

Cherokee / Grand Cherokee INSTALLATION INSTRUCTIONS

Kit #: JC301K/KN/KS/KSN -SX -DX
JC351K/KN -SX -DX
GC301K/KN -SX -DX



Before beginning the installation, read these instructions and the enclosed driver's "WARNING NOTICE" thoroughly and completely. Also affix the "WARNING" decal in passenger compartment in clear view of all occupants. If any of these items are missing from this instruction packet, do not proceed with installation, but call SKYJACKER® to obtain needed items. If you have any questions or reservations about installing this lift kit, call SKYJACKER® at 318-388-0816 for Technical Assistance or Customer Service departments.

Due to the inconsistency of vehicles when manufactured and the various options available, the amount of actual lift gained by this lift kit will vary.

IMPORTANT NOTES:

- On models outfitted with extra bolt-on equipment and accessories, SKYJACKER® offers new coil spring isolator pads made from polyurethane to boost the front ride height $\frac{3}{4}$ " (1.88cm) (order part #SIP275, pair). Also $\frac{1}{2}$ " (1.25cm) rear spring plates are available (order part #SP1225, each).

PRE-INSTALLATION NOTES:

- A professional mechanic is recommended to perform the installation.
- Read the instructions *carefully* and *study* the photo illustrations before attempting the installation.
- Secure and properly block the vehicle on a level concrete or asphalt surface.
- Always wear safety glasses.

ACCESSORIES:

- Transfer case lowering kit (with shifter linkage lowering bracket), #TCL30 or #TCL31.
- Single steering stabilizer kit w/bolt-on brackets, #7112
- $\frac{3}{4}$ " (1.88cm) Spring isolator pad spacers, pr #SIP275
- Heavy Duty Tie Rod Tube #TR300

METRIC CONVERSIONS:

1/16"	=	.16cm (.1575)
1/4"	=	.63cm (.625)
1/2"	=	1.25cm
3/4"	=	1.88cm (1.875)
1"	=	2.5cm
1 1/4"	=	1.88cm (3.125)
1 1/2"	=	3.75cm
1 3/4"	=	4.38cm (4.375)
2"	=	5cm

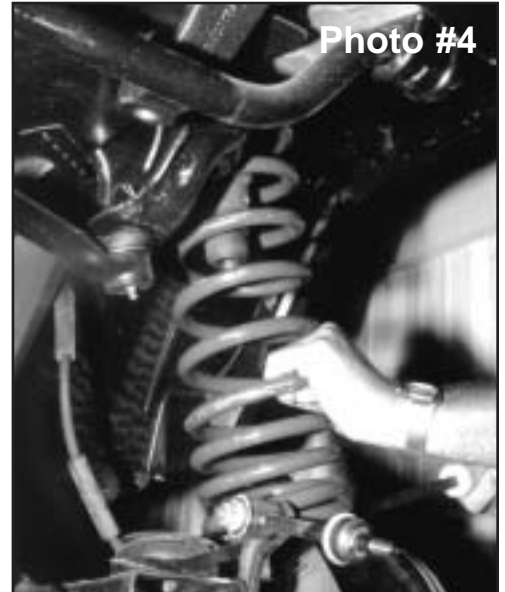


FRONT:

1. Secure and properly block the tires of vehicle on a level concrete or asphalt surface.
2. Jack up front of vehicle and install jack stands under frame behind the lower link rear brackets. Remove tires and front shocks. Now remove the track bar from vehicle (Photo #1.)



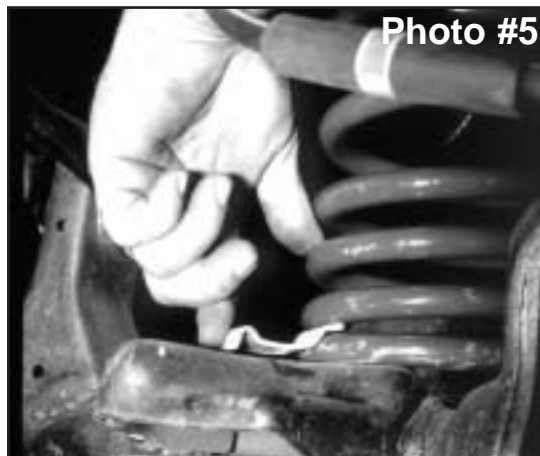
3. Remove drag link assembly from pitman arm and lower it down. Now remove the sway bar end link's lower bolt at axle housing on both sides (photo #2).



4. Lower front axle down until coil springs become loose. Remove spring bolt and clip on bottom of left front coil (see photo #3).

