

1984-2001 Jeep Cherokee XJ (Includes 1986-1992 Jeep Comanche MJ) 3" Suspension Lifts Installation Instructions

Required Tools List:

- SAE Hex Key & SAE Sockets \Wrenches
- Metric Sockets \Wrenches
- Star-Shaped T40 & T55 Torx Head Bit
- Cut-Off Tool or Hacksaw
- Adjustable Locking Pliers
- Power Drill • Drill Bits 7/16" & 9/32"
- Center Punch • C-Clamps
- Torque Wrench • Ball Peen Hammer
- Safety Glasses • Jack Stands
- Floor Jack • Wheel Chocks
- Measuring Tape • Paint Marker



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 the 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:

- 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.

Component Box Breakdown:**Part # JC30X**

Item #	Description	Qty
A2025 (FRONT)	ADX 2.0 REMOTE RESERVOIR	2
A2018 (REAR)	ADX 2.0 REMOTE RESERVOIR	2

Part # JC301BLT

Item #	Description	Qty
JC30FDR	COIL SPRINGS, FRONT, PAIR	1
R3136	ADD-A-LEAFS, REAR, PAIR	1
516X34TCFB	5/16X3/4 THRD CUTTER FLG BOLT	2

Part # JC301BPBLT

Item #	Description	Qty
JC30FDR	COIL SPRINGS, FRONT, PAIR	1
R3136	ADD-A-LEAFS, REAR, PAIR	1
516X34TCFB	5/16X3/4 THRD CUTTER FLG BOLT	2
B8525 (FRONT)	BLACK MAX SHOCK W/BLK BOOT	2
B8518 (REAR)	BLACK MAX SHOCK W/BLK BOOT	2

Part # JC301BPHLT

Item #	Description	Qty
JC30FDR	COIL SPRINGS, FRONT, PAIR	1
R3136	ADD-A-LEAFS, REAR, PAIR	1
516X34TCFB	5/16X3/4 THRD CUTTER FLG BOLT	2
H7025 (FRONT)	HYDRO SHOCK W/RED BOOT	2
H7018 (REAR)	HYDRO SHOCK W/RED BOOT	2

Part # JC301BPMLT

Item #	Description	Qty
JC30FDR	COIL SPRINGS, FRONT, PAIR	1
R3136	ADD-A-LEAFS, REAR, PAIR	1
516X34TCFB	5/16X3/4 THRD CUTTER FLG BOLT	2
M9525 (FRONT)	M95 MONOTUBE SHOCK	2
M9518 (REAR)	M95 MONOTUBE SHOCK	2

Part # JC301BPNLT

Item #	Description	Qty
JC30FDR	COIL SPRINGS, FRONT, PAIR	1
R3136	ADD-A-LEAFS, REAR, PAIR	1
516X34TCFB	5/16X3/4 THRD CUTTER FLG BOLT	2
N8025 (FRONT)	NITRO SHOCK W/RED BOOT	2
N8018 (REAR)	NITRO SHOCK W/RED BOOT	2

Part # JC3158SLT

Item #	Description	Qty
JC30FDR	COIL SPRINGS, FRONT, PAIR	1
12X234X6U	1/2 X 2-3/4 X 6 U-BOLT, ROUND	4
12X318X612U	1/2 X 3-1/8 X 6-1/2 U-BOLT, ROUND	4
516X34TCFB	5/16X3/4 THRD CUTTER FLG BOLT	2
HB-12	HDWR BAG: 1/2 NUTS \ WASHERS	1

Hardware Bag Breakdown:**Part # HB-12**

Item #	Description	Qty
12FTN	1/2-20 FINE N/I LOCK NUT	8
12UBW	1/2 U-BOLT WASHER, A325	8

Component Box Breakdown:**Part # JC305BPBLT**

Item #	Description	Qty
JC30FDR	COIL SPRINGS, FRONT, PAIR	1
R3136	ADD-A-LEAFS, REAR, PAIR	1
516X34TCFB	5/16X3/4 THRD CUTTER FLG BOLT	2
B8525 (FRONT)	BLACK MAX SHOCK W/BLK BOOT	2
B8523 (REAR)	BLACK MAX SHOCK W/BLK BOOT	2

