



## 1949 - 1954 TCI Engineering Chevy Rear 4-Link Coil-Over & Air Bag Kit

Installation Instructions

1-866-925-1101

[www.totalcostinvolved.com](http://www.totalcostinvolved.com)

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

**CHECK ALL PARTS INCLUDED IN THIS KIT TO THE PARTS LIST BEFORE INSTALLATION.**

**IF ANY PIECES ARE MISSING, PLEASE CONTACT: TOTAL COST INVOLVED 866-925-1101**

**SUPPORT VEHICLE WITH JACK STANDS BEFORE DOING ANY WORK!**  
**INSTALLATION IS FOR DRIVER SIDE. REPEAT ALL STEPS FOR PASSANGER SIDE**  
**Welding should be done by a qualified welder!**

Start by raising the car and supporting it with jack stands. Remove old suspension components (Shock, Rear-end, Leaf spring etc.). Next, remove the old shackle brackets located towards the rear of the frame.



We will start by installing the driver's side front 4-Link Bracket. The four existing holes originally used on the leaf hanger mount will be reused on the 4-link bracket.



**\*Arrow is pointing towards the front of the vehicle\***

**\*NOTE\*** 4-link bar attachment sits inboard of the frame rail

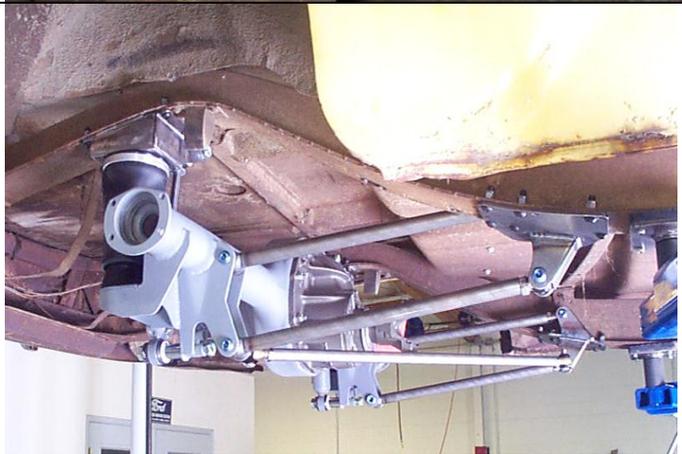
The front two existing holes on the frame will be used together with the front two holes on the 4-link bracket to locate it. Go ahead and install these 4 bolts now but do not tighten yet. The middle two holes will also be reused on the 4-link bracket. Install the middle bolts onto the bracket but do not tighten yet. Slowly tighten each bolt making sure the bracket pulls up flat against the frame and torque bolts to 45 ft lbs. The two rear holes for each side of the chassis will need to be drilled through the frame with a 3/8" bit. The remaining hardware can be installed and torqued to 45 ft lbs.



Before installing the rear TCI Upper Airbag Shock Bracket you must first remove the two rivets holding the stock bump stop

There are a couple rivets holding it in place. The rivet heads need to be ground back so the bump stop can be removed.

Also remove the body-mounting bolt that is located just behind the bump-stop bracket.



This body mount hole will be used to locate the TCI Upper Airbag & Shock Bracket. Install the TCI Upper Air-Bag & Shock Bracket using the new body-mounting bolt supplied with the kit (3/8"-16 X 5 1/2"). Tighten the bracket in place making sure that bracket is located in the middle of the frame rail and that the Upper Shock Bracket is mounted inboard putting the Bump-Stop toward the front of the vehicle. After bolting the bracket into place you will need to drill four additional 3/8" holes (clamping the bracket to the frame will make the drilling process easier).

Continue installation on the passenger side.

Once the installation of the brackets is complete measure the following:

- TCI Front 4-Link frame brackets Center to Center = 36 3/4"
- TCI Upper Air-Bag brackets Center to Center = 43 1/4"
- TCI Air Bag & 4-Link Axle brackets Center to Center = 36 3/4" (Centered housing)
- **Make sure that the lower air bag pad is mounted outboard of the 4-link axle bracket.**
- Rear-end pinion angle: Match pinion angle to transmission angle at ride height (Reference from the rear face of the axle bracket)

**\*AIR BAGS ONLY\*** Install the 90° fitting (1/4" NPT to -4 AN) to the air bag. Make sure to apply some type of pipe sealant to the 1/4" NPT side. Clock the fitting to the middle and away from the two mounting points.

