

'60-'65 Ford Falcon Triangulated 4-Link Suspension Installation Instructions

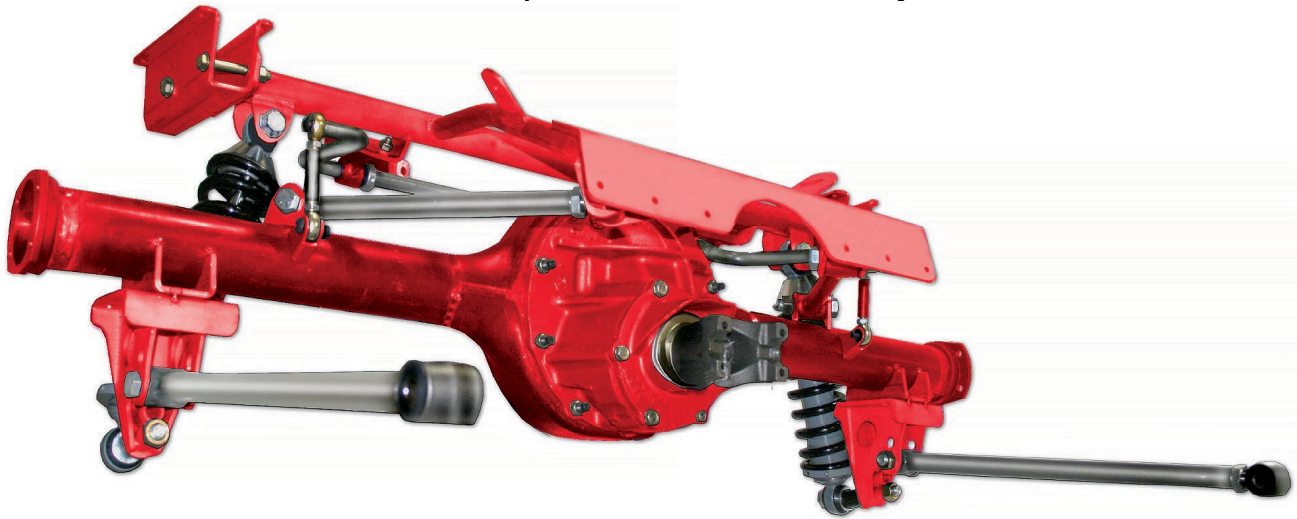
Read and understand these instructions before starting any work!

Use the parts list below to make sure your kit is complete before installation.
If any pieces are missing, please contact TCI Engineering Tech Line: **1-855-693-1259**

NOTE

The following installation manual assumes that the leaf springs, brackets, shackles, driveshaft, brake lines & rearend etc has already been removed.

***Shown with optional rear axle and anti-sway bar**



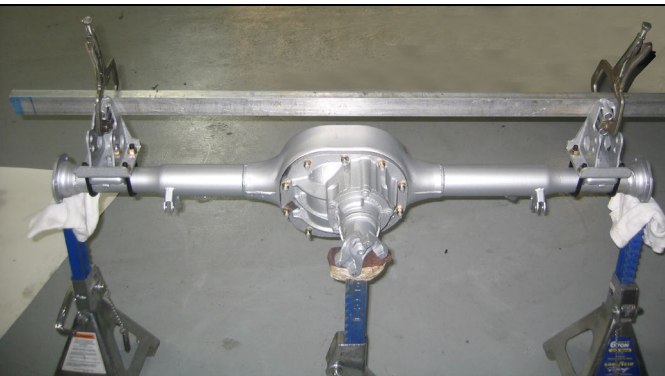
***Installing coil-over axle brackets onto an 8" housing**

Bolt the coil-over axle brackets to the leaf spring pad checking that the center bolt on the bracket aligns with the hole in the pad using the provided nuts & washers. If you have a different diameter center pin, use the pin from your old leaf springs. Install using the provided washers & nuts.

Note: Most of the 8 inch housings are 2.275 inch diameter at the spring pad but there are some that are 2.75 inch diameter at the spring pad. The bracket mounts the same on either but they do need different size u-bolts.

Note: If you are using a 9" housing skip forward five steps.



