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# 2004 - 2008 Ford F-150 4WD 6" Suspension Lift Installation Instructions

### REQUIRED TOOL LIST:

- Safety Glasses
- Metric / Standard Sockets & Wrenches
- Hex Key Wrenches
- Floor Jack
- Jack Stands
- Measuring Tape
- Torque Wrench
- Grinder / Cut Off Wheel



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. Please refer to the Parts List to insure that all parts & hardware are received prior to the disassembly of the vehicle. If any parts are found to be missing, contact SKYJACKER® Customer Service at 318-388-0816 to obtain the needed items. If you have any questions or reservations about installing this lift kit, contact SKYJACKER® Technical Assistance at 318-388-0816.

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:

- If larger tires (10% more than the OEM 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 the OEM specifications.

## Component Box Breakdown:

### Part #: F4461A

Item #	Description	Qty
F460L	LEFT STEERING KNUCKLE	1
F460R	RIGHT STEERING KNUCKLE	1
F4602FCM-S	FRONT CROSSMEMBER	1
F4602RCM-S	REAR CROSSMEMBER	1

Item #	Description	Qty
F460DDS-S	DRIVER DIFF BRACKET	1
F460DPS-S	PASSENGER DIFF BRACKET	1
SBL460-B	SWAY BAR LOWERING BRACKET	2

## Component Box Breakdown:

### Part #: F460BH / F460BM

Item #	Description	Qty
F4602SKD-S	FRONT DIFF SKID PLATE	1
RB452	4.5" DUAL PIN REAR BLOCK	2
916X318X14U	9/16 X 3 1/8 X 14 SQUARE U-BLT	4
H-BOX F460BH	HDWR BOX: F460BH COM BOX	1
H7060	HYDRO SHOCK W/RED BOOT (Included With F460BH Box)	2

Item #	Description	Qty
M9560	MONO SHOCK W/BLK BOOT (Included With F460BM Box)	2
I-F460SP	INST SHEET: F460BH / F460BM	1

## Hardware Box Breakdown:

### Part #: H-BOX F460BH

Item #	Description	Qty
F460MS-S	FRONT STRUT SPACER	2
HB-F460-BLE	HDWR BAG: F & R BL BRKTS	1
HB-F460DXBU	HDWR BAG: DIFF BRACKETS	1
HB-F4602-CM	HDWR BAG: CROSSMEMBERS	1

Item #	Description	Qty
HB-F946-MS	HDWR BAG: FRT STRUT SPCR	1
HB-SBL	HDWR BAG: SWAY BAR BRKTS	1
HB-SKD	HDWR BAG: FRT SKID PLATE	1
HB-916	HDWR BAG: 9/16" LOCK NUTS	1

## Hardware Bag Breakdown:

### Part # HB-F460-BLE

Item #	Description	Qty
F460BLE-F	FRONT BRAKE LINE BRACKET	2
DVL10	REAR BRAKE LINE BRACKET	1
14X1FTB	1/4 X 1 FINE THREAD BOLT	3
14FTN	1/4 FINE THREAD LOCK NUT	3

Item #	Description	Qty
14SAEW	1/4 SAE WASHER	6
38CC	3/8 CABLE CLAMP	2
5MMX12SHB	5MM X 12MM KNUCKLE BOLT	2

### Part # HB-F460DXBU

Item #	Description	Qty
12X90MMB	12MM X 90MM METRIC BOLT	3
12MMN	12 MM METRIC LOCK NUT	3

Item #	Description	Qty
12SAEW	1/2 SAE WASHER	3

## Part # HB-F4602-CM

Item #	Description	Qty
18X150MMB	18MM X 150MM METRIC BOLT	4
18MMN	18MM METRIC LOCK NUT	4

Item #	Description	Qty
34SAEW	3/4 SAE WASHER	8

## Part # HB-F946-MS

Item #	Description	Qty
10MMX1.5FN	10MM METRIC FLANGE NUT	6
10MMX30CARB	10MM X 30MM CARG BOLT	6

Item #	Description	Qty
10MMPN	10MM METRIC PUSH NUT	6

## Part # HB-SBL

Item #	Description	Qty
716X112FTB	7/16 X 1 1/2 FINE THREAD BOLT	4
716FTN	7/16 FINE THREAD LOCK NUT	4

Item #	Description	Qty
716SAEW	7/16 SAE WASHER	8

## Part # HB-SKD

Item #	Description	Qty
516X1FTB	5/16 X 1 FINE THREAD BOLT	4
516FTN	5/16 FINE THREAD LOCK NUT	4

