

KLM-16750



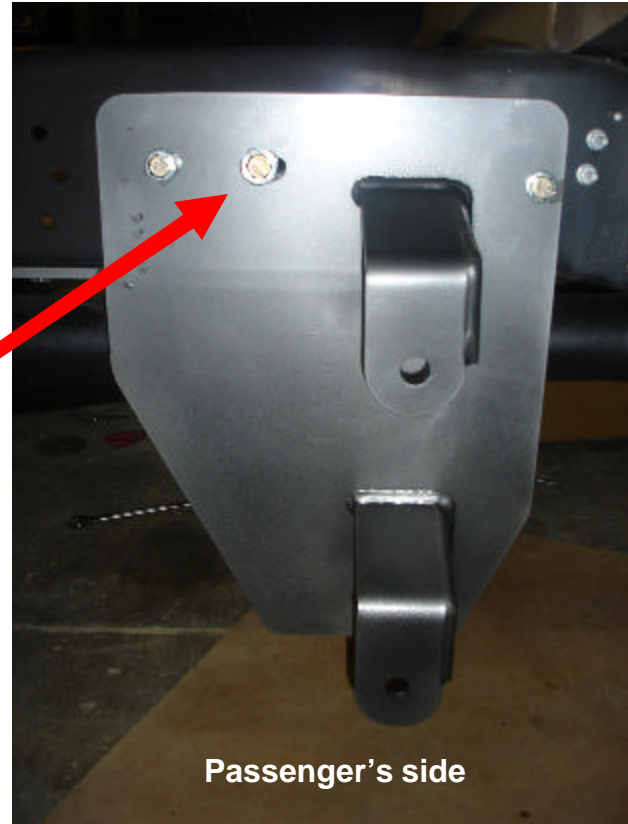
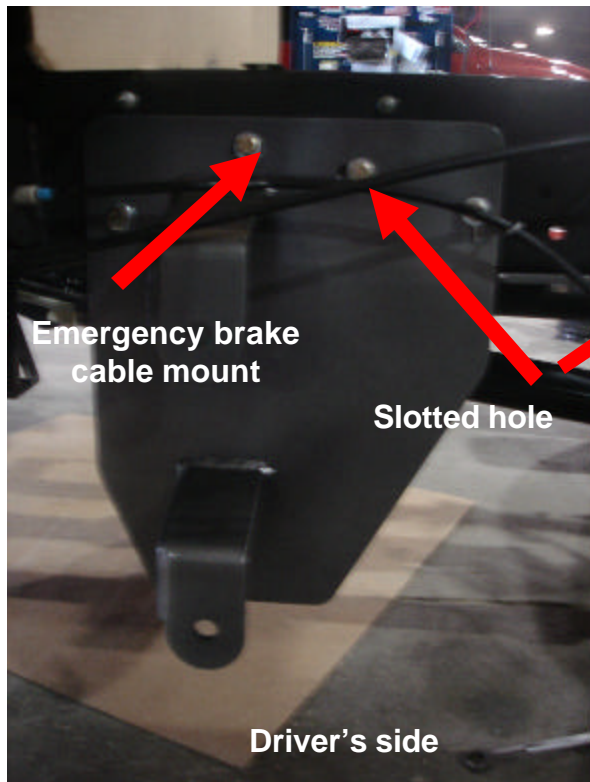
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2008 Ford F-450 Pick Up (not cab chassis) 6-8" Rear Lift Kit Installation Instructions