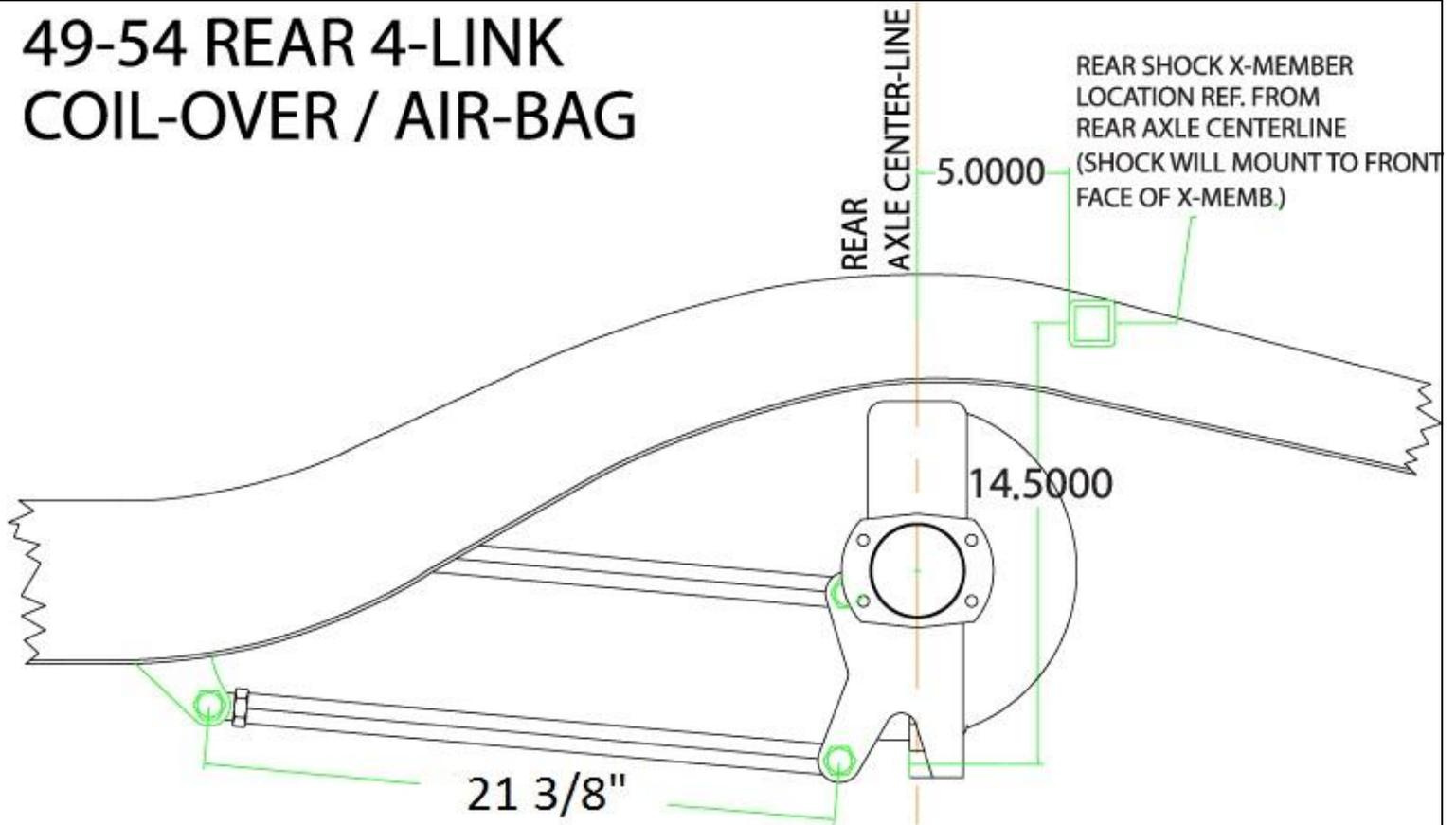
Adjust the link bars to 21 3/8" center to center. Mount the rear 4-link bars to the frame bracket with the adjusters forward. Support the rear end on a jack or jack stands and lift into place. Attach the other end of the bars to the rear end.

