

SIMPLY SUPERIOR.

2" SUSPENSION SYSTEM
1997-2006 JEEP WRANGLER TJ
JSPEC3201

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RV. 092215

GETTING STARTED

Read all warnings, instructions, notes and cautions before you begin the installation.



WHO SHOULD INSTALL THIS?

We recommend that this system be installed by a professional mechanic. The installer will need professional knowledge of special tools required for installation as well as assembly and disassembly procedures.

STAYING SAFE AND LEGAL

- If you fail to drive your lifted and modified vehicle safely it may result in serious injury or death.
- Never disconnect the swaybar when operating vehicle on public roads.
- Exercise caution: A lifted vehicle is at greater risk for rollovers or loss of control, especially during abrupt maneuvers.
- Always wear your seat belt, reduce your speed and avoid sharp turns.
- Never operate your vehicle under the influence of drugs or alcohol.
- Consult local and state laws for the legality of your ride height.

BEFORE YOU BEGIN INSTALLATION

- Needed items: OE service manual for your vehicle, safety glasses, and any special tools as indicated in these instructions as well as the following tools: assorted metric and standard wrenches, hammer, hydraulic floor jack and a set of jack stands.
- Ride Height: Measure the initial ride height of your vehicle prior to installation. Final ride height may vary depending on the factory height of your vehicle.
- Tires and rims: Larger tire and rim combinations can increase leverage and cause additional stress to suspension, steering, and related components. When installing larger than OE tires and rims, the following components should be inspected for wear every 2500-5000 miles: ball joints, tie rod ends, wheel bearings, track bar bushings, pitman arm.
- Drive line vibrations: Some vehicles may experience drive line vibration after installation of this suspension system. Possible remedies for this include: tuning angles, replacement of slider on shaft, lengthening or truing of shaft, and/or replacing u-joints.
- Installation without a hoist: We recommend completing the rear alterations first if no hoist is available.

THANK YOU FOR CHOOSING JSPEC SUSPENSION

TIRE FITMENT

32 x 11.50 on 15x8 with 4.5" max backspacing
32 x 10.50 on stock wheels

SPECIAL TOOLS REQUIRED

Torque Wrench
Torx bits - T40, T50, T55
3/8", 9/16" Drill Bit
8mm & 1/4" Allen Socket

INSTALLATION TIME

Approximately 6 hours



- | | Drv | Pass |
|-------|-----|------|
| Front | | |
| Rear | | |

02. REAR DISASSEMBLY

- Disconnect the track bar from the passenger side frame rail bracket (15mm & 18mm).
- Raise and support the vehicle. Place a hydraulic jack under the axle to support it. Remove the wheels.
- Disconnect the stabilizer bar links from the sway bar at the axle. (15mm & 18mm).



- e. With the axle well supported, remove the shock absorbers. Use penetrating oil on the upper bar pin bolts (13mm) to help prevent the bolts from breaking.
- f. Lower the axle until the spring is free from its upper mount. Remove the coil spring from the vehicle.

03. REAR TRACK BAR BRACKET

Rear track bar bracket 03248 will require bolt pack J112 and 94 sleeve

- a. Remove the track bar-to-axle Torx mounting bolt (T55). Temporarily remove the track bar from the vehicle.
- b. Remove and discard the plastic axle mount cover and xmas tree clips.
- c. Position the provided track bar bracket on the axle mount and temporarily hold it in place lining up the original track bar hole with the one in the bracket. Using the bracket as a template, mark the bottom, top, and driver's side lower mounting hole positions to be drilled. The bottom and top holes should line up close to the existing holes left from the plastic cover clips.



- d. Remove the bracket and drill a 3/8" hole at the 3 locations.
- e. Reinstall the bracket and loosely fasten the bracket to the axle mount at the drilled locations. Use 5/16" hardware at the top and side holes and the 3/8" hardware at the lower hole.
- f. Insert the provided 12mm x 80mm bolt through the original track bar hole with the provided 3/4" x 1.58" spacer sleeve mounted inside of the axle bracket. Use the factory nut tab, or if not available, use the provided nut and washer.
- g. With all of the hardware installed, torque the 5/16" hardware to 20 ft-lbs, 3/8" to 35 ft-lbs, and the 12mm hardware to 80 ft-lbs.
- h. Install the track bar in the new bracket and fasten with the provided 12mm x 80mm bolt, nut, and washers. Leave loose.

