



'61-'66 Ford Truck 4-Link

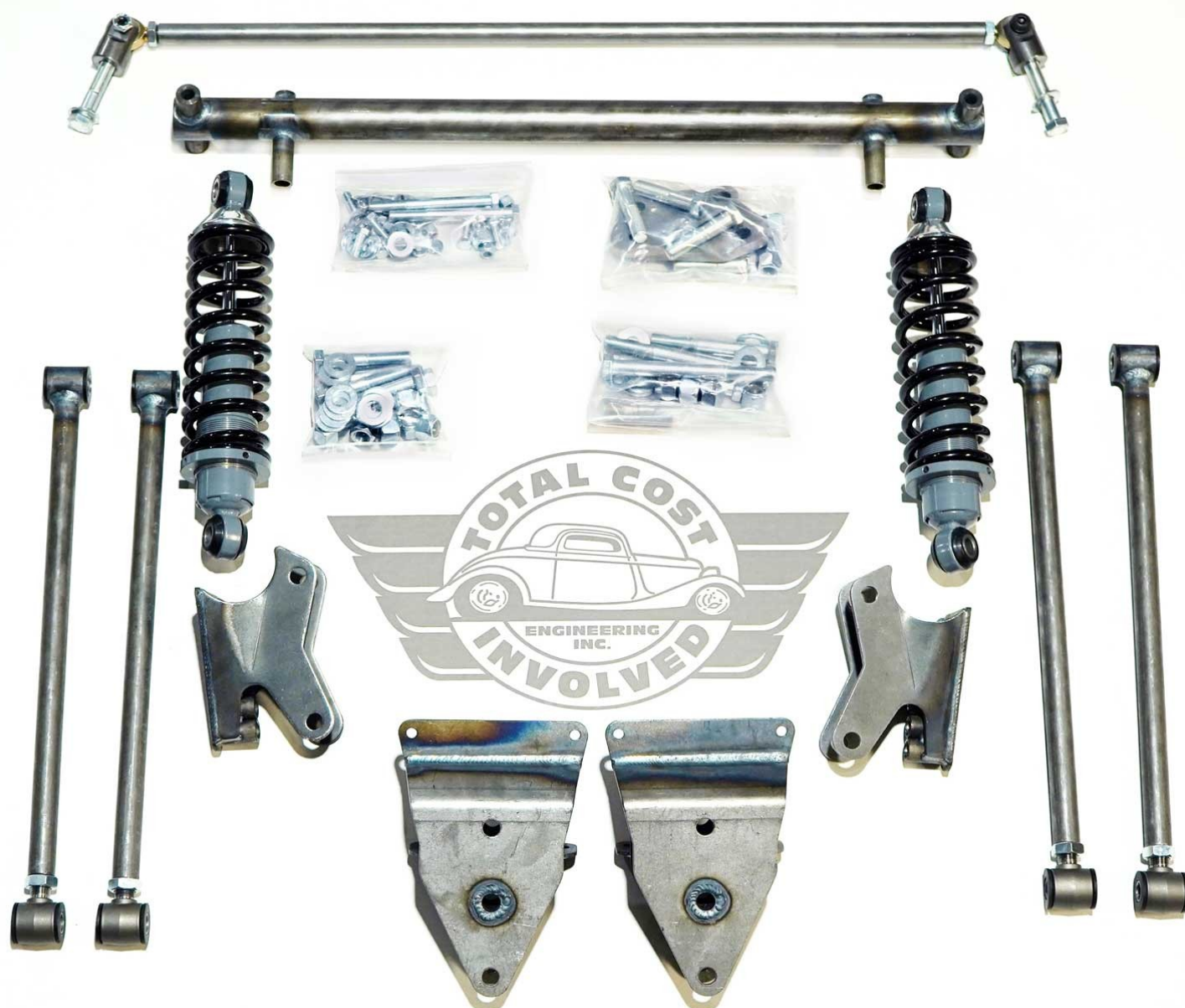
Install Instructions

Tech Line: 1-855-693-1259

www.totalcostinvolved.com

Read and understand these instructions before starting any work!

**USE THE PARTS LIST BELOW TO MAKE SURE YOUR KIT IS COMPLETE BEFORE INSTALLATION.
IF ANY PIECES ARE MISSING, PLEASE CONTACT: Total Cost Involved Engineering 1-855-693-1259**





Before removing the stock leaf springs, mark the frame and take measurement as to where the stock axle centerline was. The frame needs to be at the typical 2 degrees rake to mimic actual ride height. Keep the frame at this rake throughout the installation. Remove the brake lines, driveshaft, leaf springs, rearend, rear leaf hangers etc.