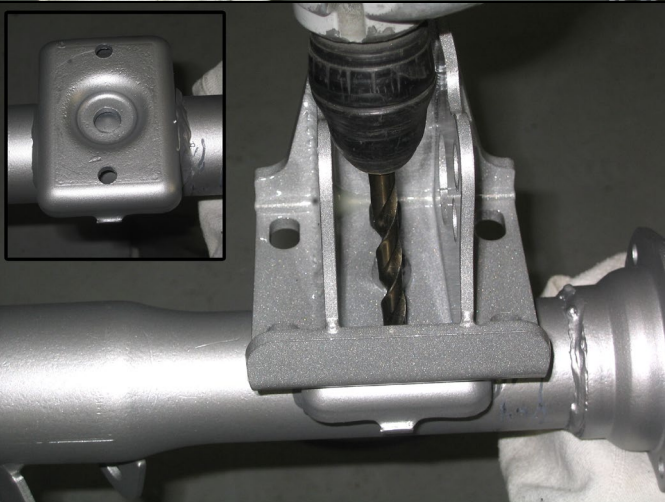


Clamp a flat bar onto the back of both axle brackets to correctly square them to the housing. Once square you can tighten down the u-bolts.



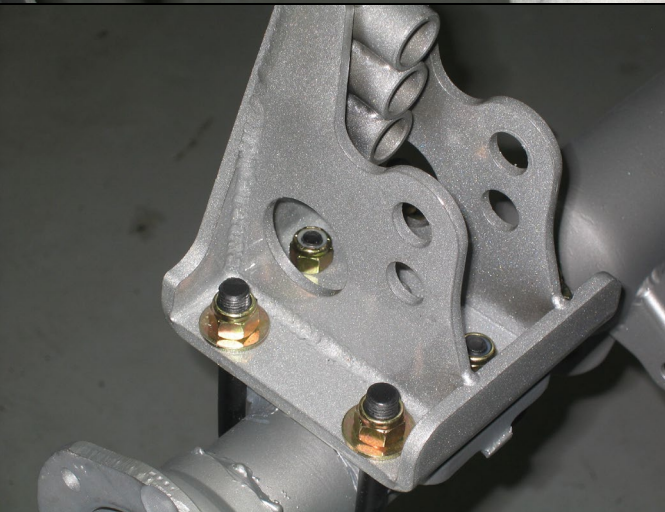
Note: If you have the 2.75" O/D housing access to the nuts on the inside of the pad is an issue. The front and rear of the spring pad needs to be welded to the axle bracket to prevent the brackets from moving.

For the 2.275" housings Drill a 3/8 inch hole through the spring pad using the hole in the axle bracket as a guide. Repeat the process for the other side.



After both sides are drilled install the provided allen bolts and tighten.

Note: Shown with the u-bolts removed for a cleaner picture.



Here is what the axle bracket will look like once the installation is complete.

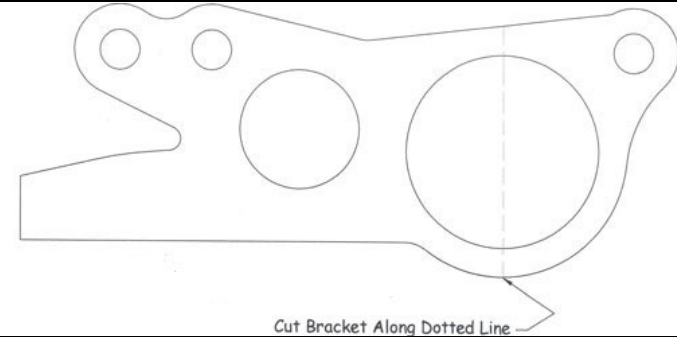


Welding axle brackets onto a 9" Housing:

***NOTE* brackets are designed for 3" axle tubes**

We prefer that the axle brackets be installed on the tubes before the bearing flanges are installed.