Installation

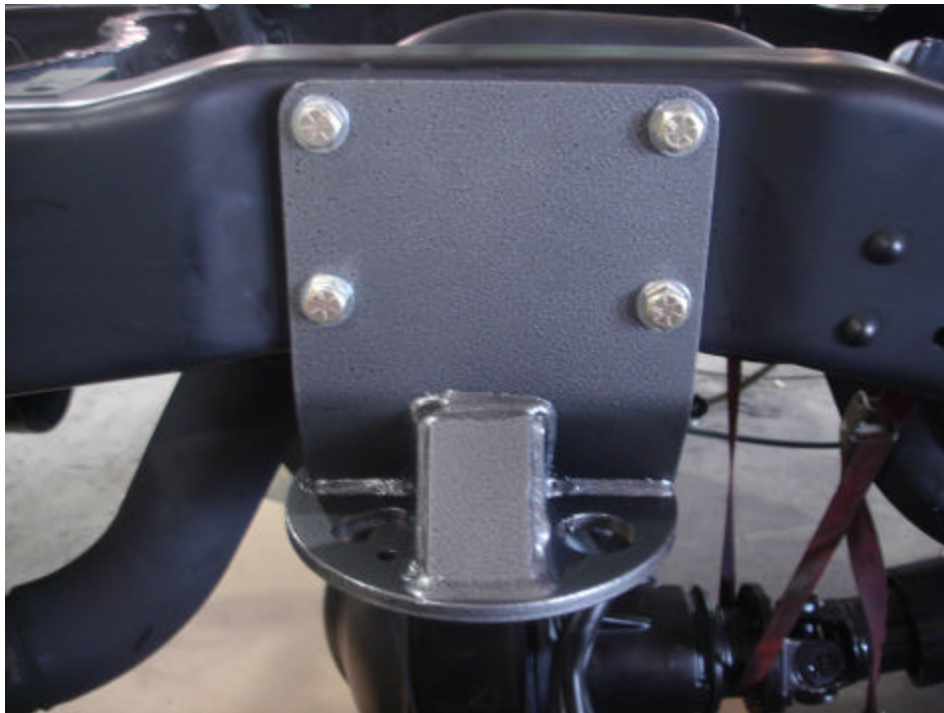
1. Before doing anything, measure the pinion angle and write the angle down. This is important because you will need to put the axle back to this measurement after the installation. Also, take a measurement from the front of the axle to a location on each side of the frame. Write these measurements here. Pinion angle _____. Right side _____ Left side _____ **NOTE: All the bolts in this kit use a flat washer on each side of the bolt.**



2. Jack up the rear of the frame so that most of the tension is off the leaf springs. Place a set of jack stands under the frame, block the tires so the axle won't move and place a jack stand under the pinion so it doesn't rotate. Remove the leaf springs. Remove the front overload pads. The best way to remove the riveted pads is to use a torch to cut the rivet heads off. Make sure that there are no fuel lines, brake lines, or wiring that can be damaged while cutting the rivets off.
3. Locate the front trailing mounts. They bolt to the side of the frame with the 1/2" x 1 1/2" bolts. You will be able to locate the correct position by looking for the oval slot in the side of the frame. It will be required to drill the rest of the holes out to 1/2", including the two in the bottom of the frame. Once you have the holes drilled, start the bolts but don't tighten yet. Locate the cross brace (the one with the drop in it), and fasten it in between the trailing arm mounts with the 1/2" x 1 1/2" bolts. After the cross brace is in place, go ahead and torque all the bolts to 85 ft/lb.

