

# INSTALLATION INSTRUCTIONS Cherokee / Grand Cherokee 3" Value Flex Lifts

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 3/4" (order part #SIP275, pair). Also 1/2" 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**

- 3/4" Spring isolator pad spacers, pr
- Transfer case lowering kit (with shifter linkage lowering bracket)
- Heavy Duty OEM steering stabilizer
- Additional Single steering stabilizer kit with bolt-on brackets
- Front double disconnect extended sway bar links.

#SIP275 #TCL30 or #TCL31 #7009 Call #SBE320



#### **METRIC CONVERSIONS**

1/16" = .16cm (.1575)1/4" = .63cm (.625)1/2" = 1.25 cm3/4" = 1.88cm (1.875)= 2.5 cm1 1/4" = 1.88cm (3.125)= 3.75 cm1 1/2" 1 3/4" = 4.38cm (4.375)

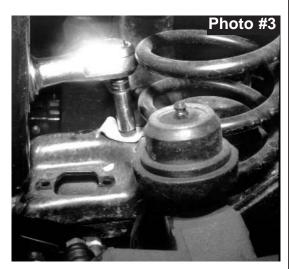
= 5cm

I-JC30-SVX 6-08 Pq 1

### FRONT:

- 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 bolt on axle end only and lower track bar down (it may be necessary to pry bar loose). See photo #1.
- 3. Remove drag link assembly from pitman arm and lower it down. Now remove the sway bar end links lower bolt at axle housing on both sides (photo #2).
- Lower front axle down until coil springs become loose. Remove spring bolt and clip on bottom of left front coil (see photo #3).
- 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 (photo #5).
- Install new shocks (see photo #6). Reinstall drag link to pitman arm and tighten (be sure to reinstall cotter pin). Install tires and lower front to ground.







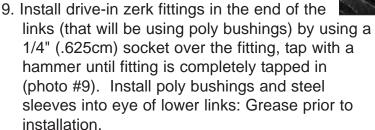






- 7. Locate the front track bar mount on the axle, insert new bracket (see photo #7). Insert original bolt and keeper nut through original hole. Drill a 3/8" hole and install the 3/8 x 1" bolt with self lock nut. Tighten these two bolts. Attach track bar using new 7/16 x 2 1/2" bolt (it may be necessary to rotate steering wheel left or right to align hole). Be sure all track bar bolts are tight.
- 8. Using the supplied 7/16" x 1 1/2" bolt 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. 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 #8)

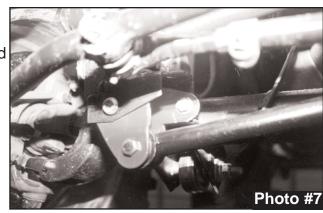


Now you are ready to "set" the length of the new Flex Series link assemblies.

- A) It is very important to position the swivel ball socket so that the bushings are exactly centered.
- 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:

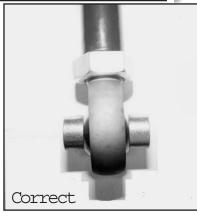
<u>Lower Front</u> should be 16 1/16" long (40.16cm) <u>Lower Rear</u> should be 16 7/8" long (42.19cm)

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. Jam nuts must be tight against steel tubing before installation!













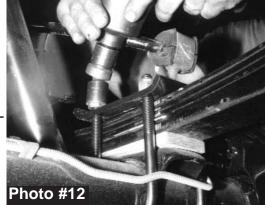
10. Remove and replace the lower links with new Skyjacker extended links (one side at a time). On Grand Cherokee models, mark original position of eccentric cams (see photo #10). Do not tighten bolts until both sides are installed (see photo #11). On Grand Cherokee models, set the eccentric cams back in original position.

**NOTE:** So that the links can be greased while on the vehicle, install them with the zerk fittings positioned as follows: front eye of link has fitting pointing out the end at the axle Rod end should be at frame. 11. Install tires and lower vehicle to ground.

Photo #11

# **CHEROKEE / COMANCHE - REAR:**

- 12. 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.
- 13. 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.
- 14. <u>ADD-A-LEAF INSTALLATION:</u> 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.
- 15. 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.



- 16. **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.
- 17. 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.
- 18. **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 # 12.
- 19. 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.

### **GRAND CHEROKEE - REAR:**

20. 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.

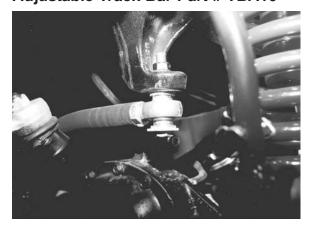
- 21. Install new coil springs. Raise jack up so that enough load is applied to hold coil springs in place.
- 22. Assemble lower arms same as the front.
- 23. Remove and replace the rear links with the new Skyjacker extended links (one side at a time). Only start these bolts and nuts, do not tighten at this time. **NOTE:** Install so that the greaseable bushing is at the axle, Rod End at the frame.
- 24. Reattach original track bar and sway bar links into the original locations (use original bolts, but do not tighten at this time).
- 25. 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.

### **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). (Includes shifter linkage relocation bracket).
- 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 <u>qualified</u> alignment center check and realign to factory specifications.

#### SEAT BELTS SAVE LIVES. PLEASE WEAR YOUR SEAT BELT.

### Adjustable Track Bar Part # TBA10



## **Heavy Duty Tie Rod Tube Part # TR300**

