

2005-2010 Super Duty Front Air Bag Installation Instructions

Congratulations! You have just purchased the best engineered, highest quality front air suspension kit available on the market for your 2005-2010 Super Duty Pickup. When installed, this kit will allow complete control and adjustability over your truck's suspension. Be sure to fully read and understand the instructions before starting your installation. As in any suspension installation, it is the installer's responsibility to assure a correct installation. The installer is also responsible for providing adequate clearances between vehicle components such as axles, shocks, tires, and mechanical linkages to ensure a safe and reliable installation.

WARNING

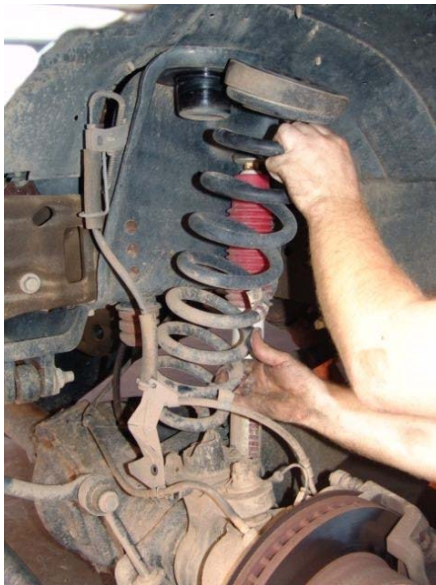
DO NOT EXCEED THE MANUFACTURER'S RECOMMENDED GROSS VEHICLE WEIGHT RATING (GVWR).

1. Raise the vehicle until wheels are off the ground and support with jack stands under the frame.
2. Remove the wheels
3. Support the axle with a floor jack and remove the lower shock mounting bolt. Also remove the brackets that attach the brake lines to the coil spring mount.



Extreme caution should be used in the next few steps to prevent personal injury and/or property damage. Make sure springs are unloaded before attempting to remove them. Failure to do so can cause the spring to eject. Use a floor jack to find the “neutral” position of the springs before removal.

4. Carefully lower the floor jack and remove the coil spring



5. Remove the bolt that attaches the lower coil spring seat to the axle housing. Set the bolt aside as it will be used again during reassembly
6. Assemble the bag and brackets as shown. Install the air line and fitting in the bag before tightening the upper mount. Be sure to leave enough air line attached to reach your valves. It is better to make the air lines too long and cut a foot off than it is to be an inch or two short.



7. Install the air bag assembly just as the coil spring came out. Use the original lower mounting bolt and supplied spacer to attach the lower mount to the axle housing.

8. Re install the shocks and secure brake lines so they can't be pinched or cut when turning. Tighten all hardware to factory specs.
9. Add and remove air to bags and articulate suspension. Be sure to check for adequate bag clearance in all height positions and all steering wheel positions. Check fastener torque after 50 miles and again every 3000 miles



1999-2010 Ford Super Duty Tow Kit Installation Instructions



Congratulations! You have just purchased the best engineered, highest quality air suspension kit available on the market for your 99-10 Super Duty Pickup. When installed, this kit will allow complete control and adjustability over your truck's suspension. Be sure to fully read and understand the instructions before starting your installation. As in any suspension installation, it is the installer's responsibility to assure a correct installation. The installer is also responsible for providing adequate clearances between vehicle components such as axles, shocks, exhaust and mechanical linkages to ensure a safe and reliable installation.

WARNING

DO NOT EXCEED THE MANUFACTURER'S RECOMMENDED GROSS VEHICLE WEIGHT RATING (GVWR).

1. Raise the vehicle until wheels are off the ground and support with jack stands under the frame.
2. It is recommended that the truck's bed be removed to allow working clearance in and around the chassis. Use care to insure that the OEM lighting wire harness connectors, fuel filler neck(s) and grounding straps are disconnected prior to lifting the bed from its mounts
3. Support the rear axle with jack stands and remove the wheels.

Extreme caution should be used in the next few steps to prevent personal injury and/or property damage. Make sure springs are unloaded before attempting to remove them. Failure to do so can cause the spring to eject. Use a floor jack to find the "neutral" position of the springs before removal.

