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#### **Required Tools List:**

- SAE & SAE Hex Key Sockets \ Wrenches (7/32" & 5/16" Hex Key Sockets, 7/16", 1/2", 9/16", 3/4", 13/16", 7/8" & 1-1/8")
- Metric & Metric Hex Key Sockets \ Wrenches
   (6mm Hex Key Socket, 10mm, 13mm, 15mm, 18mm, 19mm, 21mm, 22mm & 24mm)
- Plastic Fastener Removal Tool
- PliersMeasuring Tape
- Safety Glasses
   Wheel Chock
- Floor JackJack Stands
- Torque Wrench



Jeep JL RUBICON 392 4.5" Suspension Lift Installation Instructions

Before beginning installation, read these instructions & enclosed driver's WARNING NOTICE thoroughly & completely. Also affix WARNING decal in passenger compartment in clear view of all occupants. Please refer to Parts List to insure that all parts & hardware are received prior to disassembly of vehicle. If any parts are found to be missing, contact SKYJACKER® Customer Service at 318-388-0816 to obtain needed items. If you have any questions or reservations about installing this product, contact SKYJACKER® Technical Assistance at 318-388-0816.

# Please Record Important Measurement Information Below for Reference. It Is Very Helpful on Determining an Accurate Achieved Lift Height Measurement.

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

Driver Side Front:	/	Passenger Side Front: _	/
	BEFORE / AFTER	G	BEFORE / AFTER
Driver Side Rear:	/	Passenger Side Rear:	/
_	BEFORE / AFTER	_	BEFORE / AFTER

# Important Notes:

- Drag Link Must Be Adjusted to Center Steering Wheel <u>Before</u> Vehicle Is Driven. Failure to Do So Will Cause Computer Errors, Odd Handling Characteristics, & Poor Performance.
- If Larger Tires (10% More Than OEM Diameter) Are Installed, Speedometer Recalibration Will Be Necessary. Contact Your Local JEEP Dealer or an Authorized Skyjacker® Dealer for Details.
- After Installation, a Qualified Alignment Facility Is Required to Align Vehicle to OEM Specifications.

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# Kit Box Breakdown:

### Part # JL45R3KELT

Item #	Description	Qty
JLUR453FDR	COILS, FRONT, 4.5"   PAIR	1
JLUR403RDR	COILS, REAR, 4"   PAIR	1
JL45R3ELT	COMP BOX: JL RUBICON 392, 4.5"	1
JL24LL	LOWER LINKS, FRONT \ REAR	1

#### Part # JL45R3BKXLT

Item #	Description	Qty
JLUR453FDR	COILS, FRONT, 4.5"   PAIR	1
JLUR403RDR	COILS, REAR, 4"   PAIR	1
JL45R3BLT	COMP BOX: JL RUBICON 392, 4.5"	1
JL24LL	LOWER LINKS, FRONT \ REAR	1
JL3540X	ADX COMPONENT BOX, 3.5"-4"	1

# **Component Box Breakdown:**

# Part # JLUR453FDR

Item #	Description	Qty
G45HDFS-DR	COILS, FRONT, 4.5"	2

#### Part # JLUR403RDR

Item #	Description	Qty
JL34RS-DR-R	COILS, REAR, 4"   JL RS 20.5"	1
JL45RS-DR-R	COILS, REAR, 4"   JL RS 20.5" 45	1

# Part # JL45R3BLT

Item #	Description	Qty
JLFTBA18-B	ADJUSTABLE TRACK BAR, FRT	1
HD34X34DTB	HEAVY DUTY ROD END, 3/4"	1
34RFTJN	RIGHT HAND JAM NUT, 3/4"	1
H-BOX JL45R3	HWDR BOX: JL45R3BLT	1

### Part # JL45R3ELT

Item #	Description	Qty
JLFTBA18-B	ADJUSTABLE TRACK BAR, FRT	1
HD34X34DTB	HEAVY DUTY ROD END, 3/4"	1
34RFTJN	RIGHT HAND JAM NUT, 3/4"	1
H-BOX JL45R3E	HWDR BOX: JL45R3BPELT	1

# Part # JL24LL

Item #	Description	Qty
JL24LLFD-L	LOWER LINK, FRONT, DR	1
JL24LLFP-L	LOWER LINK, FRONT, PA	1
JL24LLR-L	LOWER LINK, REAR   PAIR	2
HB-JL24LLF	HDWR BAG: JL24LLF BRAKE TAB	1

# **Hardware Box Breakdown:**

# Part # H-BOX JL45R3

Item #	Description	Qty
ABSS2535	FRONT BUMP STOP SPACER	2
JK40RBS-S	BUMP STOP, REAR	2
JLRTBU-B	TRACK BAR BRKT, UPPER REAR	1
SBE4048-L	SWAY BAR END LINK, FRONT	2
SBE4068-L	SWAY BAR END LINK, REAR	2
HB-JL40BSS	HDWR BAG: BUMP STOP SPACERS	1
HB-JLBLE4	HDWR BAG: BRAKE LINE EXT.	1
HB-JLFTBB	HDWR BAG: TRACK BAR, FRT	1
HB-JLRTBU	HDWR BAG: TRACK BAR BRT, RR	1
HB-JLUEB	HDWR BAG: E-BRAKE, UPPER	1
HB-SBENB03	HDWR BAG: END LINKS, FRT	1
HB-SBENB04	HDWR BAG: END LINKS, RR	1

