes are drilled install the shock mount using twelve $\frac{1}{2}$ -20 x 1 $\frac{1}{4}$ " grade 8 bolts, washers and nylock nuts. See **Figure 43.**



Figure 43

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



- 18) The next step is installing the upper and lower links. Set all four link bars to 25 1/2" center to center from the bolt holes. This will be the starting point when aligning the rear end. Install the two lower links using two 5/8-18 x 4 1/2" bolts, washers and nylock jam nuts on the cross member and 5/8-18 x 3 3/4" bolts, washers and nylock jam nuts on the rear end housing. Install the Ford 9" housing using stands on each axle tube. **Connect the lower links to the housing finger tight. This will ease installation of the rear sway bar later.** Grease fittings on bushings should be facing up. See **Figures 44 and 45.**

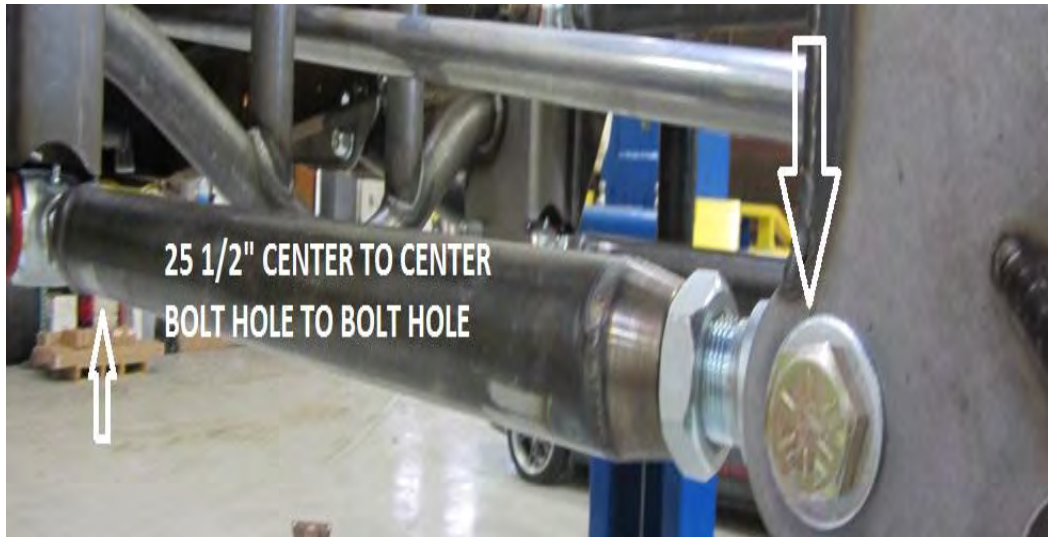


Figure 44

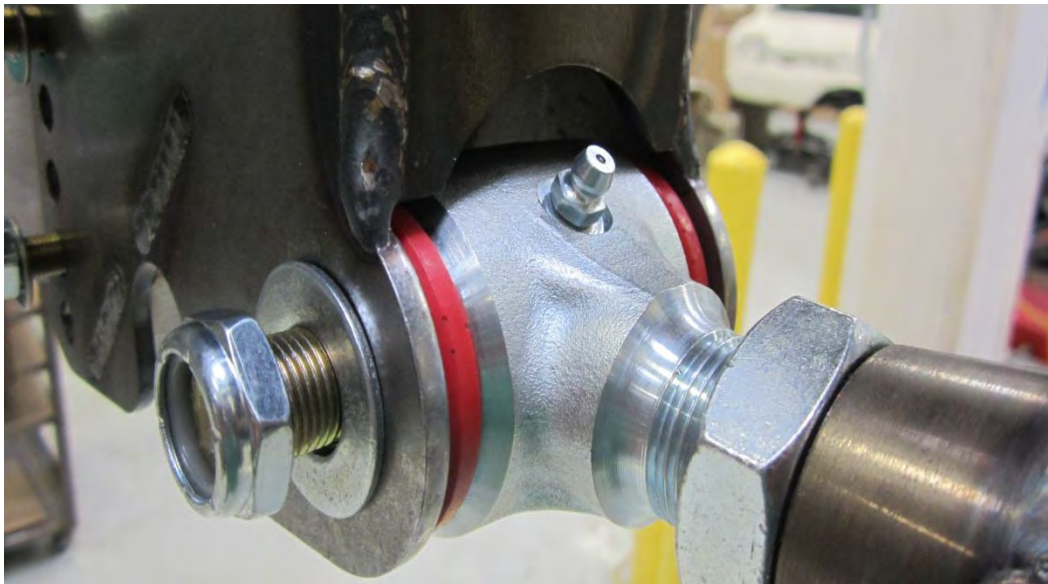


Figure 45

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



- 19) Install the two upper links using two 5/8-18 x 3 3/4" bolts, four washers and two 5/8-18 jam nuts. Grease fittings on the upper link bushings should be facing down. Opposite of lower link grease fittings. See **Figures 46 and 47**.



Figure 46



Figure 47

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



- 20) Set the Panhard bar to 24" center to center from the bolt holes. This will be the starting point when aligning the rear end. Install the panhard bar using two 5/8-18 x 3 3/4" bolts, four washers and two 5/8-18 jam nuts. Grease fittings on panhard bushings should be facing up. See **Figure 48**.



