

## 1948-1952 Ford Pickup Air Spring 4-Link Kit Install Sheet 1-866-925-1101 www.totalcostinvolved.com

## CHECK ALL PARTS INCLUDED IN THIS KIT TO THE PARTS LIST BEFORE INSTALLATING OF THE KIT. IF ANY PIECES ARE MISSING, PLEASE CONTACT: TOTAL COST INVOLVED 800-925-1101

- 1. While it may be possible to install this kit without removing the bed, it is recommended that you do so, as it is much easier. Support the front and rear of the chassis on jack stands. **Be safe!** Avoid pulling and pushing on the vehicle while it is off the ground.
- 2. Remove the rear axle, springs, bump stops, and brackets. To remove the rivets holding the brackets, grind the rivet heads flush. Center punch the rivet and drill through using progressively larger drills up to a 5/16" drill. The rivet should be relatively easy to punch out. If it is not, then continue drilling with a 3/8" drill. Take care not to drill the original rivet holes larger or off center, as you will be locating your new parts with these holes.
- 3. Install the 4-link frame brackets to the frame where the original front spring perches use to be. The left and right are determined by the lower 4-link holes being further forward than the upper ones. Fasten the brackets to the rails using the 3/8-24x1-1/4" bolts, nyloc nuts, and one washer under each nut. Drill out the two holes below the two top holes and fasten those as well. Then drill out the two holes on the bottom of the bracket and fasten them. Use a 5/8" drill and drill out the upper 4-link hole that goes through the frame.
- 4. Weld the axle 4-link brackets onto the axle at 36" center to center and 0° (90° from the pinion). The flat side of the bracket goes to the back. Weld the air spring axle brackets to the rear of the axle at 42" center to center and 92° from the 4-link bracket (the rear of the spring bracket will be higher by 2°). The spring brackets will also need to be trimmed on the inside leg so that it buts up against the back of the axle 4-link bracket.
- 5. Prep the boxing plates to be welded to the rails. Trim the plates to fit the rails so that the leading edge of the plate is approximately 5-1/2 " in front of the axle centerline. It may also be necessary to grind the flanges of the rails to allow the boxing plates to set flat and parallel to each other. The boxing plates can then be welded in.
- 6. Draw a line 31-1/8" in front of the rear bed bolt hole on the outside of each rail at the same angle as the top of the rail as measured in the center of the wheelbase. Weld the upper spring bracket to the outside of the rail by lining up the center of the spring bracket with the line drawn on the side of the rail. The front lip of the bracket should be flush to the bottom of the rail and the top of the bracket perpendicular to the line. Weld both sides (top/bottom, inside/outside) of the bracket to rail. Pay close attention to the bottom flanges as they are the most critical.
- 7. Install the bump stops using the original bump stop holes found on the bottom of the rails at the axle centerline.
- 8. Assemble the adjuster-end of the 4-link bars to the chassis brackets using the 5/8- 18x3 1/2" bolts and sheer nuts. Slide the axle under the chassis and attach the 4-links using the same nut and bolt combination. As you are assembling this, adjust the bars so that the pinion angle matches that of the transmission and the center of the axle tube bottoms out on the center of the bump stops. Attach the air springs to the axle brackets and upper spring brackets.
- 9. Draw a line 27-3/8" in front of the bed's rear bolt hole on the inside of each rail. Make the line 90° to the top of the rail as measured in the center of the wheelbase. Cut the shock cross member to fit between the rails so that the back of the cross member lines up with the line. Bolt the shock on the front-side of the cross member with the 5/8-18x4" bolts, nyloc nuts and washers on both ends of the bolt. Attach the bottom of the shock to the axle brackets using the 5/8-18x7" bolts, nyloc nuts and washers and a 2-3/4 " spacer in between the axle bracket and the coil-over. There should also be washers on both sides of the shock.

Use a floor jack to support the rear-end so that the air springs only extend 7.0" between the upper and lower brackets. Lift the shock cross member to fully extend the shocks, and line up the back of the cross member with the line drawn earlier. Double check that the cross member is level, the axle is centered under the rails, and tack weld in place. Then, compress the suspension with the jack so that it bottoms out on the bump stops. Verify the shocks do not bottom out and that everything else looks good. Now the cross member can be welded in completely.

- **NOTE:** The air spring has about 4" of travel, from 3" to 7" tall. The air spring has no device to limit its movement in either direction. It is important that the shock limits the amount of extension possible, and the bump stop be used to limit the compressed height of the spring to prevent damage to the spring or vehicle.
  - 10. Attach the panhard bar axle bracket to the rear-end and install the panhard bar with the adjuster on the frame side. Attach the panhard bar frame bracket to the panhard bar. Locate the bar so that it is parallel to the axle and tack weld. Remove the panhard bar and weld completely. The bar can be reattached once the bracket has cooled