04. BUMP STOP, COIL SPRING, AND SHOCK INSTALLATION

Bump stops 2296 will require 10mm x 80mm bolts

- a. Carefully pry the factory bump stops from the cup, normally this can be done by hand, but use some channel locks if necessary.
- b. Remove the bolt (15mm) that attaches the cup to the frame.
- c. Install the provided bump stop extension between the frame and bump stop cup and attach them to the frame using the provided 10mm x 80 mm bolts. No washer is necessary.
- d. Reinstall the factory bump stops into the cup.



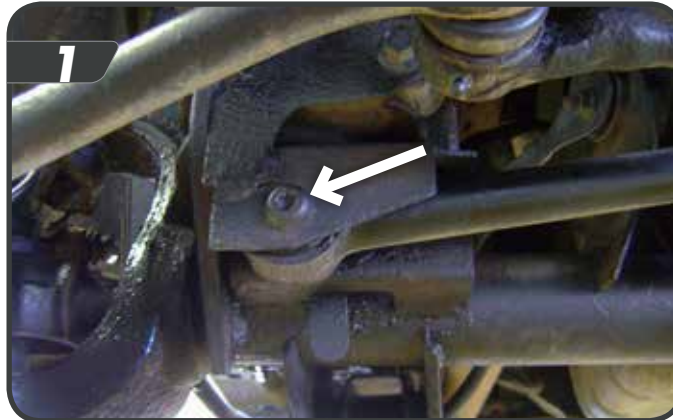
- e. Install the JSpec coil spring with the number on the spring legible and facing towards the rear.
- f. Install shocks using the factory hardware with the sticker facing rearward. Anti-seize is recommended on the upper bolts. Tighten the upper bolts to 26 ft-lbs and the lower hardware to 74 ft-lbs.



- g. Rotate the sway bar up to reconnect the sway bar links to the sway bar at the axle. Use the factory shoulder bolts and nuts. Torque to 40 ft-lbs.
- h. Lower the vehicle to the ground.
- i. Connect the track bar to the passenger frame rail bracket using the OE hardware, a buddy is useful to push on the body to get the hole lined up. A ratchet strap can also be used. Tighten the frame and axle track bar bolts to 80 ft-lbs.

05. FRONT DISASSEMBLY

- a. Disconnect the front track bar from the axle using a T50 Torx bit. Save bolt and nut tab.



- b. Raise and support the vehicle. Place a hydraulic jack under the axle to support it. Remove the wheels.
c. Remove the brake lines from the frame rail (T40) on both sides.



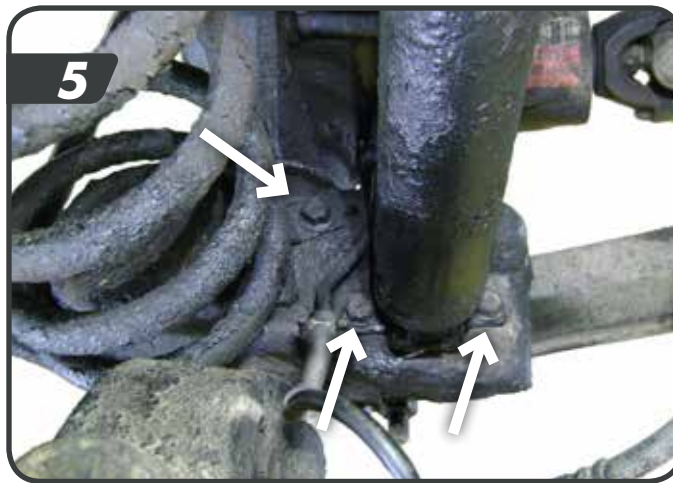
- d. Disconnect the sway bar links from the axle and sway bar (18mm). Discard links and hardware.
Note: If difficult to remove the sway bar link from the sway bar, an air chisel or pickle fork can be used.



- e. Disconnect the track bar from the frame rail bracket. Remove the cotter pin and nut (21mm) and thread it back on a few turns. Strike the track bar frame mount with a hammer to release the tapered seat. Remove the track bar.



- f. With the axle well supported, remove the shocks. Also remove the coil spring retainer located at the rear of the driver side coil mount.



- g. Remove the lower control arm to axle bolts.

