2004 Ford F-150 2WD
3” Suspension Lift
Installation Instructions

www.skyjacker.com

REQUIRED TOOL LIST:

- **Spring Compressor**
- **Metric/Standard Wrenches & Sockets**
- **Floor Jack**
- **Jack Stands**
- **Measuring Tape**
- **Torque Wrench**

Before beginning the installation, read these instructions and the enclosed driver’s WARNING NOTICE thoroughly and completely. Also affix the WARNING decal in passenger compartment in clear view of all occupants. If any of these items are missing from this instruction packet, do not proceed with installation, but call SKYJACKER® to obtain needed items. If you have any questions or reservations about installing this lift kit, call SKYJACKER® at 318-388-0816 for Technical Assistance or Customer Service departments.

Make sure you park the vehicle on a level concrete or asphalt surface. Many times a vehicle is uneven (side-to-side) from the factory, but usually not noticed until a lift kit has been installed which makes the difference more visible. Using a measuring tape, measure the front and rear (both sides) from the ground up to the center of the fender opening above the axle. Record below for future reference.

Driver Side Front: _____ Passenger Side Front: _____

Driver Side Rear: _____ Passenger Side Rear: _____

IMPORTANT NOTES:

- **The two screws located on the end cap of the shock must be tightened prior to installation!**
- Please refer to Parts List to insure that all parts and hardware are received prior to disassembly of vehicle. If any parts are found to be missing, contact your dealer as soon as possible.
- If larger tires (10% more than stock diameter) are installed, speedometer recalibration is necessary (see Ford dealer or Tire Store).
- This lift is determined from the front while only lifting the rear to a position level with the front.
- After installation, a qualified alignment facility is required to align the vehicle to factory specs.
- Under NO circumstances are SKYJACKER® coil springs to be used in conjunction with any type of coil spring or spring tower block/spacer. The use of coil spring block/spacers will allow ANY coil spring to exceed its designed stress and travel loads allowing it be overstressed, oversprung, fatigued, and possibly break. SKYJACKER® warranty is void under any such application.

Kit Box Breakdown:

F432: Main Component Box

ITEM#	DESCRIPTION	QTY
F3FS	3" 2004 F150 COIL, SINGLE	2
M9050S	PLATINUM MONOTUBE GAS SHOCK	2
SP4875	SHOCK PEDESTAL,8 7/16" OVERALL	2

Hardware Bag Breakdown:

HB-F436SHK **Front Coil / Shock Assembly**

ITEM#	DESCRIPTION	QTY
SP3608	SHOCK EYE BUSHING	4
F436SHS	LOWER SHOCK MOUNT SLEEVE	2
ZF316	ZERK FITTING / ALEMITE, 3/16"	2
38FTN	3/8” FINE THREAD NYLON LOCK NUT	2
38FTSN	3/8” FINE THREAD STANDARD HEX NUT	2
LT100	427 1 ML TUBE THREAD LOCK COMP.	1

Kit Box Breakdown:

R3415: Add-A-Leaves

ITEM#	DESCRIPTION	QTY
R3415S	SINGLE ADD-A-LEAF,1-1.5" 2004 F150	2
916X318X1012U	9/16 X 3 1/8 X 10 1/2 SQUARE	4
916FTN	9/16-18 NYLON INSERT LOCK NUT	8
1204S	1/2 X 4” TIE BOLT	4
12TBN	1/2" TIE BOLT NUT	4

Front Installation:

1. Secure and properly block the tires of vehicle on a level concrete or asphalt surface.
2. Raise the vehicle from the front center cross member and remove tires and wheels. (See Photo #1)
3. Disconnect outer tie rod from steering knuckle using a 21mm socket. It may be necessary to strike the side of the knuckle to dislodge the tie rod end. Be careful not to damage the tie rod end itself. (See Photo #2)
4. Disconnect the Upper A-Arm ball joint from the top of the steering knuckle using a 21mm socket.
5. Disconnect the lower strut mount from the lower A-Arm using a 1 3/16” and 1 1/16” socket. Remove bolt. (See Photo #3).
6. Remove the upper three strut mounting bolts from the upper frame mount using a 15mm wrench. (See Photo #4).
7. Using a spring compressor, unload the tension on the upper mount of the factory coil assembly. Remove the upper shock retaining nut using 9/16” socket. (See Arrow in Photo #5). Slide shock out from the bottom.
8. Remove the upper end cap from the factory shock. It can easily be tapped off with a rubber mallet. (See Photo #6). With end cap removed, remove the lower coil seat from the shock. (See Photo #7).