# Part # H-BOX JL45R3E

Item #	Description	Qty
ABSS2535	FRONT BUMP STOP SPACER	2
JK40RBS-S	BUMP STOP, REAR	2
JLRTBU-B	TRACK BAR BRKT, UPPER REAR	1
JL35SEF-S	SHOCK EXTENSION BRKT, FRT	2
JL25SER-S	SHOCK EXTENSION BRKT, RR	2
SBE4048-L	SWAY BAR END LINK, FRONT	2
SBE4068-L	SWAY BAR END LINK, REAR	2
HB-JL2535SE	HDWR BAG: SHOCK EXT, FRT\RR	1
HB-JL40BSS	HDWR BAG: BUMP STOP SPACERS	1
HB-JLBLE4	HDWR BAG: BRAKE LINE EXT.	1
HB-JLFTBB	HDWR BAG: TRACK BAR, FRT	1
HB-JLRTBU	HDWR BAG: TRACK BAR BRT, RR	1
HB-JLUEB	HDWR BAG: E-BRAKE, UPPER	1
HB-SBENB03	HDWR BAG: END LINKS, FRT	1
HB-SBENB04	HDWR BAG: END LINKS, RR	1

# Hardware Bag Breakdown:

# Part # HB-JL24LLF

Item #	Description	Qty
14X1FTB	1/4 X 1 FINE THREAD BOLT	2
14SAEW	1/4 SAE WASHER	4
14FTN	1/4-28 FINE N/I LOCK NUT	2

# Part # HB-JL2535SE

Item #	Description	Qty
411481	CRUSH SLEEVE   1.62" LONG	4
12X114FTB	1/2 X 1-1/4 FINE THREAD BOLT	2
12X312FTB	1/2 X 3-1/2 FINE THREAD BOLT	4
12FTN	1/2 FINE THREAD N/I LOCK NUT	6
12SAEW	1/2 SAE WASHER	8
12USSW	1/2 USS WASHER	4
38X1FTB	3/8 X 1 FINE THREAD BOLT	2
38FTN	3/8 FINE THREAD N/I LOCK NUT	2
38SAEW	3/8 SAE WASHER	4

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#### Part # HB-.JI 40BSS

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Tall # IID 02-1000					
Item #	Description	Qty			
516X1FTB	5/16 X 1 FINE THREAD BOLT	4			
516SAEW	5/16 SAE WASHER	8			
516FTN	5/16 FINE THREAD N/I LOCK NUT	4			
38X412BHB	3/8 X 4-1/2 BUTTON HEAD BOLT	2			
38SAEW	3/8 SAE WASHER	2			
38CTN	3/8-16 COARSE N/I LOCK NUT	2			

#### Part # HR-.II RI F4

Talt # 11B 0EBEE+				
Item #	Description			
JL4BE-S	BRAKE LINE BRACKET, FRONT	4		
14X1FTB	1/4 X 1 FINE THREAD BOLT \ G8	4		
14SAEW	1/4 SAE WASHER	8		
14FTN	1/4-28 FINE N/I LOCK NUT	4		

#### Part # HB-JLFTBB

Description	Qty
ROD END BUSHING / 0.563" ID	2
-	•

#### Part # HB-JLRTBU

Item #	Description	Qty
12X5FTB	1/2 X 5 FINE THREAD BOLT \ G8	1
12SAEW	1/2 SAE WASHER	2
12FTN	1/2-20 FINE N/I LOCK NUT	1
916X114FTB	9/16 X 1-1/4 FINE THREAD BOLT	2
916SAEW	9/16 SAE WASHER	4
916FTN	9/16-18 FINE N/I LOCK NUT	2

### **Hardware Bag Breakdown:**

#### Part # HB-JLUEB

Item #	Description	Qty
JLUEB-B	E-BRAKE BRKT, REAR UPPER	1
12X20MMB-1.5	12 X 20-1.5 METRIC BOLT \ 10.9	1
12SAEW	1/2 SAE WASHER	1
14X1FTB	1/4 X 1 FINE THREAD BOLT	1
14FTN	1/4-28 FINE N/I LOCK NUT	1
14SAEW	1/4 SAE WASHER	2

#### Part # HB-SBENB03

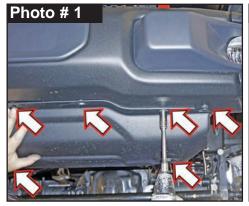
	Item #	Description					
1	141509	ES25 SLEEVE, 1.50" LONG	4				
1	12X70MMB	12 X 70 METRIC BOLT \ 10.9	2				
	716USSW	7/16 USS FLAT WASHER	4				
7	12MMN	12MM NYLON INSERT LOCK NUT	2				

#### Part # HB-SBENB04

Item #	Description	Qty
141509	ES25 SLEEVE, 1.50" LONG	4
12X65BHB	12 X 65 BUTTON HEAD BOLT	2
716USSW	7/16 USS FLAT WASHER	4
12MMN	12MM NYLON INSERT LOCK NUT	2

# Front Installation: Note: Save all factory components and hardware for reuse, unless noted.

- 1. Chock rear tires\wheels. Ensure that vehicle transmission is in PARK & engage emergency brake. Note: Be sure steering wheel \wheels are pointing straight forward.
- 2. Raise front of vehicle, support frame rails using jack stands at indicated lift points in OEM service manual. Tech Note: OEM front lower control arms will need to move freely during this installation.
- 3. Remove front tires\wheels using a 22mm socket.
- 4. Remove OEM front skid plate using a 13mm socket\wrench. (Photo # 1)
- 5. Remove OEM front sway bar end links using a 6mm hex key socket\wrench & 18mm socket\ wrench. (Photo # 2)
- 6. Disconnect OEM front track bar from frame using a 21mm socket \ wrench. (Photo # 3)