4. Remove the leaf springs and the rear shackle assembly
5. Remove the rivets that hold attach the front leaf spring hanger to the frame and the rivets that attach the secondary overload spring pads (if applicable)



6. This step applies to 99-07 trucks. For 08 and newer go to step 7.

Install the new 4 link hangers. The rear of the 4 link hanger uses the existing front holes that the leaf spring hanger mounted to. Mark and drill the 5 remaining holes and attach the hanger to the frame. Install bolts in the 3 existing rivet holes that are no longer used to attach the cross member to the frame



7. For 08 and newer trucks, hanger removal is more difficult, since the hangers are riveted and welded on. It is important that the hanger is removed without damaging or affecting the structural integrity of the frame. Make sure a qualified person performs the next few steps

8. Start by removing the outside portion of the hanger. A plasma cutter is preferred but an oxy/acetylene torch or cut off wheel can also be used.



9. After the outside of the hanger is removed, use a grinder with a cut off wheel to cut the welds attaching the hanger to the frame. Be sure to only cut the weld and do not cut into the frame.

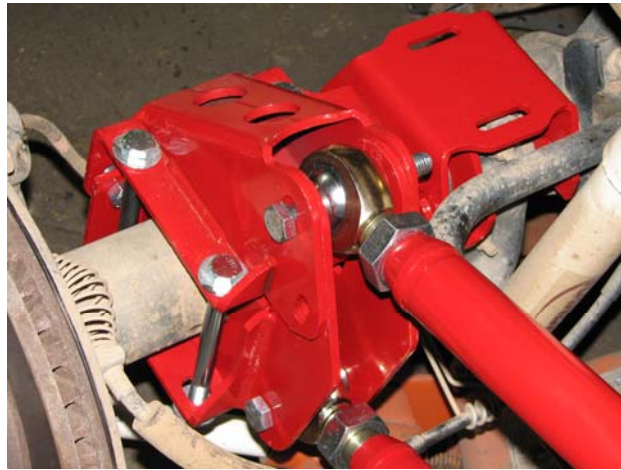


10. Use an air hammer to separate the hanger from the frame and to remove the rivets attaching the hanger.



11. Grind the frame smooth and install the spring hanger in the existing rivet holes. Drill the frame for the 2 holes on the bottom of the frame and tighten the mounting bolts

12. Remove the brake line retaining tabs from the axle perches and pull the brake lines out of the way. The brake lines will be replaced in a later step
13. Remove the shocks
14. Install the upper and lower halves of the axle 4 link mounts. The lower half will fit snugly against the axle and leaf spring pad and the upper half will locate in the centering pin of the leaf spring pad. Install 5/8"-11 x 8" bolts and finger tighten for now



15. Attach the lower bag mount to the axle and install the 4 link bars
16. The inside of the frame needs a little bit of trimming before the upper bag mounts can be put on. Use a cut off wheel or a plasma cutter to cut a straight line. Trim about a 1/4" off the inside lip of the frame so the bag mount will fit correctly against the frame



17. Align the large elongated hole on the upper bag mount with the one on the frame. Mark and drill mounting holes in the frame and install the inner and outer halves of the upper bag mount
18. Remove factory differential cover and drain fluid
19. Mount differential pan hard bracket between the differential cover and differential housing with link mount provisions towards the passenger side of the truck
20. Re fill rear axle with the manufacturer's recommended fluid type and volume
21. Mount the upper shock relocater brackets to the existing secondary overload spring holes. The driver's side shock relocater is integrated into the pan hard bar bracket. Drill mounting holes in the frame on the driver's side and tighten the bolts
22. Install the pan hard bar with the bushing end on the frame and the heim joint at the axle
23. Insert the supplied shock sleeve in the upper mount shock bushing and mount to the upper shock bracket. Use the stock lower mounting bolt to attach the shock to the lower bracket
24. Install air fitting on airbag and mount the rear air bags. Be sure to place the 9 ½" diameter flat bag plate between the bag and the mounts. This keeps the bag from rolling over itself at low pressures and contacting any sharp objects.



25. Adjust the angle of the lower bag mounts so the air bag ends are parallel with each other.
26. Be sure to tighten all hardware after installation for the hangers, links, axle mounts, bag brackets, shock brackets, pan hard bar and differential bracket. Check again after 50 miles of driving

27. Disconnect the factory brake lines at the calipers and at the frame and replace with the supplied braided stainless brake lines
28. Install the heat shield on the exhaust to protect the bag from heat damage. On DFF equipped trucks, it is recommended to install header wrap on the tail pipe where it is closest to the bag to further protect from extreme heat.
29. Raise the rear of truck and remove jack stands. Mount the wheels and lower the truck to the ground.
30. Add and remove air to bags and articulate suspension.
31. Adjust pinion angle to factory specs at ride height with adjustable heim joints on the 4 link bars

