

# 1999 - 2004 Ford F250 / F350 Super Duty & Excursion 4"- 8" Suspension Lift Installation Instructions

### **REQUIRED TOOL LIST:**

- Safety Glasses
- Metric / Standard Wrenches & Sockets
- Drill
- Assorted Drill Bits
- Floor Jack
- Jack Stands
- Measuring Tape
- Torque Wrench



Before beginning the installation, thoroughly & completely read these instructions & the enclosed driver's WARNING NOTICE. Affix the WARNING decal in the passenger compartment in clear view of all occupants.

Make sure you park the vehicle on a level concrete or asphalt surface. Many times a vehicle is not level (side-to-side) from the factory & is usually not noticed until a lift kit has been installed, which makes the difference more visible. Using a measuring tape, measure the front & rear (both sides) from the ground up to the center of the fender opening above the axle. Record this information below for future reference. (**NOTE:** Due to OEM inconsistency & the available options, the amount of lift gained by this lift kit can vary as much as 1/2".

Note: Ford made a design change to the front track bar & pitman arm on models made 3/99 & after (newer). Therefore, Skyjacker drop pitman arm part # FA499 is required on models built 03/99 & newer. The track bar on the newer models uses 20mm mounting hardware. Do not attempt to modify the new Skyjacker track bar relocation bracket(s) to fit these models. In the event you need the other brackets, contact the place of purchase for an exchange of the bracket(s).

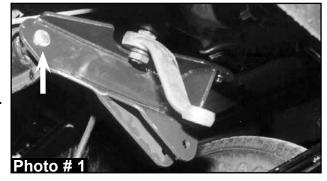
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# Front Installation:

- 1. The new Skyjacker front springs are center pinned so the new leaf spring can be installed with either end toward the front or rear of the vehicle.
- 2. Apply a thin coat of lithium-based grease around the new Skyjacker polyurethane bushings & insert into each eye of the new front leaf springs. Apply a thin coat of lithium-based grease around the new Skyjacker steel sleeves & insert one new "thin wall" sleeve into the front eye of each new leaf spring & one new "thick wall" sleeve into the rear eye of each new leaf spring.
- 3. Raise the front of vehicle, support securely with jack stands under the frame behind the front springs, & block the rear tires / wheels. Remove the front tires / wheels, OEM shocks, & OEM u-bolts <u>Caution</u>: Once the u-bolts are removed, the front axle will be free to move, so support securely using a floor jack.
- 4. Disconnect the OEM front track bar from the frame mount on the driver side. **Note:** If installing a 6" or 8" lift, also remove the track bar from the axle mount on the passenger side. Remove the OEM track bar bracket from the driver side frame & cross member. **Note:** Leave the OEM retainer clip inside the frame rail.
- 5. Disconnect the OEM tie rod assembly from the OEM pitman arm. **Note:** Skyjacker's® new drop pitman arm is needed for 4", 6" & 8" lifts. It is ordered separately in 4" & 6" kits, but included in the 8" kits. Remove the OEM pitman arm using a pitman arm puller & install the new Skyjacker drop pitman arm. **Note:** Be sure to install the new pitman arm in the same direction as the OEM pitman arm with the drag link hole end pointing forward.
- 6. Remove the OEM front sway bar end links from the sway bar. **Note:** Notice that the OEM sway bar end links are offset to the inside at the top.
- 7. Disconnect each end of the OEM front leaf springs & remove both leaf springs from the vehicle.
- 8. Attach the new Skyjacker upper track bar bracket to the frame using the OEM hardware & retainer clip inside the frame rail. Install the supplied 1/2" x 2 1/2" bolt & washer into the new track bar bracket from the front, then through the cross member using the supplied washer & lock nut on the back. (See Arrow in Photo # 1) Note: Some models may require slight grinding to the crossmember for the new upper track bar bracket to pull flush against the cross member. Reattach the OEM track bar to new track bar bracket using OEM hardware for Early 99 Models or the supplied 20mm x 90mm bolt, washer, & nut for 3/99 2004 Models. (See Photo # 2) Note: On 3/99 2004 Models the washer is to be installed on the nut side of the new 20mm x 90mm bolt.