Item #	Description	Qty
516SAEW	5/16 SAE WASHER	8

## Part # HB-916

Item #	Description	Qty
916FTN	9/16 FINE THREAD LOCK NUT	8

## Front Installation:

1. With the vehicle on flat level ground, set the emergency brake & block the rear tires / wheels.
2. Place a floor jack under the lower control arm's front crossmember & raise the front of the vehicle. Place jack stands under the frame rails, behind the front wheel wells & lower the frame onto the stands.
3. Remove the front tires / wheels using a 22mm socket.
4. Remove the OEM skid plate located under the front differential.
5. Remove the OEM brake calipers using a 13mm wrench. (See Photo # 1) **Note:** It will not be necessary to remove the brake lines from the brake calipers. Simply wire them out of the way until reassembly. Remove the OEM brake rotors.
6. Disconnect the OEM cv-axle shafts from the front differential & OEM steering knuckles. **Note:** Mark the driver & passenger side cv-axle shafts as they are removed.



**Photo # 1**

7. It will now be necessary to cut the rear crossmember for differential clearance. Unbolt & remove the OEM rear crossmember from the frame. Locate the supplied template found on Page # 9. Align the two holes of the template up with the rear mounting holes found on the driver side of the OEM rear crossmember. (See Photo # 2) Draw a straight line along the outer edge of the template. Place the template on the opposite side, reverse the template, & draw a line. Connect the two lines on the top & cut along the lines, using a grinder, cut off wheel, or similar tool. **Note:** Be sure to cut all the way around the crossmember. (See Photo # 3) Remove this piece from the frame. (See Photo # 4)



Photo # 2

8. Disconnect the OEM ABS lines & vacuum lines from the OEM hub bearing assemblies.

9. Disconnect the OEM outer tie rod ends from the OEM steering knuckles using a 21mm socket & tie rod remover or other suitable tool.



Photo # 3

10. Disconnect the OEM upper & lower ball joints from the OEM steering knuckles using a 21mm socket & ball joint remover or other suitable tool. (See Photo # 5) Remove the OEM steering knuckles.



Photo # 4

11. Disconnect the OEM front sway bar from the frame. Disconnect the OEM sway bar endlinks from the OEM lower A-arms & remove the OEM front sway bar.

12. Remove the lower strut mount bolts from the OEM lower A-arms using a 1 3/16" & 1 1/16" socket. Disconnect the upper strut mount bolts from the frame using a 15mm wrench. (See Photo # 6)

13. Remove the lower A-arm mounting bolts from the frame & remove the OEM lower A-arms.



Photo # 5

14. Disconnect the OEM front drive shaft from the front differential. **Note:** It will not be necessary to remove the front drive shaft from the transfer case. Simply wire it out of the way.

15. While supporting the front differential with a transmission jack, remove the front differential mounting bolts. There are two on the drivers side & one on the passenger side. With the bolts removed, lower the front differential out of the vehicle.



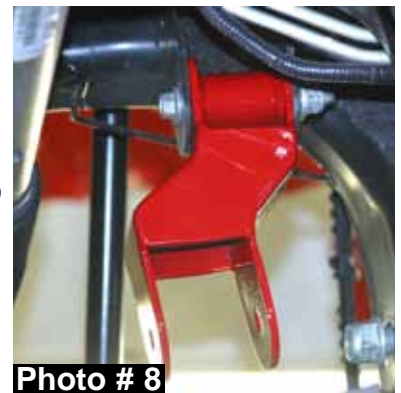
Photo # 6



16. Locate the new Skyjacker driver & passenger side differential brackets. **Note:** The driver side bracket is the thinner of the two. Attach the driver side & passenger side brackets to the OEM mounts using the OEM hardware. (See Photo # 7 & # 8)



17. Locate the new Skyjacker rear crossmember. **Note:** There is a differential mount made onto the driver side of this crossmember. The differential must be attached to this mount before the crossmember can be installed using the supplied 12mm x 90mm bolt, washer, & nut. (See Photo # 9)



18. Using a transmission jack, install the new Skyjacker rear crossmember & front differential. Attach the rear crossmember to the OEM rear A-arm mounts using the OEM hardware. Attach the front differential to the new Skyjacker driver & passenger side brackets using the supplied 12mm x 90mm bolts, washers, & nuts. (See Photo # 10)

19. Attach the new Skyjacker front crossmember to the OEM front A-arm mounts using the OEM hardware. (See Photo # 11)



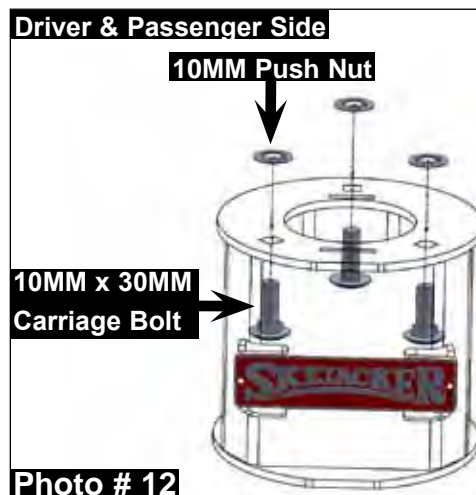
20. Attach the OEM front drive shaft to the front differential using the OEM hardware.