Figure 48

- 21) After rear end housing and Panhard bar are installed, it's time to square the rear end. First using a floor jack or stands lift the rear end housing till the panhard bar and upper and lower links are dead level.
- 22) Now that the rear end housing is level with the panhard bar, you can measure the rear end housing to a hole on the chassis. There are many holes on the factory chassis to utilize, however we are going to use this hole in **Figure 49** to square this rear end housing.

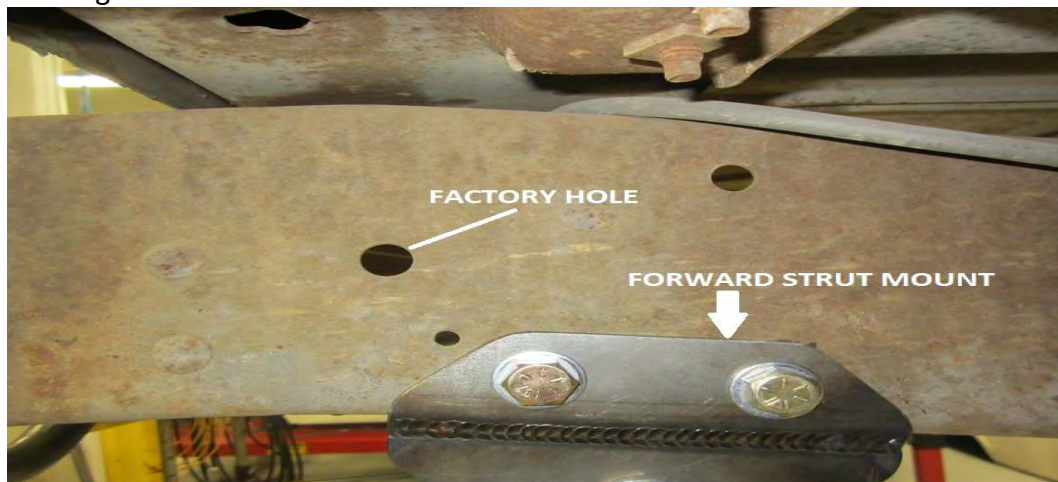


Figure 49

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



- 23) Measure from the front of the axle tube (**Figure 50**) to the start of the factory hole (**Figure 51**). Measure both driver and passenger sides and adjust accordingly using the adjustable links. Due to factory tolerances, this dimension should be in the vicinity of 43 1/16" as seen in **Figure 51**.



Figure 50



Figure 51

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



- 24) To ensure rear end housing is square side to side, we will measure from the chassis to the axle flange. Use a straight edge on the axle flange and a tape measure for this step. Make adjustments from the panhard bar until both driver and passenger side are the same dimensions. Dimensions will vary with different track width rear ends. See **Figure 52** for example.



Figure 52

- 25) *****Install rear sway bar before installing shocks. See IN-184.*****
- 26) Set the shocks at 13 ¼" center to center from the bolt hole. Once the shocks are assembled, install the shocks to the upper shock mount first. See **Figure 53**.



