



Rusty's Off-Road Products
 7161 Steele Station Road
 Rainbow City, AL 35906
 Phone: (256) 442-0607
 FAX: (256) 442-0017
 Web Site: www.RustysOffroad.com

YJ Wrangler 4" Spring Pack Kit

PART #: RK-400SP-YJ | **APPLICATION:** YJ

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-400SP-YJ	4" YJ Wrangler Spring Pack Kit	1
RC-LS400F-YJ	Springs - 4" YJ Wrangler Front Springs (each)	2
RC-LS400R-YJ	Springs - 4" YJ Wrangler Rear Spring (each)	2
RC-TBRB-YJ	Trac-Bar - Rear Brkt. Kit	1
RC-TBFB-YJ	Trac-Bar - Front Brkt. Kit	1
RC-TC1-YJ	Transfer Case Drop Kit (TJ 97-02/ YJ/ CJ)	1
RC-SHIMC-6	Shims - 6' Contoured Kit	1
RC-SB300-YJ	Sway Bar - Front Extended Link Kit	1
RB-BL10-UV	Brake Line - Front and Rear Extension Kit	1
BJ02029BK	Spring Bushing Kit	1
UB-3	C8.25 U-Bolt Kit	2
UB-1	D30-All/D35-rear YJ only U-Bolt Kit	7
RX-36-YJ	Shocks - YJ Hydro Front 3-4	2
RX-13-YJ	Shocks - YJ Hydro Rear 3-4"	2
RX-BH1318	Shock Bushing - Bushing/washer (stud style)	2
RX-BH1306	Shock Bushing - Sleeve	6

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) Remove tires and wheels.
- 3) Remove the factory shocks at the top inside the fender well and at the bottom and discard. The hardware at the bottom will be reused.
- 4) Unbolt and remove the sway bar links on both sides.
- 5) Support the front axle with the floor jack.
- 6) Remove the trac-bar bolt from the housing on the axle.
- 7) The trac-bar can be tied up for more working room.
- 8) Accessible from under the hood, remove the brake lines upper bolts. The bolt is located at the top end of the front brake line, which is connected to the top of each frame rail behind the shock tower.
- 9) Remove the 4 u-bolt nuts from the axle's u-bolts.
- 10) Using the floor jack, raise the axle up to separate the spring from the axle.
- 11) Remove the shackle bolts and frame bolts from the leaf spring.
- 12) Remove the Leaf Spring and Discard.
- 13) Repeat STEP 9---STEP 11 on other side of vehicle.

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

- 14) Lubricate the leaf-spring's sleeves and bushings with water resistant grease before the springs are installed.
- 15) Install the front leaf-springs. Insert the spring into its place; make sure the spring's tie bolts line up with the spring perch hole.
- 16) Bolt in the leaf spring, but do not tighten fully.
- 17) Install new u-bolts to both sides; torque the nuts to 65ft. lbs.
- 18) You are now ready to tighten the spring's bolts. Tighten spring bolts to 35ft. lbs. on both shackle and frame mounts. Once on the ground, Torque the shackle bolts to 95-ft. lbs and the frame bolts to 105-ft. lbs.
- 19) The front trac-bar must now be installed. If you able to tie the trac-bar out of the way, DO NOT release it just yet. Having it tied up will give you more room to work with. Place Rusty's new trac-bar bracket on top of the existing trac-bar mount. Rusty's new trac-bar mount's flange will match with the factory's flange on the right side of the bracket. The 12mm x 2 long bolt is to be installed along with the washer and flange lock nut. Torque the 12mm x 2 bolt to 45-ft lbs.
- 20) The brackets new bolt hole can be used as a guide to drill the new hole. Drill a 3/8 hole through the factory flange of the track bar housing. The 3/8 x 1 1/4 bolt, 3/8 flange lock nut, and washer will now be installed. Torque the 3/8 bolt to 35ft. lbs.
- 21) The front brake line extension brackets should now be installed.
- 22) Install the new Rusty's shocks into their upper position with new hardware. Torque the upper hardware to 17-ft. lbs.
- 23) Install the lower end of the shock to the axle using the factory hardware. Torque to 40-ft.lbs.
- 24) Place bushings and sleeves into the new sway bar links provided and install using the factory bolts
- 25) Install tires and wheels.
- 26) Jack up vehicle and remove jack stands and lower vehicle to the ground.

