

Rize Industries, LLC.
2005/2006 Ford SuperDuty Installation Instructions
Suspension Lift Kit Part# 410-306-052

While this kit is an easy bolt-on system, Rize Industries, LLC. strongly recommends that a professional installation center be contracted to do the install. Rize Industries, LLC. also recommends using a hydraulic lift when performing this installation.

Before starting installation of kit on vehicle verify the kit inventory and thoroughly read and understand all instructions.

- 1) Position vehicle on lift, locate front lift post on the body mount behind the front wheel. **(Fig A)**. Locate the back lift post on the bottom of the frame rail, just before the rail curves up in front of the rear tire. **TIP:** Use the front of gas tank as a reference point **(Fig B)**
- 2) Raise vehicle up just enough to remove wheels and tires. **(Fig C)**
- 3) Raise vehicle up in relation to the height of the support jack stands you are using. Support the front axle with jack stands and then lower vehicle just enough to slightly weight the stock coil springs and shocks.
- 4) Remove sway bar from vehicle, and retain factory hardware.
- 5) Remove front shocks and discard.
- 6) Remove the bolts (two per side) holding the brake line support brackets to the vehicle, one at the top front of the coil bucket and one at the bottom of the coil mount.
- 7) Disconnect / or re-route hub vacuum lines, and axle breather tube so there is enough slack to lower the front end down. Also make sure the brake lines have slack for the same purpose. **TIP:** On passenger side it is helpful to unclip brake line from bottom of frame **(Fig D)**
- 8) Unbolt the electric wire holders from both factory radius arms.
- 9) Disconnect drive shaft from the front axle and secure out of the way.
- 10) Remove and discard factory steering damper
- 11) Remove the drag link from pitman arm, and secure out of the way. **TIP:** An easy way to accomplish this is to use two hammers, and simultaneously strike the pitman arm on opposite sides with the hammers. Two to four blows will cause the pitman arm taper to release the drag link. **(Diagram 1)**
- 12) With the front axle supported by jack stands, raise vehicle up just enough to un-weight the factory coil springs. Make sure that the brake and vacuum lines do not get pulled tight.
- 13) Remove stock coil springs **(Fig E)**, retain rubber spring isolators for reuse.

- 14) With springs removed, lower vehicle down to appropriately stock ride height.
- 15) Unbolt panhard rod from stock bracket, retain factory hardware. Secure panhard rod out of the way.
- 16) Remove and discard stock panhard rod bracket, retain the two factory bolts in bottom of frame rail.
- 17) Remove large nut retaining pitman arm to steering box. **NOTE:** Observe and mark the spline index location of stock arm on the steering box shaft. Using a puller, remove stock pitman arm.
- 18) Install the Rize drop pitman arm with the same spline index location used on the stock arm. Torque large retaining nut to **Ford Factory Specification of 350 ft-lb.**
- 19) Install the Rize panhard rod drop bracket in the same manner as the factory bracket. Use the stock bolts in bottom frame rail location. Use the supplied hardware from **Bag #1** in the three-bolt location on the motor cross member. Tighten all bolts. **(Fig-F) & (Diagram 2a)**
- 20) Install the Rize panhard rod drop bracket support gusset. Use the supplied hardware from **Bag #1** in the two-bolt location on the drop bracket and the one bolt location on the engine cross member. Tighten all bolts. **(Fig G) & (Diagram 2b)**
- 21) While still supporting the front axle on each end, use a third jack stand to support the pinion.
- 22) At this time remove the stock bolts from the rear of factory radius arms and frame mounts. Retain factory hardware. **NOTE:** Make sure to disconnect ABS lines from stock radius arms.
- 23) Raise vehicle up/or front axle down approximately 6in. to make room for radius arm drop bracket. **NOTE:** Do not overextend any of the brake/vacuum lines.
- 24) The next step is installation of radius arm drop bracket.
 - A) If vehicle is equipped factory transfer case skid plate, remove and discard.
 - B) Lift driver side drop bracket up into factory radius arm pocket. **NOTE:** Rize badge faces out.
 - C) Using supplied 3/4" hardware from **Bag #3** align the two bolt holes in the side of drop bracket with the two holes in the factory radius arm pocket and loosely install hardware. **(Diagram 3)**
 - D) Using the supplied 7/16" hardware from **Bag #2**, align the (4) holes in the top rear of drop bracket with the (4) holes in the bottom of the frame rail and loosely install hardware. **(Diagram 4)**
 - E) Repeat steps B, C, & D on passenger side.
 - F) Install radius arms into drop down brackets, and loosely install using stock hardware.
 - G) Fully tighten all radius arm drop bracket, and radius arm hardware.
 - H) When finished installation should look like this **(Fig H)**

