



Jeep Wrangler JL 4XE 4-Door Rubicon 4XE 4WD 4.5" Suspension Lift Installation Instructions

Required Tools List:

- **SAE Hex Key & SAE 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 Hex Key & Metric Sockets \ Wrenches**
(6mm Hex Key Socket, 8mm, 10mm, 13mm, 15mm, 18mm, 19mm, 21mm, 22mm, & 24mm)
- **Plastic Fastener Removal Tool**
- **Angle Grinder**
- **Pliers**
- **Jack Stands**
- **Floor Jack**
- **Paint Marker**
- **Diagonal Cutting Pliers**
- **Safety Glasses**
- **Wheel Chock**
- **Measuring Tape**
- **Torque Wrench**



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: _____ / _____
BEFORE / AFTER

Passenger Side Front: _____ / _____
BEFORE / AFTER

Driver Side Rear: _____ / _____
BEFORE / AFTER

Passenger Side Rear: _____ / _____
BEFORE / AFTER

Important Notes:

- This Suspension Lift is NOT Designed to Fit Following Models:
 - Does NOT Fit Non-4XE Gas Models.
 - Does NOT Fit Diesel Models.
 - Does NOT Fit Mojave Models.
 - Does NOT Fit Rubicon 392 Models.
- After Installation, a Qualified Alignment Facility Is Required to Align Vehicle to OEM Specifications.
- 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.
- Drag Link Must Be Adjusted to Center Steering Wheel Before Vehicle Is Driven. Failure to Do So Will Cause Computer Errors, Odd Handling Characteristics, & Poor Performance.

Kit Box Breakdown: 4.5"**Part # JL45EBKBLT (WITH BLACK MAX)**

Item #	Description	Qty
JLUE45FDR	HD COILS, FRT NON-RUBICON	1
JLUE40RDR	HD COILS, REAR NON-RUBICON	1
JL45EBLT	COM BOX: 4XE NON-RUBICON	1
JL24LL	LOWER LINKS, FRONT & REAR	1
B8387 (FRONT)	BLACK MAX SHOCK W/BLK BOOT	2
B8389 (REAR)	BLACK MAX SHOCK W/BLK BOOT	2

Part # JL45EBKMLT (WITH M95)

JLUE45FDR	HD COILS, FRT NON-RUBICON	1
JLUE40RDR	HD COILS, REAR NON-RUBICON	1
JL45EBLT	COM BOX: 4XE NON-RUBICON	1
JL24LL	LOWER LINKS, FRONT & REAR	1
M9387 (FRONT)	M95 MONOTUBE SHOCK	2
M9389 (REAR)	M95 MONOTUBE SHOCK	2

Part # JL45EBKXLT (ADX 2.0 SHOCKS)

Item #	Description	Qty
JLUE45FDR	HD COILS, FRT NON-RUBICON	1
JLUE40RDR	HD COILS, REAR NON-RUBICON	1
JL45EBLT	COM BOX: 4XE NON-RUBICON	1
JL24LL	LOWER LINKS, FRONT & REAR	1
JL3540X	COM BOX: 3.5-4" JL ADX SHOCKS	1

Part # JL45ERBKBLT (WITH BLACK MAX)

Item #	Description	Qty
JLUER45FDR	HD COILS, FRONT RUBICON	1
JLUER40RDR	HD COILS, REAR RUBICON	1
JL45ERBLT	COM BOX: 4XE RUBICON	1
JL24LL	LOWER LINKS, FRONT & REAR	1
B8387 (FRONT)	BLACK MAX SHOCK W/BLK BOOT	2
B8389 (REAR)	BLACK MAX SHOCK W/BLK BOOT	2

Part # JL45ERBKMLT (WITH M95)

Item #	Description	Qty
JLUER45FDR	HD COILS, FRONT RUBICON	1
JLUER40RDR	HD COILS, REAR RUBICON	1
JL45ERBLT	COM BOX: 4XE RUBICON	1
JL24LL	LOWER LINKS, FRONT & REAR	1
M9387 (FRONT)	M95 MONOTUBE SHOCK	2
M9389 (REAR)	M95 MONOTUBE SHOCK	2

Part # JL45ERBKXLT (ADX 2.0 SHOCKS)

Item #	Description	Qty
JLUER45FDR	HD COILS, FRONT RUBICON	1
JLUER40RDR	HD COILS, REAR RUBICON	1
JL45ERBLT	COM BOX: 4XE RUBICON	1
JL24LL	LOWER LINKS, FRONT & REAR	1
JL3540X	COM BOX: 3.5-4" JL ADX SHOCKS	1

Jeep Wrangler JL 4XE Optional Up-Grades

Component Box Breakdown: 4.5"**Part # JL24LL**

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

Part # JL3540X (ADX 2.0 SHOCKS)

Item #	Description	Qty
A2387	ADX 2.0 REMOTE RESERVOIR	2
A2389	ADX 2.0 REMOTE RESERVOIR	2

Part # JL45EBLT

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 JL45E	HDWR BOX: JL45EBP KITS	1

Part # JL45ERBLT

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 JL45E	HDWR BOX: JL45EBP KITS	1

Part # JLUE40RDR

Item #	Description	Qty
JL34RS-DR-R	COIL, REAR, DR JL RS 20.5	1
JL45RS-DR-R	COIL, REAR, PA JL RS 20.5 45	1

Part # JLUE45FDR

Item #	Description	Qty
JL34HDFS-DR	HD DUAL RATE COIL, 4.5" FRONT	2

Part # JLUER40RDR

Item #	Description	Qty
JL34RS-DR-R	COIL, REAR, DR JL RS 20.5	1
JL45RS-DR-R	COIL, REAR, PA JL RS 20.5 45	1

Part # JLUER45FDR

Item #	Description	Qty
G45HDFS-DR	HD DUAL RATE COIL, 4.5" FRONT	2
HD34X34DTB	HEAVY DUTY ROD END, 3/4"	1



Replacement Value FLEX Front & Rear Lower Control Arms - Part # JL24LLX

Hardware Box Breakdown: 4.5"**Part # H-BOX JL45E**

Item #	Description	Qty
ABSS2535	BUMP STOP BRKT, 3.5" FRONT	2
JK40RBS-S	BUMP STOP BRACKET, 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 SPACER	1
HB-JLBLE4	HDWR BAG: BRAKE LINE EXT.	1
HB-JLFTBB	HDWR BAG: TRACK BAR BRT, FRT	1
HB-JLRTBU	HDWR BAG: TRACK BAR BRT, RR	1
HB-JLUEB	HDWR BAG: E-BRAKE, UPPER	1
HB-SBENB04	HDWR BAG: SWAY END LINK, RR	1
HB-SBENB24	HDWR BAG: SWAY END LINK, FRT	1

Hardware Bag Breakdown: 4.5"**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-JL40BSS

Item #	Description	Qty
38X412BHB	3/8 X 4-1/2 BUTTON HEAD BOLT	2
38CTN	3/8-16 COARSE N/I LOCK NUT	2
38SAEW	3/8 SAE WASHER	2
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

Part # HB-JLBLE4

Item #	Description	Qty
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 FINE THREAD N/I LOCK NUT	4

Hardware Bag Breakdown: 4.5"**Part # HB-JLFTBB**

Item #	Description	Qty
JLFTBB	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 FINE THREAD 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 FINE THREAD N/I LOCK NUT	2

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 FINE THREAD N/I LOCK NUT	1
14SAEW	1/4 SAE WASHER	2