TRANSFER CASE DROP INSTALLATION

- 27) Carefully place floor jack in the center of the transmission mount skid plate.
- 28) Raise floor jack to support the weight of the skid plate.
- 29) Loosen the bolts on the transfer case skid plate, making sure not to loosen all the bolts completely. Allow for some movement; again, making sure not to loosen all the bolts completely.
- 30) ***ONE SIDE AT A TIME!*** Do not attempt to take all bolts at one time! Take out one sides' bolts to allow room for Transfer-Case Drop pucks.
- 31) Slowly lower the floor jack allowing the space for the transfer case drop kit pucks to fit in the side that is at hand. Insert the transfer case drop pucks. In most cases, the transfer case skid will have to shift toward the rear of the vehicle to properly align the holes together.
- 32) Using the hardware provided (bolts and conical washers), tighten up the bolts of the side that is at hand. Make sure not to fully tighten the bolts, needing the room to install the other side's transfer case drop.

- 33) Using the instructions above, install the opposite's sides drop kit.
- 34) After installing the driver and passenger's sides drop kit, tighten all of the bolts. It is important that you make sure all of the bolts are tight, but do not over tighten them.
- 35) On some Wrangler models it may be necessary to remove some of the materials located under the shifter on models with a manual transmission. Removing this material will allow you to be able to shift gears. If the statement above applies to you, the statement below will guide you through adaptation. To make this modification, first you must remove your Wrangler's rubber shifter boot. After removing the boot, shift your transmission through all of the gears (including reverse). Make notes on which the gears' shifting pattern makes contact with the body. Using a small grinder, remove the body's material that is prohibiting the shifter to go through its original shifting pattern.

REAR INSTALLATION

- 36) Raise vehicle and place jack stands under frame. Chock the front tires to prevent any accidental movement.
- 37) Remove tires and wheels.
- 38) Remove the factory shocks, keeping the hardware and discarding the old shocks.
- 39) Take off the retainer clip that attaches the factory brake line to its upper mount bracket.
- 40) Disconnect trac-bar from frame rail.
- 41) Remove the 4 u-bolt nuts from the axle's u-bolts.
- 42) Using the floor jack, raise the axle up to separate the spring from the axle.
- 43) Remove the shackle bolts and frame bolts from the leaf spring.
- 44) Remove the Leaf Spring and Discard.
- 45) Repeat STEP 31--STEP 34 on other side of vehicle.

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

- 46) Install the new Rusty's Z brackets in between the factory mounting bracket and the line end. The 5/16 x 1 bolt and flanged lock nut are used at the bracket to bracket end. Position the line/hose through the slot and into the hole on Rusty's Z bracket's opposite end and reinstall clip.
- 47) Using 12mm-1.75 x 80mm bolt, 5/16 bolt, flat-washer and lock-nut, install the new Rusty's drop down trac-bar mounting bracket on the frame rail.
- 48) Lubricate the leaf-spring's sleeves and bushings with water resistant grease before the springs are installed.
- 49) Install the rear leaf-springs. Insert the spring into its place; make sure the spring's tie bolts line up with the spring perch hole.
- 50) Bolt in the leaf spring, but do not tighten fully.
- 51) Install new u-bolts to both sides; torque the nuts to 65ft. lbs.
- 52) You are now ready to tighten the spring's bolts. Tighten spring bolts to 35ft. lbs. on both shackle and frame mounts. Once on the ground, Torque the shackle bolts to 95-ft. lbs and the frame bolts to 105-ft. lbs.
- 53) Connect the trac-bar to Rusty's new drop down bracket using the original factory 12mm bolt and flange nut. Torque to 45ft. lbs.
- 54) Install the new Rusty's shocks with the factory hardware. Torque the upper and lower bolts to 40-ft.lbs.
- 55) Reinstall the tires and wheels and lower vehicle.
- 56) Torque the lug nuts to the factory specs.

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