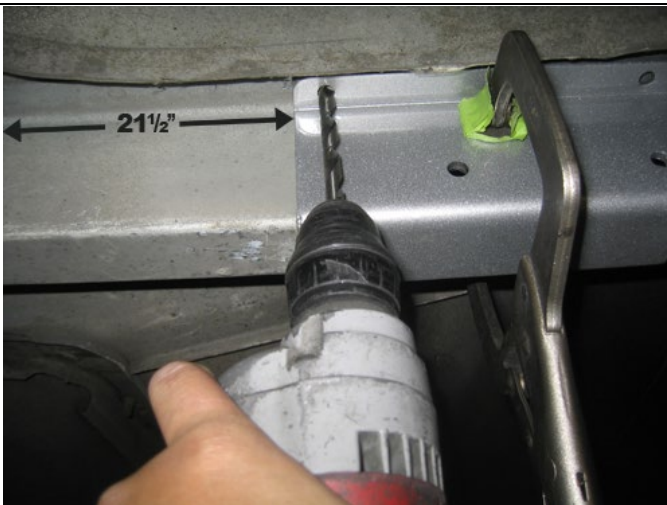
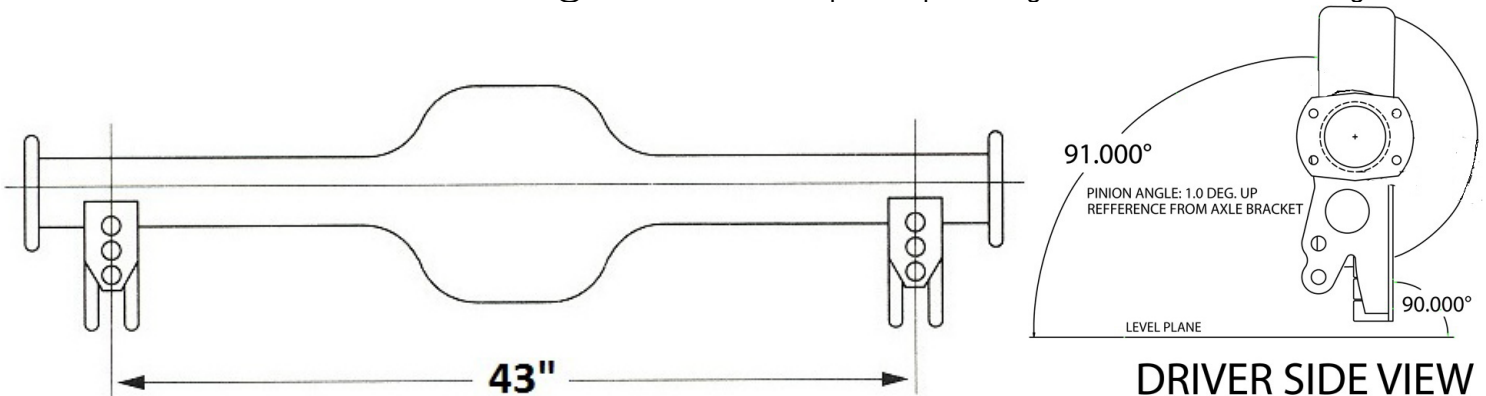
However, if your axle ends are already on the axle the brackets will need to be cut in half to fit over the axle tubes. Take extra care in realigning and welding them back together.



Use this picture as a template to cut the axle bracket.

Note: The axle bracket shown has an extra hole at the top right which is not used on this application.

Note: Weld the coil-over axle brackets @ 43" centers with the pinion up one degree. *see the next two images



Place the frame bracket just behind the axle bump stops brackets with the narrower end of the bracket forward and the square end towards the rear. Double check the location by measuring from the top of the rear face to the front edge of the stock leaf spring shackle tube that sticks out through the frame rail.

The reference measurement are:

1960-1962: 18 1/2 inch

1963-1965: 21 1/2 inch

Clamp the bracket to the frame and drill a 5/16 inch hole through the floor using the bracket as a guide. Temporarily install one 5/16 Allen bolt to prevent bracket from moving and drill remaining holes.



Place the reinforcement plates inside the trunk lining up with the new holes. Install all the button head Allen bolts with washers through these plates, the floor and the frame channel brackets and secure with nuts.

Inset picture shows reinforcing sandwich plates installed in trunk area.

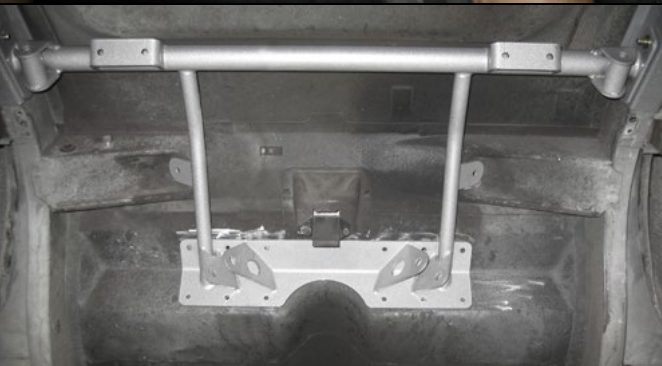


Drill the 3/8 inch holes through the frame using the channel bracket as a guide. Using the drill guide the front hole will be drilled from inside the frame rails (the bump stop bracket is in the way on the outside) and the rear hole is drilled from outside the frame rail because the floor interferes with the drill motor on the inside.



