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ZJ Grand Cherokee 5.5" Advanced Kit

PART #: RK-550A-ZJ | APPLICATION: ZJ

INTRODUCTION

This installation can be performed by anyone with mechanical experience as long as they follow the instructions listed but we suggest a certified mechanic.

Prior to installation inspect all driveline, brake lines, and bushings to be in good condition. Front-end alignment will be necessary. Be sure to properly torque all bolts and nuts to the torque specs listed.

PARTS LIST

Be sure you have all needed parts and know where they install. Read each step completely as you go.

PART NO	DESCRIPTION	QTY.
RK-550A-ZJ	ZJ Grand Cherokee 5.5" Advanced Kit	1
RC-CS808-ZJ	Coils - ZJ 5.5" Front	2
RC-CS300-ZJ	Coils - ZJ 5.5" Rear	2
RC-TB199-UV	Trac-Bar - Adjustable Front (XJ,TJ,ZJ)	1
RC-TB550-UV	Trac-Bar – Adjustable Rear (ZJ)	1
RC-TB150-UV	Trac Bar - HD Frame Mount (ZJ)	1
RC-CA111-ZJ	Control Arms - Fixed Lower Front (XJ,TJ)	2
RC-CA121-UV	Control Arms - Fixed Upper Front (XJ,TJ,ZJ)	2
RC-CA112-UV	Control Arms - Fixed Lower Rear (TJ,ZJ)	2
RC-CA222-UV	Control Arms - Adjustable Upper Rear (TJ,ZJ)	2
RS-DPA3	Drop Pitman Arm - 3" (ZJ)	1
JKS-2001	JKS Quicker Disconnects	1
RC-SB250-UV	Sway Bar – Rear Drop (pair)	1
RB-SBL10-UV	Brake Line - Front and Rear Stainless Steel Kit	1
RX-16-ZJ	Shocks - ZJ Hydro Front 5.5"	2
RX-11-ZJ	Shocks - ZJ Hydro Rear 5.5"	2
RX-BH1306	Shock Bushing - Sleeve	4
RX-BH1314	Shock Bushing - Closed Bar Pin	2
RX-BH1318	Shock Bushing - Bushing/washer (stud style)	2

FRONT INSTALLATION

NOTE: Save all factory components and hardware for reuse, unless noted.

- 1) Raise vehicle and place jack stands under frame. Chock the rear tires to prevent any accidental movement.
- 2) Support the front axle with the floor jack.
- 3) Remove tires and wheel.
- 4) Remove the factory shocks at the top and bottom and discard. The bottom hardware will be re-used.
- 5) Unbolt and remove the sway bar links on both sides.
- 6) Un-bolt brake line at the frame and at the brake caliper, save copper washers, they will be re-used. Remove brake line.
- 7) Remove the bolt at the axle end of the trac-bar, save the hardware it will be reused when installing the adjustable trac-bar.
- 8) Follow the trac-bar to the frame mount, remove cotter pin and nut and remove the trac-bar (a ball joint separator may be necessary).
- 9) Un-bolt the factory frame mount, it has two bolts at the top and two facing downward. Save bolt hardware, it will be re-used. Make sure frame is clean of grease and dirt. Inspect the factory bolts and make sure they are not worn and are in good shape.
- 10) Remove cotter pin and nut that connects the drag link to the pitman arm. A ball joint separator must be used to detach the end from the arm.
- 11) Remove the nut and washer from the steering gear shaft; you will need a puller tool to remove the pitman arm from the shaft. (Make sure to mark location of factory pitman arm to ensure accurate placement of new arm)
- 12) Paint or scribe the front bolt of the lower control, rotating this bolt adjusts the caster.
- 13) Remove the axle and frame end lower control arm bolts on both drivers and passenger's side and remove the arm.
- 14) Remove the axle and frame end upper control arm bolts on both drivers and passenger's side and remove the arm.
- 15) On each side, remove the bolt that holds the spring keeper clip, it's located on the lower coil spring mount.
- 16) If using a coil spring compressor, take special care. Lower the axle and remove the coils.

***NOTE: Do not torque bolts to spec until vehicle lowered to the ground and set to ride height.**

- 17) Install the new Rusty's trac-bar mount; start with the two holes at the bottom of the frame and then the top two. A drift may be needed to help line up depending on the model. Be sure to use RED Lock-tite on these bolts and torque to 90 ft. lbs.
- 18) Using special care, install the new Rusty's coils.
- 19) Install the new lower & upper control arms before unloading the coils. The lower control arms have a bend in them; the short side of the bend will mount to the axle side.
- 20) Inspect the old mounting bolts for wear, if worn replace with a grade 8 bolt.
- 21) Position the new coils into place. Install the factory spring keeper clip. Torque to 10-ft. lbs.
- 22) Torque the lower control arm bolts. Axle end to 85-ft. lbs. Frame end to 130-ft. lbs.
- 23) Torque the upper control arm bolts to 55-ft. lbs
- 24) Install the new Rusty's shocks into their upper position with new hardware. Torque the upper hardware to 17-ft. lbs.
- 25) Install the lower end of the shock to the axle using the factory hardware. Torque to 21-ft.lbs.
- 26) Install the JKS disconnects. (follow manufacturer's instructions)
- 27) Install tires and wheels.
- 28) Jack up vehicle and remove jack stands and lower to the ground.