Part # JC305BPHLT

Item #	Description	Qty
JC30FDR	COIL SPRINGS, FRONT, PAIR	1
R3136	ADD-A-LEAFS, REAR, PAIR	1
516X34TCFB	5/16X3/4 THRD CUTTER FLG BOLT	2
H7025 (FRONT)	HYDRO SHOCK W/RED BOOT	2
H7023 (REAR)	HYDRO SHOCK W/RED BOOT	2

Part # JC305BPMLT

Item #	Description	Qty
JC30FDR	COIL SPRINGS, FRONT, PAIR	1
R3136	ADD-A-LEAFS, REAR, PAIR	1
516X34TCFB	5/16X3/4 THRD CUTTER FLG BOLT	2
M9525 (FRONT)	M95 MONOTUBE SHOCK	2
M9523 (REAR)	M95 MONOTUBE SHOCK	2

Part # JC305BPNLT

Item #	Description	Qty
JC30FDR	COIL SPRINGS, FRONT, PAIR	1
R3136	ADD-A-LEAFS, REAR, PAIR	1
516X34TCFB	5/16X3/4 THRD CUTTER FLG BOLT	2
N8025 (FRONT)	NITRO SHOCK W/RED BOOT	2
N8023 (REAR)	NITRO SHOCK W/RED BOOT	2

Part # JC3158SBLT

Item #	Description	Qty
JC30FDR	COIL SPRINGS, FRONT, PAIR	1
12X234X6U	1/2 X 2-3/4 X 6 U-BOLT, ROUND	4
12X318X612U	1/2 X 3-1/8 X 6-1/2 U-BOLT, ROUND	4
516X34TCFB	5/16X3/4 THRD CUTTER FLG BOLT	2
HB-12	HDWR BAG: 1/2 NUTS \ WASHERS	1
B8525 (FRONT)	BLACK MAX SHOCK W/BLK BOOT	2
B8518 (REAR)	BLACK MAX SHOCK W/BLK BOOT	2

Part # JC3158SMLT

Item #	Description	Qty
JC30FDR	COIL SPRINGS, FRONT, PAIR	1
12X234X6U	1/2 X 2-3/4 X 6 U-BOLT, ROUND	4
12X318X612U	1/2 X 3-1/8 X 6-1/2 U-BOLT, ROUND	4
516X34TCFB	5/16X3/4 THRD CUTTER FLG BOLT	2
HB-12	HDWR BAG: 1/2 NUTS \ WASHERS	1
M9525 (REAR)	M95 MONOTUBE SHOCK	2
M9518 (REAR)	M95 MONOTUBE SHOCK	2

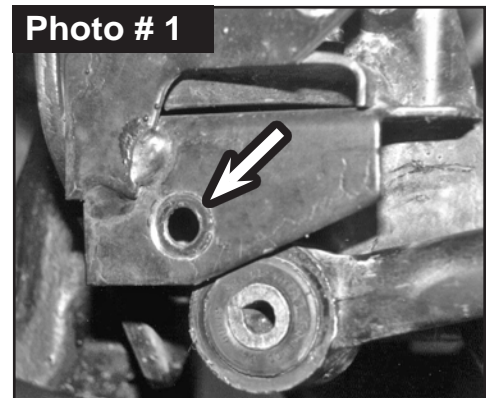
Front Installation: Note: Save all factory components & hardware for reuse, unless noted.

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.
4. Place a floor jack underneath front axle for support. Put a slight load on axle \jack to prevent axle from moving. Remove OEM front shocks.

Tech Note: Access upper shock retaining nut through engine compartment using a 15mm socket \ wrench. It also may be necessary to temporarily remove OEM washer fluid reservoir to access driver side.

Disconnect OEM front shock lower mount using a 15mm socket \ wrench. Retain factory lower mounting hardware for re-use.

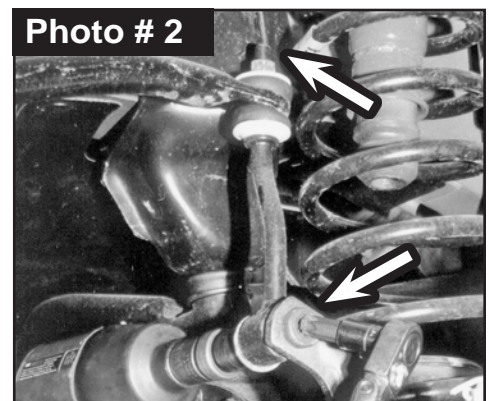
5. Disconnect OEM track bar from passenger side lower front axle mount. **Note:** It may be necessary to pry OEM track bar loose from passenger side lower front axle mount. (See Photo # 1)



6. Disconnect OEM drag link assembly from OEM pitman arm. Take caution not to tear drag link grease boot.

Tech Note: Replace OEM drag link if any excessive wear, defects or if you can twist OEM stud in its socket easily.