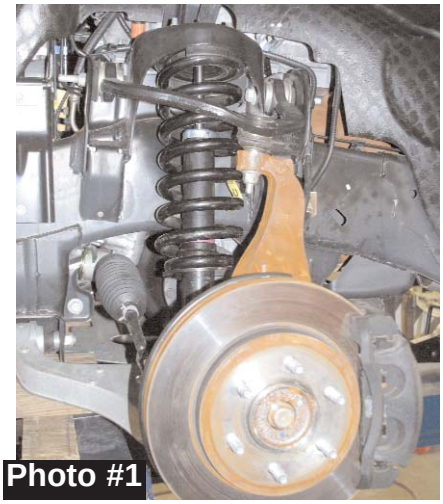
Photo #1

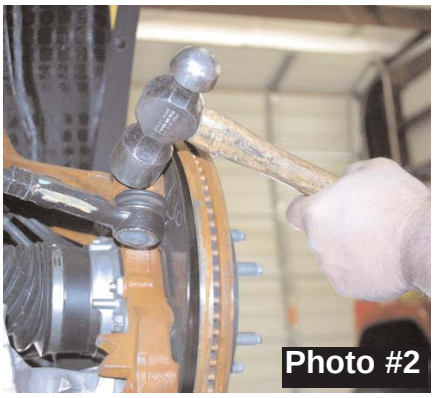
Photo #2


Photo #3


Photo #4


Photo #5


Photo #6


Photo #7

9. Locate new lower shock mount. Install new bushings, sleeves and zerk fitting into shock eye. Zerk fitting is easily tapped in with the use of a 1/4" socket. Be sure to grease thoroughly. Now place the factory coil seat onto the new retainer. (See Photo #8).
10. With lower coil seat in place, place 2 drops of high strength thread locking compound onto threads of shock shaft. Screw the shock shaft into the top of the aluminum coil seat retainer. With shock assembled, place new Skyjacker coil into spring compressor and load. Slide new shock assembly in from the bottom, and install factory rubber coil seat on top of coil. (See Photo #9). Important Note: Be sure bottom shock eye is square with upper two front studs on factory mount. Be sure that Skyjacker Decal is towards the outside.

    <u>Important</u> <u>Note!</u> Using a wrench or ratchet, install the 3/8" nylon-insert lock nut on shock stem first and torque to 15-17 Ft. Lbs, then double nut by tightening the 3/8" standard hex nut against the nylon lock nut and torque to 14-16 Ft. Lbs. NOTE: Do NOT use an air impact to install nuts as this will strip the threads. Be sure coil is seated properly in upper and lower seat. (See Photo #9-A)

11. Install new coil / shock assembly into vehicle. Attach to factory upper mount using factory nuts. (See Photo #10). **Important Note: The coil assembly should be installed so that the bottom wrap of the coil is towards the inside (center) of vehicle. This will allow adequate clearance between the coil sparing and steering knuckle.**
12. Attach to lower A-Arm using factory bolt and nut. **"Ford Torque Specifications"** for this bolt is 351 Ft. Lbs.
13. Attach outer tie rod to steering knuckle and torque to 111 Ft. Lbs. Reattach upper A-Arm to steering knuckle and torque to 85 Ft Lbs. *Periodically re-torque upper / lower ball joints and outer tie rod!*
14. With all bolts tight, install tires / wheels, lower vehicle to the ground.

<u>Rear Installation</u>:

15. Raise the rear of the vehicle and support the frame rails using jack stands. Remove the rear shocks using a 15mm and 18mm socket. (See Photo #11). Remove the rear U-Bolts using 21mm socket.
16. Lower axle down to gain access to rear leaf spring. To perform the installation of add-a-leafs properly you must use two large C-clamps to contain the elastic potential energy in a leaf spring when the center tie bolts are being removed. Attach and tighten a C-clamp on each end of the leaf spring to hold spring assembly securely together. (See Photo #12) Using vise-grips to hold the head of the two center bolts, loosen and remove them. With care, slowly loosen and remove the C-clamps.