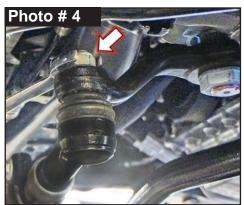


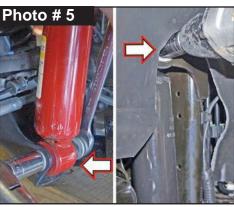


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- 7. Disconnect OEM drag link from OEM pitman arm using a 21mm socket \ wrench. (Photo # 4)
- 8. **Kit With Shock Extension Brackets:** Disconnect OEM front shock only from lower axle mount using a 18mm socket\wrench. (Photo # 5)
  - Kit With ADX 2.0 Remote Reservoir: Disconnect OEM front shock from upper shock tower mount & lower axle mount using a 18mm socket\wrench. (Photo # 5)
- 9. Disconnect OEM front brake line brackets from OEM front lower control arms using a 15mm socket \ wrench. (Photo # 6) Unclip all ABS line rubber grommets from OEM brake line.





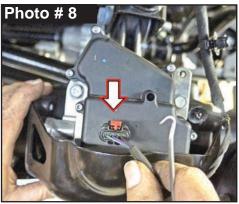


10. Disconnect OEM front driveshaft. Mark location of OEM front driveshaft & front differential input yoke. Disconnect using a 15mm socket\wrench. (Photo # 7) **Tech Note:** Secure

driveshaft safely up & out of way with a bungee or other method.

11. OEM Center Axle
Disconnect (CAD) 4WD
Actuator, must be
disconnected. Disconnect
wiring harness from
Passenger Side at OEM
front upper control arm axle
mount. (Photo # 8)





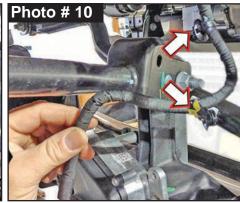
<u>Tech Note</u>: Red safety lock clip must be slid rearward to unlock. Press & hold rearward tang down, grab connector & pull away while from plug-in.

12. OEM Center Axle Disconnect (CAD) 4WD Actuator, on Passenger Side located at inner frame rail above axle, remove cable tie from wiring harness. Unclip wiring harness clips from frame

using a plastic fastener removal tool. (Photo # 9)

Unclip wiring clips from front axle using a plastic fastener removal tool. (Photo # 10)





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13. OEM front locker must be disconnected. On driver side located at 'inner' frame rail above axle, unplug OEM harness plug. (Photo # 11) <u>Tech Note</u>: Red safety lock clip must be slid rearward to unlock. Press & hold rearward tang down, grab connector & pull away while from plug-in.

Unclip wiring harness clips from frame using a plastic fastener removal tool. (Photo # 11)

14. Disconnect OEM axle vent hose clip. Locate OEM brake line bracket attached on driver side frame to rear of shock tower. Unclip axle vent hose clip from brake line bracket using a plastic fastener removal tool. (Photo # 12)



Follow vent tube up & unclip frame attachment using a plastic fastener removal tool. (Photo # 13) Continue to follow vent tube up & unclip from shock tower (behind OEM inner fender liner) using a plastic fastener removal tool. (Photo # 14)







- 15. While checking for appropriate slack in ABS lines, brake lines, axle vent hose & etc. Lower front axle. Remove OEM front coil springs & rubber isolators.
- 16. Skyjacker Front Coil Springs Are Not Side Specific: # G45HDFS-DR Driver or Passenger Side.

  Place Skyjacker # ABSS2535 Front Bump Stop Spacer inside Skyjacker # G45HDFS-DR Front Coil Spring.

Install front coil spring with bump stop inside. (Photo # 15) Insert coil spring into upper tower first. Be sure that coil is indexed to seat properly, then raise axle enough to hold coil springs in place. **Tech Note:** If front axle cannot be lowered enough to allow coil spring to be installed, carefully rotate pinion up to provide more clearance for coil installation.

Insert supplied 3/8" x 4-1/2" Button Head Bolt into bump stop. Align bolt into hole of OEM lower coil spring mount pad. Reach under spring mount pad & above axle tube to install supplied 3/8" SAE Washer & 3/8" Nylon Insert Lock Nut onto bolt. (Photo # 15)

Tighten bump stop into place using a 7/32" hex key socket\wrench & 9/16" socket\wrench. Torque 25 ft.-lbs.

<u>Tech Note</u>: On passenger side, it may be necessary to remove ABS bracket to install bump stop lock nut. At rear of axle above shock mount, remove ABS mounting bracket using a 10mm socket\wrench. (Photo # 16)

Once bump stop spacer is tight, reinstall ABS line mounting bracket onto axle.

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17. Raise front axle in order to load Skyjacker front coil springs. **Note:** There has been occasional reports of passenger side coil spring having an inward bow after installation on taller lifts. If so, OEM upper coil spring isolator can be rotated 180 degrees.

Mark OEM position of passenger side OEM upper coil spring isolator. (Photo # 17) Remove two (2) alignment pins on top of passenger side OEM upper coil spring isolator using diagonal cutting pliers or similar tool.

Rotate passenger side OEM upper coil spring isolator so thicker portion is on inside toward frame.







NOTE: Kit With Shock Extension Brackets: Proceed to Step 18. Kit With ADX 2.0 Remote Reservoir: Proceed to Step 20.