7. Disconnect OEM sway bar end links from front axle mounts. **Note:** Some early models use a T55 Torx Bit & 19mm socket \ wrench for lower mount. (Later models used a bolt with a serrated neck that is pressed into OEM bracket, so it will not rotate.) Use a 15mm socket \ wrench for upper nut. (See Photo # 2)

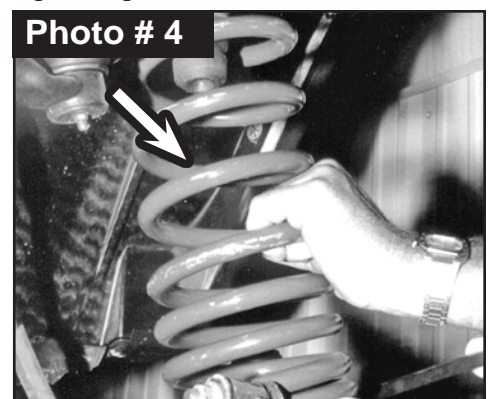
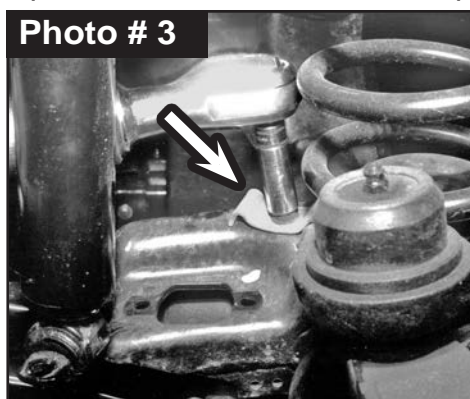


8. Electrical \ vacuum four-wheel drive wiring must be disconnected. Disconnect plugs at passenger side of axle.
9. Support front axle with a floor jack. While checking for appropriate slack in ABS lines, brake lines, differential vent hose & etc, lower front differential until OEM front coil springs become loose.

Remove OEM bottom bolt & clip from driver side OEM coil spring using a 13mm socket \ wrench. (See Photo # 3)

Remove OEM coil springs. (See Photo # 4)

Tech Note: If front axle cannot be lowered enough to allow coil spring to be installed, carefully rotate pinion up to provide more clearance.



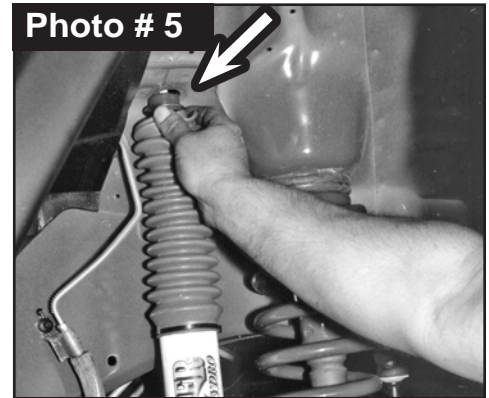
10. Install Skyjacker front coil springs. Insert coil spring into upper tower first. Be sure that coil & OEM spring isolator are indexed to seat properly, then raise axle enough to hold coil springs in place. (See Photo # 4)

Re-install OEM bottom clip & bolt to driver side OEM coil spring using a 13mm socket \ wrench. Torque 20 ft-lbs. (See Photo # 3)

NOTE: Kit With HYDRO, NITRO, Black MAX, or M95 Monotube: Proceed to Step 11.
Kit With ADX 2.0 Remote Reservoir: Proceed to Step 12.

11. Install Skyjacker front shock at upper shock tower mount with supplied stud bushings, cup washers & nut using a 15mm socket \ wrench. (See Photo # 5)

Connect Skyjacker shock at lower axle mount with OEM hardware using a 15mm socket \ wrench. Secure, but **Do Not Completely Tighten**. To set bushings properly for ride height, these will be tightened once vehicle is on ground with full vehicle weight on tires \ wheels.