5. Install new coil springs (photo #4). Raise jack up so that enough load is applied to hold coil springs in place.

Reinstall spring bolt and clip at bottom of left front coil (see photo #5).



6. Install new shocks (see photo #6.) Reinstall drag link to pitman arm and tighten (be sure to reinstall cotter pin). Install the tires and lower front to the ground.

7. On Single Flex links assemblies: install drive-in zerk fittings in the end of the links (that will be using poly bushings) by using a 1/4" (.625cm) socket over the fitting, tap with a hammer until fitting is completely tapped in (photo #7). Install poly bushings and steel sleeves into eye of lower links: Lower uses bushing #2617, sleeve 2.645" long, Upper rear uses bushing #2887, sleeve 2" (5cm) long. Grease them prior to installation.



8. Now you are ready to "set" the length of the new Flex Series link assemblies.

A) It is very important to position the swivel ball socket so that the bushings are exactly centered (see photo #8).

B) Measure the length of the link assembly between the center of each eye on each end. Rotate the rod end(s) as needed, being sure to keep the ends square with each other until link assembly measures:

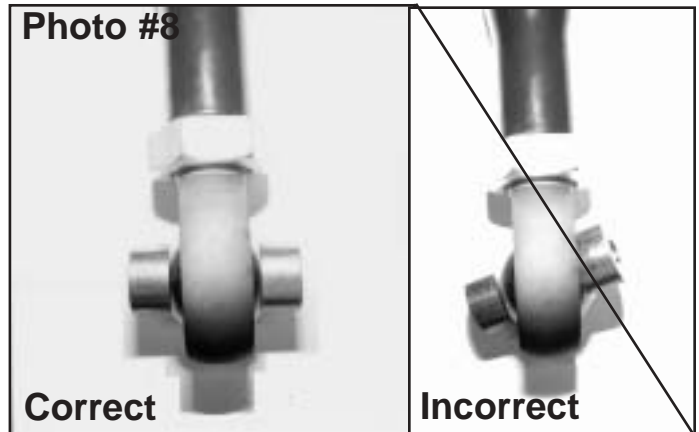
Lower Front should be 16 1/16" long (40.16cm)

Upper Front should be 15 1/16" long (37.66cm)

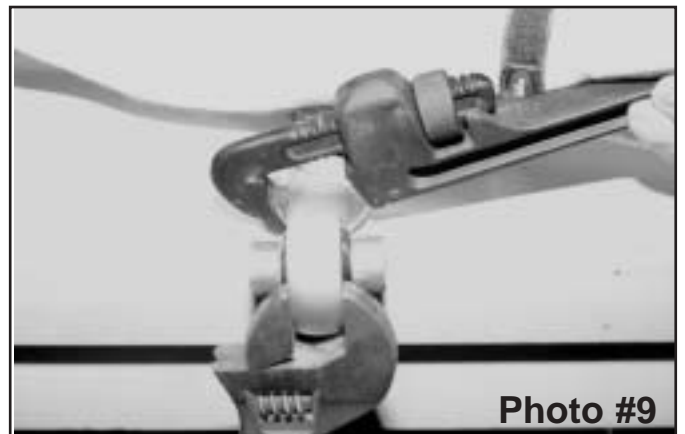
Grand Cherokee only:

Lower Rear should be 16 7/8" long (42.19cm)

Upper Rear should be 13 1/2" long (33.75cm)



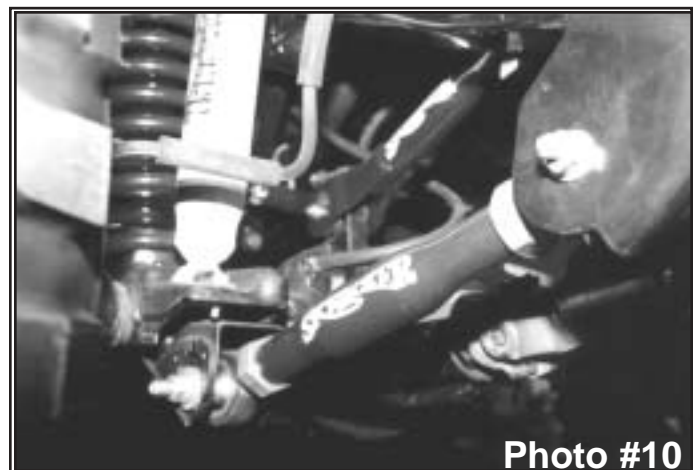
C) On each rod end, rotate jam nut against steel tubing. Hold the rod end in place with a crescent wrench, and using a pipe or crescent wrench on the jam nut, completely tighten (see photo #9). On Double Flex link assemblies, one end is right hand threaded, and one end is left hand threaded so be sure to tighten properly. Jam nuts must be tight against steel tubing before installation.