Part # HB-SBENB04

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

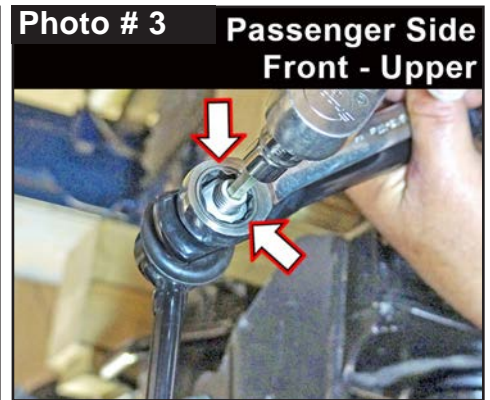
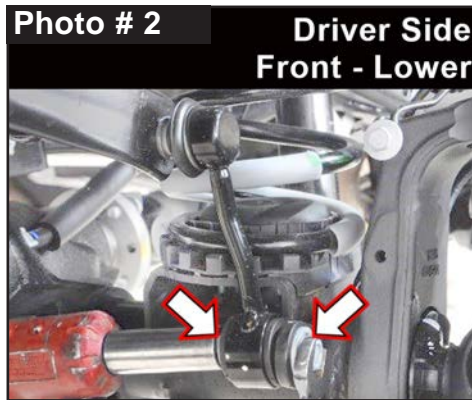
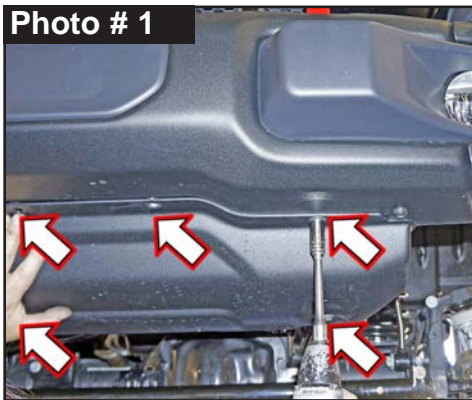
Part # HB-SBENB24

Item #	Description	Qty
1412BSG-S	SWAY BAR REDUCER BUSHING	2
141509	ES25 SLEEVE, 1.50 LONG	4
12X70MMB	12MM X 70MM METRIC BOLT	2
716USSW	7/16 USS FLAT WASHER	4
12MMN	12MM NYLON INSERT LOCK NUT	2

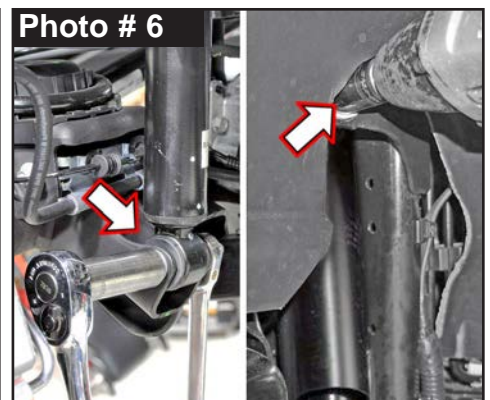
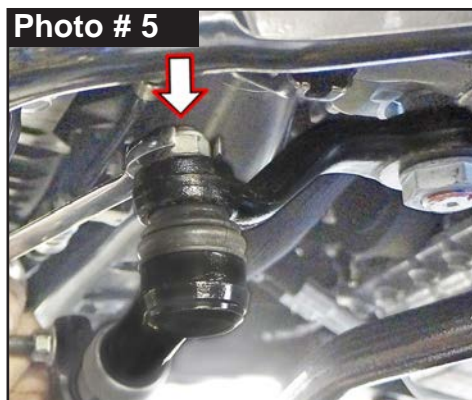
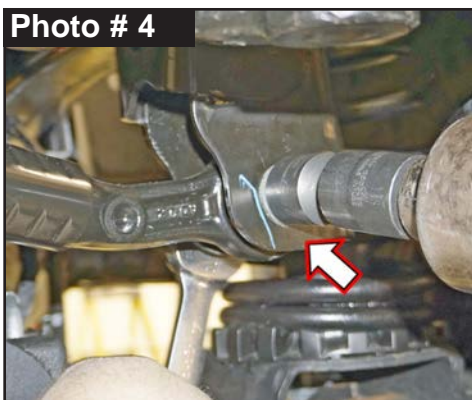
Front Installation: Note: Save all factory components & hardware for reuse, unless noted.

1. With vehicle on flat level ground, set emergency brake & chock rear tires\wheels.
2. Raise front of vehicle, support frame rails using jack stands at indicated lift points in OEM service manual.
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 link lower mount from OEM axle mount using a 18mm socket \ wrench. (Photo # 2)
6. Remove OEM front sway bar end link upper mount from OEM sway bar using a 6mm hex key socket \ wrench & 18mm socket \ wrench. (Photo # 3)



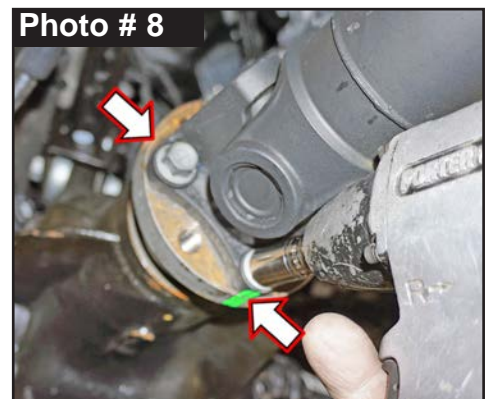
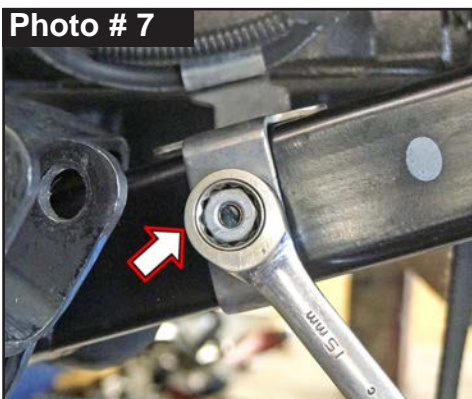
7. Disconnect OEM front track bar from frame mount using a 21mm socket \ wrench. (Photo # 4)
8. Disconnect OEM drag link from OEM pitman arm using a 21mm socket \ wrench. (Photo # 5)
9. Disconnect OEM front shock from upper shock tower mount & lower axle mount using a 18mm socket \ wrench. (Photo # 6)



10. Disconnect OEM front brake line bracket from OEM front lower control arms using a 15mm socket \ wrench. (Photo # 7)

11. For proper driveshaft reassembly realignment, mark position of OEM front differential flange & OEM driveshaft flange. (Photo # 8)

Remove four (4) OEM front driveshaft mounting bolts from OEM differential using a 15mm socket \ wrench. (Photo # 8)



Tech Note: Secure driveshaft safely up & out of way with a bungee or other method.

12. 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 # 9)

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

13. 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 # 10)

OEM Center Axle Disconnect (CAD) 4WD Actuator, on passenger side unclip wiring clips from front axle using a plastic fastener removal tool. (Photo # 11)

Photo # 9

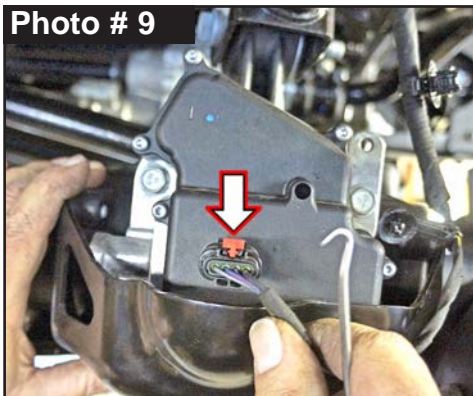


Photo # 10

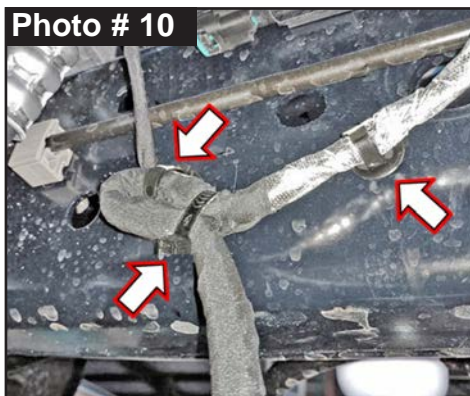
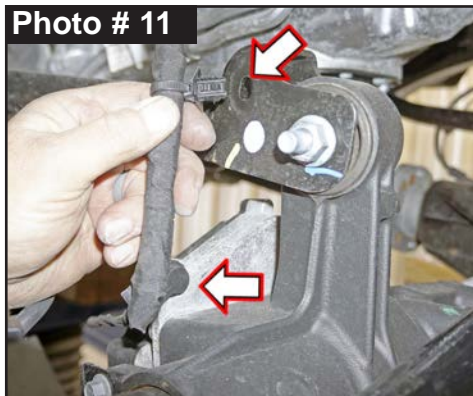