Lift the cradle up into place and between the channel brackets. Align the rear flange holes on the cradle and the frame bracket. Install the 3/8 x 3 inch bolt from the outside. Lightly tighten.

Note: The convertible cradle looks slightly different but installs in the same manner.

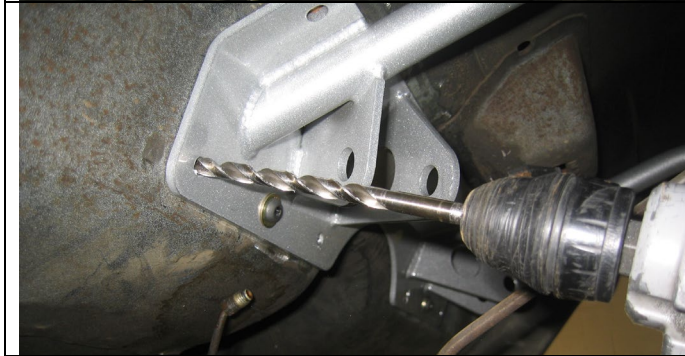


Swing the cradle up to the angled tunnel/floor pan area in front of the pinion snubber. Remove any tabs or brackets (brake line tabs, etc.) that will interfere with the folded front plate of the cradle. Make sure the cradle will sit flush with the tunnel/floor pan area.



Push the cradle up against the floor as tight as possible.

With the cradle seated securely up against the tunnel/floor pan area and centered between the frame rails use the hole in the picture as a guide to drill a 5/16 inch hole through the floor. Install one 5/16 inch button head bolt and tighten it down. Repeat this process one more time in any hole on the other side of the bracket so it does not move. With these two bolts holding the cradle in place they will maintain alignment while drilling the remaining holes.



Finish drilling the remaining holes with the two alignment bolts holding the cradle securely in place.



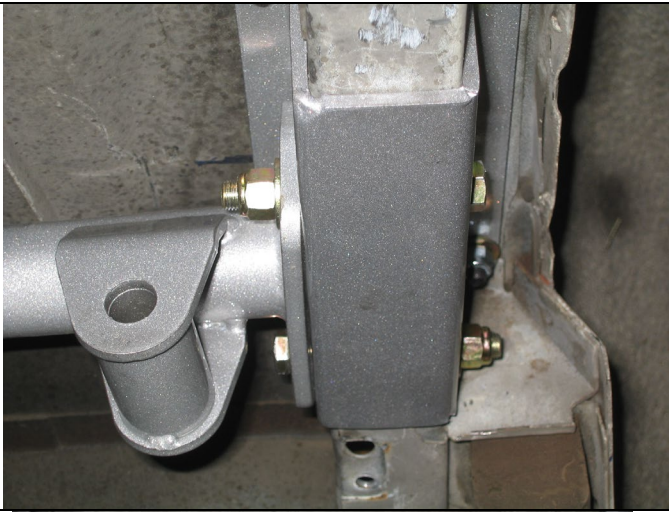
Remove the two alignment bolts and install the two folded sandwich plates over the drilled holes in the trunk area with the notch on the plate facing down. Install the twelve 5/16 fine thread button head bolts and washers through the cradle, the floor pan and through the sandwich plates. Install washers and nuts and tighten.



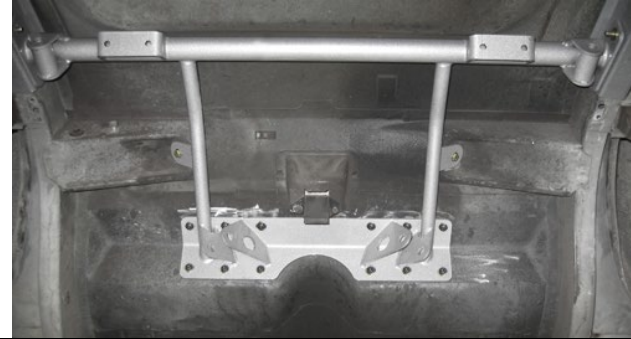
Install the 3/8 inch bolts through the tab on the cradle and into the factory shock hole.