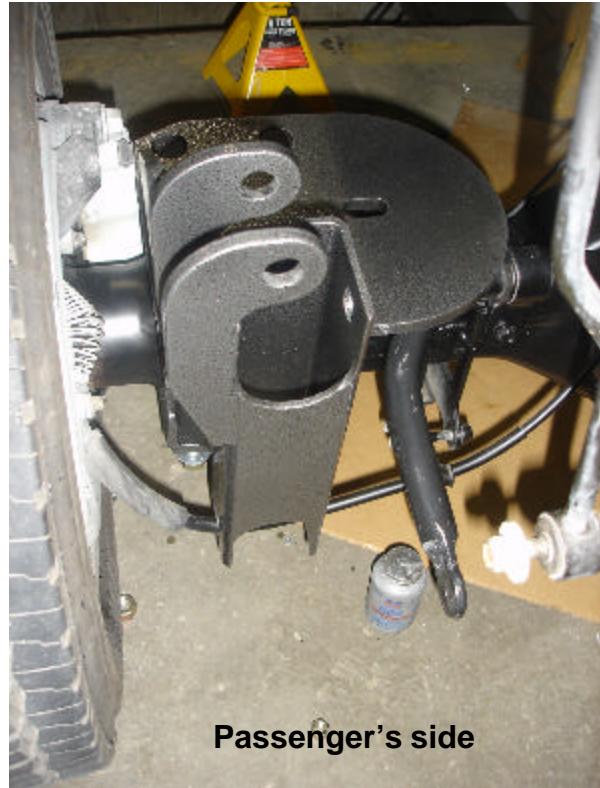
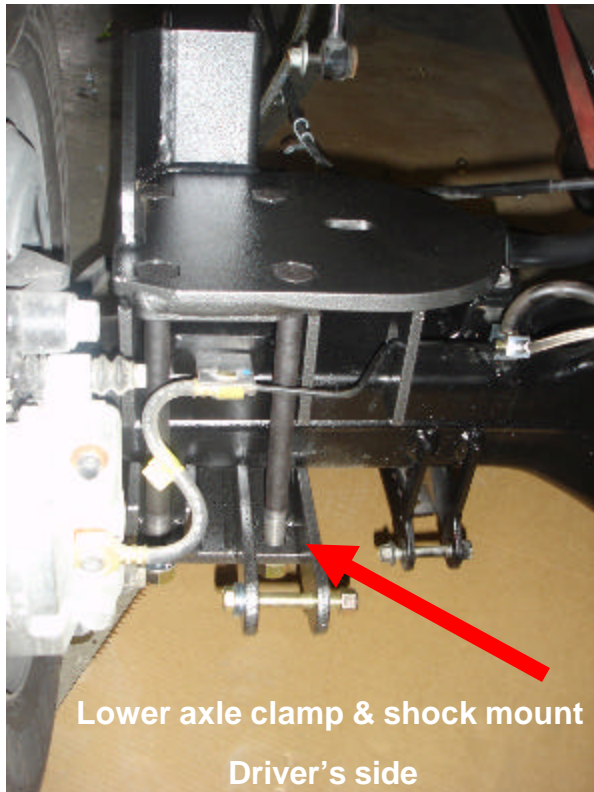


Cross brace



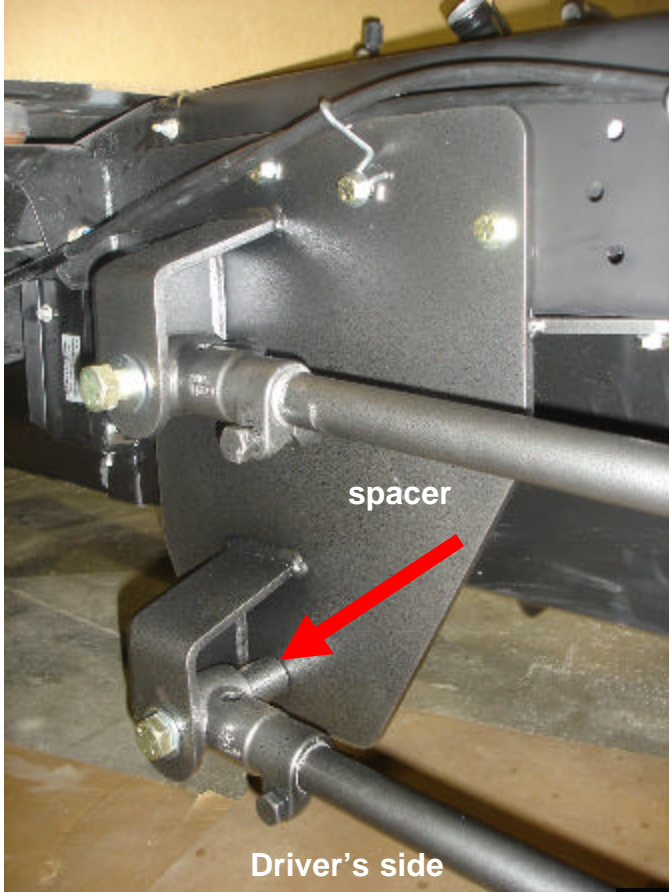
4. Remove the bump stops from the bottom of the frame. Next locate the upper bag mount/pan hard bar mount. It will be required to drill four 1/2" holes in the side of the frame. Making sure the pan hard bar ears are on the drivers side, center the upper bag mount on the frame and use a center punch to locate the holes. Drill the hole out to 1/2" or slightly larger. Once you have the eight holes drilled, fasten the upper air bag mount with the 1/2" x 2" bolts and torque them to 85ft/lbs.