This picture was taken with the frame flipped upside down to get a better shot. The two rivets holding the stock cross member must be removed in order to install the 4-link frame brackets.

Use a grinder to remove the rivet heads.



Once the rivet heads have been trimmed back to the top of the frame rail use a punch and a hammer to knock out the rivets.



Passenger Side Shown

Drill through the holes with a 3/8" bit.



Passenger Side Shown

The two 4-Link frame brackets are identical so there is no right/left. The new 4-Link bracket will be reusing the factory holes that were just drilled out. Install the 4 bolts and hardware and tighten down.



Passenger Side Shown

Using the bracket as a template drill the two remaining holes.

Repeat for Driver Side.



Passenger Side Shown

Locate the 5/8" upper 4-link bar hole within the new bracket. Using a 5/8" bit, drill through the frame using the existing 5/8" hole on the bracket as a guide.

This will be for the attachment point for the upper link bar.



Passenger Side Shown

Here is a shot from inside the frame showing the 5/8" bit going through the bracket & frame.

Repeat for Driver Side



Remove the factory shock cross member using the same process as before with the leaf spring brackets.



Installing rear shock cross member



Measure from the center of the rear bed hole going forward.

Make a mark at 37" on both passenger and driver side frame rails. Draw a line across the top of the frame rail at 37". This is done so that we can find the center of the frame rail from side to side. That way the crossmember is centered in the chassis.



Set the cross member on top of the rails at 37" centers.

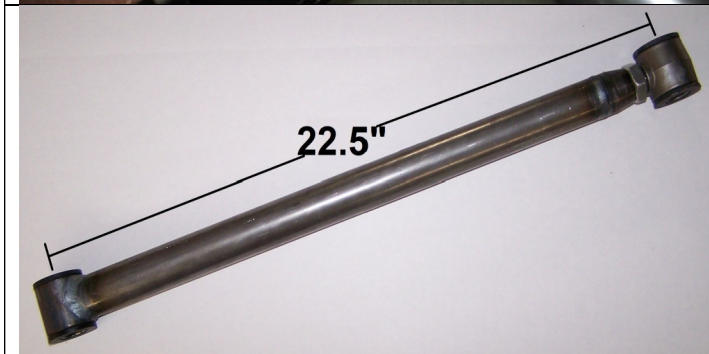
Center the cross member for and aft on the line. Take measurements on both passenger and driver side in order to center the cross member from side to side as pictured.

Center punch one side with a $\frac{1}{2}$ inch transfer punch as pictured in the lower left corner. Remove the crossmember and drill the hole to $\frac{1}{2}$ inch.

Set the cross member back up on top of the frame rails and insert a $\frac{1}{2}$ inch bolt through the cross member and through the hole in the frame as pictured on upper right. On the opposite side frame rail, line up the tube to the frame mark and center punch the frame and drill the hole out to $\frac{1}{2}$ inch.



Install the cross member between the rails with the shock tubes parallel to the ground and facing forward. Install a $\frac{1}{2}$ " bolt through the frame into the cross member on one side to register it properly. On the opposite side use a $\frac{1}{2}$ " transfer punch to go through the frame hole and cross member to center punch the hole. Remove the crossmember. Use a small, long drill bit and drill down through the $\frac{1}{2}$ " top hole into the center punch mark. The final $\frac{1}{2}$ " hole can be drilled from the bottom to keep the bit from 'walking'. Slide the cross member back up to the hole and install the $\frac{1}{2}$ " bolt all the way through. The cross member is positioned correctly now so you can drill through the top hole with a $\frac{1}{2}$ " bit using the cross member as a guide. Install hardware and tighten down.



Adjust all the 4-link bars to 22.5" center to center and tighten the leave the jam nuts finger tight.

NOTE It will be necessary to adjust the 4-link bars later to set wheelbase and pinion angle.



Passenger Side Shown

Install the lower 4-link bar with the adjuster side onto the frame using the provided $\frac{5}{8}$ " hardware. The bolts go in from the outside of the frame which will place the nylock on the inboard side.