D) Recheck center-to-center measurement to be sure it is correct, and that the ends are square with each other.

IMPORTANT: Under no circumstances should rod end be adjusted out more than 1/2" (including the jam nut) from the steel tubing of link assembly!

9. Remove and replace the lower links with new Skyjacker® Flex Series links (Lowers first, then uppers). Only start these bolts and nuts, do not tighten at this time. (On Single Flex Lower links, the adjustable rod end is installed at the axle.) Once all links are installed, tighten each link. (See photo #10.) On Grand Cherokee models be sure to realign marks on the eccentric cams.



10. **NOTE:** using the supplied 7/16" x 1 1/2" bolt (see arrow in photo #11) place the new end link mounting bracket to the bottom of the sway bar with the bolt pointing up through the sway bar and the nut and 7/16 USS washer applied on top (see picture 11). Apply lithium grease to the polyurethane bushings. Insert them into the end link eyes along with the metal sleeve (#54314). The top 1/2" x 2 1/2" bolt connecting the bracket to the end link must be installed with the nut to the outside of the vehicle to provide adequate clearance to the frame. Install new double disconnect end links on the inboard side of the axle bracket, being sure that the offset is turned inward. (see picture #12).



Photo #11

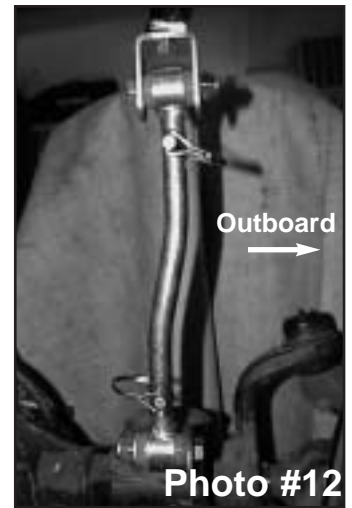


Photo #12

11. Install new adjustable track bar by first greasing and installing polyurethane bushings #2888 and steel sleeve #51792. Insert bushing end into the OEM steering damper location on top of axle, NOT the original track bar location. Referring to photo #13, install new steering damper mounting bracket: the 90° tab is held by the sway bar end link's original hardware; also use the original steering damper hardware to bolt new bracket to new track bar. Install mounting stud for new steering damper as shown.

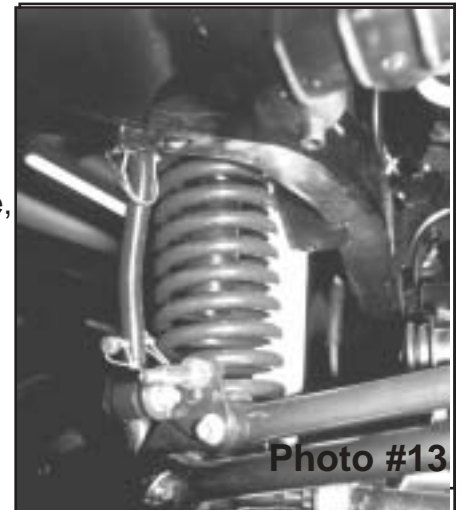


Photo #13

Next install frame end of track bar by following the hardware as shown in photos #14 & #15, being sure to keep rod end square (parallel) with frame mount. Check vehicle to see if body is centered over the tires, and adjust rod end as needed then completely tighten bolt in frame mount.

NOTE: Be sure not more than 1/2" (1.25cm) of threads are extended from bar (including jam nut). Hold the rod end in place with a crescent wrench, using a crescent wrench on the jam nut, completely tighten.



Photo #14



Photo #15

12. Install steering damper mounting stud in hole of drag link as shown in photo #16. Install steering damper on studs in photos 13 and 17. Additional damper #7112 is available (see photo #17).



Photo #16



Photo #17

CHEROKEE / COMANCHE - REAR:

13. Place a floor jack under rear axle and raise vehicle. Place jack stands under the frame to support vehicle and remove the rear tires and shock absorbers.

14. Remove the axle U-bolts and lower axle down a few inches. Care should be taken because when U-bolts are removed, axle can move freely.

