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# Jeep Wrangler TJ Rock Ready 10" Installation Instructions

### REQUIRED TOOL LIST:

- \* Metric and Standard wrenches and sockets
- \* Allen Wrenches
- \* Assorted Drill Bits
- \* Floor Jack
- \* Jack Stands
- \* Measuring Tape
- \* Torque Wrench



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.

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

Driver Side Front: \_\_\_\_\_ Passenger Side Front: \_\_\_\_\_

Driver Side Rear: \_\_\_\_\_ Passenger Side Rear: \_\_\_\_\_

### **IMPORTANT NOTES:**

- **6-Speed Transmission models may require additional modifications, contact Skyjacker @ 318-388-0816 for additional information.**
- **The 10" Suspension Lift will NOT work on Rubicon Models. Skyjacker recommends no lift bigger than 6" be installed on a Jeep Rubicon due to rear driveshaft angles.**
- **Exhaust Modifications may necessary.**
- A professional mechanic is recommended to perform the installation.
- Please refer to Parts List to insure that all parts and hardware are received prior to disassembly of vehicle. If any parts are found to be missing, contact your dealer as soon as possible.
- ***Slip Yoke Eliminator Kit # FIX231 and rear C.V. Drive Shaft is required.***

## Kit Box Breakdown:

### TJ10-DX:

| <u>ITEM#</u> | <u>DESCRIPTION</u>                | <u>QTY</u> |
|--------------|-----------------------------------|------------|
| TJ60DFB-B    | TJ,6"DRIVER SUB FRAME BRACKET     | 1          |
| TJ60PFB-B    | TJ,6"PASS SUB FRAME BRACKET       | 1          |
| TJ6VXRDRB-B  | REAR, DRIVER UPPER RELOC BRACKET  | 1          |
| TJ6VXRPRB-B  | REAR, PASS UPPER RELOC BRACKET    | 1          |
| TJ6VXFDRB-B  | FRONT, DRIVER UPPER RELOC BRACKET | 1          |
| TJ6VXFPRB-B  | FRONT, PASS UPPER RELOC BRACKET   | 1          |
| TJ60RTB-B    | TJ 6-8"/ REAR TRK BAR BRKT        | 1          |
| JULR10-DX    | JEEP UPR REAR LINK DBL FLEX       | 1          |
| TJLL4-DX     | TJ,LOWER LINKS                    | 2          |
| FBL44-RBL98  | BRAKE LINE SET TJ                 | 1          |
| JSRB231A     | JEEP SHIFT REL BKT/05 UNLTD       | 1          |
| SBE606       | END LINKS REAR 6-8" TJ            | 1          |
| TJRSB10      | TJ,REAR SHOCK RELOC BRKT          | 1          |
| HB-TJ68-DX   | HDWR BAG:8"04-05TJ UNLIMITED      | 1          |

### Hardware Bag Breakdown:

#### HB-TJ68-DX

#### Hardware Bag

| <u>ITEM#</u> | <u>DESCRIPTION</u>          | <u>QTY</u> |
|--------------|-----------------------------|------------|
| 10MMX80MMB   | 10 X 80 METRIC BOLT/ 10.9   | 2          |
| 12X70MMB     | 12 X 70 METRIC BOLT/10.9    | 3          |
| 12X80MMB     | 12 X 80 METRIC BOLT/10.9    | 4          |
| 12X114FTB    | 1/2 X 1 1/4 FINE THD BOLT   | 1          |
| 10MMX70MMB   | 10 X 70 METRIC BOLT/10.9    | 2          |
| 516X34TCFB   | 5/16 X 3/4 THD CUT FLG BOLT | 1          |
| CCTJ         | COIL SPRING CLIP / JEEP TJ  | 1          |
| 12X3FSB      | 1/2 X 3 FLAT SOCKET BOLT    | 6          |
| 516X1FTB     | 5/16 X 1 FINE THRD BOLT     | 1          |
| 141509       | ES25 SLEEVE/403646 1.50"    | 1          |
| 12FTN        | 1/2-20 FINE N/I LOCK NUT    | 5          |
| 10MMN        | 10 MM N/I LOCKNUT           | 4          |
| 12MMN        | 12 MM NUT (METRIC)          | 1          |
| 516FTN       | 5/16" FINE THRD N/I LOCKNUT | 1          |
| 12SAEW       | 1/2 SAE WASHER              | 12         |

