

## '60-'65 Ford Falcon

## **Rear Triangulated Suspension Install Instructions**

1-866-925-1101

www.totalcostinvolved.com



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

\*Installing coil-over axle brackets to 8 inch housing leaf spring pads.

**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.



**Note:** If you are using a 9 inch Ford housing and welding on our coil-over axle brackets the bracket centers is 43 inches with the pinion down one degree from the back face of the axle brackets which are 90 degrees to horizontal.



Clamp a flat bar on the back of both brackets to correctly square them to the housing. Even with the u-bolts tight the brackets need additional fastening to prevent them from moving with the side load that the coilover's put on them and from rocking for and aft with accelerating and braking so two holes will be drilled in the front and rear of the axle pad to correct this. If you have the bigger housing and access to install the nuts on the inside of the pad is an issue then the front and rear of the spring pad needs to be welded to the axle bracket to prevent the brackets from moving even though they're u-bolted down.



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 rotate both brackets 180 degrees and install the Allen bolts and tighten.



With the axle bracket bolted down and using the axle bracket as a guide drill the remaining hole in the spring pad.

Inset picture shows the pad with the two holes drilled.



Rotate the brackets back to their correct location and install the Allen bolts and the u-bolts and finish tightening.



Install the cross-member frame saddle brackets onto the frame rails just behind the axle snubber brackets with the angled end forward and the square end towards the rear. Double check the location by measuring from the top folded edge of the bracket back to the front edge of the stock rear spring shackle tube that sticks through the frame rail. The reference measurement is:

1960-1962: 18 ½ inch 1963-1965: 21 ½ 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.



Install the button head Allen bolts with washers through the sandwich brackets, 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 snubber 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 cross-member cradle between the channel brackets aligning the rear cross-member flange hole with the rear hole in the channel bracket and install the  $3/8 \times 3$  inch bolt from the outside. Lightly tighten.

**Note:** The convertible cradle is 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 bracket. Remove any tabs or brackets (brake line tabs, etc.) that will interfere with the folded front plate of the cradle from setting flush with the tunnel/floor pan area



With the cradle seated securely up against the tunnel/floor pan area and centered between the frame rails use the center hole in the cradle as a guide and drill a 5/16 inch hole through the hole. Install a 5/16 inch button head bolt to maintain alignment while drilling remaining holes. Repeat on other side.



Finish drilling the remaining 10 holes with the two alignment bolts holding the cradle secure.



After all the holes are drilled 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.

The inside sandwich plates for the convertible are two piece and require a slightly different install procedure as pictured below.



The lower sandwich plate is installed as pictured. The inside plate with the weld nuts will have to be slid through the side hole as pictured and aligned over the drilled holes above the lower sandwich plate and the bolts tightened from under the car. The button heads used on the weld nut plates are 5/16 coarse by one inch.



Install the 3/8 inch bolt through the tab on the cradle through the stock 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 in the front hole in the cross-member from the inside because of the snubber bracket issue. Tighten all four bolts.



Cross-member cradle assembly completely installed.

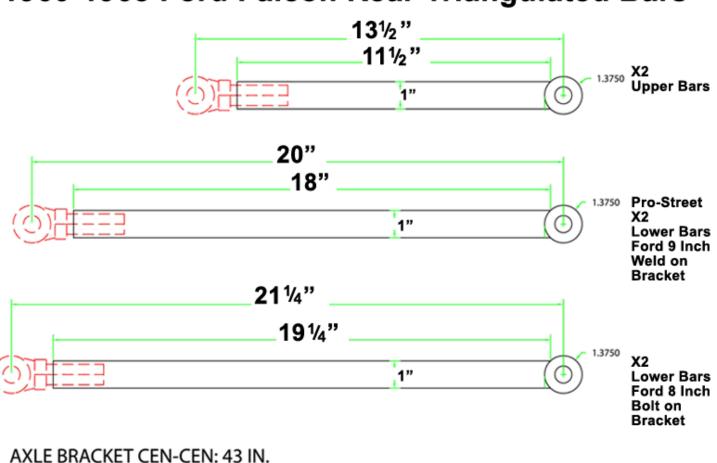


The rear axle assembly needs to be installed next to determine the correct location for the upper bar tabs to be welded on the housing.