15. **ADD-A-LEAF INSTALLATION:** To perform the installation of add-a-leafs properly you must use two large C-clamps to contain the elastic potential energy in a leaf spring when the center tie bolt is removed. Attach and tighten a C-clamp on leaf spring on both sides of the center tie bolt to hold spring assembly securely together. Using vice grips to hold the head of the center bolt, loosen and remove it. With care slowly loosen and remove the C-clamps and springs bottom overload leaf, if equipped.

16. Place new leaf into the spring so that the leaves remain progressive longest to shortest while matching the long end and short end of add-a-leaf to leaf spring. (New add-a-leaf will install under top main leaf). Insert new tie bolt through original bottom overload leaf, if equipped, and then through spring pack. Only finger tighten the tie bolt nut.

17. **DO NOT USE THE CENTER TIE BOLT TO DRAW THE SPRING LEAVES TOGETHER.** Failure of any component can cause an explosive disassembly and possible injury! Place one C-clamp on each side of center tie bolt and tighten evenly. Once C-clamp has drawn the leaves securely together, hold center tie bolt head with vice-grips and tighten nut. Remove C-clamps.

18. Install leaf spring on vehicle and lower the rear axle back down, aligning spring pins into axle housing. Install original U-bolts and tighten evenly. Install rear shock absorbers, tires, remove jack stands and lower vehicle down.

19. **NEW REAR SPRING INSTALLATION:** (Cherokee Only)

Remove the spring eye bolts and remove original springs from vehicle. Install new springs with thick end of bottom degree shims pointing toward the rear bumper. (Which is also the long end of the spring toward the rear bumper). See photo # 18

20. Raise the axle back up, aligning spring pins into axle housing. Install and tighten new U-bolts evenly. Install rear shock absorbers, tires, remove jack stands and lower vehicle down.



Picture #18

GRAND CHEROKEE - REAR:

21. Place a floor jack under rear axle and raise vehicle. Place jack stands under the frame ahead of lower link bracket to support vehicle and remove the rear tires and shock absorbers. Remove rear track bar and sway bar end link bolts at axle housing. Lower rear axle down and remove coil springs.
22. Install new coil springs. Raise jack up so that enough load is applied to hold coil springs in place.
23. Install drive-in zerk fittings in each end of links by using a 1/4" (.625cm) socket over the fitting, tap with a hammer until fitting is completely tapped in. Install poly bushings #2617 and steel sleeves (2.645" or 6.61cm long) in each end of links. Be sure to slightly grease them prior to installation.
24. Remove and replace the rear links with the new Skyjacker® Flex Series links (replace Lower links first, then upper links). **Be sure they were set to the proper lengths in step #8.** Only start these bolts and nuts, do not tighten at this time. (On Single Flex links, the adjustable rod end is installed at the axle.) Once all links are installed, tighten each one.

Attach brake original line bracket to new upper rear link assemblies using original hardware.
25. Reattach original track bar and sway bar links into the original locations (use original bolts, but do not tighten at this time).
26. Install new shocks, install tires and lower rear to the ground. Now tighten the rear track bar bolts on each end and the sway bar end links. Thoroughly grease all zerk fittings in suspension links.

WARNING:

On Jeep Cherokee Models, only the shock absorbers limit the extended position of the front suspension. On the Grand Cherokee the shock absorber limits *both* Front *and* Rear suspensions! The use of shocks other than those supplied in this system, may cause coil disengagement, adverse steering angles, brakeline failure, driveline component failure, and/or other related component failure! The use of other shocks will void your Skyjacker® warranty!

FINAL NOTES:

- After installation is complete, double check that all nuts and bolts are tight. (Do not retighten nuts and bolts where Loctite was used.) Check to ensure there is adequate clearance between All rotating, mobile and fixed members.
- A transfer case lowering kit is available if a drive shaft vibration is present. Part Number TCL30 ('84-'96) or TCL31 ('97-'99).
- Rotate driveshafts and check for interference at differential yoke and cardan joint. If necessary, lightly dress casting(s) and/or U-joint tabs in order to eliminate binding.
- Check clearance between inner side wall of tires and links. **It may be necessary to adjust steering stops.**
- Ensure there is adequate clearance between exhaust and brakelines, fuel lines, fuel tank, floor board, and wiring harnesses. Check steering gear for interference and proper working order. Inspect brakelines for damage and adequate clearance.
- With the vehicle on the floor, cycle steering lock to lock and inspect steering, suspension, driveline and brakeline systems for proper operation, tightness and adequate clearance.
- Have headlights readjusted to proper settings.
- Have a qualified alignment center check and realign to factory specifications.

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