

# '73-'87 C10 Chevy Truck 4-Link Suspension

# **Installation Instructions**

Tech line: 1-855-693-1259 www.totalcostinvolved.com

## Read and understand these instructions before starting any work!

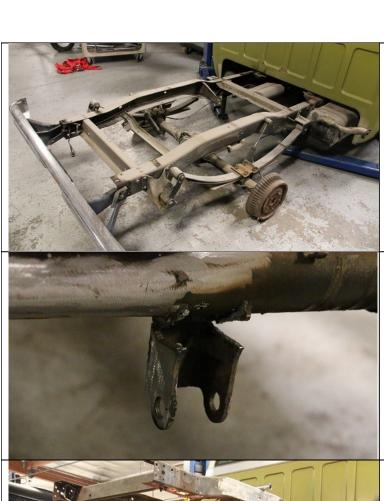
USE THE PARTS LIST BELOW TO MAKE SURE YOUR KIT IS COMPLETE BEFORE INSTALLATION. FOR MISSING PIECES, PLEASE CONTACT: Total Cost Involved Engineering 855-693-1259



\*Before beginning work vehicle must be securely positioned on jack stands preferably at desired ride rake/height.



Disconnect wiring, remove bed bolts, disconnect gas fill hose and remove the bed



Remove the leaf springs, shocks and frame brackets. Grind the rivet heads flat, then drill them out and knock loose with a punch/hammer. Take care removing the front leaf spring bracketry because we will be reusing those holes.





You will need to grind the axle housing smooth where the factory shock mounts used to be.



Remove the brake hose and the hard line from the brake line bracket. Then remove the brake line bracket from the frame.

\*NOTE\* Bleeding the brakes afterwards will be required.



We cleaned up the frame and the housing before installing the new bracketry. We like to mock everything up before any paint is applied.

We removed the brake lines on the housing but it isn't necessary. If you do leave them in place you will need to bend them away from the housing slightly when the new axle brackets are installed.

\*Passenger Side Shown

The frame bracket is installed with the shock tabs towards the rear.

You can follow this bracket install process for both passenger and driver side.

\*NOTE\* The cutout on top of the frame bracket, this is to clear the factory bed frame.

\*Passenger Side Shown

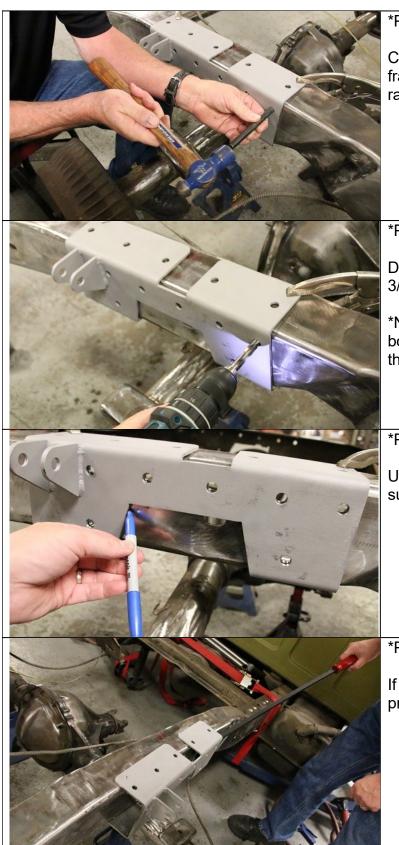
There are different measurements for short bed and long bed trucks. See the image to the right.

Bracket placement for a short bed truck is 26 7/8" from the back of the frame rail to the rear face of the bracket.

The measurement for the long bed truck is 32 3/4" The measurement is the same for both driver and passenger sides.

\*Passenger Side Shown

Once you've confirmed placement, make sure the bracket is tight up against the frame rail. Clamp a couple vise grips on the bracket/frame to keep it from moving.



Center punch all the holes on the outside of the frame(don't worry about the top holes of the frame rail yet)

\*Passenger Side Shown

Drill all the horizontal holes. We started with a 3/16" bit and slowly stepped up the size to 7/16".

\*NOTE\* You can install a couple of the 7/16"x1.25 bolts as you complete drilling holes to help hold the bracket in place.