21. Attach the OEM lower A-arms to the new Skyjacker crossmembers using the supplied 18mm x 150mm bolts, washers, & nuts.

22. Assemble the new Skyjacker strut spacers using the supplied 10mm x 30mm carriage bolts, & 10mm push nuts. (See Photo # 12)



23. Install the new Skyjacker strut spacers on the top of each OEM strut assembly using the OEM hardware & a 15mm socket. **Do not tighten at this time.**



24. Install the strut / spacer assemblies & align the three studs of each new strut spacer with the OEM mounting locations. For alignment purposes, mark the location of the upper strut mount & new strut spacer. (See Photo # 13)



25. Remove the strut / spacer assemblies. Align the previously made marks & tighten the new strut spacers to the OEM strut assemblies using a 15mm socket. (See Photo # 14)



26. Install the strut / spacer assemblies by aligning the three upper strut mount studs with the OEM mounting locations using the supplied 10mm nuts & a 15mm socket. (See Photo # 15)

27. Attach the strut assemblies to the OEM lower A-arms using the OEM hardware. **Note:** "Ford Torque Specifications" for this bolt is 351 ft lbs.

28. Remove the OEM hub assemblies from the OEM steering knuckles & install onto the new Skyjacker steering knuckles using OEM hardware. (See Photo # 16) **Note:** The OEM dust shields will not be reused. Install the OEM hub assemblies so the OEM ABS line is pointing toward the top of the new steering knuckle.



29. Attach the new Skyjacker steering knuckles to the OEM lower ball joints (Torque to 111 ft. lbs) & OEM upper ball joints (Torque to 85 ft. lbs.) using the OEM hardware. Attach the OEM outer tie rod ends using the OEM hardware. (Torque to 111 ft.lbs.) **Note:** Periodically retorque the OEM upper / lower ball joints & outer tie rod ends. Install the OEM cv-axle shafts using the OEM hardware.



30. On the rearward side of the new Skyjacker steering knuckles, there is a new mounting location for the OEM ABS lines. Using the supplied 3/8" cable clamps & 5mm x 12mm bolts, attach the OEM ABS lines to this new location.

31. Remove the OEM brake line brackets from the frame rail & install the new Skyjacker drop brackets at this position. Attach the new Skyjacker drop brackets to the frame rail using the OEM hardware. Attach the OEM brake line brackets to the new Skyjacker drop brackets using the supplied 1/4" x 1" fine thread bolts, washers, & nuts. (See Photo # 17) **Note:** Some mounting configurations require the new Skyjacker drop brackets to be flattened. This can be accomplished by placing the new Skyjacker drop brackets in a vise or tapping flat with a hammer. Some mounting configurations will also require the upper hole of the new Skyjacker drop brackets to be enlarged by drilling using a 13/32" drill bit. (See Photo # 18)



Photo # 17

32. Attach the OEM brake rotors & brake calipers to the new Skyjacker steering knuckles using the OEM hardware.

33. Install the new Skyjacker sway bar drop brackets to the frame using the OEM hardware. Attach the OEM sway bar to the new Skyjacker brackets using the supplied 7/16" x 1 1/2" fine thread bolts, washers, & nuts. **Note:** The new brackets will install with the open portion towards the inside of the vehicle & the pointed end towards the rear of the vehicle. Attach the OEM sway bar endlinks to the OEM lower A-arms using the OEM hardware.



Photo # 18

34. Hold the new Skyjacker front differential skid plate in place with the mounting holes of the skid plate facing the rear of the front & rear crossmembers. Install the new front differential skid plate using the supplied 5/16" x 1" bolts, washers, nuts, 1/2" wrench, & 1/2" socket. (See Photo # 19)



Photo # 19

35. Install the front tires / wheels & lower the front of the vehicle to the ground.

## **Rear Installation:**

1. With the vehicle on flat level ground, set the emergency brake & block the front tires / wheels.
2. Raise the rear of the vehicle & support the frame rails using jack stands.
3. Remove the rear tires / wheels using a 22mm socket.
4. Remove the OEM rear shocks using a 15mm & 18mm socket. (See Photo # 20)
5. Support the rear axle & remove the OEM rear u-bolts using a 21mm socket.