Passenger Side Shown

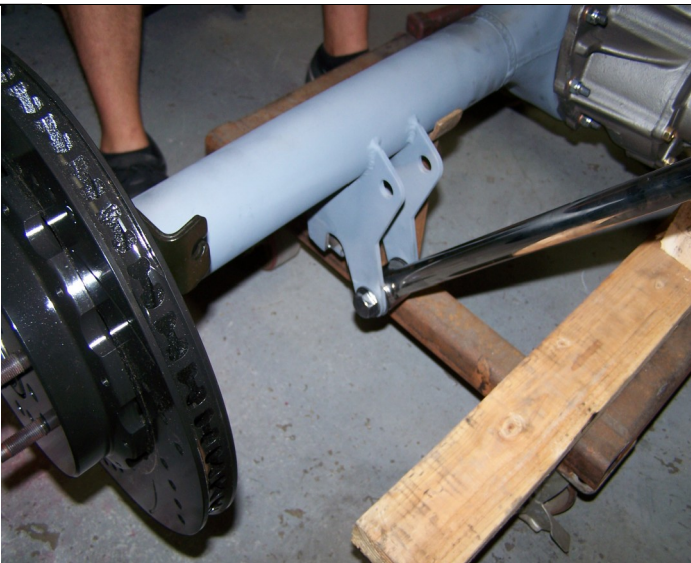
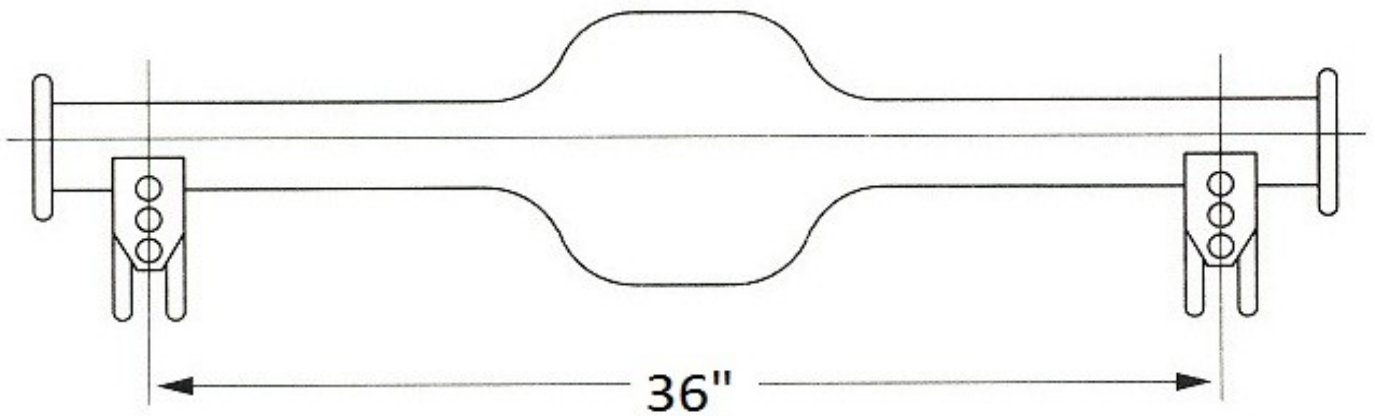
Install the upper 4-link bar with the adjuster side onto the frame using the provided $\frac{5}{8}$ " hardware. The bolts go in from the outside of the frame which will place the nylock on the inboard side.



Driver Side Shown

On the driver side lower link there is a clevis instead of a nylock. Leave loose for now.

The factory leaf spring pads must first be removed from the housing and the area cleaned up. The axle brackets are installed at 36" Center to center. Make sure that they are centered on the housing. Also, make sure the pinion is pointed up one degree in comparison to the flat area at the backside of the brackets (where the three holes for the coil-overs are located). Use the 3rd member mounting face on a Ford 9" or the differential cover on a GM housing as reference.



Move the rear axle into place underneath the frame near wheel centerline.

Place the Passenger side lower 4-link bar onto the lower hole of the axle bracket using the same clevis we used on the driver side front bracket.



Place the upper 4-link bar onto the upper hole of the axle bracket using the provided 5/8" hardware.

Repeat for Driver side

NOTE If you purchased the optional anti-sway please use the provided shoulder bolt within the anti-sway bar bolt kit.

***Pictures of the anti-sway bar installation are later in this manual**

Leave bolts loose for now



Install the offset axle brackets onto the axle brackets using the provided 5/8" hardware. These are designed to keep the coil-overs from making contact with the frame rail as the suspension compresses. The flat area of the plate will sit parallel to the ground and the shock hole will sit inboard of the bracket when properly installed.

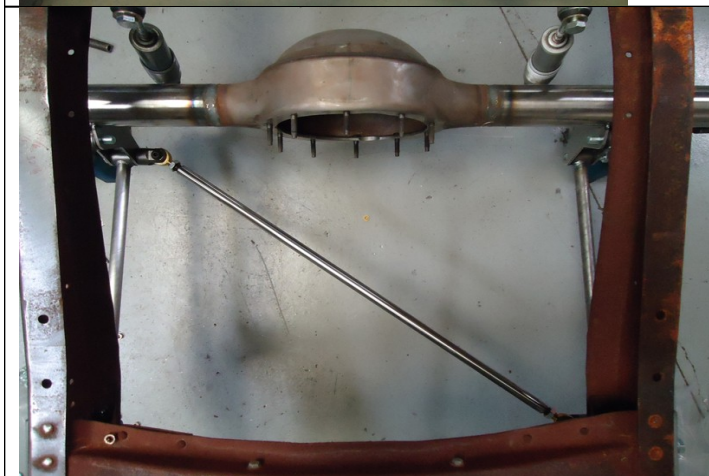
Tighten down hardware



You can now install the coil-overs using the provided 5/8" hardware and spacers. The threaded side of the shock goes down as per the picture.