5. Locate the lower bag mounts. The passenger's side mount is the one with the pan hard bar ears. Locate the 3/4" x 9 1/2" bolts. Locate two of the 5323 air bags. Slide the bolts through the bracket from the top down. Next fasten the air bag to the bracket using the 1/2" x 4" bolts, flat washer, and lock washer. Make sure the studs on the top of the air bags are parallel with the air bag mount. Tighten the 1/2" bolt to 35 ft/lbs.



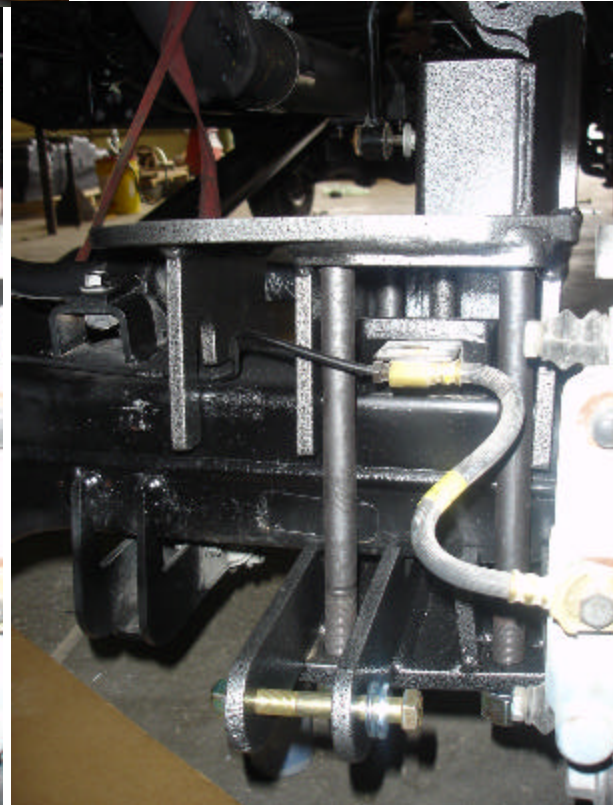
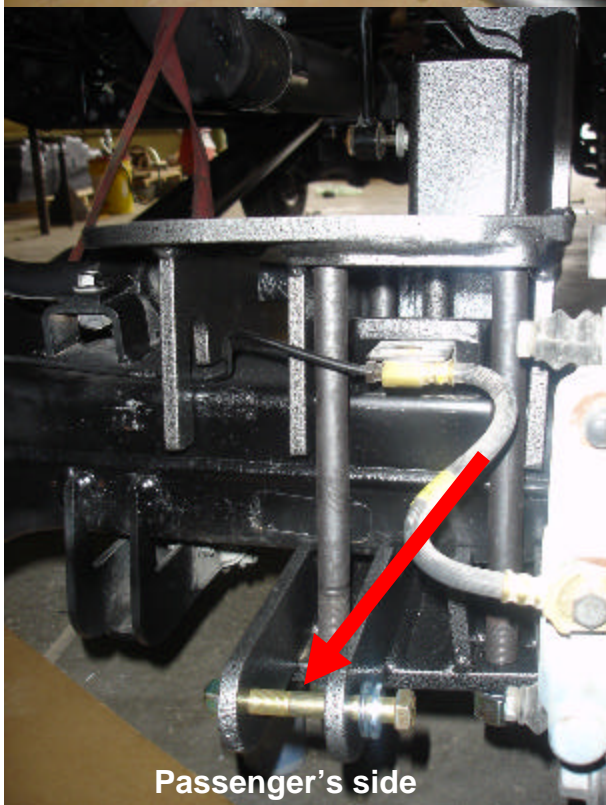
6. Take the lower air bag brackets with the front air bag mounted to it and slide it over the axle. Use the center dowel pin to locate the bracket on the axle. Locate the lower axle clamp and slide it up under the axle. Use the 3/4" x 10 1/2" nuts and flat washers to fasten the to mounts together. The tabs that stick out of the lower axle clamps are used as the lower shock mounts. They face the rear of the truck and the tabs go away from the tire (closer to the frame). Tighten the bolts in a criss-cross pattern and torque the 3/4" bolts to 225ft/lbs.