- 25) Using supplied extension tab, reinstall ABS wire onto radius arm (Diagram 5). Use hardware from **Bag #2**.
- 26) Install panhard rod up into the Rize panhard rod drop bracket. Use factory nut and bolt along with the supplied adjustment shims from **Bag #1**. Use the shim with the hole centered (**Fig I**) & (**Diagram 2a**) Tighten hardware to **Ford Factory Specification of 406 ft-lb**. **NOTE:** Offset shims are also supplied in hardware **Bag #1**, these are for custom lifts or fine tuning.
- 27) Install the Rize coil springs in reverse order of Steps #12 & #13, the removal of stock springs. Reuse the rubber spring isolators on the top of the springs. **NOTE:** Remember to properly support the front axle with stands while raising vehicle just enough to fit the coil springs between the coil bucket and the bottom axle hat. Be sure coil spring is rotated against stops on both the axle hats and the rubber spring isolators are seated properly against the coil. Check brake / vacuum / electric line tension. Make sure they have enough slack when the axle is dropped for spring installation to avoid any possible damage. (**Fig J**)
- 28) With spring in correct location, lower vehicle SLOWLY TO SLIGHTLY load coil springs. **NOTE:** Use caution as not to load springs so much as to raise vehicle off the vehicle lift.
- 29) Install the Rize sway bar drop brackets using factory hardware and tighten. **NOTE:** The opening in one end of the sway bar drop bracket goes up against the frame.
- 30) Install sway bar onto drop brackets. Then install the sway bar back onto vehicle exactly like factory. Use supplied hardware from **Bag #5** and tighten. Be sure the slit in the rubber bushing is positioned towards the front of the vehicle. (**Fig K**) **NOTE: DO NOT INSTALL SWAY BAR LINKS ONTO AXLE AT THIS TIME.**
- 31) Reinstall steering link into pitman arm. Use factory nut with new cotter pin.
- 32) Install driver and passenger brake line drop brackets onto front of coil spring buckets. Use factory hardware.
- 33) Install brake lines on drop brackets using supplied hardware from **Bag #5** (**Fig L**) **NOTE:** A slight re-rotating of the brake lines is necessary. Use caution when re-rotating as not to damage lines.
- 34) Install supplied front shocks **Part# 929510**. Use factory hardware on bottom mount.
- 35) Reconnect drive shaft to front axle.
- 36) Install rear lift
 - A) Remove and discard factory shocks.
 - B) Install supplied rear lift blocks and U-bolts. **NOTE:** New block are to be positioned under factory block to achieve a level vehicle.
 - C) If necessary use the supplied emergency brake cable extension tab. **NOTE:** It fits between emergency brake cable and driver side U-bolt plate. (**Diagram 6**)
 - D) Install supplied rear shocks **Part# 932000**. Use factory hardware.

- 37) At this time go back and double check all hardware to make sure it is properly tightened.
- 38) Rize Industries recommends having the caster and toe angles checked and if necessary adjusted to factory specifications.
- 39) Test drive vehicle. Check for correct operation. After 500 miles it is strongly recommended to check all hardware and retighten if necessary.

If you have any questions, comments, or concerns please contact us immediately.

Thank you for choosing Rize Industries, LLC.

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919 El Cajon Blvd.

El Cajon, CA 92020

Tel. 619-447-0110