



04 - 08 Ford F-150 2WD / 4WD 1" - 3" Performance Strut Installation Instructions

REQUIRED TOOL LIST:

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



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.

Driver Side Front: _____

Passenger Side Front: _____

Driver Side Rear: _____

Passenger Side Rear: _____

IMPORTANT NOTES:

- This lift is determined from the amount of lift to the front of the vehicle, while only lifting the rear to a position level with the front.
- 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 installation a qualified alignment facility is required to align the vehicle to factory specifications.

Kit Box Breakdown:

F430ST: 4WD

Main Component Box

ITEM#	DESCRIPTION	QTY
F423ST-S	FORD F150 2-3" STRUT-SINGLE	2
STSP1	.467" STRUT SPACER RING/PR	1
I-F430ST	INST SHEET:2-3" F-150 STRUT	1

F432ST: 2WD

Main Component Box

ITEM#	DESCRIPTION	QTY
F4132ST-S	F150 1.5-3" 2WD STRUT	2
STSP1	.467" STRUT SPACER RING/PR	2
I-F430ST	INST SHEET:2-3" F-150 STRUT	1

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 & properly block the tires / wheels of the vehicle on a flat / level concrete or asphalt surface.
2. Raise the vehicle from the front center cross member & remove the front tires / wheels. (See Photo # 1)
3. Disconnect the outer tie rod from the 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. (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 1/16" & 1 3/16" socket. Remove bolt. (See Photo # 3)



Photo # 1



Photo # 3



Photo # 2

6. Remove the upper three strut mounting bolts from the upper frame mount using a 15mm wrench. (See Photo # 4)

7. Using a strut spring compressor, unload the tension on the upper mount of the OEM coil assembly. Remove the upper shock retaining nut using a 9/16" socket & remove the strut from the bottom. (See Photo # 5)

8. At the upper hex portion of the shaft, rotate the shaft of the new Skyjacker strut assembly counter clockwise in order to unlock & extend the shaft of the new Skyjacker strut assembly. Assemble the new Skyjacker strut by installing the new Skyjacker coil seat spacer ring Part # F964ST-SP1 (See Step # 9), new Skyjacker coil spring seat, new Skyjacker coil spring pad, & OEM bump stop on the new Skyjacker strut. (See Photo # 6 & # 7) **Once the coil spring seat spacer rings have been installed check all suspension components for any contact or interference. If suspension component contact or interference is present, lower the coil spring seat by removing a coil spring seat spacer ring until no contact or interference is present.**

9. **2WD Model:** If 1" of lift is desired, do not install the strut spacer ring, 2" of lift use one strut spacer ring, & 3" of lift use two strut spacer rings. The 3" suspension lift will make for a firmer ride than stock because of the coils preload.

4WD Model: If 2" of lift is desired, do not install the strut spacer ring & 3" of lift use one strut spacer ring.

10. Assemble the new strut assembly using the OEM coil & OEM upper coil seat. (See Photo # 8) Install the new strut assembly using the OEM hardware.



Photo # 4



Photo #5



Photo #6

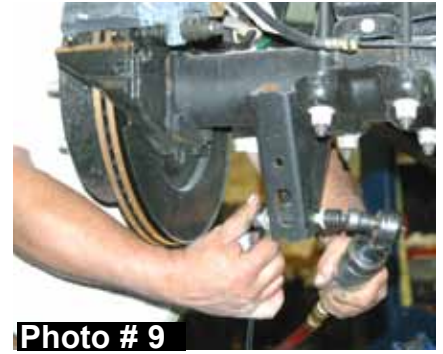


Photo #7



Photo # 8

11. Attach to the lower A-arm using the OEM hardware. **“Ford Torque Specifications”** for this bolt is 351 Ft. Lbs.
12. Attach the outer tie rod to the steering knuckle & torque to 111 Ft. Lbs. Reattach the upper A-arm to the steering knuckle & torque to 85 Ft Lbs. Periodically re-torque the upper / lower ball joints & outer tie rod.
13. With all bolts tight, install the front tires / wheels & lower the vehicle to the ground.



Rear Installation:

14. Raise the rear of the vehicle & support the frame rails using jack stands. Remove the rear shocks using a 15mm & 18mm socket. (See Photo # 9). Remove the rear U-bolts using a 21mm socket.
15. Lower the axle to gain access to the rear leaf spring. To perform the installation of add-a-leaves 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 & tighten a C-clamp on each end of the leaf spring to hold the leaf spring assembly securely together. (See Photo # 10) Using locking pliers to hold the head of the two center bolts, loosen & remove them. With care, slowly loosen & remove the C-clamps.
16. Insert the new Skyjacker tie bolts through the OEM bottom overload leaf, new Skyjacker add-a-leaf, & OEM leaf spring pack. Only finger tighten the nut & be sure to install the add-a-leaf so the teflon wear pad in towards the rear of the vehicle.



17. **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 & tighten evenly. Once the C-clamps have drawn the leaves securely together, hold the center tie bolt heads with locking pliers & torque the nuts to 41 Ft. Lbs. (See Photo # 11) Remove the C-clamps & cut off the excess length of the tie bolts. Install the new Skyjacker U-bolts & torque to 130 Ft. Lbs.
18. Install the new Skyjacker rear shocks. With all bolts tight, install the rear tires / wheels & lower the vehicle to the ground.

FINAL NOTES:

- After the installation is complete, double check that all nuts & bolts are tight. Refer to the following chart below 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 realign the front end to the factory specifications.
- Retorque all the bolts after the first 100 miles.

<u>TORQUE SPECIFICATIONS</u>					
<u>INCH SYSTEM</u>			<u>METRIC SYSTEM</u>		
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 8.8	Class 10.9
5/16	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 FT LB	14MM	85 FT LB	120 FT LB
5/8	135 FT LB	175 FT LB	16MM	130 FT LB	165 FT LB
3/4	185 FT LB	280 FT LB	18MM	170 FT LB	240 FT LB

- **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.