\*Passenger Side Shown

Use the frame bracket to trace the c-notch. Make sure to follow it underneath the frame also.

\*Passenger Side Shown

If you've installed any bolts remove them now and pry the frame bracket away from the frame.



You should be left with only your trace marks for where to cut for the c-notch



\*Passenger Side Shown

Cut the c-notch carefully following the mark.



\*Passenger Side Shown

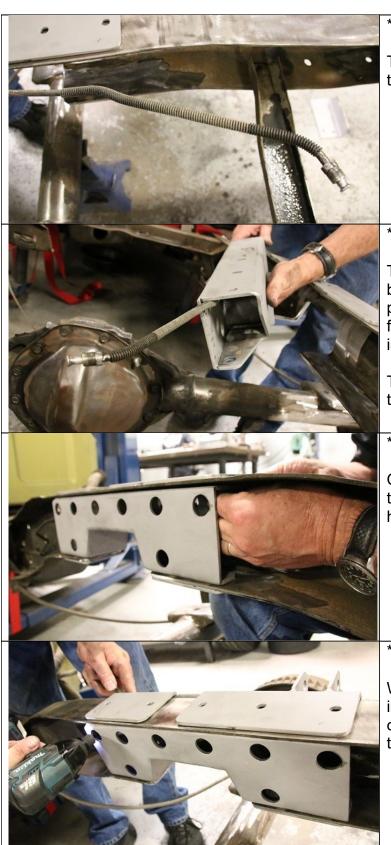
Once we had the c-notch cut out we reinstalled the bracket with two 7/16" x 1.25" bolts. Then we used a grinding wheel to remove any excess material.



\*Passenger Side Shown

Here is what it should look like when complete. Both the frame and bracket faces should be even.

You will need to remove any bolts holding the bracket to the frame at this time. You can leave the bracket in place.



The brake line needs to be bent straight to fit through the inner frame bracket.

\*Passenger Side Shown

There is a left/right inner bracket as well. The bottom rear of the bracket is tapered like in the picture. There is a small protrusion on the stock frame that will only allow the proper bracket to be installed.

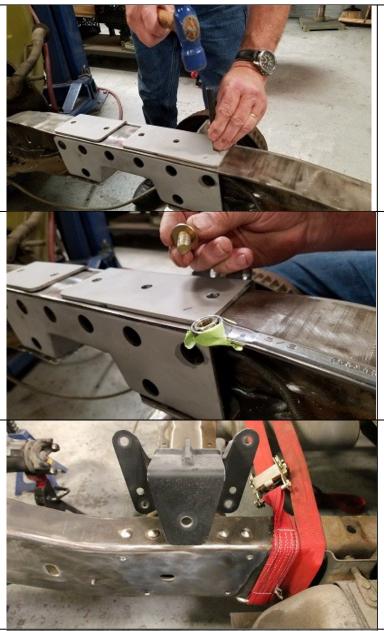
The brake line didn't require much effort to feed it through the inner frame bracket.

\*Passenger Side Shown

Once you've successfully fed the brake line through the bracket you can now align all the holes and install the horizontal facing hardware.

\*Passenger Side Shown

We've provided access holes in order to easily install the 7/16 x 1.25" bolts and hardware. You can tighten down the horizontal facing bolts at this time.



Now that the frame bracket is pulled up nice and tight to the frame you can now center punch and drill the top & bottom holes in the frame.

\*Passenger Side Shown

The vertically placed hardware are a little tougher to reach so a trick we use is tape on the wrench to hold the nut.

Install all the hardware into the top and bottom of the frame and tighten them down.

Complete driver side installation in the same manner.