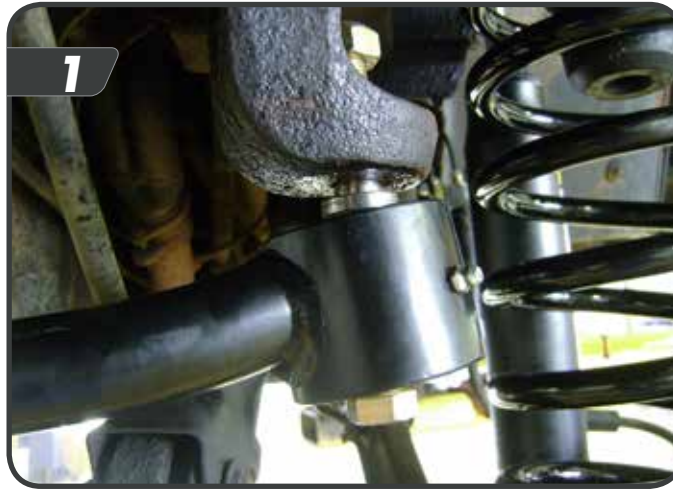


- h. Lower the axle enough to remove the factory coil springs. Take care to ensure all hoses have adequate slack and the steering isn't binding. The drag link can be disconnected if necessary.

06. ADJUSTABLE FRONT TRACK BAR

- a. Using a 9/16" drill bit, enlarge the factory tapered mounting hole at the frame.
- b. Adjust the track bar to approximately 31-3/4" center of the flex eye to center of the bushing eye. Leave the jam nut loose. Final adjustment will be made once the vehicle is on the ground.
- c. Locate the provided 9/16" bolt and insert it through the flex eye followed by the tapered split cone with the narrow end facing away from the track bar. Fasten the track bar to the frame mount with the provided, 9/16" nut, no washer is used. Tighten the bolt to 100 ft-lbs.

Note: Leave the axle end out of the axle, this will be attached w/ the vehicle on the ground.



07. FRONT COIL SPRING, SHOCK, AND CAM BOLT INSTALLATION

- a. Lower the axle far enough to install the JSPEC coil spring. Rotate the spring to seat it in the lower coil mount. Raise the axle enough to bring the spring in to contact with both the upper and lower mounts. Take care to ensure all hoses have adequate slack and the steering isn't binding.
- b. Raise the axle enough to loosely install the front shocks to the upper stem mount followed by the lower bar pin mount using the factory hardware. Tighten the stem mount until the bushings begin to swell. Re-install the coil spring retainer. Tighten the lower bolts to 20 ft-lbs.

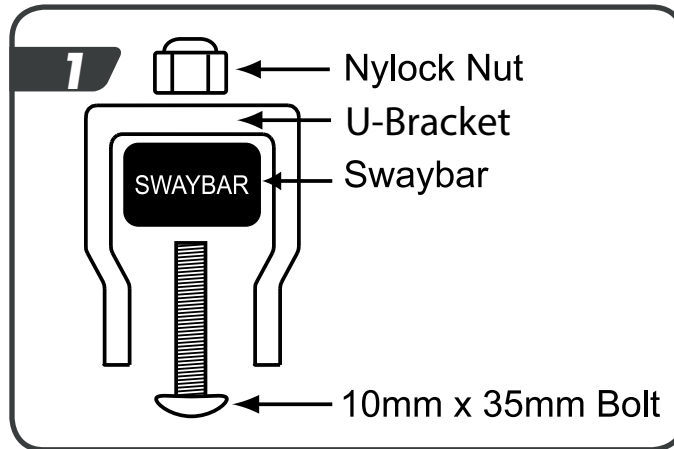


- c. Position the lower suspension arms in the axle brackets.
- d. Install the provided front cam bolts into the control arms. Snug the bolts so the cams will stay within the cam stops, but do not tighten, that will be done once the vehicle is on the ground.
- e. Install the brake line drop brackets to the frame using the 8mm button head bolts so the wide part of the bracket is forward.
- f. Install the brake lines to the brackets with the 8mm button head bolts and nuts. Torque the bolts to 18 ft-lbs.



08. QUICKER DISCONNECTS

- a. Mount the U-bracket on the top of the sway bar with the threaded hole to the inside using the supplied 10mm x 35mm button head bolt upward through the sway bar and fasten w/ the nylock nut. Torque bolt to 40 ft-lbs.