Photo # 11



14. **Rubicon Models:** Disconnect OEM front locker. On driver side located at 'inner' frame rail above axle, unplug OEM harness plug. (Photo # 12) **Tech Note:** 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 # 12)

Photo # 12

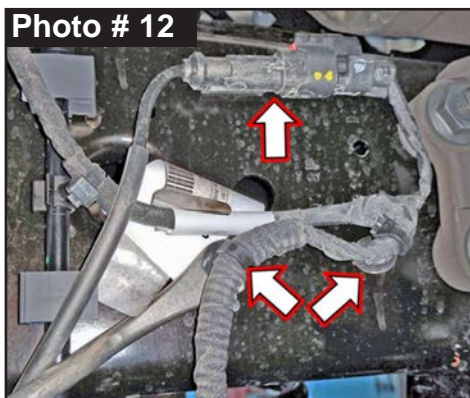
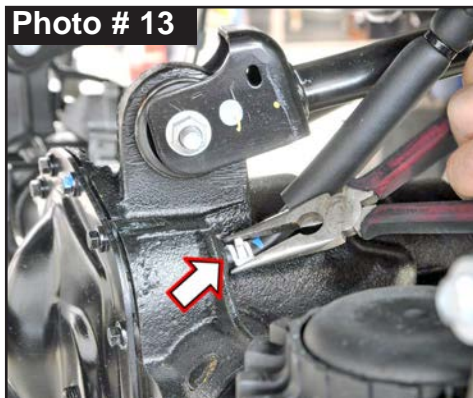


Photo # 13



15. Disconnect OEM vent hose \ clip from front differential using pliers. (Photo # 13)

16. 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 # 14) Follow vent tube up & unclip frame attachment using a plastic fastener removal tool. (Photo # 15) Continue to follow vent tube up & unclip from shock tower (behind OEM inner fender liner) using a plastic fastener removal tool. (Photo # 16)

Photo # 14

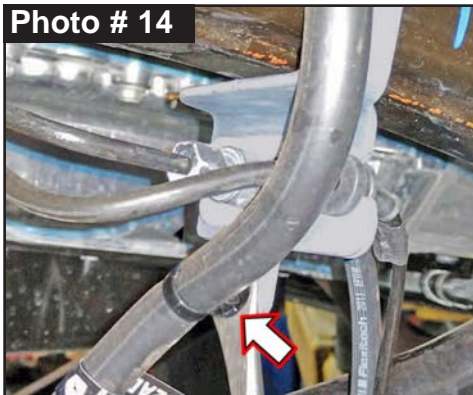


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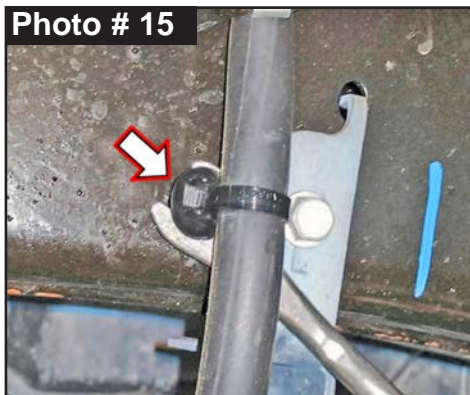


Photo # 16



17. While checking for appropriate slack in ABS lines, brake lines, axle vent hose & etc. Lower front axle. Remove OEM front coil springs & rubber isolators.
18. Skyjacker Front Coil Springs Are Not Side Specific. Place Skyjacker # ABSS2535 Front Bump Stop Spacer inside Skyjacker Front Coil Spring.

Install front coil spring with bump stop spacer inside. Insert coil spring into upper tower first.

Note: Make sure OEM coil spring isolator is properly aligned in upper OEM tab mount.

Be sure coil is indexed to seat properly, then raise axle enough to hold coil springs in place.

Insert supplied 3/8" x 4-1/2" Button Head Bolt into bump stop spacer. Align bolt into hole of OEM lower spring mount pad. (Photo # 17)

Reach under spring mount pad & above axle tube to install supplied 3/8" SAE Washer & 3/8" Nylon Insert Lock Nut onto bolt. Tighten bump stop spacer into place

Photo # 17

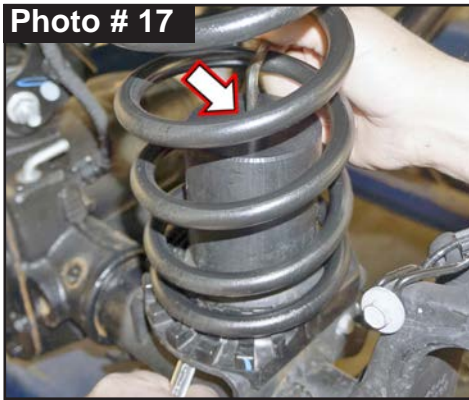
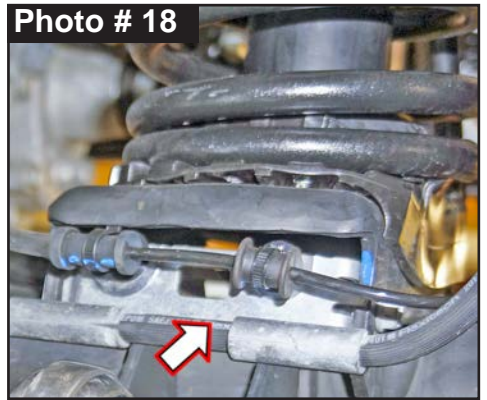


Photo # 18



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

Tech Note: On passenger side, it may be necessary to remove ABS bracket to install bump stop spacer lock nut. At rear of axle above shock mount, remove ABS mounting bracket using a 10mm socket \wrench. (Photo # 18) Once bump stop spacer is installed, reinstall ABS bracket.

19. Raise front axle to load Skyjacker front coil springs.

Note: There has been occasional reports of passenger side coil spring having an inward bow after installation. If so, OEM upper coil spring isolator can be rotated 180 degrees.

Mark OEM position of passenger side OEM upper coil spring isolator. (Photo # 19) 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.

Photo # 19 Passenger Side Front ➡



NOTE: Kit With Black MAX \M95 Monotube: Proceed to Step 20.

Kit With ADX 2.0 Remote Reservoir: Proceed to Step 21.

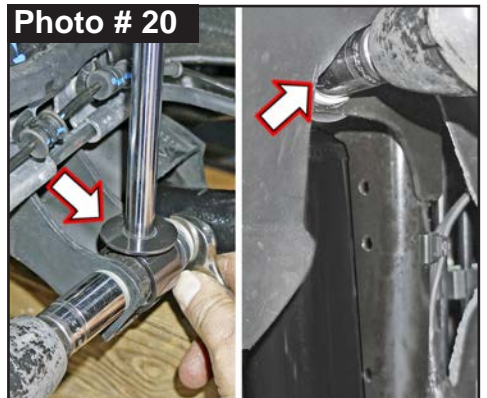
20. Install Skyjacker front shock with OEM hardware at upper shock tower mount using a 18mm socket \wrench. Secure, but **Do Not Completely Tighten** at this time. (Photo # 20)

Tech Note: Black MAX & M95 Monotube are to be mounted with cylinder body up for proper installation of pre-installed upper mount bushings.

Note: Upper shock mount has a OEM fixed nut welded onto 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. (Photo # 20) Secure, but **Do Not Completely Tighten** at this time. To set bushings properly for ride height, these will be tightened once vehicle is on ground with full vehicle weight on tires \wheels.