## Kit Box Breakdown:

### TJ10:

| <u>ITEM#</u> | <u>DESCRIPTION</u>            | <u>QTY</u> |
|--------------|-------------------------------|------------|
| JULF24-FX    | JEEP UPR FRT LINK FLEX SER    | 1          |
| TBA80        | FRT TRK BAR 8" TJ/XJ          | 1          |
| RTBA85       | REAR ADJ TRK BAR 8" 97-01 T   | 1          |
| SBE228       | SWAY BAR END LINKS FRT 8" T   | 1          |
| BP50S        | POLY BUMP STOP WRANGLER TJ    | 4          |
| ABSS2535     | BUMP STOP SPACER 2.5X         | 4          |
| JA500        | PITMAN ARM JEEP XJ/ZJ/MJ      | 1          |
| 38X412FTB    | 3/8 X 412 FINE THD BOLT,GRD 8 | 4          |
| 38FTN        | 3/8-24 FINE N/I LOCK NUT      | 4          |
| 38SAEW       | 3/8 SAE WASHER                | 4          |
| TJSS941P     | 1"POLY BODYLIFT 10"JEEP TJ    | 1          |

| <b>TORQUE SPECIFICATIONS</b> |                |                |                      |                  |                   |
|------------------------------|----------------|----------------|----------------------|------------------|-------------------|
| <b>INCH SYSTEM</b>           |                |                | <b>METRIC SYSTEM</b> |                  |                   |
| <b>Bolt Size</b>             | <b>Grade 5</b> | <b>Grade 8</b> | <b>Bolt Size</b>     | <b>Class 8.8</b> | <b>Class 10.9</b> |
| 5/16                         | 15 FT LB       | 20 FT LB       | 6MM                  | 5 FT LB          | 9 FT LB           |
| 3/8                          | 30 FT LB       | 35 FT LB       | 8MM                  | 18 FT LB         | 23 FT LB          |
| 7/16                         | 45 FT LB       | 60 FT LB       | 10MM                 | 32 FT LB         | 45 FT LB          |
| 1/2                          | 65 FT LB       | 90 FT LB       | 12MM                 | 55 FT LB         | 75 FT LB          |
| 9/16                         | 95 FT LB       | 130 FT LB      | 14MM                 | 85 FT LB         | 120 FT LB         |
| 5/8                          | 135 FT LB      | 175 FT LB      | 16MM                 | 130 FT LB        | 165 FT LB         |
| 3/4                          | 185 FT LB      | 280 FT LB      | 18MM                 | 170 FT LB        | 240 FT LB         |

**\*The above specifications are not to be used when bolt is being installed with a bushing.**

## Pre-Installation Tips:

Now you are ready to "set" the length of the new Rock Ready™ 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:

### 10" Measurements

- Lower Front should be set @ 30"  
Lower Rear should be set @ 30"  
Upper Front should be set @ 15"  
Upper Rear should be set @ 14 1/8"

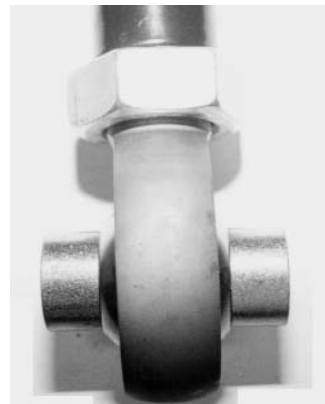
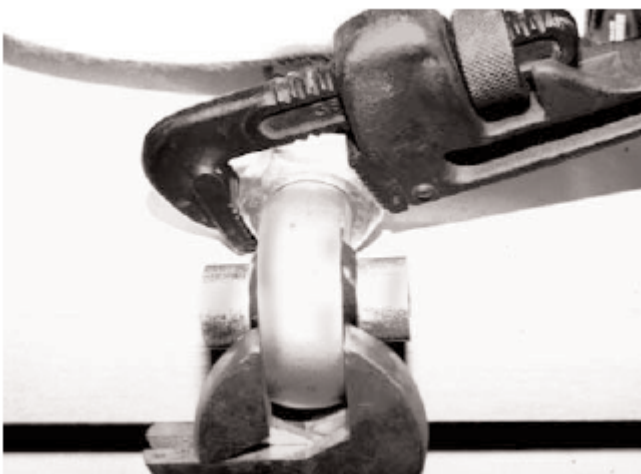
These are pre-alignment measurements only. Final Measurements to be set by a qualified alignment facility.