**NOTE:** Track bar brackets will only work with the Skyjacker specific application height of lift springs.

**<u>DO NOT</u>** combine with other manufactures lift kit components.



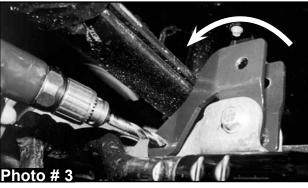
9. 6" & 8" Lifts Only: The new Skyjacker lower track bar bracket for models made 3/99 - 2004, looks slightly different from the track bar bracket shown in Photos # 3 & # 4. Place the new track bar bracket into the OEM track bar mount. (Photo # 3) You may need to lightly tap the new track bar bracket down in place. Rotate the top of the new track bar bracket toward the passenger side leaf spring until the rear gusset is against the OEM track bar mount. (See Arrow in Photo # 3)

Early 99 Models - Attach the new Skyjacker lower track bar bracket to the axle using the supplied 9/16" x 3 1/2" bolt, washer, & nut. Note: The washer is to be installed on the nut side of the new 9/16" x 3 1/2" bolt. Using the new track bar bracket left tab as a guide, drill a 1/2" hole through the outer OEM plate only. Insert the supplied 1/2" x 1 1/2" bolt with washer & tighten the nut. Reattach the track bar using the OEM hardware. (See Photo # 4)

3/99 - 2004 Models - Attach the new Skyjacker lower track bar bracket to the axle using the supplied 20mm x 90mm bolt, washer, & nut. Note: The washer is to be installed on the nut side of the new 20mm x 90mm bolt. Using the new track bar bracket left tab as a guide, drill a 9/16" hole through both the inner & outer OEM plates. Be sure to keep the drill bit level vertically & horizontally. Insert the supplied 1" long spacer at the new drilled hole, inside the OEM mounts. Insert the supplied 9/16" x 3" bolt with washer through the spacer & tighten the nut Reattach track bar using the OEM hardware. (See Photo # 4)

10. <u>8" Lifts Only</u>: Weld in place the new Skyjacker steering stop spacers. Match these new steering stop spacers with the contour of the OEM steering stops on the axle. Weld in place by placing a weld across the top & bottom of the supplied spacers. (See Photo # 5)





Here's A Tip: Have a friend turn the steering wheel slightly from left to right, this will aid in aligning the trackbar to the trackbar bracket hole. See arrow below.





- 11. Install the new Skyjacker front leaf springs with the "thin wall" sleeves toward the front bumper. Do not fully tighten the leaf spring & shackle bolts at this time. Note: It is important to **NOT** fully tighten the leaf spring & shackle bolts at this time because with no load being applied on the leaf springs, a false lift & stiff ride will result. These bolts will be fully tightened later once the vehicle is on the ground with the weight on the leaf springs. Install the new Skyjacker front u-bolts & torque to 85-90 ft. lbs.
- 12. Reattach the OEM drag link assembly to the new drop pitman arm being sure to reinstall cotter pin. 8" Lifts Only: Install the new Skyjacker front brake lines using the supplied instructions.
- 13. Insert the supplied bushings & metal sleeves into each eye of the new Skyjacker front sway bar end links. Install the new end links beginning with the top driver side. (See Photo # 6, Shown From The Rear) Insert the supplied 12mm bolt & large washer from the inside through the end link eye then mounting tab & tighten the 12mm nut. Install the top of new passenger side end link. (See Photo #7, Shown From The Rear) Insert the supplied 12mm bolt & large washer from the outside through the end link eye then mounting tab & tighten the 12mm nut. Attach the sway bar to the new end links using the supplied 1/2" x 3" bolts through the mount (from outside) then through end link with a large washer & lock nut on the inside. (See
  - tighten the front leaf spring Photo #8
- Photo #8)

14. Install the new Skyjacker front shocks using the

OEM hardware.

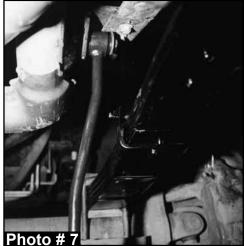
each side.