Photo # 20



21. **Tech Note:** ADX Remote Reservoir are to be mounted with cylinder body up & remote reservoir toward rear for proper clearance (opposite side of coil spring mount). (Photo # 21 & # 22)

Locate Skyjacker ADX front shock. 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 body & reservoir cylinder. Secure, but **Do Not Completely Tighten**.

Install Skyjacker ADX front shock. Connect upper shock mount with OEM hardware at upper shock tower mount using a 18mm socket \wrench. **Note:** Upper shock mount has a OEM fixed nut welded onto frame. Be careful not to dislodge nor over tighten this nut.

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

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

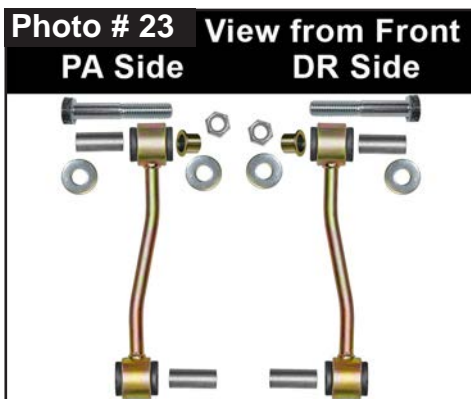
22. **Note:** Skyjacker Sway Bar End Links Are Not Side Specific. Installation Direction \ Position Is Side Specific. (Photo # 23)

Coat supplied # ES25 1.50 Long Steel Sleeves with a water resistant grease.

Press Sleeves into supplied Sway Bar End Link Eyes.

23. **Note:** Skyjacker # 1412BSG-S Sway Bar Reducer Bushing is supplied for **All 2024+ Models**.

Insert Sway Bar Reducer Bushing into OEM sway bar from outside-to-inside. (Photo # 24)



24. Install Skyjacker Sway Bar End Link Assembly upper eye mount with supplied 12mm x 70mm Bolt with a 7/16" USS Washer from inside-to-outside through sway bar.
Attach with a 7/16" USS Washer & 12mm Nylon Insert Lock Nut using a 19mm socket \ wrench. (Photo # 25) Secure, but **Do Not Completely Tighten**.

25. Install Skyjacker Sway Bar End Link Assembly lower eye mount with OEM hardware using a 18mm socket \ wrench. (Photo # 26) Secure, but **Do Not Completely Tighten**.

Note: On Driver Side, install lower OEM bolt head with large washer from inside-to-outside through outer bushing side of end link. (Photo # 27) Secure, but **Do Not Completely Tighten**.

Photo # 25 **Driver Side
Front - Upper**

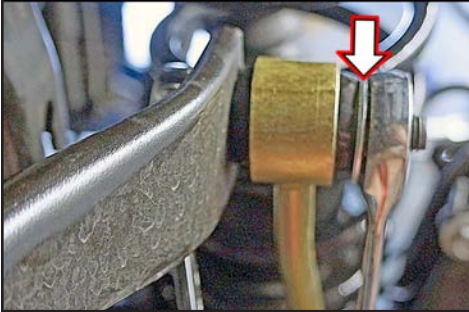


Photo # 26 **Passenger Side
Front - Lower**

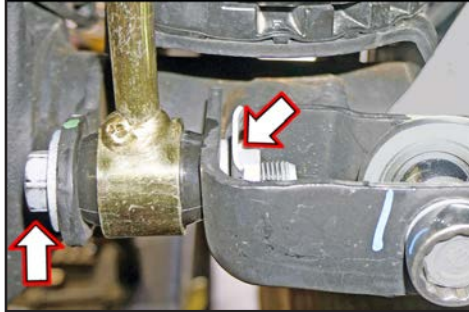
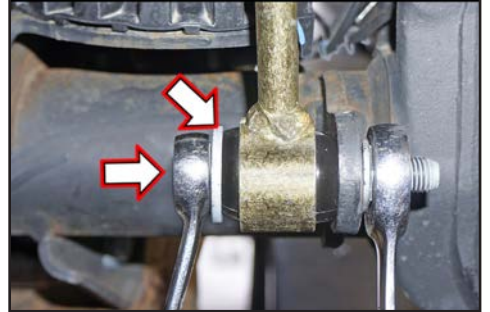


Photo # 27 **Driver Side
Front - Lower**



26. Connect OEM axle vent hose at OEM mounts.

Clip at shock tower mount (behind OEM inner fender liner).
(Photo # 28)

Clip at frame attachment. (Photo # 29)

Clip axle vent hose clip to brake line bracket. (Photo # 30)

27. Connect OEM vent hose \ clip to front differential using pliers.
(Photo # 31)

Photo # 28



Photo # 29

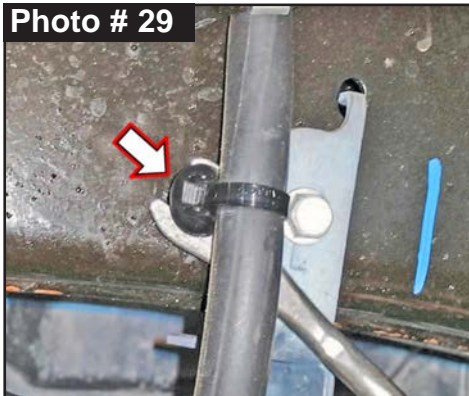


Photo # 30

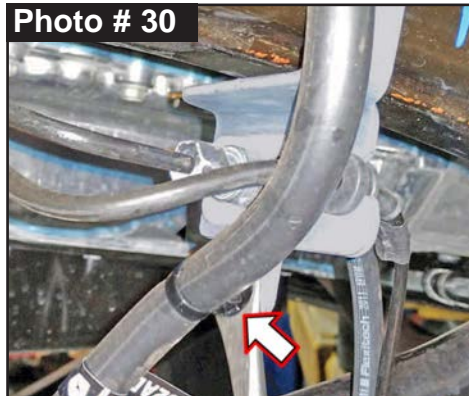
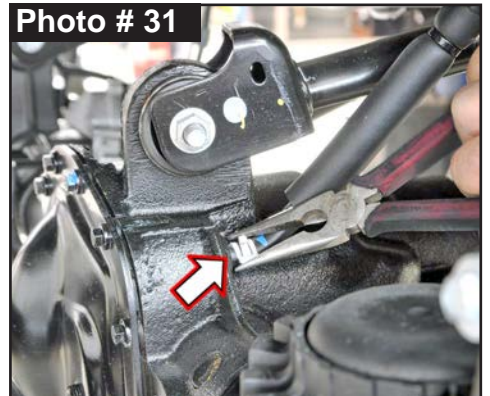


Photo # 31



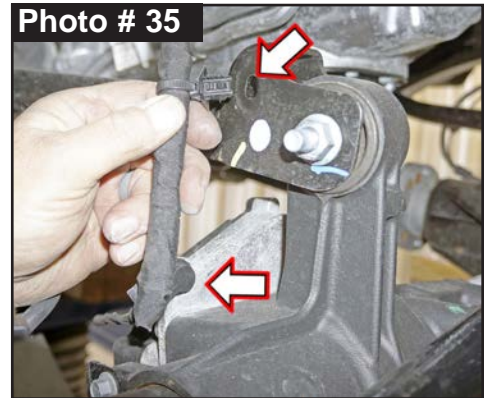
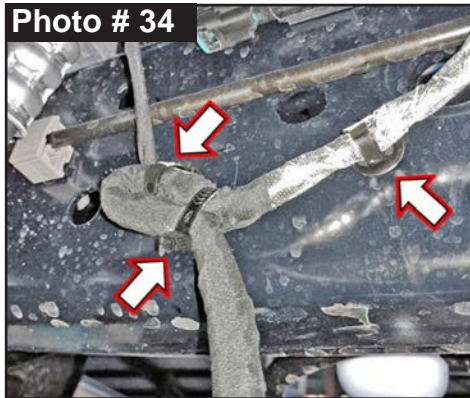
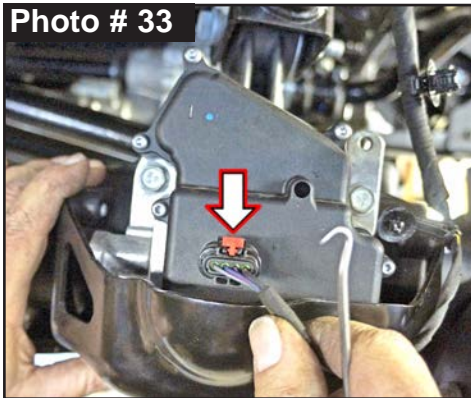
28. **Rubicon Models:** Connect OEM front locker on driver side.
(Photo # 32) **Tech Note:** Pull out on connector to verify that it is securely plugged in properly.