First, adjust the lower bars to 21½ inch centers when using bolt-on brackets; 20 inches when using weld-on brackets and position the adjustor end into the stock leaf spring pocket. Using the stock 6½ by ½ inch bolt, install the 9/16 inch spacer first (against the frame rail) then the adjuster end of the bar and finally the outside ¾ inch spacer.

\* Note: If using 9 inch Ford rear housing with our weld-on brackets the lower bar center to center measurement is 19 inches.

## 1960-1965 Ford Falcon Rear Triangulated Bars



AXLE BRACKET CEN-CEN: 43 IN. PINION ANGLE: 1 DEG. DOWN

BAR ADJUSTMENT LENGTH W/ 9 IN REAR END: 20 IN. CEN-CEN

BAR ADJUSTMENT LENGTH W/ STOCK REAR END: 21 1/4 IN. CEN-CEN



Next position the rear of the lower bar into the bottom hole on the axle bracket and install the 3 by 5/8 inch bolt.

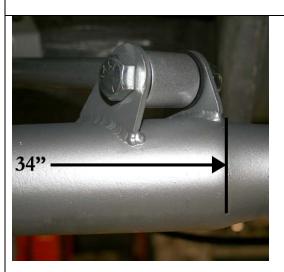


The coil-over shocks are installed next. The top bolt is 5 by 5/8 inch with a washer on the outside of the urethane bushing and the bottom bolt is 6 by 5/8 inch with washers on both sides of the urethane bushing with a 1 3/8 inch spacer between the washer and the bracket.

\* **Note:** If using 9" Ford rear housing with our weld-on brackets the lower spacer is 2 ½ inch and the lower bolt is 7 inch's long.



Adjust the top bars need to 13 7/16 inch centers and the adjustor end installed in the brackets on the cradle using the 3 by 5/8 inch bolt.



Install the axle housing tabs on the other end of the bar with the longer tab on the inside, angle forward and the shorter tab on the outside with the rear edge of the bracket right 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. This is going to be your "fixture" to install the tabs in the correct location. As a reference check the measurement from the rear of the outside tab to the rear of the opposite tab should be approximately 34 inches.



The axle housing is hanging on the coil-over shocks, the bottom bars are adjusted and the top bar is adjusted and installed in the cradle and the rear of the bar has tabs installed and resting on the top of the axle housing. With the car level and using a degree finder set the pinion angle 1 degrees up. This will locate the tabs in the correct location to weld. Final adjustment can be made with the adjustors on the bars but this will get you in the ball park. At ride height the pinion angle should be from 0 to 1 degree up. Double check the tab location on the housing and with the tabs firmly against the housing, tack weld the ends of the tabs to the housing to secure. Remove the bar and remove the inner steel bushing in the urethane and install between the tabs and lightly tighten to complete welding so as not to burn up the urethane bushings.

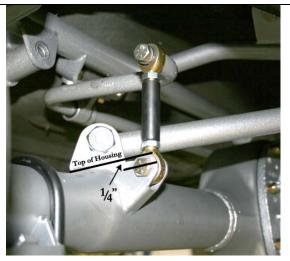


The sway bar is installed next.

Slide the two aluminum lock rings onto the center of the sway bar. Next, slide the brackets onto the bar. Before installing the bushings, place the four 3/8 by 1 inch bolts into the bracket as shown. You can't get them in after the bushings are installed. Spread the split urethane bushing over the sway bar between the bracket and the lock ring with the flange facing 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 sway bar brackets on the cross-member brackets that support the sway bar. Install the nuts onto the bracket bolts and tighten. Once the brackets are tightened, the 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.



Next the sway bar link axle housing brackets need to be installed on the axle housing. Adjust the rod end link to approximately 3 7/8 inch centers and install onto the sway bar using the 3/8 by 1½ bolt and lock washer.

Install the stamped bracket on the other end as pictured and let the link hang straight down. Position the stamped bracket against the housing with the hole center on the bracket approximately ¼ inch below the top of the housing. Tack weld in position. Remove the rod end link and finish welding. After welding reinstall link and repeat process on other side.



Finish tightening all the bolts including the jam nuts on all four adjustors. You are ready to install the drive shaft and set the car on the ground.



The rear height of the car 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 in the rear to relieve the weight off the shocks to turn the lower ring.

Enjoy the test drive!