18. **Kit With Shock Extension Brackets:** Skyjacker Front Lower Shock Extension Bracket Are Not Side Specific: # JL35SEF-S Driver or Passenger Side.

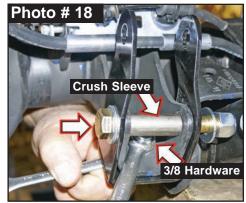
Connect Skyjacker Front Lower Shock Extension Bracket to OEM front lower shock mount with

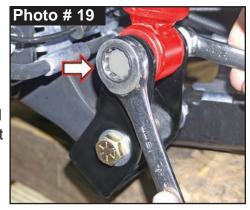
upper mounting holes offset towards front of vehicle.

Install supplied 3/8" x 1" Fine Thread Bolt with 3/8" SAE Washer up through OEM mount & Skyjacker bracket. Attach with 3/8" SAE Washers & 3/8" Fine Thread Nylon Insert Nuts using a 9/16" socket\wrench. (Photo # 18)

Insert supplied 1/2" x 3-1/2" Fine Thread Bolt with 1/2" SAE Washers from outside-to-inside through brackets & shock mount. Insert supplied 1.62" Long Crush Sleeve between OEM shock mount & continue bolt though Skyjacker brackets. Attach with supplied 1/2" SAE Washer & 1/2" Nylon Insert Lock Nut using a 3/4" socket\wrench. (Photo # 18) Secure, but **Do Not Completely Tighten** at this time.

19. Connect OEM front shock to Skyjacker Shock Extension Bracket with OEM hardware using a 21mm socket\wrench. (Photo # 19) Secure, but **Do Not Completely Tighten** at this time. **Note**: To set bushings properly for ride height, these will be tightened once vehicle is on ground with full vehicle weight on tires\wheels. **Proceed to Step 21.** 

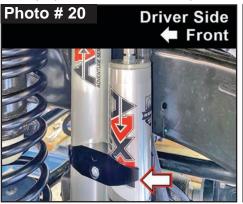




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20. **Kit With ADX 2.0 Remote Reservoir:** <u>Tech Note</u>: ADX Front Shock # A2387 Remote Reservoir are to be mounted with cylinder body up & remote reservoir toward rear for proper clearance (opposite side of coil spring mount). (Photo # 20 & # 21)

Loosely assemble two (2) supplied reservoir clamps with two (2) supplied hex head bolts using a hex key socket (one (1) front & one (1) back). Position clamp into place around shock & reservoir cylinder. Secure, but **Do Not Completely Tighten**.





Install Skyjacker # A2387 ADX Front Shock with OEM hardware at upper shock tower mount using a 18mm socket\wrench. <u>Tech Note</u>: Exposed Portion of Bushing\Sleeve Goes to Inside Toward Frame Mount. <u>Note</u>: Upper shock mount has a OEM fixed nut welded onto the frame. Be careful not to dislodge nor over tighten this nut.

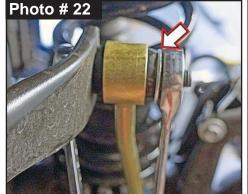
Connect Skyjacker shock at lower axle mount with OEM hardware using a 18mm socket\ wrench. Secure, but **Do Not Completely Tighten** at this time. **Note:** To set bushings properly for ride height, these will be tightened once vehicle is on ground with full vehicle weight on tires\wheels. **Proceed to Step 21.** 

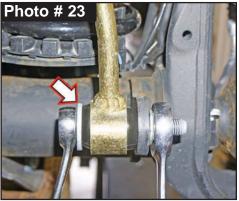
21. Coat with a water resistant grease & press # ES25 1.50" Long Steel Sleeves into upper & lower mounts of # SBE4048-L Front Sway Bar End Link.

Install upper end link mount to OEM sway bar with supplied 12mm x 70mm Bolt & 7/16" USS

Washer through sway bar from inside-to-outside of vehicle. Attach with supplied 7/16" USS Washer & 12mm Nylon Insert Lock Nut using a 19mm socket\wrench. (Photo # 22) Secure, but **Do Not Completely Tighten**.

Attach lower end link to OEM axle mount with OEM hardware using a 18mm





socket\wrench. <u>Note</u>: On driver side, install OEM lower bolt with supplied 7/16" USS Washer to outer bushing side of sway bar end link. (Photo # 23) Secure, but **Do Not Completely Tighten**.

- 22. Connect OEM axle vent hose at OEM mounts. Clip axle vent hose clip to brake line bracket. (Photo # 12) Clip at frame attachment. (Photo # 13) Clip at shock tower mount (behind OEM inner fender liner). (Photo # 14)
- 23. Connect OEM front locker on driver side. Located at 'inner' frame rail above axle, plug OEM harness plug. (Photo # 11) **Tech Note**: Pull out on connector to verify that it is securely plugged in properly.

Clip wiring harness clips to frame. (Photo # 11)

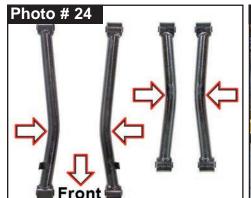
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- 24. Connect OEM Center Axle Disconnect (CAD) 4WD Actuator, on passenger side located at inner frame rail above axle. (Photo # 8) **Tech Note**: Pull out on connector to verify that it is securely plugged in properly.
  - Clip wiring harness clip to frame. (Photo # 9) Clip wiring clip to front axle. (Photo # 10)
- 25. Raise front axle to align marks on OEM front driveshaft \flange & connect driveshaft with OEM hardware using a 15mm socket \wrench. (Photo # 7) Torque 89 ft-lbs.
- 26. Connect OEM drag link to OEM pitman arm with OEM hardware using a 21mm socket\wrench. (Photo # 4) Note: Drag Link Must Be Adjusted to Center the Steering Wheel Before the Vehicle Is Driven. Failure to Do So Will Cause Computer Errors, Odd Handling Characteristics, & Poor Performance.