Clip wiring harness clips to frame. (Photo # 32)

29. Connect OEM Center Axle Disconnect (CAD) 4WD Actuator, on passenger side located at inner frame rail above axle.
(Photo # 33) **Tech Note:** Pull out on connector to verify that it is securely plugged in properly.

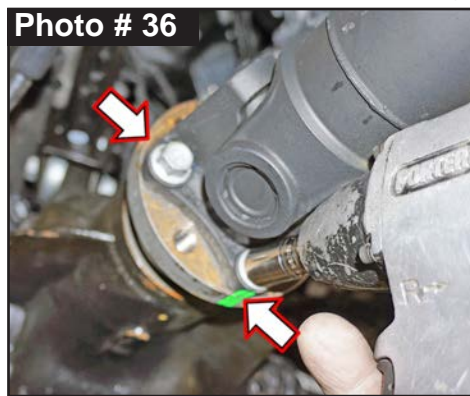
Attach wiring harness clip to frame. (Photo # 34)

Attach wiring clip to front axle. (Photo # 35)



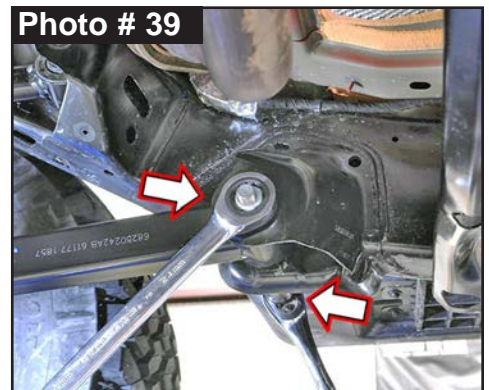
30. Raise front axle to align marks on OEM front driveshaft \ flange & connect driveshaft with OEM hardware using a 15mm socket \ wrench. (Photo # 36) Torque 89 ft-lbs.

31. Connect OEM drag link to OEM pitman arm with OEM hardware using a 21mm socket \ wrench. (Photo # 37) **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 32-35 on One Side at a Time.

32. Remove OEM front lower control arm from front axle mount & upper frame mount using a 21mm & 24mm socket \ wrench. (Photo # 38 & # 39)



33. 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 # 40)

34. Install appropriate Skyjacker Front Lower Link with OEM hardware.

Insert OEM hardware from inside-to-outside.

Attach using a 21mm & 24mm socket \ wrench. (Photo # 41 & # 42)

Secure, but **Do Not Completely Tighten** at this time. To set bushings properly for ride height, these will be tightened once vehicle is on ground with full vehicle weight on tires \ wheels.

Photo # 40

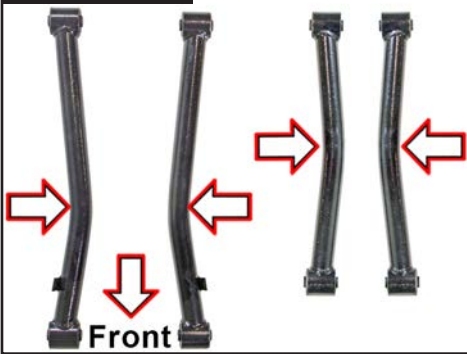


Photo # 41

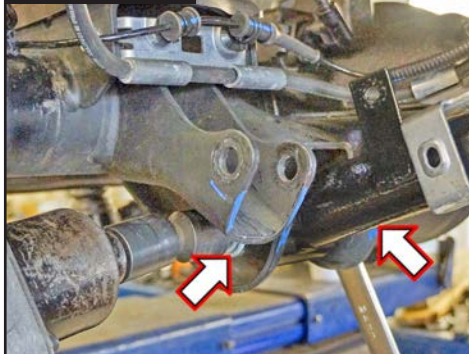
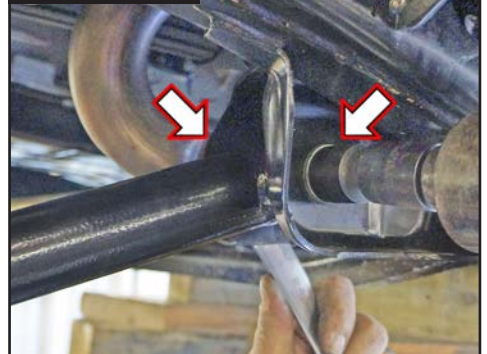


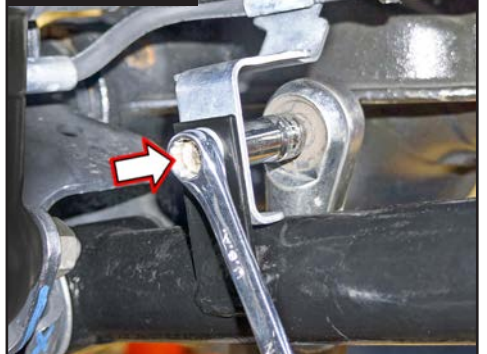
Photo # 42



35. Attach OEM front brake line bracket to inside of Skyjacker Link brake line bracket tab with supplied 1/4" x 1" Fine Thread 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 # 43)

Photo # 43



Note: Perform Steps 32-35 on Opposite Side.
Then Proceed to Step 36.

36. Install OEM front skid plate with OEM hardware using a 13mm socket \ wrench. (Photo # 44)

37. Install front tires \ wheels using a 22mm socket. Lower vehicle to ground. Torque lugs to OEM service manual specifications.

38. 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 # 45) Secure, but **Do Not Completely Tighten** at this time.

39. Install supplied # JLFTBB Rod End Bushings onto rod end of Skyjacker track bar. (Photo # 46)

Install rod end assembly into front axle mount with OEM hardware using a 21mm socket \ wrench. (Photo # 47) **Note:** Secure, but **Do Not Completely Tighten** at this time.

Tech Note: It may be necessary to turn steering wheel to align track rod end with mount.

Photo # 44

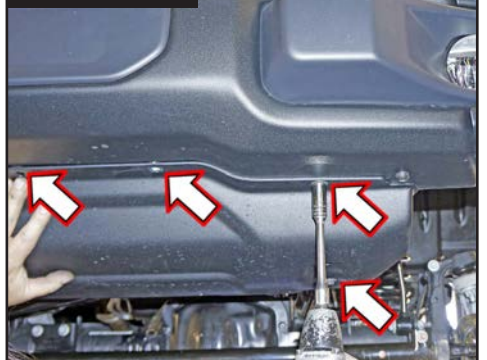


Photo # 45

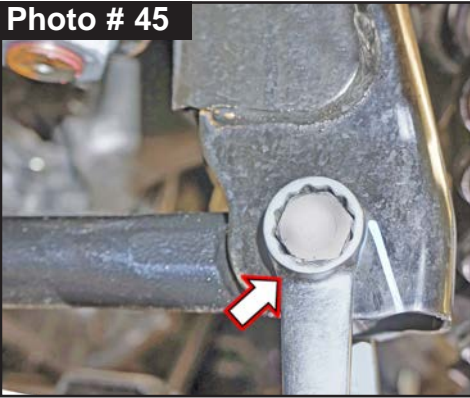


Photo # 46

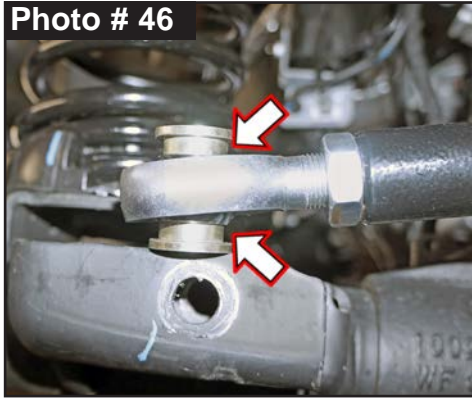
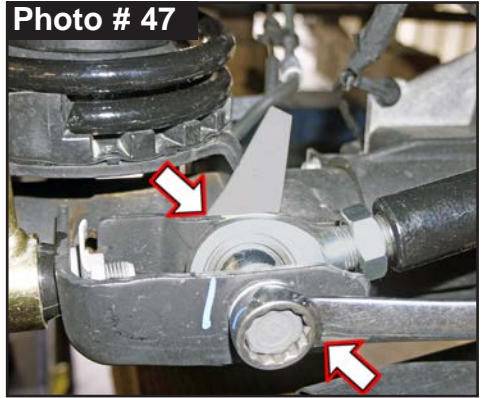