Figure 53

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



- 27) Install aluminum lower shock mount to the rear end housing. Use the 3/8-24 x 3 1/2" grade 8 bolts, 3/8-24 nylock nuts and washers. See **Figure 54**.



Figure 54

- 28) Complete the shock installation by bolting the shock to the lower shock mount using 1/2-20 X 3 12Pt. Flange Head bolts and 1/2-20 12 Pt. Flange Nuts. Make sure adjuster faces towards the rear of the truck. See **Figures 55 and 56**.



Figure 55



Figure 56

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

- 29) Install both shocks so both adjusters are facing out. This is for ease of adjustment.
*****Make sure all nuts and bolts are tightened before driving on the road.*****
See **Figure 57**.

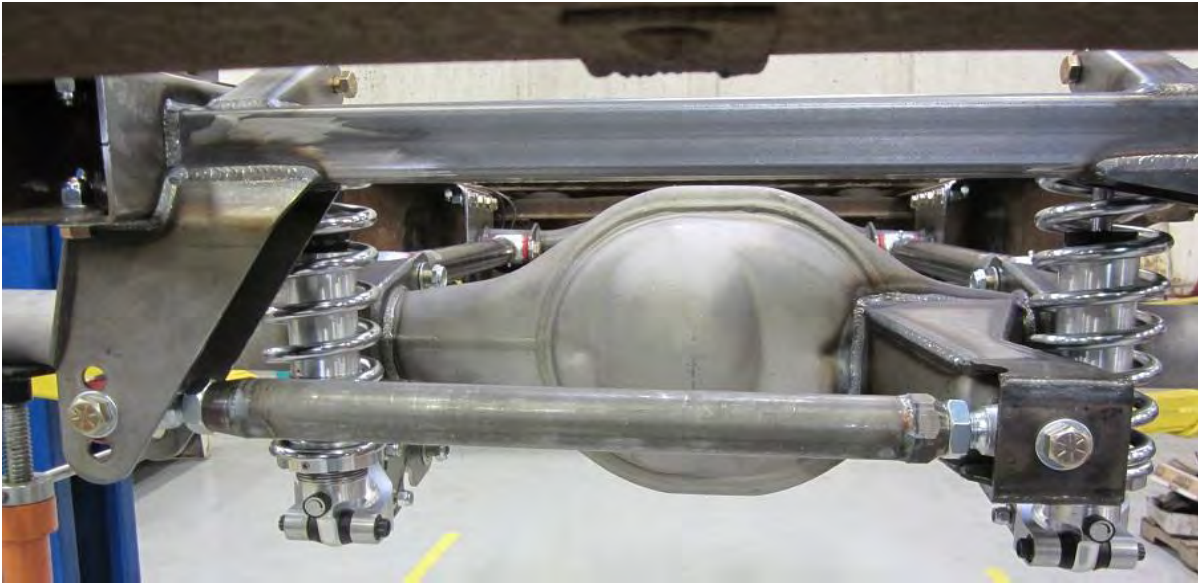


Figure 57

- 30) Install rear end housing bump stops in existing factory bump stop holes. Use the 3/8" washers provided in the kit. Bump rubber may have to be modified for shock travel. For extra rear end housing clearance, remove the shocks and jack the rear end housing up to contact the chassis. Mark with a sharpie where the housing touches the chassis and grind a notch in the chassis for extra clearance. See **Figures 58 and 59**.