#### Note: Perform Steps 27-29 on One Side at a Time.

- 27. Remove OEM front lower control arm from front axle mount & upper frame mount using a 21mm & 24mm socket\wrench.
- 28. Skyjacker Front Lower Links Are Side Specific:
  # JL24LLFD-L Driver Side & # JL24LLFP-L Passenger Side. Note: Install Skyjacker Front
  Lower Link with brake line bracket tab toward outside front & link offset bend toward inside of
  vehicle. (Photo # 24)

Install appropriate Skyjacker Front Lower Link with OEM hardware. Insert OEM hardware from inside-to-outside. Attach using a 21mm & 24mm socket\wrench. (Photo # 25 & # 26) Secure, but **Do Not Completely Tighten** at this time.







- 29. Connect OEM front brake line bracket inside of Skyjacker Link tab with supplied 1/4" x 1" bolt with 1/4" SAE Washer.
  - Attach with 1/4" SAE Washer & 1/4" Nylon Insert Lock Nut using a 7/16" socket\wrench. (Photo # 27)

# Note: Perform Steps 27-29 on Opposite Side at a this Time, Then Proceed to Step 30.

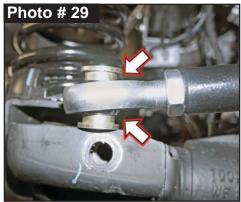
- 30. Install OEM front skid plate with OEM hardware using a 13mm socket \ wrench. (Photo # 1)
- 31. Install front tires\wheels using a 22mm socket. Lower vehicle to ground. Torque lugs to OEM service manual specifications.

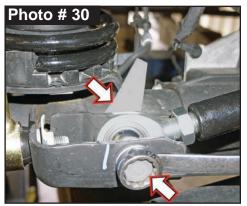


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- 32. Make sure that tires\wheels are pointed straight ahead. Install fixed end of Skyjacker # JLFTBA18-B Front Adjustable Track Bar to frame with OEM hardware using a 21mm socket\wrench. (Photo # 28) Secure, but **Do Not Completely Tighten** at this time.
- 33. Install supplied # JLFTBB Rod End Bushings onto rod end of Skyjacker track bar. (Photo # 29) Install rod end assembly into front axle mount with OEM hardware using a 21mm socket \ wrench. (Photo # 30) Note: Do not tighten at this time. Tech Note: It may be necessary to turn steering wheel to align track rod end with mount.







34. Check front of vehicle to make sure body is centered over front tires\wheels. Using a measuring tape, measure from inside of tire to frame on Driver Side, then measure passenger side.

Compare two measurements; aim is to make both sides equal. <u>Note</u>: If driver side measurement is greater than passenger side, track bar needs to be lengthened. If passenger side measurement is greater than driver side, track bar needs to be shortened.

Remove adjustable rod end of track bar, loosen jam nut using a 1-1/8" wrench & turn rod end to adjust in or out. Once body is properly aligned over front tires\wheels, tighten OEM hardware using a 21mm socket\wrench.

Fully tighten all OEM hardware at upper frame mount & axle mount. Fully tighten jam nut of Skyjacker adjustable front track bar using a 1-1/8" wrench.

# Rear Installation: Note: Save all factory components and hardware for reuse, unless noted.

- Chock front tires\wheels. Raise rear of vehicle & support frame rails using jack stands at indicated lift points in OEM service manual. <u>Tech Note</u>: OEM rear lower control arms will need to move freely during this installation.
- 2. Remove rear tires\wheels using a 22mm socket.
- 3. Remove OEM rear sway bar end links using a 6mm hex key socket\wrench & 18mm socket\wrench.

  (Photo # 31 & # 32)





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- 4. Disconnect OEM rear brake line brackets from frame using a 10mm socket\wrench. (Photo # 33)

  Disconnect OEM rear brake line bracket from rear axle at upper control arm mount on each side using a 13mm socket\wrench. (Photo # 34)
- 5. Disconnect OEM rear track bar from passenger side upper frame mount using a 21mm socket \ wrench. (Photo # 35)



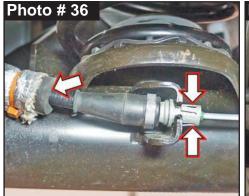




- 6. Rear locker must be disconnected so wiring connectors are not over-extended. On rear axle, unplug locker wiring harness from side of center differential housing. Follow wiring harness up & unclip wiring harness clamps from emergency brake cable. Continue up wiring harness & unclip two (2) wiring harness clips from driver side inner frame rail above axle using a plastic fastener removal tool.
- 7. Locate two (2) OEM emergency brake cables on front of rear axle. They run down from body to center of axle out to each driver & passenger brake housing.

Hold tension on inward cable & pinch ears of aluminum fitting to release it from axle mount using pliers. (Photo # 36)

Remove e-brake cable. Disconnect cable hook-end from ring on brake housing. (Photo # 37) Repeat process on opposite side of vehicle.





NOTE: Kit With Shock Extension Brackets: Proceed to Step 8.
Kit With ADX 2.0 Remote Reservoir: Proceed to Step 9.