7. Locate the trailing arms. The front of the trailing arms fasten into the front trailing arm mounts with the 7/8" x 7" bolts and 1 3/4" spacers. Make sure that the 1 3/4" spacers go between the trailing arm and inside of the trailing arm bracket. The rear of the trailing arm mount fastens to the lower air bag bracket with the 7/8" x 5" bolts. Do not tighten the 7/8" bolts until the alignment is complete. After that you will be able to torque the 7/8" bolts to 275 ft/lbs.

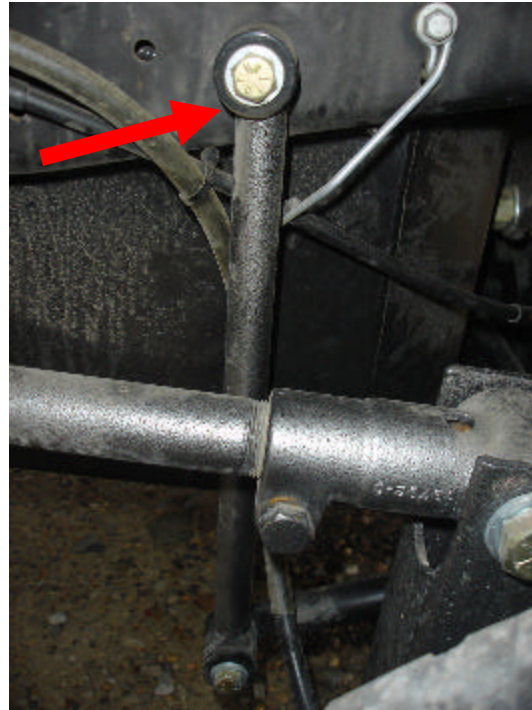
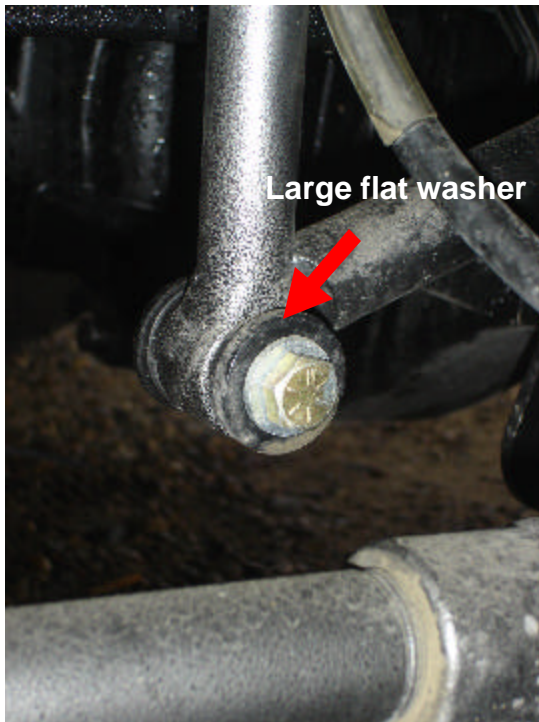