- 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. On Double Flex link assemblies, one end is right hand threaded, and one end is left hand threaded so be sure to tighten properly.

NOTE: 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 (heim) be adjusted out more than 1/2" (approx. 6 threads) from the ball casing!



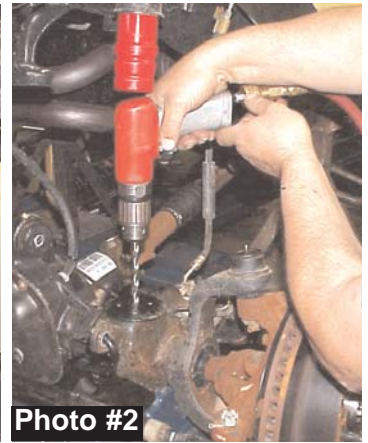
## Front:

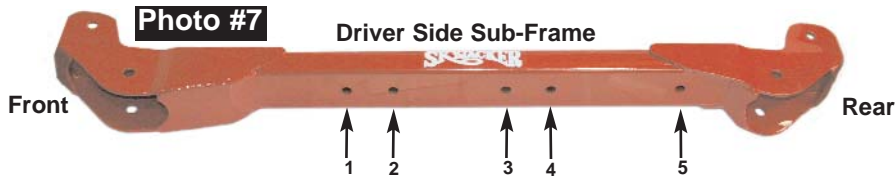
1. Secure and properly block the tires of vehicle on a level concrete or asphalt surface.
2. Jack up front of vehicle and place jack stands under piped cross member behind front bumper. Remove tires and front shocks. Next remove steering damper and track bar.
3. Remove draglink from pitman arm, and install new pitman arm at this time. Remove sway bar end links and calipers from mounts. See Photo #1.
4. Lower front differential and remove coils. Remove factory bump stop and install new longer poly stops. Drill a 3/8" hole in the indent of the lower coil seat and install polymer bump stop spacer as shown in Photo #2. Tighten the 3/8" bolt until the top of the washer is flush with the top of the bump stop. (See Photo #3)
5. Disconnect upper front control arm from the frame and axle. Note: only disconnect one arm at a time so that the axle does not roll. (See Photo #4)

### Important Note:

Exhaust modifications may necessary to allow for articulation, and clearance of the new drop down bracket. On some models, The cross over pipe will need to be shortened so that it does not run under the control arm and new bracket.

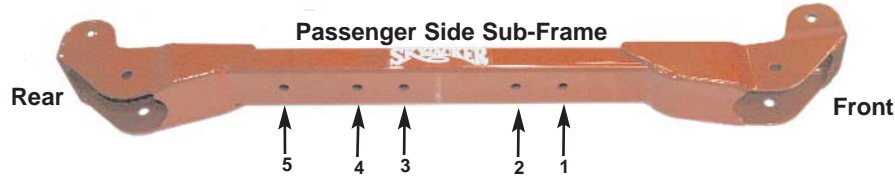
6. Install new upper arm relocation bracket. Attach to factory control arm position using OEM hardware. Insert 2 small stepped spacers into each rod end of the new upper front control arms. Attach new upper control arm to new bracket using 10x80 mm bolt supplied. Attach new upper control arm to axle using oem hardware. There are 4 more mounting locations that attach this bracket to the frame. Two on the outside and two on the bottom. With bracket sitting flush on frame, drill these locations using a 9/32" drill bit. Once drilled, install the 3/8" thread cutter bolts in these locations. (See Photo #5 and #6)
8. Remove front lower control arms. Using care grind off the factory lower control arm mounts and paint-exposed surface. See Photo #8
9. Place a jack under the transmission skid pan; remove mounting hardware and lower pan by 2". Place left and right sub frame rails in between the bottom of frame and pan. Fasten using the 1/2 X 3" flat socket bolts on 97-02 models. Use the 12x80mm bolts on the 03 and newer models. Note: On some models it may be necessary to grind down the factory rear ward step bar nut insert on the outside of the frame. This will allow for the sub-frame rail to pull up flush.





**Note:** Skyjacker Sub-Frames are designed to work on 1997 and newer Jeep TJ's. Therefore, each Sub-Frame will have multiple mounting holes.