8. **Kit With Shock Extension Brackets:** Disconnect OEM rear shock only from lower axle mount using a 18mm socket \ wrench. (Photo # 38)



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9. Kit With ADX 2.0 Remote Reservoir: Disconnect OEM rear shock from lower axle mount using a 18mm socket\wrench. (Photo # 39)

In order to gain access to OEM rear upper shock mounting bolts, remove three (3) OEM bolts rear bumper inner fender liner using a 8mm socket\wrench. (Photo # 40) Retain hardware.

Disconnect OEM rear shock from upper shock tower mount using a 18mm socket\wrench. Note: OEM upper shock mount has nut attached to shock mount. (Photo # 41) Remove OEM rear shocks.

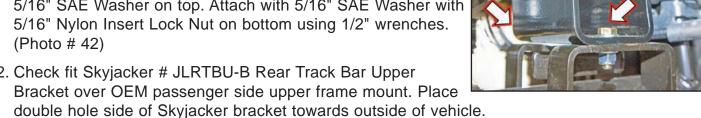






Photo # 42

- 10. While checking for appropriate slack in electric locker lines, ABS lines, brake lines, differential vent hose & etc, lower rear axle & remove OEM rear coil springs.
- 11. Install Skyjacker # JK40RBS-S Rear Bump Stop Spacer to OEM rear bump stop pads with supplied 5/16" x 1" Bolt with 5/16" SAE Washer on top. Attach with 5/16" SAE Washer with 5/16" Nylon Insert Lock Nut on bottom using 1/2" wrenches. (Photo # 42)
- 12. Check fit Skyjacker # JLRTBU-B Rear Track Bar Upper Bracket over OEM passenger side upper frame mount. Place

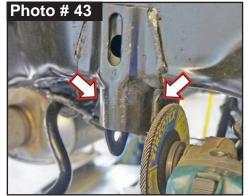


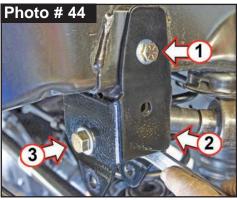
Note: It may be necessary to slightly grind welds of OEM frame mount for Skyjacker bracket to be installed easily. (Photo # 43)

File smooth any burrs or sharp edges on OEM mount then paint \ undercoat all exposed metal.

13. Install # JLRTBU-B Rear Track Bar Upper Bracket over OEM rear upper track bar bracket on frame.

> First, insert a supplied 1/2" x 5" Fine Thread Bolt with 1/2"





SAE Washer through bracket's upper mounting hole from outside-to-inside. Attach with 1/2" SAE Washer & 1/2" Nylon Insert Lock Nut on inside using a 3/4" socket\wrench. (Photo # 44) Secure, but **Do Not Completely Tighten** at this time.

I-JL45R3E REV1 11/23 Page 11 of 16 14. Second, insert one (1) supplied 9/16" x 1-1/4" Fine Thread Bolt with 9/16" SAE Washer through bracket \ OEM track bar mounting holes from front-to-rear. (Photo # 44 & # 60) Attach with 9/16" SAE Washer & 9/16" Nylon Insert Lock Nut on inside using a 13/16" & 7/8" socket\wrench.

Third, insert one (1) supplied 9/16" x 1-1/4" Fine Thread Bolt with 9/16" SAE Washer bracket \ OEM track bar mounting holes from rear-to-front. (Photo # 44 & # 60) Attach with 9/16" SAE Washer & 9/16" Nylon Insert Lock Nut on inside using a 13/16" & 7/8" socket\wrench.

Torque 1/2" Bolt 90 ft-lbs. Torque 9/16" Bolts 130 ft-lbs.

15. Skyjacker Rear Coil Springs Are Side Specific: # JL34RS-DR-R with Coil Spring Stamp JL RS 20.5" Driver Side (Photo # 45) # JL45RS-DR-R with Coil Spring Stamp JL RS 20.5" 45 Passenger Side (Photo # 46)

**Note:** Be sure that tab of each OEM rear upper coil spring isolator are aligned with hole of OEM rear upper coil spring mount. (Photo # 47)

Install Skyjacker rear coil springs. Raise rear differential to load Skyjacker rear coil springs.







NOTE: Kit With Shock Extension Brackets: Proceed to Step 16. Kit With ADX 2.0 Remote Reservoir: Proceed to Step 18.

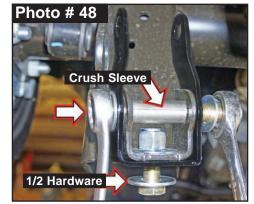
16. Kit With Shock Extension Brackets: Skyjacker Rear Lower Shock Extension Bracket Are Not Side Specific: # JL25SER-S Driver or Passenger Side.

Connect Skyjacker Rear Lower Shock Extension Brackets to OEM rear lower shock mount with upper mounting holes offset towards front of vehicle.

Install supplied 1/2" x 1-1/4" Fine Thread Bolt with larger 1/2" USS Washer up through OEM mount & Skyjacker bracket. Attach with 1/2" USS Washer with 1/2" Nylon Insert Lock Nut top using a 3/4" socket\wrench. (Photo # 48)

Insert supplied 1/2" x 3-1/2" Fine Thread Bolt with 1/2" SAE Washers from outside-to-inside through brackets & shock mount. Insert supplied 1.62" Long Crush Sleeve between OEM shock mount & continue bolt though Skyjacker bracket. Attach with supplied 1/2" SAE Washer & 1/2" Nylon Insert Lock Nut using a 3/4" socket\wrench. (Photo # 43) Secure. but **Do Not Completely Tighten** at this time.