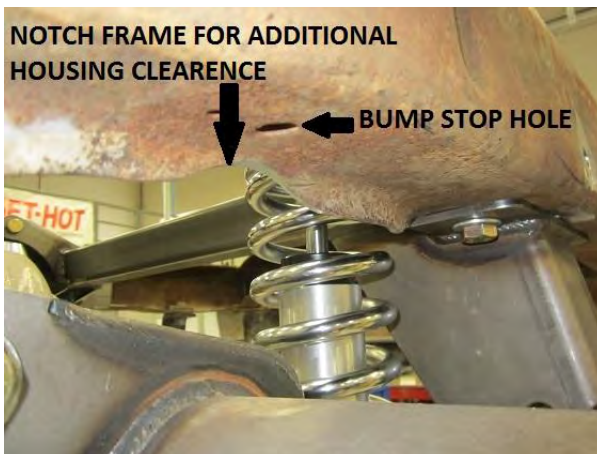


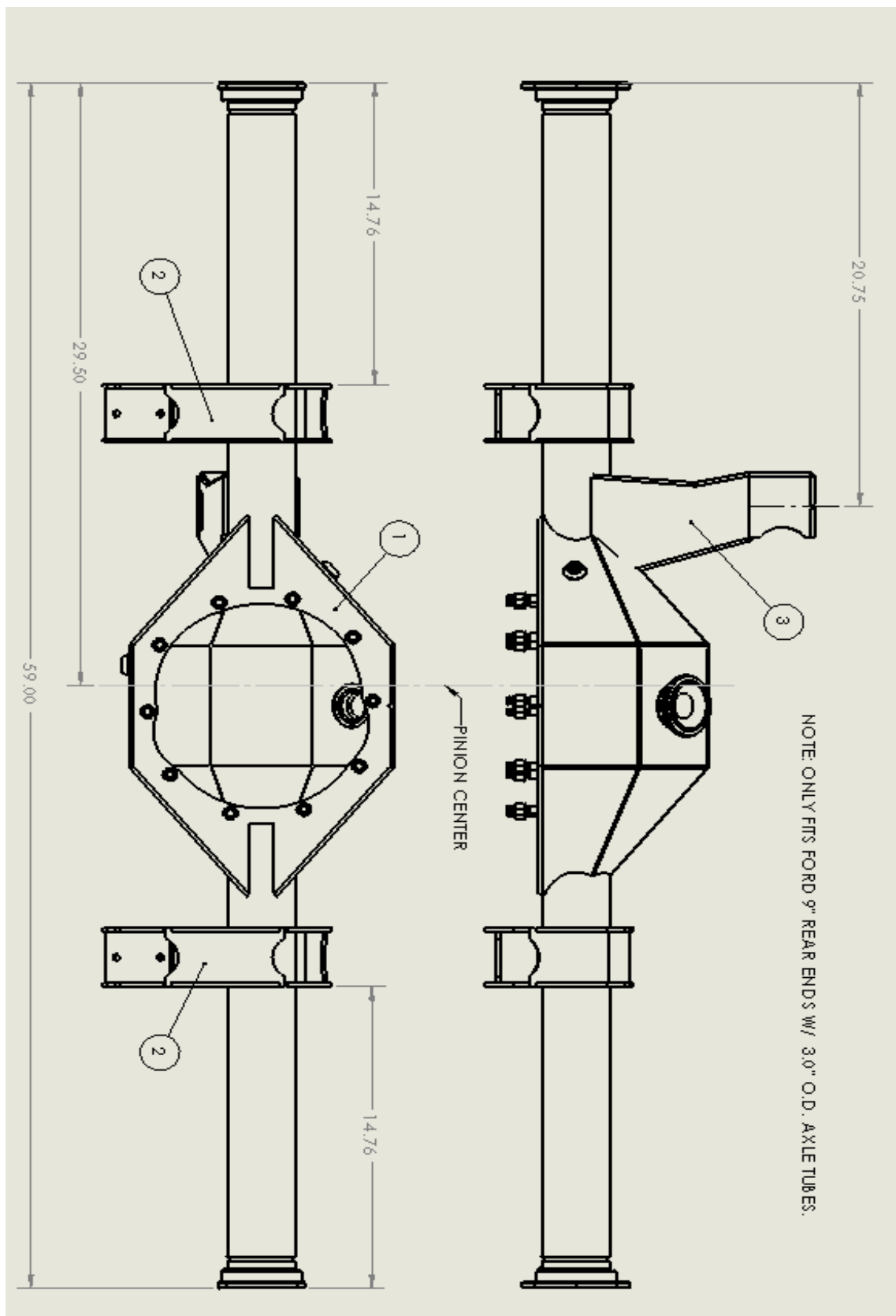
Figure 58



Figure 59

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





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



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. 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.

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