Photo # 20



6. Disconnect the OEM rear brake line bracket from the frame rail.

7. While checking for appropriate slack in ABS lines, brake lines, differential breather hose, & etc. Lower the rear axle & install the new Skyjacker 4.5" rear lift blocks below the OEM rear blocks with the taller end of the new rear lift blocks toward the rear of the vehicle. (See Photo # 21)



8. Raise the rear axle & install the new Skyjacker rear u-bolts using the supplied 9/16" nuts & a 7/8" socket. (See Photo # 21)

9. Install the new Skyjacker rear brake line bracket to the OEM mount on the frame rail using the OEM hardware. Connect the OEM brake line bracket to the new brake line bracket using the supplied 1/4" x 1" bolt, washers, nut, & a 7/16" socket.

10. Install the new Skyjacker rear shocks using the supplied hardware, OEM hardware, a 15mm, & 18mm socket.

11. Install the rear tires / wheels & lower the rear of the vehicle to the ground.

**Final Notes:**

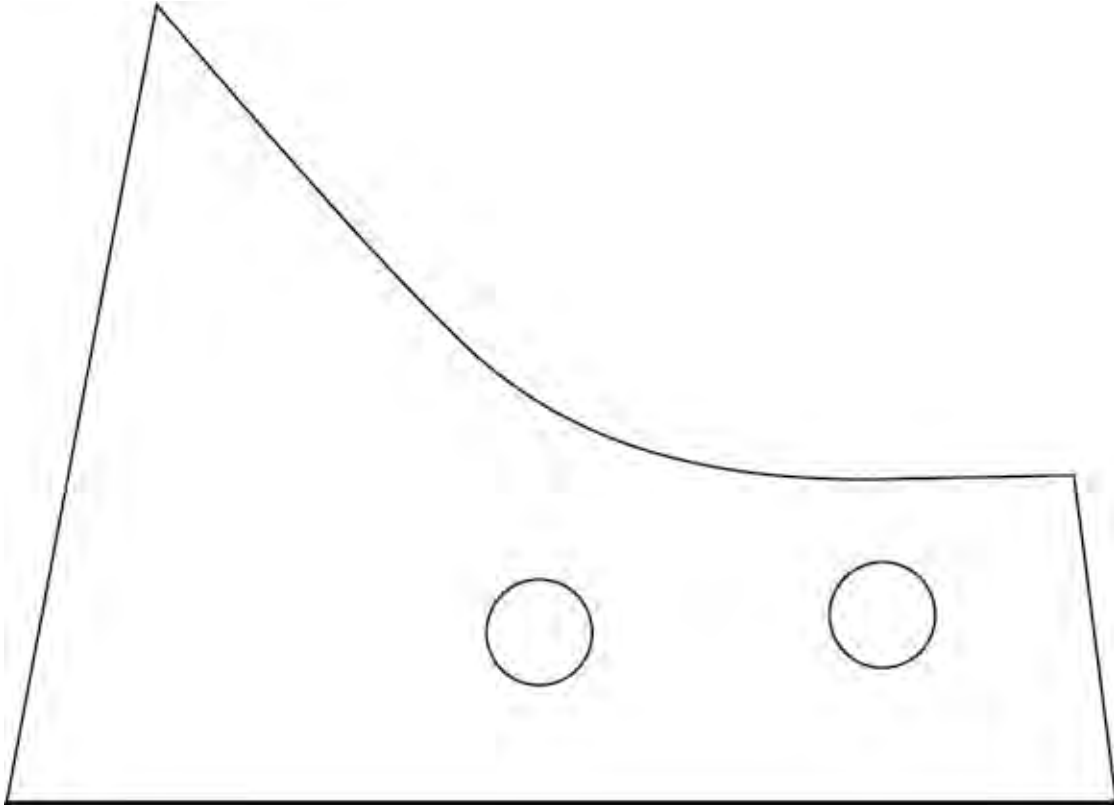
- After the installation is complete, double check that all nuts & bolts are tight. Refer to the following chart for the proper torque specifications. (Do not retighten the nuts & bolts where thread lock compound was used.)
- With the vehicle placed on the ground, cycle the steering lock to lock & inspect 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.
- After the first 100 miles, check all hardware for the proper torque & periodically thereafter.

<b><u>TORQUE SPECIFICATIONS</u></b>					
<b><u>INCH SYSTEM</u></b>			<b><u>METRIC SYSTEM</u></b>		
<b>Bolt Size</b>	<b>Grade 5</b>	<b>Grade 8</b>	<b>Bolt Size</b>	<b>Class 8.8</b>	<b>Class 10.9</b>
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.**



## OEM Rear Crossmember Template



**Seat Belts Save Lives, Please Wear Your Seat Belt.**