Install the large thick washer onto the bolt through the shock hole inside the trunk area. Install nut and tighten.

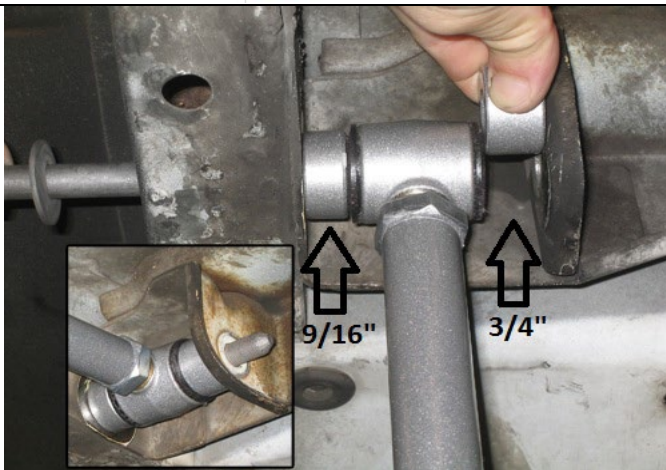
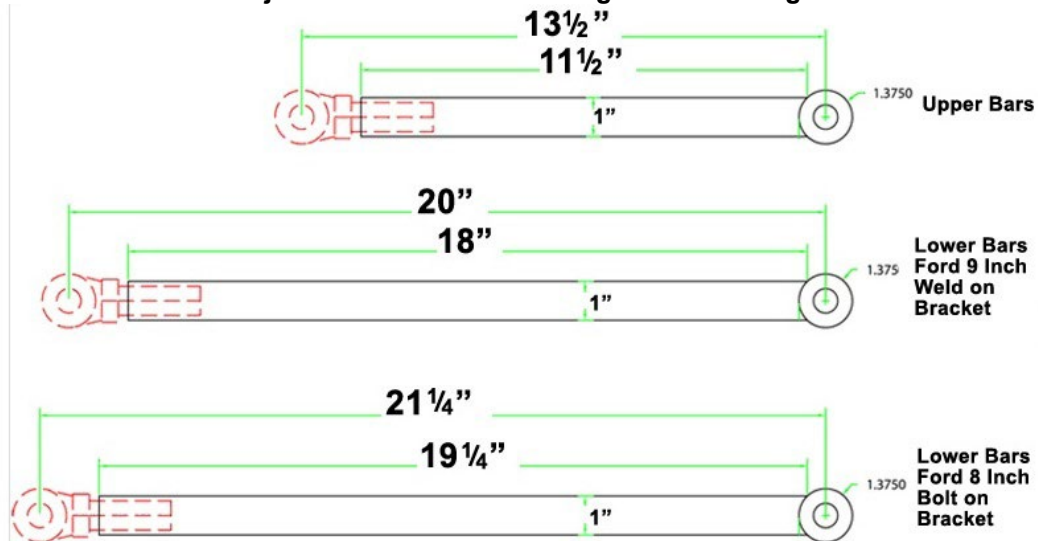


Install the two 3/8 x3 inch bolts into the front hole of the cross-member from the inside because of the snubber bracket won't allow it to go in from the outside. Tighten all four bolts.



Cross-member cradle assembly completely installed.

Adjust the link bars according to the drawing



Install the front of the lower bars with the spacers as shown. The front original front leaf spring bolt is used in this location. .



Lift the rearend up into place, install the lower bar into the bottom hole of the axle bracket and install the 3 by 5/8 inch bolt and tighten it down.

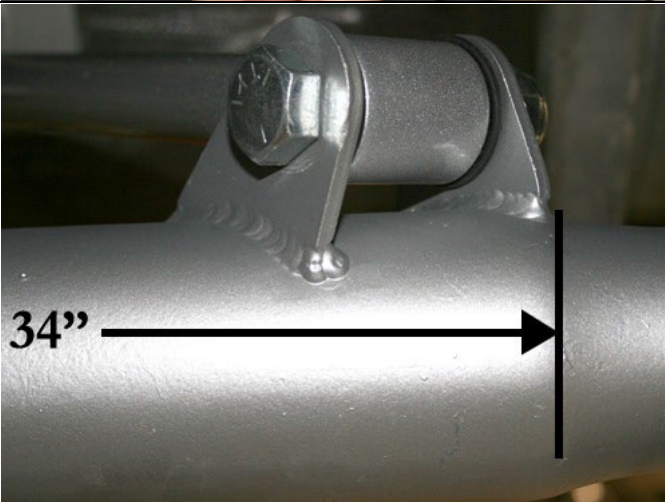


The coil-over shocks are installed next. The top bolt is 5 by 5/8 inch with a washer on the outside of the urethane bushing. The bottom bolt is 6 by 5/8 inch with washers on both sides of the urethane bushing with a 1 3/8 inch spacer between the washer and the bracket.