Photo # 47



40. **Adjust \Align Track Bar**: 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. **Note**: 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 & hardware for reuse, unless noted.

1. Chock front tires\wheels. Raise rear of vehicle & support frame rails using jack stands at indicated lift points in OEM service manual. **Tech Note**: 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 # 48 & # 49)
4. Disconnect OEM rear brake line brackets from frame using a 10mm socket\wrench. (Photo # 50)

Photo # 48

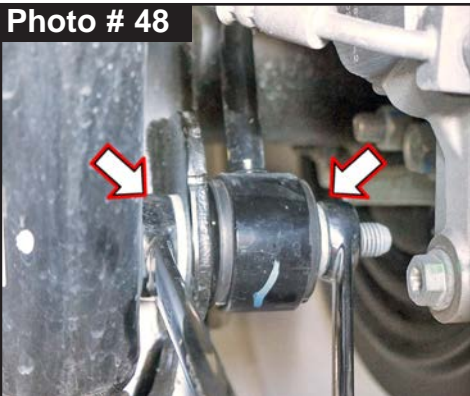


Photo # 49

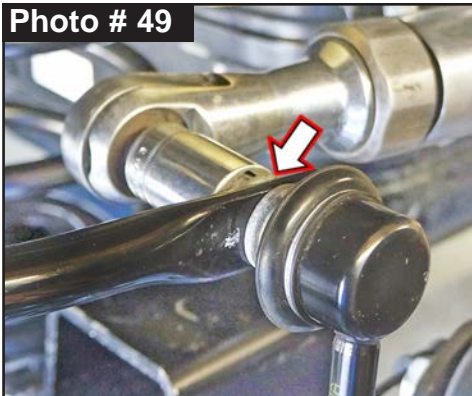
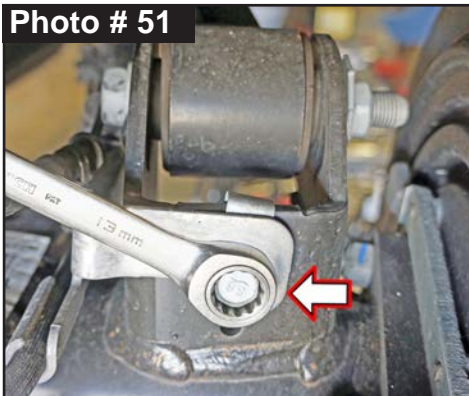


Photo # 50



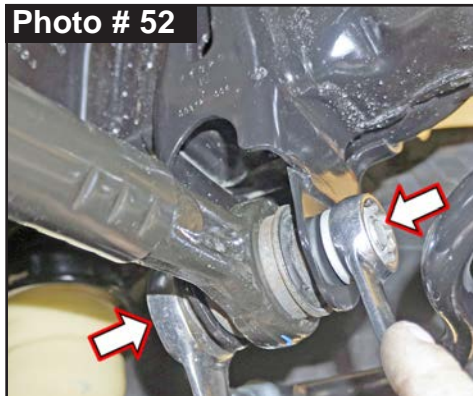
5. Disconnect OEM rear brake line bracket from rear axle at upper control arm mount on each side using a 13mm socket \ wrench. (Photo # 51)

Photo # 51



6. Disconnect OEM rear track bar from passenger side upper frame mount using a 21mm socket \ wrench. (Photo # 52)

Photo # 52



7. **Rubicon Models:** OEM 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. **Tech Note:** Safety lock clip must be slid rearward to unlock. Press & hold rearward tang down, grab connector & pull away while from plug-in. Follow OEM locker wiring harness up & unclip harness clamps from emergency brake cable. Continue up OEM locker wiring harness & unclip two (2) wiring harness clips from driver side inner frame rail above axle using a plastic fastener removal tool.

8. 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 # 53)

Photo # 53

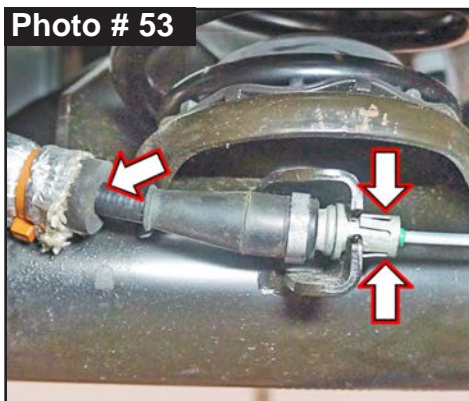
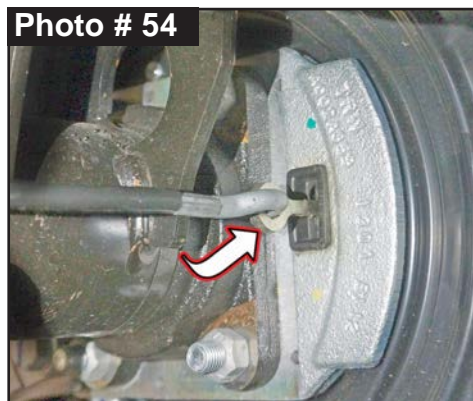


Photo # 54



Remove e-brake cable. Disconnect cable hook-end from ring on brake housing. (Photo # 54) Repeat process on opposite side of vehicle.

9. 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 # 55) Retain hardware. Remove OEM rear shocks using a 18mm socket \ wrench. (Photo # 56 & # 57) **Note:** OEM upper shock mount has nut attached to shock mount.

Photo # 55

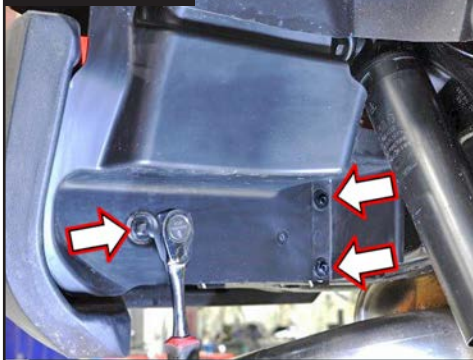


Photo # 56

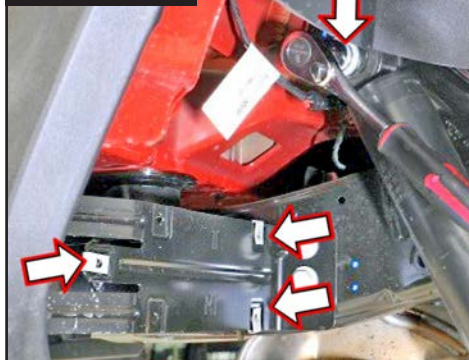
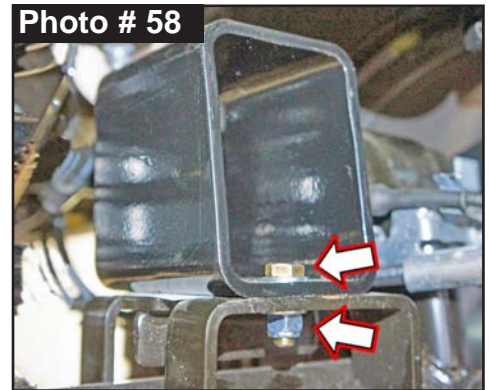


Photo # 57



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 # 58)



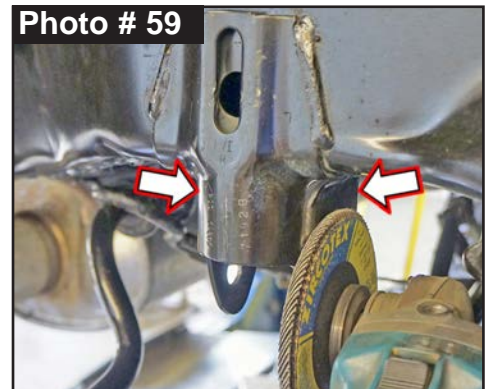
12. Check fit Skyjacker # JLRTBU-B Rear Track Bar Upper Bracket over OEM passenger side upper frame mount. Place double hole side of Skyjacker bracket towards outside of vehicle.