- 1997-2002 models use mounting holes 1,3 and 5.
- 10" Kits are only designed for 1997-2002 models. Therefore, the 2nd and 4th mounting hole will not be used.



10. Install the new transfer case shifter bracket (part # JSRB231A) using the instructions provided.
11. With new Sub-Frame attached by the bottom bolts, drill the outer mounting locations using a 1/2" drill bit. Drill completely through frame and mounting tab located on back side of sub frame rail. (See Photo #9) Once Drilled, install the 1/2 x 4" fine thread bolt, washers and nuts. Torque to 70 Ft. Lbs.
12. The new lower control arms (22.75" tube length) mount to the OEM lower location at the differential and to the new position of the sub frame. Insert 2 large stepped spacers into each rod end of the new lower control arms and fasten using the original hardware. (See Photo #10)

13. Lower front differential and install the new coils placing the top of the coil over the upper bump stop mount first. Provided with the springs is the clip and hardware (See Photo #11) to fasten the passenger front coil like the driver's side. The manufacturer provides the hole in the left lower coil mount for you to fasten the coil securely to its seat. Install same as driver side.

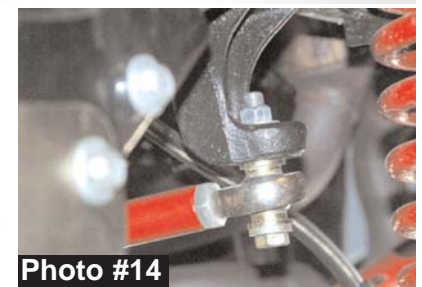
14. Install new adjustable track bar by first greasing and installing poly bushing #2888 and sleeve #51792.

Insert poly end into the OEM steering damper location on passenger side of axle, NOT the original track bar location. Install new steering damper mounting bracket: tab goes over the sway bar end link stud with original nut, use the new 1/2" x 2 1/2" flat socket head bolt and stover nut to bolt new bracket to track bar. See Photo #12. In extreme situations depending on pinion angle and caster settings, the drag link may contact this bracket when turning. This bracket can be slightly ground for additional clearance.

Next install frame end of track bar by following the hardware as shown in Photos #13 & 14, being sure to keep rod end square (parallel) with frame mount. NOTE: Be sure not more than 1/2" of threads are extended from bar (including jam nut). Hold the rod end in place with a crescent wrench, using a wrench on the jam nut, completely tighten.



5/16" x 3/4" thread cutter flange bolt.



15. Install steering damper mounting stud in hole of drag link and upper mounting hole on new track bar bracket. Install the provided 5/8 hour-glass bushings into new steering stabilizer and attach onto new studs. (See Photo #15) Install front brake lines using instructions packaged with brake line kit.



Photo #15

16. **NOTE:** Sway bar end must be drilled or filed to allow clearance for the provided 7/16" x 1 1/2" bolt (See arrow in Photo A). The new end link mounting bracket should be mounted 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 A). 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 Photo B).



Photo #16

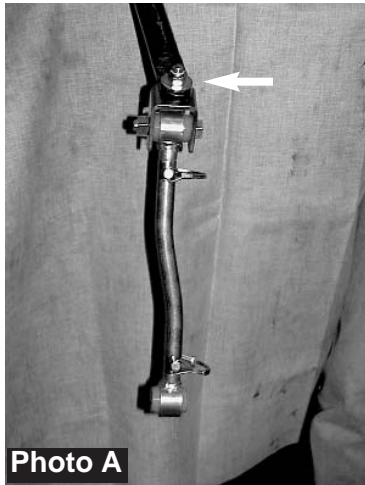


Photo A

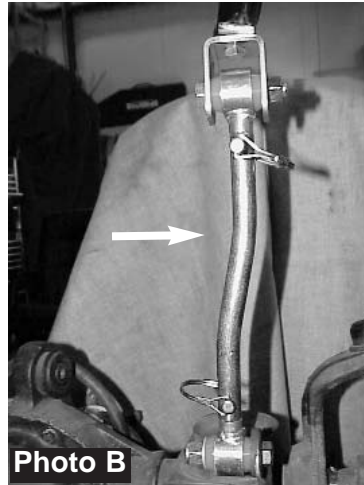


Photo B



Photo #16A

## Rear:

17. Raise and support vehicle under rear cross member with two jack stands. Remove rear tires and shock absorbers.

18. Disconnect rear track bar from differential and sway bar end links, lower differential and remove rear coils.

19. Drill a 3/8" hole into center of rear lower spring seat and install polymer bump stop spacer. See Photo #16. Tighten the 3/8" bolt until the top of the washer is flush with the top of the bump stop. (See Photo #16A) Remove upper bump stop by pulling back and forth with pliers. Replace with new poly bump stop. Install new rear coils.



