

99-04 Ford 5/6, 7/8, 9/10 Lift Kit Instructions

Front Kit

Step 1. Before you remove anything off the truck, measure the pinion on the front and rear axle differential. Make sure to record this measurement as we will want to put each axle back to this angle after the suspension lift kit is installed. This is especially important for the front axle. Putting the front axle back to the same measurement will keep the stock camber and caster.

Step 2. Jack up the truck and place a jack stand under the frame on each side of the truck. Jack the truck up enough so that the front tires are just barely off the ground. Take a motorcycle strap and wrap the strap around the differential and to the frame. This will help keep the axle in the general proximity while the factory suspension is removed and the 4 link is installed.

Step 3. Remove shock absorbers, leaf springs, sway bar, and sway bar end links.

Step 4. Locate upper bag mount and drill out the four 3/8" holes in side of the frame to 1/2". Bolt the brackets to the side of frame using the four 1/2" grade 8 bolts. Make sure to check the back side of the frame for brake lines, fuel lines and on the Excursion, heater lines.

Step 5. Locate the lower air bag mount. Position this part on top of the axle. Locate the lower trailing arm mounts and position them on the bottom of the axle. The passenger side lower trailing arm mount is the one with the sway bar bracket welded to it. It will be required to cut the factory trailing arm mount off the axle. Fasten the lower air bag mount and the lower trailing arm mount together with the 9/16 x 8 bolts. Torque to 135 ft/lbs.

Step 6. Locate rear trailing arm brackets and fasten to the frame using the 1/2" bolts provided. It will be required to drill the (4) holes in the bottom of the frame. Be careful not to drill into any fuel lines.

Step 7. Remove the factory trac bar mounting bracket, and factory pitman arm. Use the factory bolts to fasten the new upper trac bar drop bracket on the frame. Install the new pitman arm and install. **It will be required to retighten the pitman arm after the test drive.** Tighten all the bolts and nuts up at this point. Make sure to put the cotter pin back in the pitman arm. Locate and install the adjustable trac bar. The end with the 7/8" heim end goes into the axle. It may be necessary to enlarge the hole to fit in the 7/8" bolt. A spacer goes on each side of the heim ends both in the axle and in the trac bar drop bracket.

Step 8. Locate the upper and lower trailing arms. Install the arms so that the upper arms are the same length and the lower arms are the same length. Try and install so the pinion angle is close to original.

Step 9. Locate the airbags and install. Locate the shocks and install. If you are using the Bilstein 7100's put one spacer on each side. If you are using the 5150's, you don't need any spacers. Use Loctite on the bolts or the bolts may back out while you are driving.

Step 10. Alignment. You can do this after you do the rear system or after the front is installed. On the 6" and 8" kit, inflate the bag to 8" (5323 bag). On the 10" kit, inflate the bag to 10-12" (8979 bags). You will now need the pinion angle measurement you took before the front end was disassembled. Measure out the front so the axle is centered in the wheel well. Put the pinion angle back to stock. Pick a point on the frame to make sure the axle is the same. Next, measure from the outside of the tire to the frame on each side of the truck. Use the adjustable panhard/trac bar to center up the axle. Tighten the jam nuts when done with all the adjustments. You will need to also adjust the steering wheel. This is usually done after the first test drive.

Step 11. Attach the sway bar to the axle. Remove the two bolts that hold the factory upper sway bar end link pivot points from inside the frame. Reattach the bracket to the bottom of the truck frame with the original bolts. Attach the factory end links. Let all the air out of the bags to make sure the bolts or end links do not rub on the trailing arms.

Rear Kit

Step 1. Measure the rear pinion angle. Record this angle as you will need it to align the rear axle after the kit is installed.

Step 2. Jack up the rear of the truck so the rear wheels are just barely off the ground. Put a motorcycle strap over the differential to the frame. Remove the rear leaf springs, sway bar and the rubber bump stops located on the bottom of the frame. You will reuse the bolts that hold the front of the leaf spring in the spring perch, so set them aside.