12. Install Skyjacker ADX front shock. **Tech Note:** ADX Remote Reservoir are to be mounted with remote reservoir toward rear for proper clearance (opposite side of coil spring mount).

Loosely assemble two (2) supplied reservoir clamps with two (2) supplied hex head bolts using a 5/32" Hex Key socket. Position clamp into place around shock & reservoir cylinder. Secure, but **Do Not Completely Tighten**.

Install Skyjacker ADX front shock at upper shock tower mount with supplied stud bushings, cup washers & nut using a 15mm socket \ wrench.

Connect Skyjacker shock at lower axle mount with OEM hardware using a 15mm socket \ wrench. Secure, but **Do Not Completely Tighten** at this time. These will be tightened once vehicle is on ground with full vehicle weight on tires \ wheels.

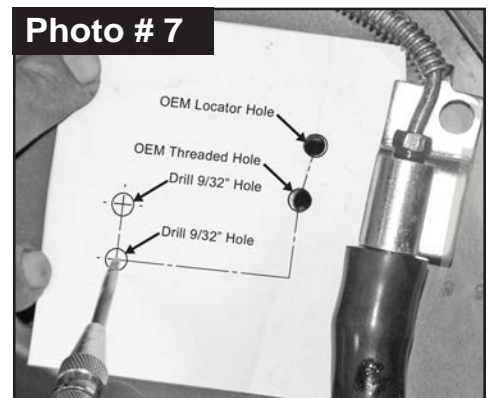
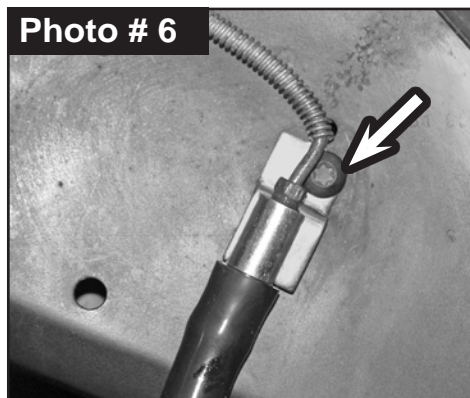
13. Connect OEM drag link to OEM pitman arm with OEM hardware.

14. Connect OEM sway bar end links to front axle mounts. Use a T55 Torx Bit & 19mm socket \ wrench for lower mount. Use a 15mm socket \ wrench for upper nut. (See Photo # 2)

15. **JC301BP & JC3158S Boxes:** Locate supplied **Brake Line Relocation Template** on Page 9 of this installation instruction manual. Cut out template using outside edge of square as a guide.

Remove OEM brake line bracket from frame using a T40 Torx bit. (See Photo # 6)

Position template. Align OEM Locator & OEM Thread holes in frame. Mark two (2) holes to be drilled. Mark with a center punch. (See Photo # 7)



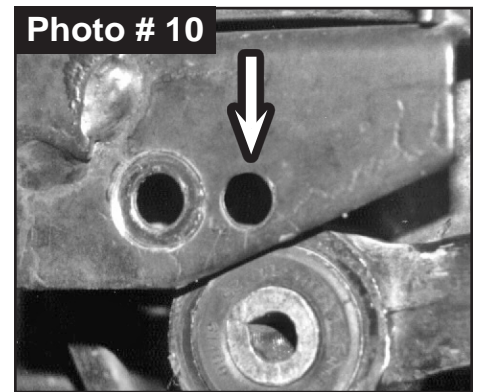
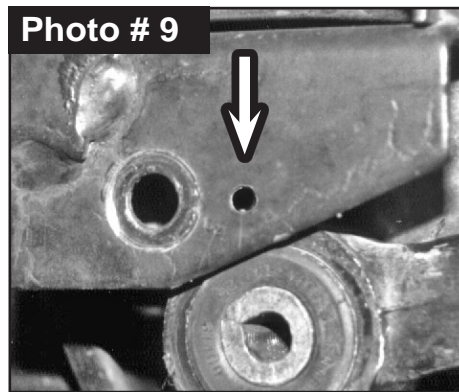
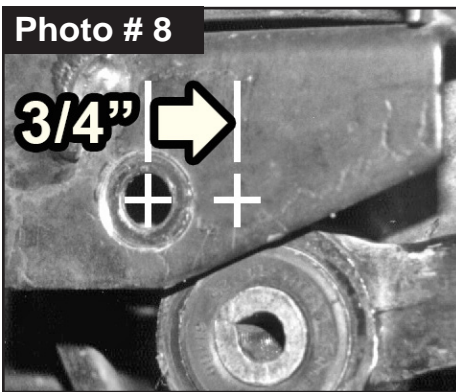
Note: Prior to drilling, check behind surface area being worked on for any wires, brake lines, fuel lines, hoses, etc that could be damaged.