Photo #8


Photo #9

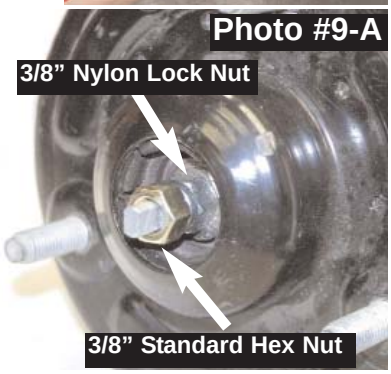

Photo #9-A


Photo #10

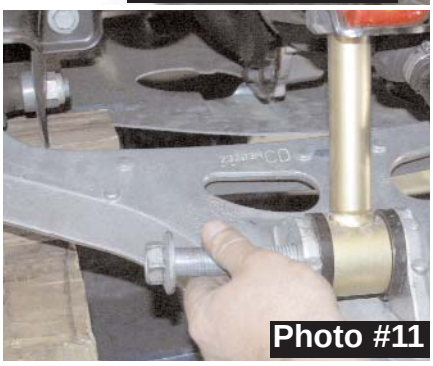
Photo #11

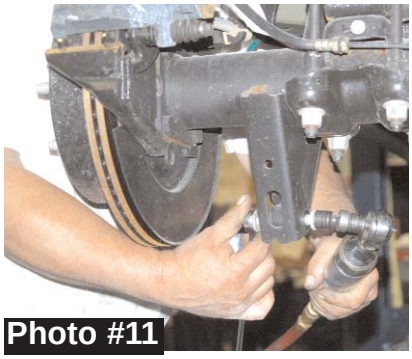
Photo #11

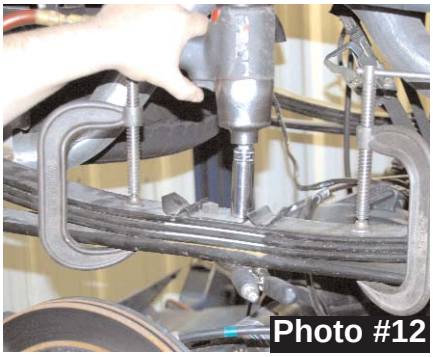
Photo #12

17. Insert new tie bolts through original bottom overload leaf, new add-a-leaf, and through original spring pack. Only finger tighten the nut. Be sure to install so that the teflon wear pad is located at the rear of the spring.
18. DO NOT USE THE CENTER TIE BOLTS TO DRAW THE SPRING LEAVES TOGETHER. FAILURE OF ANY COMPONENT CAN CAUSE AN EXPLOSIVE DISASSEMBLY AND POSSIBLE INJURY! Place one C-clamp on each side of the center bolts and tighten evenly. Once C-clamps have drawn leaves securely together, hold the center tie bolt heads with vise-grips and torque nuts to 41 Ft. Lbs. (See Photo #13). Remove C-clamps. Cut off excess length of tie bolts. Install new U-Bolts and torque to 130 Ft. Lbs. Lower vehicle back to the ground. Install new Skyjacker rear shocks.


Photo #13

FINAL NOTES:

* After installation is complete, double check that all nuts and bolts are tight.
* Rotate drive shafts and check for interference at differential yoke and cardan joint.
* Check to ensure there is adequate clearance between All rotating, mobile and fixed members. Check clearance between inner side wall of tires.
* Ensure there is adequate clearance between exhaust and brake lines, fuel lines, fuel tank, floor board, and wiring harnesses. Check steering gear for interference and proper working order. Inspect brake lines for damage and adequate clearance. Test brake system.
* With the vehicle on the floor, cycle steering lock to lock and inspect steering, suspension, drive line and brake line systems for proper operation, tightness and adequate clearance.
* Have headlights readjusted to proper settings.
* Front end realignment is necessary so have a qualified alignment center realign front end to factory specifications.