Step 3. Locate the lower air bag mount and the lower axle clamps. The passenger side lower air bag mount is the one with the two tabs welded to it. The bottom axle clamps are also the lower shock mounts. Place the lower axle clamps on the top of the axle leaf spring perches. Use the 5/8 x 8" bolts to fasten components into place. Make sure to run the bolts in from the top down (nuts on the bottom). The bottom shock mounts should be mounted so the ears are toward the inside of the frame.

Step 4. Locate the side frame lower trailing arm mount. Hold the mount against the side of the frame and match up the holes. It will be necessary to drill the holes in the bottom and sides of the frame. Use a 1/2" drill or slightly larger. On the driver's side, it will be necessary to remove the fuel tank. Also, be sure to use extreme caution when drilling around the fuel and brake lines. On the driver's side, we recommend NOT drilling out the rear bolt hole on the bottom of the frame since the fuel and brake lines are so close.

Step 5. Locate the trailing arms. The short ones go on top. Locate the step bushing and slide it into the end of the trailing arm that goes into the factory leaf spring perch. The step side of the bushing goes against the outside, away from the frame. Use the factory bolt to fasten into place. Use the 7/8" x 5" bolt to fasten the other end in the bottom air bag axle mount. Locate the bottom trailing arms and fasten them into place. The spacer goes on the frame side. Use the 7/8" by 8" bolt on the front mounting bracket and the 7/8"x5" on the bottom bag mount.

Step 6. Using a torch or grinder, remove the rivet heads that hold the rubber bump stop in place. Knock out rivets with a punch and hammer. The rubber bump stop is no longer used.

Step 7. Locate the top air bag mount/panhard bar anchor. Drill out the rivet holes with a ½” drill. Fasten the (6) ½” x 2” bolts into the holes where the rubber bump stop was located. The panhard bar anchor is goes on the driver’s side next to the fuel tank.

Step 8. Locate the airbags. Fasten into place using the ½” by 4 ½” bolt (8979 bags) in the bottom and the ½” coarse nut and ¾” fine thread nut. Insert the air fitting into the bag.

Step 9. Locate the panhard bar. Use the ¾” bolts to fasten into place. Put a spacer on each side of the heim end in order to center the panhard bar.

Step 10. In order to align the rear axle, it will be necessary to put the truck at ride height. Inflate the bags. Use the chart below:

Kit size	Bag	Bag Height
6”	5323	8”
8”	8979	10”
10”	8979	12”

Once the bags are inflated, set the upper arms so they are the same length. Now set the bottom bars to the same length. Find a hole on the frame that the same on each side. Use that as a reference point as you are squaring up the axle. Also try to keep the pinion angle close to the original measurement. It is easier to adjust the trailing arms by turning each one ½ a turn and then going to the opposite arm and turning it ½ a turn. If you get to point where an arm will not turn, take a jack stand and place it under the rear hitch. Let the air out of the bags. Keep the truck and ride height. This should relieve some of pressure and make the adjusting easier. Once you get the ride height established, axle squared up, and pinion angle set, adjust the panhard bar side to side. After everything is lined up, go over and retorque all the bolts. NOTE: Do not be alarmed if the bottoms of the bags are angled.

Step 11. Now that the rear axle is square, you will want to make sure the front axle is square with the rear axle. Take a tape measure and have a helper hold the end of the tape on the front side of the rear axle. Measure forward to the kingpin on top of the front axle. Record this measurement. Measure the other side. Try and get this measurement within 1/8”. You should have the front airbags setting pretty square when all is done. Be sure to recheck the front panhard bar to make sure the front axle is square.

Step 12. Locate the upper shock mounts and shocks. Use a straight edge to locate the upper shock mount. Drill two 3/8” holes in the frame. Use the 3/8” x 1 ½” bolts to attach the mount to the frame. Fasten the shocks in place.

Step 13. The next suspension install is the rear sway bar. If you are using the factory sway bar, it will be required to lengthen the end links. With the truck at ride height, set the sway bar so it is level with the ground. Cut the end links and lengthen them. Make sure there are not any bolts sticking out that could rub on the trailing arms.

Step 14. The carrier bearing on the driveshaft will need to be spaced down. Use the 2x3 tube or supplied shims to space the carrier bearing down. Use a string to make sure the driveshaft is straight.