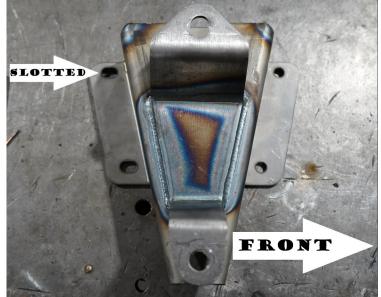
\*Passenger Side Shown

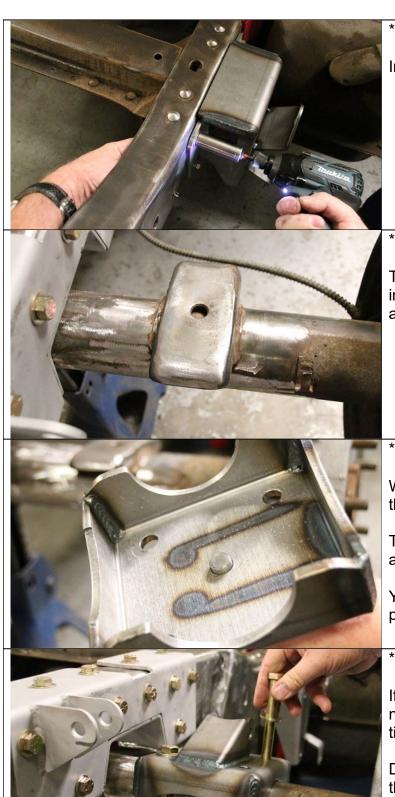
This particular truck had an aftermarket lowering kit already on it so your factory bracket will look different. We will be reusing the factory frame holes with our new 4-Link frame bracket. They just need to be reamed/drilled to 7/16".

\*Passenger Side Shown

The 4-Link frame brackets are also left/right specific. The easiest way to tell is the mounting bolt holes go towards the front of the truck, whereas the slotted holes go towards the rear. Install the 7/16 x 1.25" bolts and hardware.

You can follow this bracket install process for both passenger and driver side.





Install the hardware and tighten.

\*Passenger Side Shown

The factory leaf spring pad & pin hole are instrumental to the installation of the new 4-Link axle brackets.

\*Passenger Side Shown

We have placed a corresponding locating pin on the bottom side of our upper 4-Link brackets.

These brackets are the same for both passenger and driver sides.

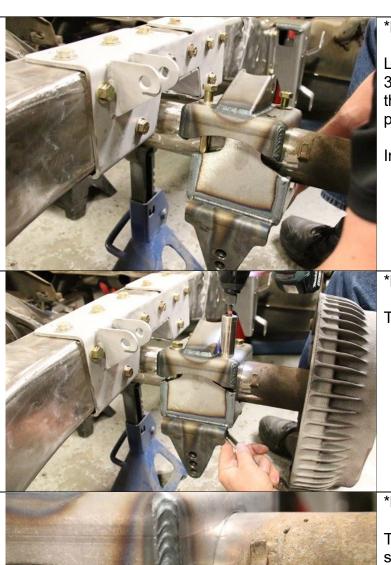
You can follow this bracket install process for both passenger and driver side.

\*Passenger Side Shown

If you've left the brake line on the axle you will need to bend it back and out of the way at this time.

Drop the upper half of the 4-Link axle bracket onto the leaf spring pad making sure the pin lines up.

Drop a pair of  $\frac{1}{2}$ " x 6" bolts with washers down through the bracket holes.



Lift the lower half of the bracket into place with the 3 coilover mounting holes facing rearward. Install the washers and nuts onto the bolts to hold it in place.

Install the other two bolts, washers and nuts.

\*Passenger Side Shown

Tighten down all the 4-Link axle bracket hardware.



\*Passenger Side Shown

The gap between the bracket and the housing should be nice and tight.



\*Passenger Side Shown

Adjust the link bars to 24.75" centers. Take two bars and adjust them two full turns out. These will now be the upper link bars in order to set pinion angle. Tighten all the jam nuts.

\*NOTE\* Fine tuning pinion angle and wheelbase may be required.



Place the NON adjustable side of the link bar into the bottom of the axle bracket using the provided 5/8" bolt.



\*Passenger Side Shown

Screw the provided clevis onto the 5/8" bolt. Just finger tight at this time.

The driver side axle bracket will get a nylock. Just finger tight at this time.



\*Passenger Side Shown

Place the adjustable side of the link bar into the front frame bracket using the provided 5/8" bolt.



\*Passenger Side Shown

Screw the provided nylock onto the 5/8" bolt. Just finger tight at this time.

The driver side frame bracket will get a clevis. Just finger tight at this time.



Place the NON adjustable side of the link bar into the top of the axle bracket using the provided 5/8" bolt.