Photo #17

20. Place new track bar relocating bracket over the oem track bar mount at differential. Place the new 12mm x 70mm bolt through the original track bar location. Use the supplied spacer (#54314) to fill the space where the oem track bar was located. Apply lock nut and tighten. Drill a 1/2" hole through the hole in the driver's side of the new bracket. Install the 1/2" x 1 1/4" bolt with washers on each side through the newly drilled hole and tighten with self locking nut. Install the 5/16" x 1" fine thread bolt, washers and nut into the forward hole of the new bracket. (See Photo #17). Place the track bar into the upper hole of the new bracket using the original hardware and tighten once vehicle has been lowered to the ground. Be sure to install both upper and lower bolts from the rear, forward as shown in Photo #17. 8" lifts come with an adjustable rear track bar and special instructions.

21. Remove upper control arms (freeing rear brake line and emergency cables) and rear sway bar end links. Install new upper arm relocating brackets. These brackets and control arms will install the same as the front. Only install one at a time so that the axle does not roll.

**Note:** The rear upper link brackets feature 2 mounting locations for the upper arms. Arrow in Photo# 18 shows the correct mounting for an 8" lift. If installing the Skyjacker 6" lift, you must use the forward most hole in the bracket.



22. Install new upper control arms (10" tube length) into new upper frame mount using 10mm hardware provided.

23. If vehicle is equipped with an optional upper control arm eccentric cam bolt they must be reused. Attach factory emergency brake bracket to the new upper control arm bracket using the zip-tie provided.

24. Assemble the new rear sway bar end links by applying grease to the poly bushings and insert them into each eye along with a sleeve #54587. Install using original hardware.

25. Remove lower control arms and rear lower control arm mounts at frame. Repeat process from front lower control arm mount. Clean and paint exposed surfaces. The new rear lower control arms (22.75" tube length) mount to the OEM lower location at the differential and to the new position of the sub frame. Insert 2 large stepped spacers into each rod end of the new lower control arms and fasten using the original hardware. See Photo #19.



26. Install rear brake line. Install rear coils and shocks. Reinstall tires and lower vehicle to ground.

### Final Notes:

- Alignment is necessary, so after the lift is installed have a qualified alignment center realign the vehicle to factory specifications.
- 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.
- 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. Test brake system before driving.
- 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

### Available Accessories:

- Heavy Duty Steering Box Skid Plate Part # SSP10
- Heavy Duty Tie Rod Tube Part # TR300

# SKYJACKER®

THE BEAR OF SUSPENSIONS

## Skyjacker® 97-05 Jeep Accessories

- Steering Box Skid Plate Part # SSP10



- Heavy-Duty Tie Rod Tube Part# TR300



- High Capacity Oil Pan  
(97-02 Models w/ Automatic Transmission)  
Part# OPA999



- Shifter Relocation Bracket  
(Included in Rock Ready® Kits)  
Regular TJ with NP231 Transfer Case  
Part# JSRB231A  
Unlimited, Rubicon and Rubicon Unlimited  
Part# JSRB2315U



- 1" Motor Mounts Part # MM100



- Rear Shock Relocation  
Brackets Part# TJRSB10



- Heavy-Duty Limiting Straps

LS16K 16"      LS28K 28"  
LS20K 20"      LS32K 32"  
LS24K 24"



- Rock Ready® Grab Handles

RRGH20-K      2" Black  
RRGH20-R      2" Red  
RRGH30-K      3" Black  
RRGH30-R      3" Red



- C.V. Yoke (Rubicon Models Only)  
Part# CVR680



- High Clearance Transfer Case Skid Plate.  
97-02 Models Part# SP28  
03-05 Models Part# SP283



- Heavy-Duty Adjustable Rear Sway Bar  
Part #RSBA410



- Stainless Steel Brakelines 4 - 10" Lift  
Front Part# FBL44 Rear Part# RBL98



Contact your distributor and get your Skyjacker® Jeep Accessories Today!!