Proceed to Step 17.



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- 17. Connect OEM rear shocks to Skyjacker rear lower shock extension brackets with OEM hardware using a 18mm socket\wrench. (Photo # 49)
- 18. Kit With ADX 2.0 Remote
  Reservoir: Tech Note: ADX
  Rear Shock # A2389
  Remote Reservoir are to be





mounted with cylinder body up & remote reservoir toward rear for proper clearance. (Photo # 50)

Loosely assemble two (2) supplied reservoir clamps with two (2) supplied hex head bolts using a hex key socket (one (1) front & one (1) back). Position clamp into place around shock & reservoir cylinder. Secure, but **Do Not Completely Tighten**.

Install Skyjacker ADX # A2389 Rear Shock with OEM hardware using a 18mm socket\wrench. Secure, but **Do Not Completely Tighten**.

Attach OEM rear bumper inner fender liner with OEM bolts using a 8mm socket\wrench. (Photo # 40) **Proceed to Step 19.** 

19. Locate two (2) OEM emergency brake cables attached to bottom of body. Remove OEM e-brake bracket that holds cables using a 13mm socket\wrench. (Photo # 51)

Move two (2) OEM emergency brake cables from behind OEM crossmember to <u>in front of crossmember</u> as shown. (Photo # 52)

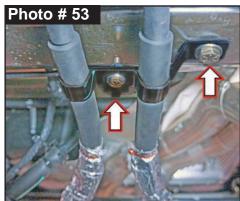
Attach Skyjacker # JLUEB-B Rear Upper E-Brake Bracket into OEM threaded bolt hole of crossmember (off center slightly toward driver side). Install with supplied 12mm x 20mm Bolt with a 1/2" SAE Washer through Skyjacker bracket into crossmember using a 19mm socket \ wrench. (Photo # 53)

Attach OEM e-brake bracket & e-brake cables to Skyjacker bracket. **Note**: OEM e-brake bracket attaches with bent alignment <u>tab rearward</u>.

First, insert a supplied 1/4" x 1" Fine Thread Bolt with 1/4" SAE Washer through OEM e-brake bracket. Align OEM e-brake bracket with both e-brake cables & Skyjacker bracket. Attach with 1/4" SAE Washer & 1/4" Nylon Insert Lock Nut on top using a 7/16" socket \ wrench. (Photo # 53)







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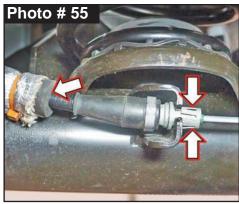
20. Run each e-brake cable down & out to appropriate driver \ passenger brake housing. Connect

cable hook-end onto ring on brake housing. (Photo # 54) Hold tension on inward e-brake cable. Using pliers, pinch ears of aluminum fitting to attach cable to OEM axle mount.

Repeat Process on Opposite Side of Vehicle.

(Photo # 55)



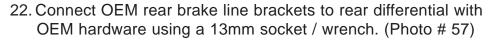


21. First, install Skyjacker # JL4BE-S Rear Brake Line Brackets to frame with OEM hardware using a 10mm socket\wrench. (Photo # 56)

Second, rotate & connect OEM rear brake line bracket to Skyjacker bracket using supplied 1/4" x 1" Fine Thread Bolt with 1/4" SAE Washer outside & 1/4" SAE Washer with 1/4" Nylon Insert Lock Nut on inside with a 7/16" socket\wrench.

Third, slightly bend\straighten OEM rear hard brake line.

Note: Be careful not to damage OEM rear hard brake lines.



23. Coat with a water resistant grease & press # ES25 1.50" Long Steel Sleeves into upper & lower mounts of Skyjacker # SBE4068-L Rear Sway Bar End Links.

Attach upper end link mount to OEM sway bar with supplied 12mm x 65mm Button Head Bolt & 7/16" USS Washer from outside-to-inside of vehicle. Attach with supplied 7/16" USS Washer & 12mm Nylon Insert Lock Nut on inside of OEM sway bar using a 5/16" hex key socket & a 18mm socket\

wrench. (Photo # 58)

Attach lower end link with OEM hardware with large washer to bushing side of end link using a 18mm socket\wrench. (Photo # 59) Secure, but **Do Not Completely Tighten**.









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24. Connect OEM rear track bar to Skyjacker Rear Upper Track Bar Bracket using OEM hardware & a 21mm socket\wrench. (Photo # 60) Note: Install OEM bolt from front-to-rear of vehicle. Tech Note: It may be necessary to raise\lower axle to take pressure off track bar bolt.

#### Note: Perform Steps 25-26 on One Side at a Time.

- 25. Remove OEM rear lower control arm from rear axle mount & upper frame mount using a 21mm socket\wrench.
- 26. Skyjacker Rear Lower Links Are Not Side Specific: #

JL24LLR-L Driver or Passenger Side.

Note: Install Skyjacker Rear Lower Link with offset bend toward inside of vehicle. (Photo # 24)

Install Skyjacker Rear Lower Link with OEM hardware. Insert OEM hardware from outside-to-inside. (Photo # 61 & # 62)

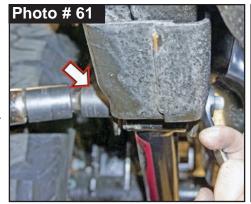




Photo # 60

Attach using a 21mm socket\wrench. Secure, but **Do Not Completely Tighten** at this time.