Note: It may be necessary to slightly grind welds of OEM frame mount for Skyjacker bracket to be installed easily. (Photo # 59)

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

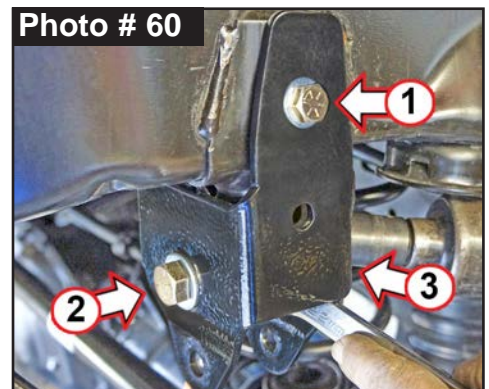
13. Install # JLRTBU-B Rear Track Bar Upper Bracket over OEM rear upper track bar bracket on frame.

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 # 60) Secure, but **Do Not Completely Tighten**.



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 rear-to-front. (Photo # 55) 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 front-to-rear. (Photo # 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. **Note:** Skyjacker Rear Coil Springs Are Side Specific.

JL34RS-DR-R with Coil Spring Stamp JL RS 20.5" Driver Side. (Photo # 61)

JL45RS-DR-R with Coil Spring Stamp JL RS 20.5" 45 Passenger Side. (Photo # 62)

Install appropriate Skyjacker rear coil springs. **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 # 63)

Raise rear differential to load Skyjacker rear coil springs.



NOTE: Kit With Black MAX\M95 Monotube: Proceed to Step 16.

Kit With ADX 2.0 Remote Reservoir: Proceed to Steps 17-18.

16. Install Skyjacker rear shock with OEM hardware using a 18mm socket\wrench. Secure, but **Do Not Completely Tighten** at this time. **Tech Note:** Black MAX & M95 Monotube are to be mounted with cylinder body up for proper installation of pre-installed upper mount bushings. **Proceed to Step 19.**

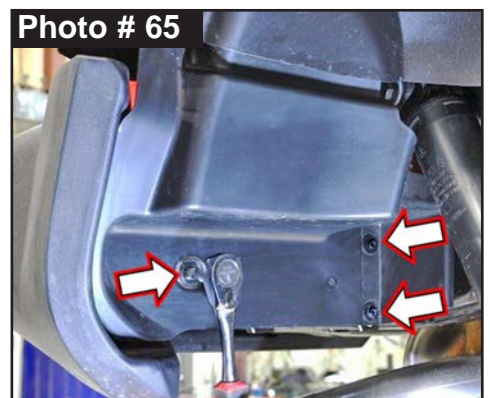
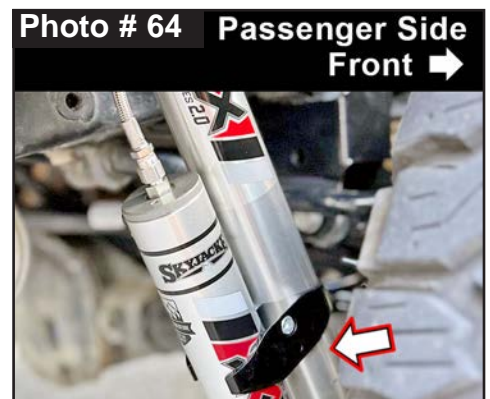
17. **Tech Note:** ADX Remote Reservoir are to be mounted with cylinder body up & remote reservoir toward rear for proper clearance. (Photo # 64)

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 body & reservoir cylinder. Secure, but **Do Not Completely Tighten**.

Install Skyjacker ADX rear shock. Connect upper shock mount with OEM hardware at upper shock tower mount using a 18mm socket\wrench. **Note:** Upper shock mount has a OEM fixed nut welded onto frame. Be careful not to dislodge nor over tighten this nut.

Connect lower axle mount with OEM hardware using a 18mm socket\wrench. Secure, but **Do Not Completely Tighten** at this time.

18. Attach OEM rear bumper inner fender liner with OEM bolts using a 8mm socket\wrench. (Photo # 65) **Proceed to Step 19.**



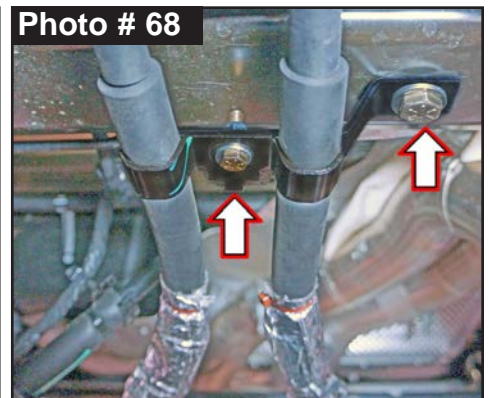
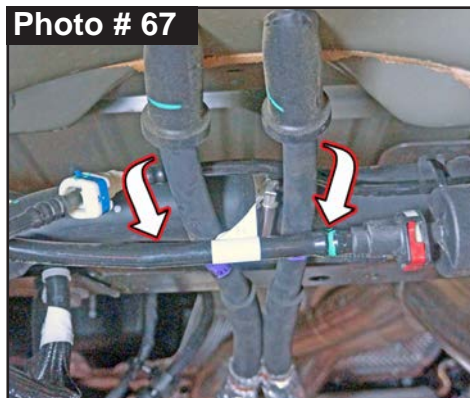
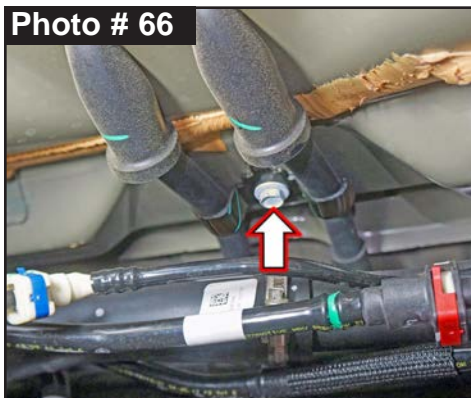
19. Locate two (2) OEM emergency brake cables attached to bottom of body. Remove OEM e-brake bracket that holds cables using a 13mm socket \ wrench. (Photo # 66)

Move two (2) OEM emergency brake cables from behind OEM crossmember to in front of crossmember as shown. (Photo # 67)

20. 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 # 68)