Using your punched marks as a guide, drill out marks using a 9/32" drill bit.

Tech Note: You may want to first drill out holes with a smaller drill bit to be more precise.

Attach OEM brake line bracket with supplied 5/16" x 3/4" Thread Cutter Flange Bolts using a 1/2" socket \ wrench. Torque 180 in-lbs.

16. Connect electrical \ vacuum four-wheel drive wiring plugs at passenger side of axle.
Connect all things disconnected to lower front axle (ABS lines, differential vent hose & etc.)
17. Install front tires \ wheels. Lower vehicle to ground. Torque lugs to OEM service manual specifications.
18. Go to OEM front track bar lower passenger side axle mount. Measure from center-line of OEM mounting hole inward toward driver side 3/4". (See Photo # 8)
Mark, center punch & drill a pilot hole. (See Photo # 9)
Drill out pilot hole using a 7/16" drill bit. (See Photo # 10)
Center punch axle mount back plate through drilled hole. Drill back plate using a 7/16" drill bit.
Tech Note: Keep drill as straight & square to front bracket as possible.
Connect OEM front track bar to drilled hole with OEM hardware front-to-rear a using a 15mm socket \ wrench or a T55 Torx head bit. Torque 35 ft-lbs. **Tech Note:** It may be necessary to turn steering wheel to align track rod end with mount.



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.
2. Remove rear tires \ wheels.
3. Support rear axle with a hydraulic jack. Allow ample room to lower rear axle.
4. Remove OEM rear shocks. Disconnect shock lower mount using a 3/4" socket \ wrench. Retain factory lower mounting hardware for re-use. Use a 13mm socket \ wrench for upper mount.
5. Remove OEM u-bolts. Discard u-bolts & hardware. Retain lower OEM u-bolt plate.
6. While checking for appropriate slack in ABS lines, brake lines, differential vent hose, & etc, lower rear axle to gain access to OEM rear leaf springs.

NOTE: Kit With Add-A-Leafs: Proceed to Step 7.

Kit With Replacement Leaf Springs: Proceed to Step 11.

Note: Perform Steps 7-10 on One Side at a Time. Complete Steps on One Side, THEN Go to Opposite Side & Repeat Same Steps.

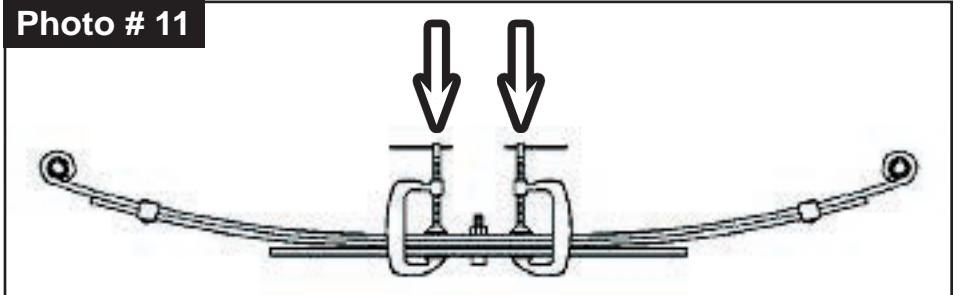
7. **Add-A-Leaf Installation:** Use a 21mm socket \ wrench to loosen OEM leaf spring mounts. Loosen front spring eye bolt. Loosen rear spring eye bolt. Loosen rear shackle eye bolt. (Note direction of OEM hardware.)

Note: Installation of Skyjacker Add-A-Leafs properly, you must use two (2) large C-clamps to contain elastic potential energy of OEM rear leaf springs when OEM tie bolts are being removed. **Tech Note:** Spray a good penetrating oil onto center tie bolt to help loosen nut.