- b. Install the tapered posts to the lower sway bar mount so they point inward. Tighten the posts to 65 ft-lbs so the click pin holes are horizontal. Slide the offset bushing onto the post.

Note: A small phillips head screwdriver or punch inserted in the click pin hole can be used to prevent the post from rotating when tightening the nylock nut.

- c. Adjust the length of the sway bar links to 8- $\frac{1}{4}$ " and install the sleeve into the male side of the sway bar link.
- d. Apply the supplied loctite to the end of the 10mm x 50mm button head bolt and install it with the external tooth lock washer through the U-bracket and male end of the sway bar link so the grease fittings face forward. Tighten to 40 ft-lbs using a 6mm Allen head socket.



- e. With both sway bar links installed, rotate the sway bar and link up so the female end of the sway bar link is close to the center of the frame rail. Mark this location for the storage pin.
- f. Drill a hole using a 17/64 or F size (.257") drill and tap the hole using the provided 5/16" self tapping bolt.
- g. Install the storage pin using the supplied 5/16" x 1- $\frac{1}{2}$ " socket head bolt. Repeat the pin installation on the other side.

09. FINAL INSTALLATION STEPS

- a. Lower the vehicle to the ground.
- b. Slide the quicker disconnects over the lower tapered posts and install the click pins.
- c. Rotate the lower control arm cam bolts so the wide part of the cam washer is forward and torque to 85 lbs.
- d. Install the front track bar into the axle with the factory bolt and nut tab.
- e. Check to see if the axle is centered by measuring the distance between the tire and chassis on both sides. If the measurement varies, adjust the track bar by half the difference of the measurements and re-install.
- f. Torque the front track bar axle bolt to 50 ft-lbs.
- g. Check all fasteners for proper torque.
- h. The vehicle will need a front end alignment.
- i. Align headlights.
- j. Check all fasteners after 500 miles.

KIT CONTENTS

JSPEC3200 COIL SPRINGS - 2"

Part No.	Qty	Description
034214R	2	Front coil springs
034216R	2	Rear coil springs

JSPEC3201 COMPONENT BOX KIT

Adjustable Track Bar

Part No.	Qty	Description
A1021	1	Adjustable Track Bar
03050	1	Tapered Split Cone
18271	1	9/16"-18 x 4-1/2" Bolt
N96FPT	1	9/16"-18 Prevailing Torque Nut

Quicker Sway Bar Disconnects

Part No.	Qty	Description
A1024	2	Quicker Disconnect Links
03029	2	Sleeve
03005	2	Quick Pin
M03212	2	Poly Spacer
03013	2	Stainless Steel Tapered Post
03014	2	Storage Post
N12FPT	2	1/2" Nylock Nut
03012	2	Quicker Disconnect U-Bracket
23259	2	5/16"-18 x 1-1/2" Socket Head Bolt
10598-00499	2	M10-1.5 x 35mm Button Head Bolt
10598-01212	2	M10-1.5 x 50mm Button Head Bolt
40167	2	M10-1.5 Nylock Nut
40515	2	M10 external tooth lock washer

Front Brake Line Brackets

Part No.	Qty	Description
03193	1	TJ Front Brake Line Brkt - Drv
03194	1	TJ Front Brake Line Brkt - PassRear
452	1	Bolt Pack - Front Brake Lines
	4	8mm-1.25 x 16mm button head bolt
	2	8mm-1.25 nylock nut

Cam Bolts

Part No.	Qty	Description
823801	2	Front LCA Cam Bolt Assembly

JSPEC3201 COMPONENT BOX KIT (CONT.)

Rear Bump Stops

Part No.	Qty	Description
2296	2	Bump Stop Extension
B1080G5	2	10mm x 80mm Bolt

Rear Track Bar Bracket

Part No.	Qty	Description
03248	1	Rear Track Bar Bracket
94	1	Track Bar Bracket Sleeve
J112	1	Bolt Pack - Track Bar Bracket
	2	5/16"-18 x 7/8" bolt
	2	5/16-18 prevailing torque nut
	4	5/16" SAE washer
	2	5/16" USS washer
	1	3/8"-16 x 1" bolt
	1	3/8"-16 prevailing torque nut
	2	12mm-1.75 x 80mm bolt
	2	12mm-1.75 prevailing torque nut
	4	1/2" SAE washer