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

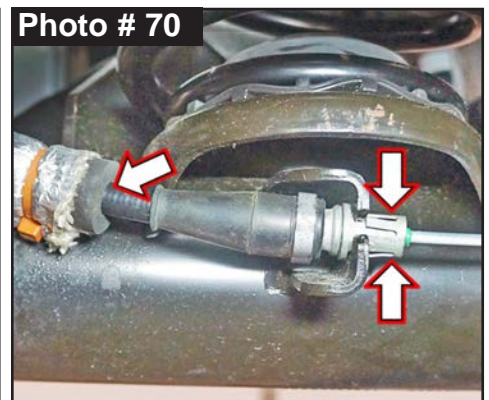
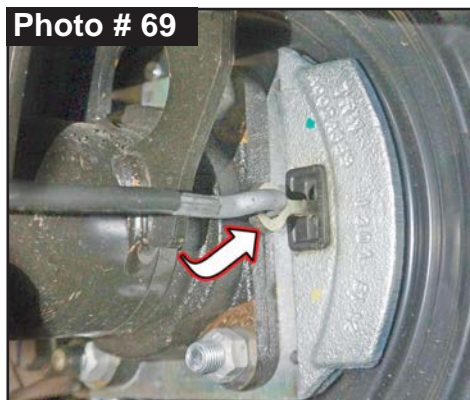
First, insert a supplied 1/4" x 1" Fine Thread Bolt with 1/4" SAE Washer through OEM e-brake bracket. Align OEM e-brake bracket with both e-brake cables & Skyjacker bracket. Attach with 1/4" SAE Washer & 1/4" Nylon Insert Lock Nut on top using a 7/16" socket \ wrench. (Photo # 68)



21. Run each e-brake cable down & out to appropriate driver \ passenger brake housing. Connect cable hook-end onto ring on brake housing. (Photo # 69)

Hold tension on inward e-brake cable. Using pliers, pinch ears of aluminum fitting to attach cable to OEM axle mount.

(Photo # 70) Repeat Process on Opposite Side of Vehicle.

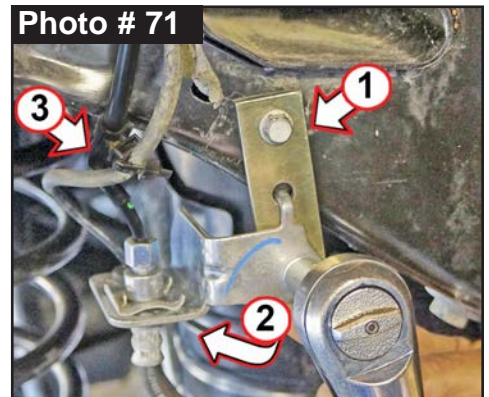


22. First, install Skyjacker # JL4BE-S Rear Brake Line Brackets to frame with OEM hardware using a 10mm socket \ wrench. (Photo # 71)

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. Connect OEM rear brake line brackets to rear differential with OEM hardware using a 13mm socket \ wrench. (Photo # 72)

24. Skyjacker # SBE4068-L Sway Bar End Links Are Not Side Specific. Installation Direction \ Position Is Side Specific.

Coat supplied # ES25 1.50 Long Steel Sleeves with a water resistant grease.

Press Sleeves into supplied Sway Bar End Link Eyes.

25. Install upper end link mount with supplied 12mm x 65mm Button Head Bolt with a 7/16" USS Washer from outside-to-inside through sway bar. Attach with a 7/16" USS Washer & 12mm Nylon Insert Lock Nut using a 5/16" hex key socket & a 18mm socket \ wrench. (Photo # 73) Secure, but **Do Not Completely Tighten**.

Install lower end link mount with lower OEM bolt head with large washer from inside-to-outside through outer bushing side of end link using a 18mm socket \ wrench. (Photo # 74) Secure, but **Do Not Completely Tighten**.

Photo # 72

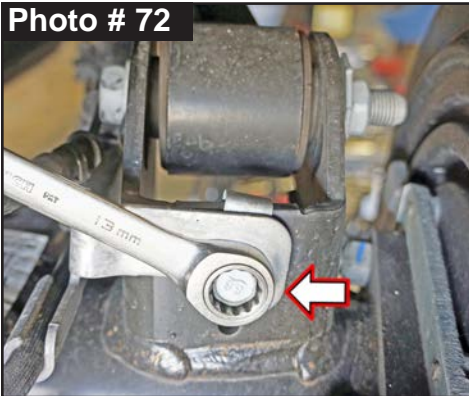


Photo # 73

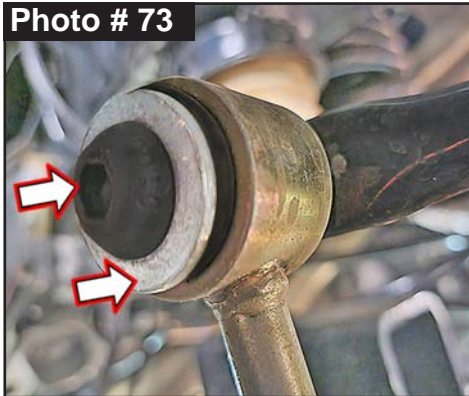
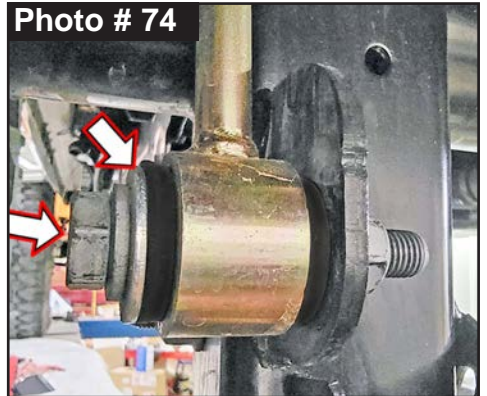


Photo # 74



26. Connect OEM rear track bar to Skyjacker Rear Upper Track Bar Bracket using OEM hardware & a 21mm socket \ wrench. (Photo # 75) **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 27-28 on One Side at a Time.

27. Remove OEM rear lower control arm from rear axle mount & upper frame mount using a 21mm socket \ wrench.

28. 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 # 40)

Install Skyjacker Rear Lower Link with OEM hardware. Insert OEM hardware from outside-to-inside. (Photo # 76 & # 77)

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

Note: Perform Steps 27-28 on Opposite Side. Proceed to Step 29.

Photo # 75



Photo # 76

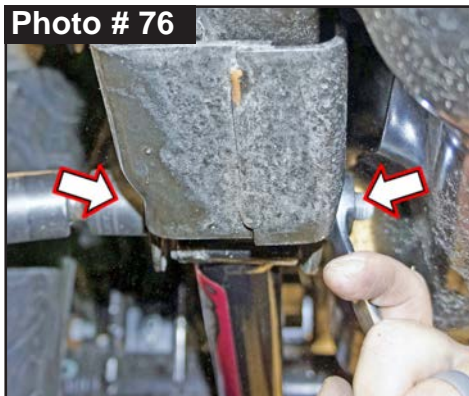
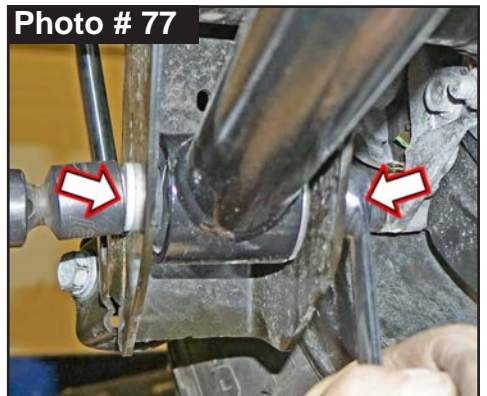


Photo # 77



29. **Rubicon Models:** Reconnect OEM rear locker wiring harness to side of center differential housing. **Tech Note:** Pull out on connector to verify that it is securely plugged in properly. Follow OEM locker wiring harness up & reattach OEM wiring harness clamps to OEM emergency brake cable.
Continue up OEM locker wiring harness & re-clip two (2) wiring harness clips to driver side inner frame rail above axle.
30. 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 ADX Shocks & Reservoirs, control arms, brake hoses, ABS wiring, etc.

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

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 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 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 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 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. (**Note:** 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.
- 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.

TORQUE SPECIFICATIONS					
INCH SYSTEM			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	102 in-lbs	108 in-lbs
3/8	30 ft-lbs	35 ft-lbs	8MM	16 ft-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.					

Seat Belts Save Lives, Please Wear Your Seat Belt.