Attach C-clamp on each side of OEM leaf spring center tie bolt to hold leaf spring assembly securely together. Tighten C-clamp equally on each side. (See Photo # 11)

Use locking pliers to hold head of OEM tie bolt. Use a wrench to loosen & remove nut. Remove tie bolt.

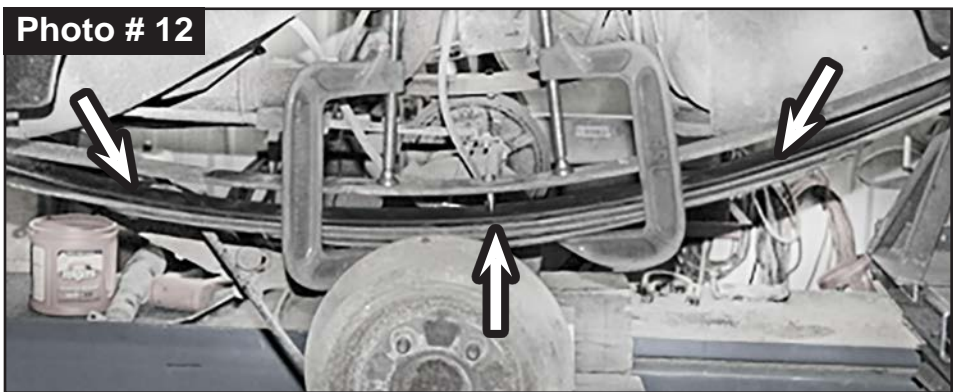
Carefully & slowly loosen C-clamps equally on each side until leaf spring expands completely. Remove C-clamps.



8. Separate leaves & install Skyjacker Add-A-Leaf into spring pack so leaves remain progressive (longest at top & shortest to bottom). (See Photo # 12)

If center pin is offset, match long \ short end of add-a-leaf to OEM leaf spring offset.

Tech Note: Lower rear axle as needed to allow add-a-leaf to be installed.



9. Install supplied Skyjacker tie bolt. **Tech Note:** Cherokee tie bolt installs up through bottom of leaf spring. (See Photo # 12) Comanche pickup tie bolt head installs down through top.

CAUTION: Do Not Use Skyjacker Tie Bolts to Draw OEM Leaf Springs Together. Failure of Any Component Can Cause an Explosive Disassembly & Possible Injury!

10. Attach C-clamp on each side of Skyjacker tie bolt to hold leaf spring assembly. (See Photo # 12) Tighten C-clamps equally on each side until leaf spring compresses completely.

Once C-clamps have drawn leaves securely together, use locking pliers to hold tie bolt head & tighten tie bolt nut with a wrench.

Torque 180 in-lbs.

Caution: Do not use an air gun to tighten tie bolt. An air gun could strip or over torque \ stretch tie bolt.

Note: Make sure individual leaves are all in-line with each other.

Remove C-clamps. Cut off any excess tie bolt length with cut-off tool or hacksaw.

Note: Perform Steps 7-10 on Opposite Side at a Time, Then Proceed to Step 12.

Note: Perform Step 11 on One Side at a Time.

11. Leaf Spring Installation:

Remove OEM rear leaf spring using a 21mm socket \ wrench. (Note direction of OEM hardware.) Loosen front spring eye bolt. Loosen rear spring eye bolt. Loosen rear shackle eye bolt. Disconnect spring eye bolts & remove leaf spring with rear shackle attached.

Tech Note: A helping hand is recommended to keep leaf spring assembly from falling.

Remove OEM shackle & attach to rear eye of Skyjacker Replacement Rear Leaf Spring.

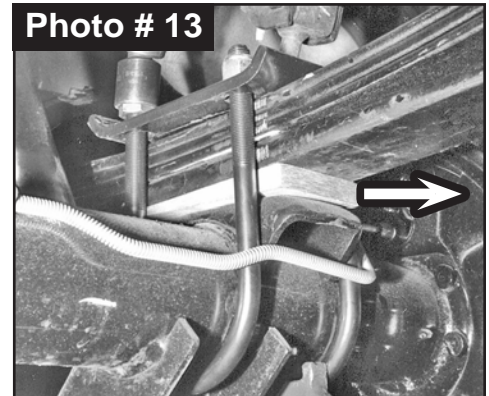
Note: Long end of Skyjacker leaf spring & thick end of bottom degree shim goes to rear. (See Photo # 13)

Tech Note: OEM rear shackle 'closed end' goes to rear.

