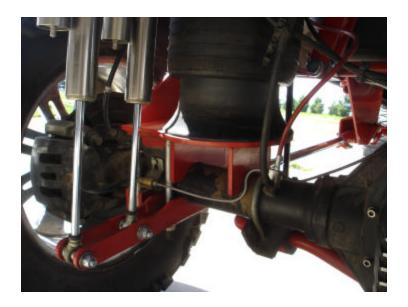


2686 Highway 92 - Oskaloosa, IA 52577 phone: 641.673.0468 - fax: 641.673.4168 www.kelderman.com

2005-2007 Ford SD Rear 10-12" Lift Kit Installation Instructions



- 1. Before you remove anything off the truck, measure the pinion angle on the bottom of the differential. Make sure to record the measurement here _____. Once the kit is installed, it is required to put the axle back to this measurement. This will keep the correct caster and camber.
- 2. Raise the truck, enough to remove the leaf spring. Remove the bolts that hold the front leaf spring and rear shackle in place. The leaf spring and the shackle will not be reused.
- 3. Using a torch or grinder, remove the rivet heads that hold the rubber bump stops in place. Knock out rivets with a punch and hammer. You can also remove the rear brake line and install the provided brake line extension kit. Once the install is complete, make sure the air is out of the system by bleeding the brakes.
- 4. Locate the lower bag brackets. Fasten into place with the lower axle clamp and the 5/8" x 9" bolts. Make sure the bolts go from the top down. Use the extended nuts and thick washers. Torque to 150 lb/ft. Make sure that the shock mounts on the lower axle clamps are mounted towards the inside of the frame.







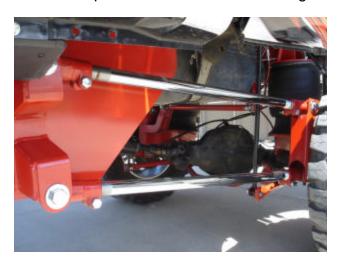
5. Locate driver's side trailing arm frame mount. They bolt against the side of the frame. It will be necessary to drill out the holes in the frame to accommodate the 1/2" bolts on the bottom of the frame. Be careful to not drill holes into the brake or fuel lines. Before you tighten up the trailing arm mounts, locate the cross brace that bolts between the two mounts. Use the 1/2" x 1 1/2" bolts to fasten in place. After the brace is in place, tighten all the bolts.



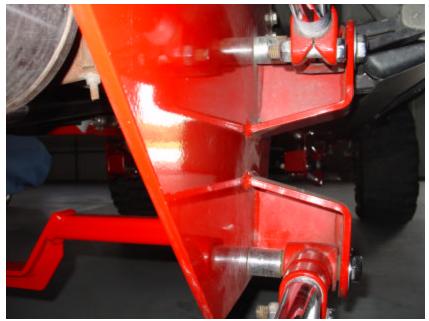




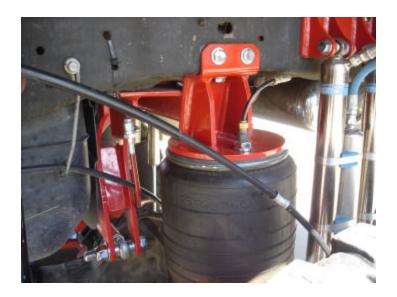
6. Locate the trailing arms. Use the 7/8" x 5" bolt to fasten into the bottom air bag axle mount. Use the 7/8" x 8" bolts on the front trailing arm mount. The spacers go in between the knuckle inside of the mount closest to the truck frame. Try and keep the top arms close to the same length as well as the bottom arms similar in length.



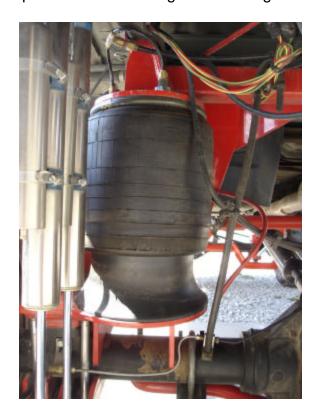




7. Locate the top crossmember. Hold up the bracket and drill out the rivet holes with a 1/2" drill. Fasten the six 1/2" x 2" bolts into the holes where the rubber bump stop was located.



8. Locate the airbags. Fasten the bottom of the bag into place using the flat washer, lock washer and nut and fasten the top into place using the 3/4" fine thread jam nut and lock washer on top. Insert the air fittings into the bags.



9. Locate the panhard bar. Use the 3/4" bolts to fasten into place. Put a spacer on each side of the heim end in order to center the panhard bar.



10. Locate the upper shock mounts and shocks. Fasten the bottom eyelet of the shock into the bottom axle clamp/lower shock mount using the 1/2" x 3 1/2" bolts, flat washers and lock nuts. With the airbags at ride height, (around 14-15"), position the shock straight up and down and hold the upper shock mount against the frame. Use a center punch to mark where to drill the holes and drill them out to 9/16" Use the 1/2" x 1 1/2" bolts, flat washers and lock nuts to fasten the bracket to the frame. Use the 1/2" x 3 1/2" bolts, flat washers and lock nuts to mount the shock to the upper shock mount.







11. Sway bar installation. Locate the sway bar and the sway bar mounting system. The sway bar mount to the axle brackets utilizing the u-bolt. Fasten the end links to the sway bar with the 1/2" x 3" bolts (put thick washer between the head of the bolt and the bushing). Use the 1/2" x 2 1/2" bolts to fasten the upper sway bar end link to the frame.







12.*Disregard this step if a one-piece driveshaft has been purchased. Locate the carrier bearing drop bracket. Remove the factory drop bracket and replace with the provided drop bracket. Once the installation is completed and the truck is at operating ride height, the driveshaft should be straight. Unless the truck is converted over to a one-piece driveshaft, you will likely experience some type of driveline howl, therefore it is highly recommended to convert the truck to a one-piece driveshaft.





- 13. Air supply system. Use the installation instructions for whichever air system you are using.
- 14. Alignment. Inflate the bags to 14-15". When measuring the bags, measure between the mounting brackets to calculate the ride height. Refer back to the original pinion angle measurement from step one. Center the axle in the wheel well, use the panhard bar to center the axle side to side and recheck the pinion angle when finished. The 4-link bars should turn by hand. If they don't, place a jack stand under the rear hitch and let the air out of the bags. This will take the weight off the axle and allow the arms to turn easier. Also try to keep the top arm within an 1/8" of each other as well as the bottom arms close to each other. The most accurate way of setting the axle square in the wheel well is to measure from the front of the rear axle housing to the front axle kingpin. Check to make sure the front axle is square with the frame. This will ensure that the axles are perfectly parallel. Once the alignment is complete, tighten the pinch bolts on the trailing arms and tighten the jam nuts on the panhard bar.
- 15. Recheck all bolts for tightness. If you are have not installed the front system, go ahead and do the front before test driving. If the front is already installed, the truck should be ready for a test drive. If the truck shutters upon take-off, then the pinion angle is off. If the truck has a driveline howl, then the carrier bearing is not correct or the pinion angle is off.