Note: The 9" Ford weld-on brackets uses 2.5" lower spacer and the lower bolt is 7" long.



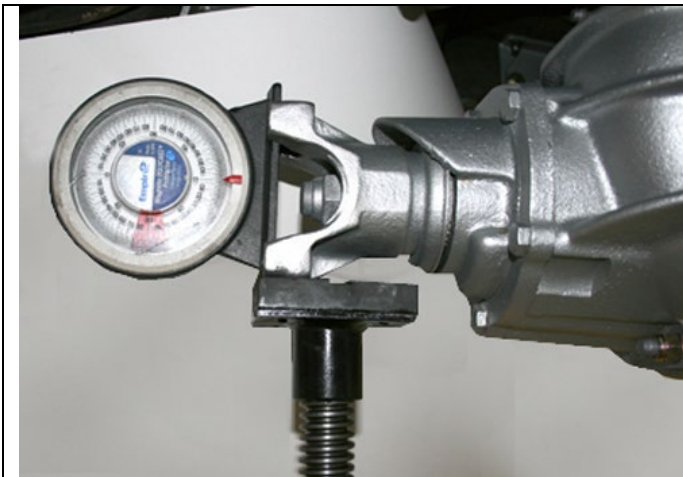
With the top bars adjusted to 13.5" as per the drawing above place the adjuster end into the cradle mount using the 3 by 5/8 inch bolts and tighten them down.



Install the axle housing tabs on the non-adjustable side of the bar with the taller tab on the inside and forward. The shorter tab goes on the outside and the rear edge of the bracket will be right at where the axle tube starts to neck down. The tabs should fit the curve of the housing and the steel bushing level to the top of the housing. Tighten down the 5/8" bolt. This is going to be your "fixture" to install the tabs in the correct location.

Do not weld the tabs yet.

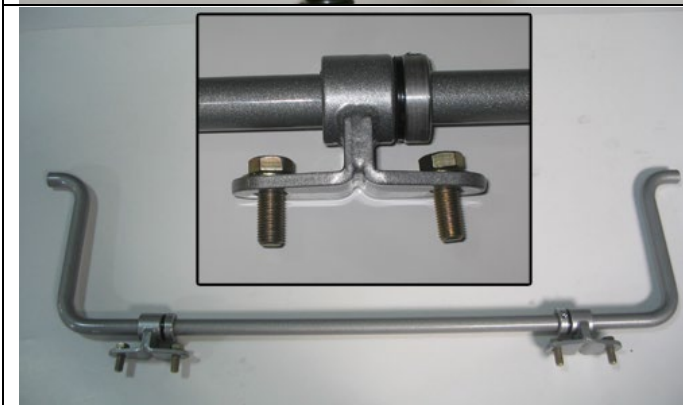
Note: As a secondary reference, check the measurement from the rear of the outside tab to the rear of the opposite tab, it should be approximately 34 inches.



With the car level front to back use a degree finder to set the pinion angle at 1 degree up. This will locate the tabs in the correct location to weld. Final adjustments can be made with the adjusters on the bars but this will get you in the ball park.

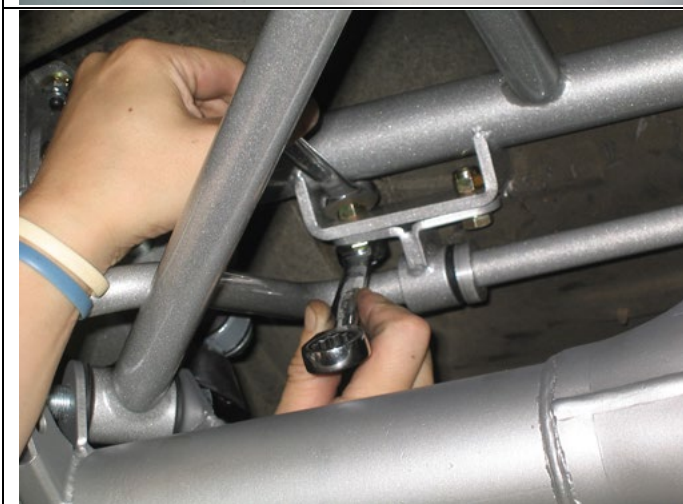
Note: At ride height the pinion angle should be from 0 to 1 degree up.