Install Skyjacker \ OEM Shackle Assembly to OEM frame mount with OEM hardware.

Tech Note: A helping hand is recommended.

Secure OEM hardware, but **Do Not Completely Tighten** leaf spring hardware 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.



Note: Perform Steps 11 on Opposite Side at a Time, Then Proceed to Step 12.

12. Clean spring pads of all debris. Raise axle to mate leaf spring to axle.

Note: Be sure that leaf spring center bolt head seats properly into axle pad.

Tech Note: Two (2) different U-bolt sizes are included. Use appropriate U-bolt for your axle housing size. Install supplied Skyjacker 1/2" U-Bolts under axle up into OEM u-bolt plate. (Comanche pickups install over axle down).

Install supplied 1/2" Nylon Insert Nuts using a 3/4" socket \ wrench.

Torque u-bolts evenly using an 'X' crisscross tightening sequence. Torque to 90 ft-lbs.

NOTE: Kit With HYDRO, NITRO, Black MAX, or M95 Monotube: Proceed to Step 13.

Kit With ADX 2.0 Remote Reservoir: Proceed to Step 14.

13. Install Skyjacker rear shock. Connect upper shock mount with OEM hardware using a 13mm socket \ wrench. Connect lower shock mount with OEM hardware using a 3/4" socket \ wrench. Secure, but **Do Not Completely Tighten** at this time.

14. Locate Skyjacker ADX rear shock. Loosely assemble two (2) supplied reservoir clamps with two (2) supplied hex head bolts using a 5/32" Hex Key socket. Position clamp into place around shock body & reservoir cylinder. Secure, but **Do Not Completely Tighten** at this time.

Install Skyjacker ADX rear shock. Connect upper shock mount with OEM hardware using a 13mm socket \ wrench. Connect lower shock mount with OEM hardware using a 3/4" socket \ wrench. Secure, but **Do Not Completely Tighten** at this time.

CAUTION: Make Sure ADX Shock Reservoir \ Reservoir Hose Does Not & Will Not Make Contact with Anything Throughout Full Travel Cycle of Suspension. (frame, 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 5/32" Hex Key socket to loosen clamps to position reservoir cylinder as needed.

15. Install rear tires \ wheels. Lower vehicle to ground. Torque lugs to OEM service manual specifications.

Final Clearance Check & Torque Steps:

Notes: Check electrical \ vacuum four-wheel drive wiring plugs at passenger side of axle.

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. Drag link at pitman arm mount. Torque 35 ft-lbs.

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, ADX Shocks & Reservoirs, control arms, brake hoses, ABS wiring, etc.
3. **Front Tighten & Torque Sequence.**
Track bar at axle mount using a 15mm socket \ wrench or a T55 Torx head bit. Torque 55 ft-lbs.
Front shock absorber upper mount using a 15mm socket \ wrench. Torque 25 ft-lbs.
Front shock absorber lower mount using a 15mm socket \ wrench. Torque 32 ft-lbs.
ADX Reservoir clamp. Double check position & clearance. Tighten with 5/32" Hex Key socket.
Sway bar end link upper nut using a 15mm socket \ wrench. Torque 32 ft-lbs.
Sway bar end link lower bolt using a T55 Torx Bit & 19mm socket \ wrench. Torque 55 ft-lbs.
4. **Rear Tighten & Torque Sequence.**
Rear shock absorber upper mount using a 13mm socket \ wrench. Torque 25 ft-lbs.
Rear shock absorber lower mount using a 3/4" socket \ wrench. Torque 50 ft-lbs.
ADX Reservoir clamp. Double check position & clearance. Tighten with 5/32" Hex Key socket.
Torque u-bolts evenly using an 'X' crisscross tightening sequence. Torque to 90 ft-lbs.
Leaf Spring using a 21mm socket \ wrench. Spring eye & shackle eye bolts. Torque 65 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

**The Above Specifications Are Not to Be Used
When the Bolt Is Being Installed With a Bushing.**

Seat Belts Save Lives, Please Wear Your Seat Belt.

Brake Line Relocation Template

Cut out template using outside edge of square as a guide.