15. Install the front tires /

wheels, lower the vehicle to ground, & completely

eye & shackle bolts on

Photo #6



# **Rear Installation:**

- Raise the rear of the vehicle, support securely with jack stands, & block the front tires / wheels. Remove the rear tires / wheels, OEM shocks, OEM u-bolts, & vent tube on the differential.
   Caution: Once the u-bolts are removed, the rear axle will be free to move, so support securely using a floor jack.
- 2. <u>Rear Leaf Spring Installation</u>: Remove the OEM rear leaf spring & install the new Skyjacker rear leaf springs with the long end of the new leaf spring & the thick end of the bottom degree shim towards the rear bumper. The OEM rear blocks are maintained. <u>Note</u>: On vehicles built prior to 3/99, the block is removed on 4" systems with new rear leaf springs. Do not fully tighten the leaf spring & shackle bolts at this time. <u>Note</u>: It is important to <u>NOT</u> fully tighten the leaf spring & shackle bolts at this time because with no load being applied on the leaf springs, a false lift & stiff ride will result. These bolts will be fully tightened later once the vehicle is on the ground with the weight on the leaf springs. <u>8" Lifts Only</u>: Install the new Skyjacker rear brake lines using the supplied instructions.
- 3. <u>Rear Block Installation</u>: Install the new Skyjacker rear lift blocks with the taller end of the new rear lift blocks toward the rear bumper. Install the new rear lift blocks between the OEM rear leaf springs & OEM rear blocks <u>Note</u>: The new rear lift blocks will be installed on top of the OEM rear blocks. <u>8" Lifts Only</u>: Install the new Skyjacker rear brake lines using the supplied instructions.
- 4. Using a floor jack, raise the axle to the rear leaf springs. Be sure the leaf spring tie bolts & block pins align in the proper holes & are completely seated. Install & torque the new Skyjacker u-bolts to 100-110 ft. lbs.
- 5. 8" Lifts Only: Install the new Skyjacker rear sway bar end links.
- 6. Install the new Skyjacker rear shocks using the OEM hardware.
- 7. Install the rear tires / wheels, lower the vehicle to ground, & completely tighten the rear leaf spring eye & shackle bolts on each side.

### Final Notes:

- If the vehicle is equipped with OEM rear sway bars, you will need to order the following Skyjacker extended sway bar end links sold seperately: Part # SBE404 for 4" lifts or Part # SBE405 for 6" lifts
- According to Ford OEM manuals there is a 3/4" tolerance on the side to side height differences from factory. If you are having this problem after installation, please contact SKYJACKER® Customer Service at 318-388-0816 for further options.
- On models equipped with an OEM rear carrier bearing, if a driveline vibration occurs it may be required to lower carrier bearing after installation of this lift: Part # CBL3401 for 4" - 6" Lifts or Part # CBL214 for 8" Lifts
- If larger tires (10% more than the stock diameter) are installed, speedometer recalibration will be necessary. Contact your local Ford dealer or an authorized dealer for details.

- After the installation is complete, double check that all nuts & bolts are tight. Refer to the following chart for the proper torque specifications. (Do not retighten the nuts & bolts where thread lock compound was used.)
- With the vehicle placed on the ground, cycle the steering lock to lock & inspect the steering, suspension, brake lines, front & rear drivelines, fuel lines, & wiring harnesses for proper operation, tightness, & adequate clearance.
- Have the headlights readjusted to the proper settings.
- Have a qualified alignment center align the vehicle to the OEM specifications.
- Retorque all the bolts after the first 100 miles.

		TORQUE SPE	CIFICATION	<u>S</u>	
	<u>INCH SYSTEM</u>			METRIC SYSTEM	
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 8.8	<b>Class 10.9</b>
<u>5/16</u>	15 FT LB	20 FT LB	6MM	5 FT LB	9 FT LB
3/8	30 FT LB	35 FT LB	8MM	18 FT LB	23 FT LB
7/16	45 FT LB	60 FT LB	10MM	32 FT LB	45 FT LB
1/2	65 FT LB	90 FT LB	12MM	55 FT LB	75 FT LB
9/16	95 FT LB	130 FTLB	14MM	85 FT LB	120 FT LB
<u>5/8</u>	135 FT LB	175 FT LB	16MM	130 FT LB	165 FT LB
<u>3/4</u>	185 FT LB	280 FT LB	18MM	170 FT LB	240 FT LB

<sup>•</sup> The above specifications are not to be used when the bolt is being installed with a bushing.

Seat Belts Save Lives, Please Wear Your Seat Belt.

# **Accessories**:

- Triple Front Shock Kit (Shown at Right) Part # TS950
- HD OEM Replacement Steering Stabilizer Part # 7099
- Single Steering Stabilizer (Shown Below) Part # 7199
- Dual Steering Stabilizer Part # 7299