**\*NOTE\*** The track bar mounts at the driver's side front and the passenger side rear link bars. Use the provided clevises in place of the nylocks at these two attachment points. Use the track bar as leverage to tighten down the clevises. Install the rod ends onto the clevises and finally the bar onto the rod ends. Center the rear end in the vehicle by adjusting the track bar as needed.

**\*AIR BAGS ONLY\*** With the air bag mounted to the top bracket, the fitting on the air bag must be pointed towards the inside of the frame rail. Fasten the lower part of the air bag to the rear end, make sure not to over extend or over-tighten the airbag. With the supplied (3/8" -16 X 3/4") bolt tighten it to the specified torque(see note)

**\*AIR BAGS ONLY\*** Once the air bag is mounted we can install the shock. Start by bolting the shock to the TCI Upper Air-Bag & Shock Bracket using the 5/8"-18 x 3" bolts. Mount the lower shock using the 5/8"-18 x 5" bolts with the 3/4" spacer to the rear end.

## 49-54 REAR 4-LINK COIL-OVER / AIR-BAG



### TORQUE CHART:

3/8"-16	30 lb.ft
5/8"-18	140 lb.ft

## 1949 -1954 Chevy Air Bag / 4-Link Kit:

<u>Component:</u>	<u>Qty.</u>	<u>Description</u>
TCI Front 4-Link Bracket	1 pr. (L & R)	
Includes:	12	3/8"-16 X 1" NC Hex Bolt
	12	3/8" Flat Washer (Bracket Side)
	12	3/8"-16 Full Height Nyloc
TCI Upper Air Bag & Shock Bracket	1 pr. (L & R)	
Includes:	8	3/8"-16 X 1" NC Hex Bolt
	2	3/8"-16 X 5 1/2" NC Hex Bolt (Body Mount)
	12	3/8" Flat Washer (Bracket Side)
	10	3/8"-16 Full Height Nyloc
	2	Rubber Bump Stops (Long)
		Cut threads to 5/8" long (Upper Air Bag Mount)
	2	5/8"-18 X 2 1/2" NF Hex Bolt (Upper Shock Mount)
	4	5/8" Flat Washer (Upper Shock Mount)
	2	5/8"-18 Half Height Nyloc (Upper Shock Mount)
	2	90° Fitting 1/4NPT to -4 (Air Bag)
	6	3/8"-16 X 3/4" NC Hex Bolt (Air Bag)
	6	3/8" Lock Washer (Air Bag)
TCI Air Bag & 4-Link Axle Bracket	1 pr. (L & R)	
Includes:	2	3/4" Long Spacer 5/8 Hole (Lower Shock Mount)
	2	5/8"-18 X 5 NF Hex Bolt (Lower Shock Mount)
	4	5/8" Flat Washer (Lower Shock Mount)
	2	5/8"-18 Full Height Nyloc (Lower Shock Mount)

## 1949 -1954 Chevy Air Bag / 4-Link Kit (Cont.)

<b>Component:</b>	<b><u>Qty.</u></b>	<b><u>Description</u></b>
TCI Rear 4-Bar	4	19 3/8" Bar Length
Includes:	4	3/4"-16 R.H. Adjusters (Frame Side)
	4	3/4"-16 R.H. Jam Nut (For Adjuster)
	<b>16</b>	<b>Rear 4-Link Polyurethane Bushing</b>
	8	5/8" Rear 4-Link Bushing Sleeve
	6	5/8"-18 X 3" NF Hex Bolt
	6	5/8"-18 Full Height Nyloc
	12	5/8" Flat Washer
TCI Rear Track Bar Kit	1	34" Bar (L & R)
Includes:	1	5/8" R.H. Rod End (With 1/2" Reducer Sleeve)
	1	5/8" L.H. Rod End (With 1/2" Reducer Sleeve)
	1	5/8" R.H. Jam Nut
	1	5/8" R.H. Jam Nut
	<b>2</b>	<b>Clevis</b>
	2	5/8"-18 X 3" NF Hex Bolt
	2	5/8" Flat Washer
	2	1/2"-20 X 2" Button Head Bolt
	2	1/2" Full Height Nyloc
TCI All-American Rear Shock	1 pr.	