#### Note: Perform Steps 25-26 on Opposite Side at a this Time, Then Proceed to Step 27.

- 27. On rear axle, reconnect rear locker wiring harness to side of center differential housing. Follow wiring harness up & re-clip wiring harness clamps to emergency brake cable. Continue up wiring harness & re-clip two (2) wiring harness clips to driver side inner frame rail above axle.
- 28. Install rear tires\wheels using a 22mm socket. Lower vehicle to ground. Torque lugs to OEM service manual specifications.

# **Final Clearance Check & Torque Steps:**

- 1. Start vehicle. Make sure there are no dash lights pertaining to suspension.
- 2. Jounce vehicle a couple of times. This will help suspension settle to new ride height. Cycle steering lock-to-lock & check all components for proper operation & clearances. Pay special attention to clearance between tires\wheels and shocks, control arms, brake hoses, ABS wiring, etc.

<u>CAUTION</u>: Make Sure ADX Shock Reservoir\Reservoir Hose Does Not & Will Not Make Contact with Anything Throughout the Full Travel Cycle of the Suspension. (Tire\wheel, frame rail, frame brackets, springs, brake lines, exhaust, etc.) For proper clearance, it may be necessary to change the location or orientation of the reservoir on the shock body. Use a hex key socket to loosen clamps to position reservoir cylinder as needed.

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#### 3. Front Tighten & Torque Sequence.

Skyjacker track bar at frame using a 21mm wrench. Torque 52 ft-lbs. + 115° Skyjacker track bar at axle using a 21mm wrench. Torque 52 ft-lbs. + 115°

Front shock extension bracket at lower bolt mount using a 9/16" socket\wrench. Torque 35 ft-lbs.

Front shock extension bracket at crush sleeve using a 3/4" socket\wrench. Torque 65 ft-lbs.

Front shock extension bracket at lower shock mount using a 18mm wrench. Torque 74 ft-lbs.

Front shock absorber upper mount using a 18mm wrench. Torque 81 ft-lbs.

Front shock absorber lower mount using a 18mm wrench. Torque 74 ft-lbs.

ADX Reservoir clamp. Double check position & clearance. Tighten with 5/32" Hex Key socket.

Skyjacker sway bar end link upper bolt using a 19mm socket\wrench. Torque 59 ft-lbs.

Skyjacker sway bar end link lower bolt using a 18mm socket\wrench. Torque 59 ft-lbs.

Skyjacker front lower links bolts using a 21mm & 24mm socket\wrench. Torque 125 ft-lbs.

#### 4. Rear Tighten & Torque Sequence.

Skyjacker track bar bracket bolts. 1/2" Bolts Torque 90 ft-lbs. 9/16" Bolt Torque 130 ft-lbs. Track bar at Skyjacker bracket. Torque 130 ft-lbs.

Rear shock extension bracket at lower bolt mount using a 3/4" socket \ wrench. Torque 65 ft-lbs.

Rear shock extension bracket at crush sleeve using a 3/4" socket\wrench. Torque 65 ft-lbs.

Rear shock extension bracket at lower shock mount using a 18mm wrench. Torque 74 ft-lbs.

Rear shock absorber upper mount using a 18mm socket\wrench. Torque 81 ft-lbs.

Rear shock absorber lower mount using a 18mm socket\wrench. Torque 74 ft-lbs.

ADX Reservoir clamp. Double check position & clearance. Tighten with 5/32" Hex Key socket.

Skyjacker sway bar end link mount using a 5/16" hex key socket & a 18mm socket\wrench. Torque 59 ft-lbs.

Skyjacker sway bar end link mount using a 18mm socket\wrench. Torque 59 ft-lbs.

Skyjacker rear lower links bolts using a 21mm socket\wrench. Torque 125 ft-lbs.

#### **Final Notes:**

 After installation is complete, double check that all nuts & bolts are tight. Refer to following chart for proper torque specifications. (<u>Note</u>: Do not re-tighten nuts & bolts where thread lock

compound was used.)

 With vehicle placed on ground, cycle steering lock to lock & inspect steering, suspension, brake lines, front & rear drivelines, fuel lines & wiring harnesses for proper operation, tightness & adequate clearance.

TORQUE SPECIFICATIONS								
ll ll	NCH SYSTE	ΕM	METRIC SYSTEM					
Bolt Size	Grade 5	Grade 8	Bolt Size Class 8.8		Class 10.9			
5/16	180 in-lbs	240 in-lbs	6MM	60 in-lbs	108 in-lbs			
3/8	30 ft-lbs	35 ft-lbs	8MM	216 in-lbs	23 ft-lbs			
7/16	45 ft-lbs	60 ft-lbs	10MM	32 ft-lbs	45 ft-lbs			
1/2	65 ft-lbs	90 ft-lbs	12MM	55 ft-lbs	75 ft-lbs			
9/16	95 ft-lbs	130 ft-lbs	14MM	85 ft-lbs	120 ft-lbs			
5/8	135 ft-lbs	175 ft-lbs	16MM	130 ft-lbs	165 ft-lbs			
3/4	185 ft-lbs	280 ft-lbs	18MM	170 ft-lbs	240 ft-lbs			
	Above Specifications Are Not to Be Used							

When Bolt Is Being Installed With a Bushing.

 Have headlights readjusted to proper settings.

- Have a qualified alignment center align vehicle to OEM specifications.
- After first 100 miles, check all hardware for proper torque & periodically thereafter.

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