

1999-2005 Ford 5-6" and 7-8"

Excursion/ F-250/350 Rear Instructions



1. Record the pinion angle here ______. Remove the rear leaf springs, shocks, sway bar and rubber bump stops of the bottom of the frame. Keep the front bolts from the leaf spring hanger. It will be reused to connect the upper trailing arms into the forward leaf spring perch.



2. Locate the lower trailing arm mounts (part# XXXX DS and XXXX PS. They fasten to the side and bottom of the frame with the five $1/2x1 \ 1/2$ " bolts. You will have to drill out the side rear hole as well as the bottom two holes in the frame flange with a 17/32 drill bit. Torque these bolts to 85 ft./lbs.



3. Remove the factory bump stop off the bottom of the frame rails. Drill that hole out to 17/32". Locate the upper cross member (part# XXXX) and slide it up into position. Fasten to the bump stop holes with a $1/2x1 \ 1/2$ " bolt on each side. Go ahead and torque to 85 ft/lbs. Drill out the two holes in each side of the frame to 17/32" Install the $1/2x1 \ 1/2$ " bolts and torque to 85 ft./lbs.



NOTE: air bag was installed when this picture was taken

4. Locate the lower air bag mounts (part# XXXX DS and XXXX PS has pan hard bar ears) and the lower axle clamps (part# XXXX DS and XXXX PS. The lower axle clamps also are the lower shock mounts. Set the lower bag mounts on top of the leaf spring perch. Drop the four 5/8x 9 bolts down. Now slide the axle clamps up. Make sure the shock ears are outside towards the break caliper. Torque these bolts to 150 ft'lbs.



5. Locate the trailing arms (part# XXXX upper and XXXX lower). Set the upper bars so there is 8" between the knuckles. Set the bottom bars at 31 3/8" between the knuckles. Locate the inner sleeve for the forward upper knuckle (part# XXXX). Insert this into the front spring perch so the thick spacer is towards the inside of the mount. Set the trailing arm orientations so the pinch bolts on the knuckles are down. Use the original leaf spring bolt to fasten into place. You will torque this bolt to 135 ft/lbs after the back of the trailing arm is installed into the lower bag mounts. Drop the other end of the trailing arm into the top hole of the upper air bag mount. Use the 7/8x5" bolt to fasten. Insert this bolt from inside out.





The upper trailing arm bolts needs to be inserted with the nut side towards the tire. If not, the threads on the bolt may hit the frame when the air is deflated 6. Insert the lower trailing arms into the forward trailing arm mount and into the bottom hole in the lower air bag mount. Use the 7/8x5" bolts to fasten. Insert the bolts outside in. You will torque all the 7/8" bolts to 250 ft/lbs once the install is complete.



7. Locate the sway bar (part# XXXX). The drivers side fastens into the upper air bag cross member with the 3/4x4" bolts. Make sure to center the heim end with the provided spacers and orientate the bolt so the threaded bolt is facing away from the air bag. The passenger side fastens to the lower air bag mount with the 3/4x4 1/2" bolt. Torque these bolts to 175 ft/lbs.



8. Locate the Firestone 8979 air bags (part# XXXX). They fasten to the upper cross member with the 1/2 and 3/4" nuts and washers. The bottom of the air bag fastens to the lower air bag mounts with the 1/2x4 1/2" bolts. Torque these bolts to 35 ftl/bs. Also locate the air fitting and install into the air port on top of the bag. Insert the fitting finger tight then tighten it one turn.



9. With the four link installed and the pan hard bar is in place, set the air bags at 10.5" tall. You can do this by manually airing the bags up or just measuring between the plates and using a jack to set the vehicle height. Using your original pinion angle measurement in step one, shorten/lengthen the trailing arms to get the correct pinion angle. Also make sure the axle is centered in the wheel well. Use the pan hard bar to get the axle centered side to side. You can also go to YouTube and type in 'Dialing In The Kelderman Lift Kit' and watch the tutorial videos on how to align up your air suspension. Now that the rear suspension is set up, we can install the sway bar and sway bar end links and then the shocks. We need the axle centered to ensure the shocks and end links are straight up and down.



10. Locate the sway bar (part# KLD-XXXX) and sway bar mounting brackets (part# XXXXPS and XXXXDS). The mounting brackets fasten to the axle housing with the supplied U-bolt. The hoop welded to the side of the mounting bracket fits over the round tab sticking out of the axle. Next locate the sway bar Blue bushing, D clamps and grease. Apply some grease to the sway bar and place the blue bushing over it. Next clamp the assembly to the bracket and fasten with the U-bolt studs. Torque to 55 ft/lbs. You can wipe the excess grease off the sway bar once the install is complete.

Passenger side

Drivers side



11. Locate the sway bar end links (part# XXXX). They fasten to the side of the frame and to the sway bar with 1/2xXXX" bolts. Make sure to put the large washer on the outside of the poly bushings. The top hole is in the frame just under the body mount. It just needs to be drilled out to 1/2". Torque these bolts to 85 ft/lbs.





Large flat washer



Large flat washer

12. Locate the shocks (part# XXXX) and upper shock mounts (part# XXXX). The shock mount tabs go down. They will mount on the side of the frame about 1/4" off of center (towards the bottom of the frame) You will need to drill the holes in the frame for the shock mounts. Torque all the 1/2" bolts to 85 ft/lbs.





13. Locate the sensors, sensor brackets and linkage kit. You will need to weld the sensor brackets to the bottom of the frame. The sensor then bolts to the bracket with the 1/4x1" bolts. Next you will set the linkage arms to 4 1/2. Fasten the collar to the upper trailing arm about 3 3/8" inches from the knuckle on the lower air bag mount. Connect the linkage to the collar and sensor.

Sensor bracket welds to the frame just under the bend of the leaf spring perch and where the frame just begins to turn up