NOTE The springs were left off the shock for this picture to show the threaded end more clearly. Your shocks will come pre-assembled.

Tighten down all shock bolts.



Installing the track Locating Bar.

Install one rod end of the track bar onto either clevis and use it as leverage to tighten it down. Remove the rod end from that clevis and repeat this process on the other clevis. You may need to rotate the clevis so that the 9/16" bolts holding the rod end are sitting vertical. Install the track bar completely onto the clevises.

Once the bed is back on you can center the axle in the chassis, set wheelbase & pinion angle. Tighten down the jam nuts on the Track bar and all 4-link hardware.

If you purchased the optional anti-sway bar proceed to the next step.

If not, reinstall the driveshaft, brake lines etc and drop the vehicle down onto its full weight. Adjust ride height as needed with the coil-over shocks. Double check all hardware and make sure the pinion angle is still one degree up. Adjust the link bars accordingly.

Installing the optional Anti-Sway bar:



LOCATING THE REAR ANTI-ROLL BAR HOUSING TO THE FRAME:

NOTE The pictured frame has been boxed

Mark the frame 2 1/4" from the rear face of the coilover cross member.



Measure down 2 1/8" down from the top of the rail at the mark you just made. Use a center punch to mark the frame where these two measurements intersect. This is the anti-roll bar housing centerline.

Duplicate the last two steps for the opposite side of the vehicle.

Use a 1 1/4" hole saw to drill through the frame at the marked location.



Place the housing through the frame making sure it protrudes the same distance on both sides.

Once it is centered, it can be welded into place.



Place the splined bar into the housing.



SEQUENCE OF INSTALLATION PER SIDE:

1. Nyliner
2. Washer
3. Aluminum arm

Duplicate these steps for the other side of the vehicle making sure the aluminum arms are clocked the same. Tighten down the pinch bolts on the splined end of the bar.

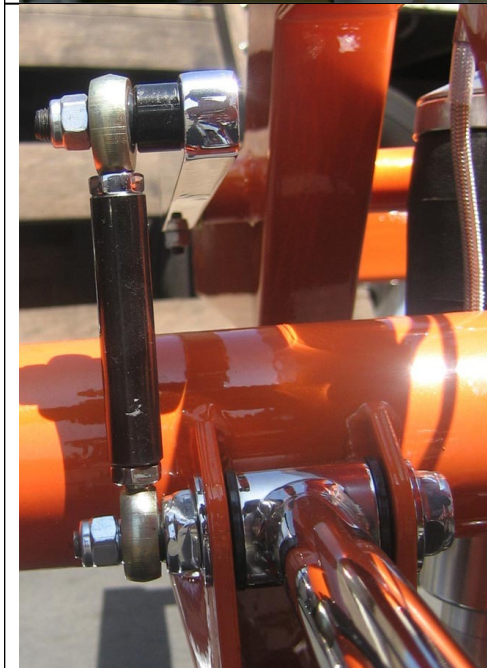
NOTE Make sure the countersunk side of the aluminum arm is facing the frame. ***SEE BELOW**



Install flat head bolt and provided spacer.



Install the 3/8" rod ends and extension rod onto the aluminum arm.
 The lower 3/8" rod end connects to the upper 4-link bolt. This is where the special shoulder bolt should be installed. If you haven't installed this bolt already during the 4-link process you will need to remove the upper link bolt and replace it with the provided shoulder bolt. The shoulder side should face out towards the wheel. Install the short 5/8" nylock and then tighten it down. The rod end goes on next and the 3/8" nylock onto the small end of shoulder bolt. Duplicate the process for the other side of the vehicle making sure the extension rods are sitting vertical. Adjust the extension rod as needed to have zero preload.



Here is how the finalized installation will look.

No returns or exchanges without a RMA#. Packages must be inspected upon receipt & be reported within 10 days. If you are missing parts from your kit, TCI Engineering will send the missing parts via FedEx or U.S. mail ground. Returned packages are subject to inspection before replacement/refund is given. (Some items will be subject to a 15% restocking fee)

Thank you for your business!