8. Locate the 9626 air bags. The top of the bags fasten in place with the 1/2" and 3/4" nuts and lock washers. The bottom of the bag fastens to the lower air bag plate with the 1/2" flat washer, lock washer and nut.

11. Locate the pan hard bar. The pan hard bar fastens into the lower air bag mount on the passengers side and into the upper bag mounts. Use the 7/8" x 4" bolts and place a spacer on each side of the heim end. Start the nuts, but do not tighten until the alignment is done. Once this is done, you can torque to 175 ft/lbs.



12. Locate the sway bar end links. The bottom of the end link attaches to the factory sway bar with the 1/2" x 3 1/2" bolts. Make sure to use the large machined washer on the outside against the red bushing. Make sure the sway bar is parallel with the ground when the bag is at 11". You may be able to use an existing hole in the frame for the upper end of the end link (although you may have to drill it out to 1/2")



13. Alignment: Once all the components are installed and tightened, adjust the jack stands that are holding up the rear of the frame so that the distance between the upper and lower air bag mounting brackets is 11". Once this height is set, refer to the original measurements taken in step 1. It also works well to measure from the front of the rear axle to the kingpin on the front axle. Try and get this measurement within 1/8". Also adjust the pan hard bar to center up the rear axle with the frame. After the adjustments are made, go ahead and tighten all the 7/8" bolts to 275 lb/ft. Next, tighten the pinch bolts to 75 ft/lb. Tighten the jam nuts on the pan hard bar as tight as you can with a wrench.
14. Locate the stainless brake line and install.
15. Shock installation. Locate the rear shocks. If you bought the Bilsteins, they will be the 12" versions. Fasten the lower end of the shock to the lower axle clamp with the 1/2" x 3" bolts. If you are running the 7100 series, one of the supplied spacers on each side of the hiem end. Locate the upper shock mounts. They will fasten to the side of the frame with the 1/2" x 2" bolts. Make sure that the shocks are straight up and down at ride height. The holes will have to be drilled in the side of the frame for the 1/2" bolts. **NOTE: Before you bolt the upper shock mounts to the frame, make sure that the shocks will not be bottomed out when all the air is out of the rear bags.**

16. Once the rear kit is installed, inflate the bags to ride height (around 11"). Locate the drive shaft carrier bearing shims. There are 1/4", 3/8" and 1/2" shims. Use whatever combination that it takes to drop the carrier bearing down enough to make the driveshaft straight. You may need to add or subtract to after you drive the truck. Once the kit was installed, you should have very little drive train vibration/ noise, if any at all.
17. Go over all the bolts and re-torque them.
18. Use the supplied instructions and install the air control system that you purchased. The recommended air bag ride heights are around 7.5" inches on the rear
19. If the front kit is already installed, make sure all the front bolts have been torqued, the front is aligned, and the brakes have been bled. Make sure all the tires are at the same air pressure. Take the truck on a test drive. The truck should drive straight down the road without any vibrations. If the truck has a shutter upon take off, (between 0-10 mph) then the pinion angle needs adjusted. If the truck has a drive line "drone" then the carrier bearing needs to be raised/lowered. If the truck pulls to the right, then the right rear bars need to be extended. When adjusting the bars to get the final alignment, we recommend only adjusting the bars one turn at a time. This will move the axle 1/8". NOTE: It is recommended to re-torque the bolts at 500-750 miles and then every 10,000 miles there after.