FRONT ALIGNMENT

- 29) Install the new pitman arm onto the steering shaft; install the factory washer and nut. Torque to 185-ft lbs.
- 30) Install the drag link to the pitman arm and torque to 60-ft lbs. Install cotter pin.
- 31) Install new adjustable trac-bar to the axle, torque to 55-ft. lbs.
- 32) Before bolting to the frame, you will need to center the body over the axle. Look at the front of the vehicle to see if the axle is centered, if not unlock the steering wheel, but do not crank, turn the steering wheel one way or the other to shift the body until the body is centered. When centered, lock the steering wheel. Adjust the tie rod end to the proper length and bolt to the frame. Torque to 65-ft. lbs.

REAR INSTALLATION

- 33) Raise vehicle and place jack stands under frame. Chock the front tires to prevent any accidental movement.
- 34) Support the rear axle with the floor jack.
- 35) Remove the tires and wheels.
- 36) Remove the factory shocks, keeping the factory hardware and discarding the old shocks.
- 37) Unbolt the sway bar on both sides at the frame, don't discard hardware it will be reused. The front sway bar drop bolts to the frame with the factory hardware.
- 38) Un-bolt the brake line and discard.
- 39) Remove the plastic shield that covers the driver's side of the rear trac-bar, discard the plastic cover.
- 40) Remove the rear trac-bar, retain the hardware, it will be re-used.
- 41) Remove the axle and frame end lower & upper control arm bolts on both drivers and passenger's side and remove the arms.
- 42) If using a coil spring compressor, take special care. Lower the axle and remove the coils.

***NOTE: Do not torque bolts to spec until vehicle lowered to the ground and set to ride height.**

- 43) Install the new coil springs and raise the axle until the springs are seated. Be sure the frame stays on the jack stands.
- 44) Install the new lower & upper control arms before unloading the coils.
- 45) The lower control arms have a bend in them; the short side of the bend will mount to the axle side.
- 46) Torque the lower control arm bolts to 130-ft. lbs.
- 47) Install the new adjustable control arms. (As a starting point, adjust the arms 3/8" longer than factory). Make sure that the jam nuts are tightened. Torque the upper control arm bolts to 55-ft. lbs.
- 48) Install the new shocks with the factory hardware. Torque the upper bolts to 23-ft. lbs. and the lower to 74-ft. lbs.
- 49) Install the new stainless steel brake line provided. Make sure to properly bleed the brake system prior to driving.
- 50) Install the new rear trac-bar to the frame (fixed end). Torque to 74-ft. lbs.
- 51) Before installing to the axle, use a ratchet strap to center the body over the rear axle. When centered, adjust the tie rod end to the proper length and bolt to the axle. Torque to 65-ft. lbs.
- 52) Re-install the sway bar to the sway bar drops at this time using the new hardware. Torque to 20 ft. lbs.
- 53) Install tires and wheels.
- 54) Remove jack stands and lower the vehicle.

***Refer to the driveshaft angles that were taken before raising the vehicle. Again take a driveshaft angle reading and compare to the first readings. If needed, rotate the cam bolts to get the driveshaft angles as close as possible. This should eliminate driveshaft vibrations. It is very important that both cam bolts are adjusted the same. Be sure to re-torque the cam bolts to 85-ft. lbs. if loosened.

At this point there should be no parts left but installing the stickers. The vehicle will need to have an alignment as soon as possible, if you don't you may get the "death wobble", poor tire wear or just a bad handling vehicle. Alignment specs are 7 degree positive castor, 0 camber and the toe should start at 0.

WARNING

It is the owners' responsibility to inspect all Rusty's products for proper torque specs to prevent loosening of components. Seat belts and shoulder harnesses should be worn at all times. Re-check all bolts and nuts after the first 300 miles and after any off-road usage during the first 300 miles. Although all of our products are made from the highest quality materials possible, they are not a substitute for Safe and Careful driving. In other words, have good safe on-road / off-road sense. Know the terrain, the speed limitations, and any obstacles that may lie ahead. Please remember to preserve our right to enjoy public land through the proper use of off-road vehicles. Thank you for choosing Rusty's Off Road Products.

For questions or suggestions, contact our Tech Department 256-442-0607