\*Passenger Side Shown

Screw the provided nylock onto the 5/8" bolt. Just finger tight at this time.

\*Passenger Side Shown

We've left an access window in the frame bracket in order to install the washer and nylock into the upper link bar.



\*Passenger Side Shown

Once all 4 link bars are installed you can now tighten down all the nylocks.



The clevis can be tightened down now. Make sure the flat surfaces are parallel to the ground and each other.

We used a 3/8" extension to hold the clevis while tightening.

\*NOTE\* Fine tuning the angle can be done once we're ready to install the track bar.



### \*Passenger Side Shown

Install the 5/8" x 6" bolt with the washer under the head of the bolt and into the bottom (threaded side) of the coilover. Place the spacer as shown.



#### \*Passenger Side Shown

There are 3 holes on the axle bracket. Each hole equals 7/8" of ride height change. We chose the lowest hole to provide the lowest ride height. You can fine tune ride height with the coil adjuster.



## \*Passenger Side Shown

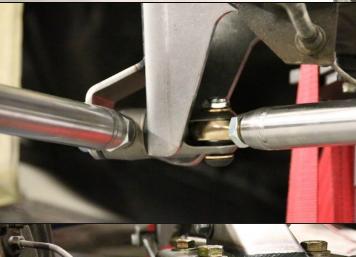
Place the coilovers onto the frame bracket as shown with the adjuster knob pointing out.

Tighten down top and bottom hardware.

Repeat process for the driver side.



Install the track bar heim joint onto the clevis using the ½" button head bolt. You may have to clock the clevis slightly so the heim doesn't bind. Tighten down the nylock.



#### \*Driver Side Shown

Install the track bar heim joint onto the clevis using the ½" button head bolt. You may have to clock the clevis slightly so the heim doesn't bind. Tighten down the nylock.

We will adjust the track bar length once the truck is at ride height so leave the jam nuts loose.

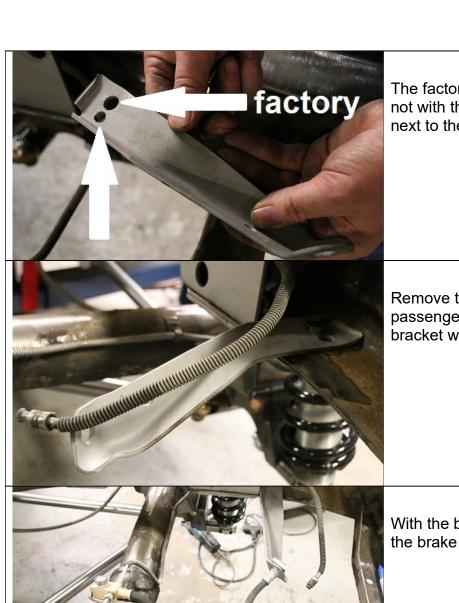
#### \*Driver Side Shown

The brake lines can be bent back into place at this time.

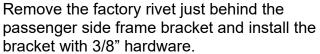


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The brake lines can be bent back into place at this time.



The factory brake line bracket can be reused but not with the factory hole. We drilled a 3/8" hole next to the factory hole.



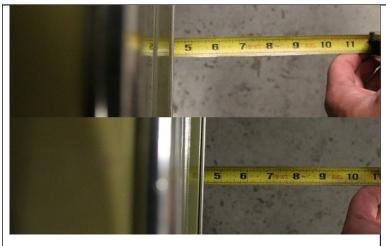


With the bracket installed you can now connect the brake hose and clip from the axle.



You can now connect the brake line to the brake hose.

Bleed the brakes and check for leaks.



Reinstall the bed and check ride height. If ride height is close you can use the adjustment ring on the coilover to fine tune. If ride height is more than one inch off then use the other axle bracket bolt holes for adjustment.

Once you have achieved the desired ride height you can then adjust the track bar.

Measure from the wheel face to the outer fender for both sides of the truck. Adjust the track bar as needed. Tighten down the jam nuts on the track bar once the rearend is centered.

Pinion angle should be pointed up the same angle as the engine/tranny points down.

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 US mail ground.

Returned packages are subject to inspection before replacement/refund is given. (Some items will be subject to a 15% restocking fee)