Make sure the axle is level side to side and centered in the chassis. Place the upper link bar tabs firmly against the housing and tack weld into place. Remove the link bars from the tabs. Remove the inner steel sleeve from the bushing. Place the steel sleeves back into the tabs and install the 5/8" bolts again. Now you can finish welding the tabs without damaging the urethane bushings. Once finished reinstall the sleeve into the link bar.

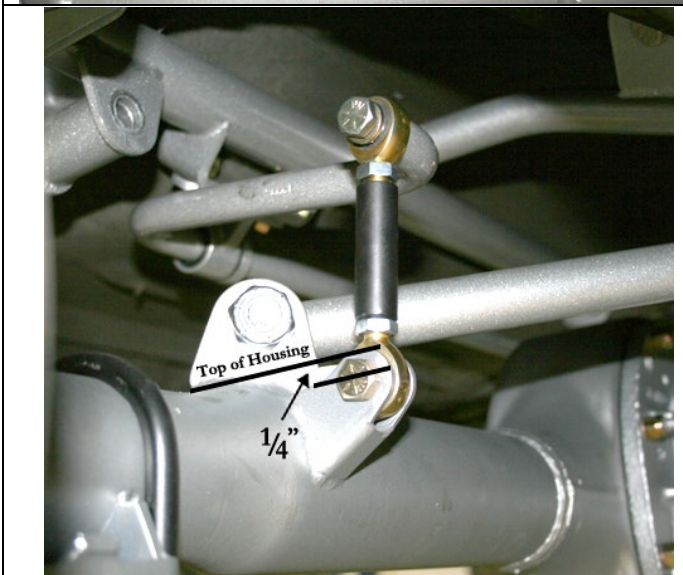


Optional Anti-Sway bar installation

Slide the two aluminum lock rings onto the center of the sway bar. Place the four 3/8" x 1" bolts into the brackets as shown. Slide the brackets onto the bar. Spread the split urethane bushing over the sway bar between the bracket and the lock ring with the flange facing inward toward the lock ring. Using WD-40, slide the bushing into the bracket using the lock ring to assist the install. Don't tighten the lock ring until the sway bar is installed on the cross-member.



Install the anti-sway bar brackets onto the cross-member brackets that support the sway bar. Install the nuts onto the bracket bolts and tighten. Once the brackets are tightened, the anti-sway bar has to be centered. Rotate the bar up where it is between the frame rails and measure from the end of the bar to the inside of the frame and slide the bar either way until that measurement is equal. Slide the lock rings tight against the flange on the urethane and tighten set screw.



The anti-sway bar axle brackets need to be installed on the axle housing. Adjust the rod end link to 3 7/8 inch centers and install them onto the sway bar using the 3/8 by 1 1/4 bolt and lock washer.

Install the bracket on the other end as pictured and let the link hang straight down. Position the bracket against the housing with the hole center on the bracket approximately 1/4 inch below the top of the housing. Tack weld in position. Remove the rod end link and finish welding. After welding reinstall the link and repeat process on the other side.

Note: For final adjustment: Disconnect one of the 3/8" anti-sway bar bolts (doesn't matter which one), place the vehicle down on its full weight, place the driver in the driver's seat, adjust the anti-sway bar end link until the 3/8" bolt can be reinstalled with zero preload.



Finish tightening all the bolts including the jam nuts on all four adjusters. You are ready to install the drive shaft, brake lines etc and set the car on the ground.



Vehicle height can be adjusted by loosening the set screw in the lower shock ring and turning the ring with a spanner wrench. The car needs to be raised up to relieve the weight off the shocks to turn the lower ring.

Tech Info:

Size & Backspacing (with factory width rear axle) = 8" wide wheel with 5.25" backspace (255 tire)

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!



1964 Falcon - Nick Licatas

