



KevinsOffroad.com
WJ Jeep Grand Cherokee Death Wobble Kit
Installation Guide

JKS[®]

INSTALLATION INSTRUCTIONS

Product: Adjustable Trackbar
Part Number: JKSOGS127

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Welcome

CONGRATULATIONS on purchasing a new Adjustable Trackbar from JKS Manufacturing. We are committed to providing you with the best products available and your satisfaction is our first priority.

PLEASE READ these Installation Instructions carefully, and save them for future reference, as they contain important installation and maintenance information.

Important

NOT COMPATIBLE WITH right hand drive vehicles.

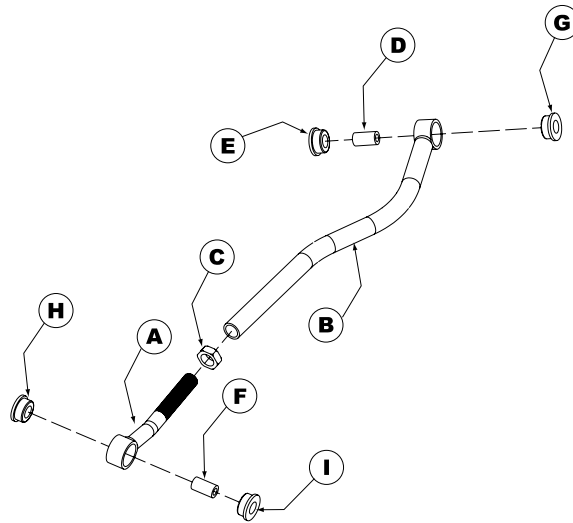
CHECK TORQUE SPECIFICATIONS regularly.

Tools Required

- Metric/Standard Socket Wrench Set
- Torque Wrench
- Flat Head Screwdriver
- Tape Measure
- 1-1/2" Open-End Wrench
- Heavy Duty Ratchet Strap *
- Anti-Seize Lubricant
- Hydraulic Press *
- Wheel Bearing Grease

** Asterisk denotes tools that are not required for some applications. Thoroughly read instructions first to determine which tools will be required for your application.*

Parts



	Description
A	Male Threaded (Axle) End
B	Female Threaded (Chassis) End
C	1" NF Jam Nut
D	Sleeve
E	Polyurethane Bushing
F	Sleeve
G	Polyurethane Bushing
H	Polyurethane Bushing
I	Polyurethane Bushing

Installation

❑ 1. REMOVE ORIGINAL EQUIPMENT (OE) FRONT TRACK BAR

- Remove front track bar and mounting hardware per the factory service manual instructions for your vehicle. Retain the original mounting hardware as it is required for Adjustable Trackbar installation. **HINT:** It will be necessary to remove the driver-side bumpstop to access the bolt on chassis end. A flat head screwdriver is useful for removing bumpstop from holder.

❑ 2. LUBRICATE BUSHINGS AT BOTH ENDS OF TRACKBAR

- Locate the bag of parts containing the Polyurethane Bushings (E, G, H, & I) and Sleeves (D & F).
- Liberally apply wheel bearing grease to surface of bushings.
- Assemble Polyurethane Bushings and Sleeves at each end of trackbar as indicated in the parts diagram on page 1.

❑ 3. MOUNT ADJUSTABLE TRACKBAR TO CHASSIS BRACKET

- Mount Chassis End (B) of Adjustable Trackbar to the chassis rail bracket and secure with the original mounting hardware. Apply anti-seize lubricant to bolt threads. **HINT:** When installed correctly, the curve in Adjustable Trackbar should point toward the front of vehicle.
- Tighten original mounting bolt on chassis rail bracket to 75 ft-lb. using a torque wrench.

❑ 4. CENTER FRONT AXLE HOUSING

The front axle housing must be in perfect lateral alignment with vehicle chassis before Adjustable Trackbar installation can be completed.

- Before you center the axle housing, make sure the vehicle is at normal ride height, on level ground, with the suspension supporting the full vehicle weight.
- Determine if the axle housing is centered by measuring the distance between the tire and chassis, using the exact same points on each side of the vehicle to ensure accuracy.



HINT: For example, measure from the edge of a tire tread lug to the outboard side of the chassis, then repeat the measurement on the other side of vehicle using the exact same points.

- If the two measurements are equal, the axle is centered. If the measurements vary, divide the difference in half to determine the amount of adjustment required. **HINT:** If the axle housing is not centered, the chassis can be laterally shifted using either of the following methods.

Ratchet Strap (preferred)

- Attach a heavy duty ratchet strap to the chassis on one side of the vehicle, and to the axle housing on the other side.
- Tighten the strap in small increments to pull the chassis in alignment with the axle.
- Take measurements after each adjustment until centered.

Steering Wheel

- Have a partner turn the steering wheel in small increments to shift the vehicle chassis side-to-side.
- After each adjustment, have your partner hold the steering wheel steady while you take measurements.

❑ 5. SET ADJUSTABLE TRACKBAR LENGTH AND MOUNT TO AXLE

IMPORTANT: The length of the Adjustable Trackbar must be set with the axle housing perfectly centered and the vehicle at normal ride height.

- With the axle housing centered beneath the chassis, adjust the length of Adjustable Trackbar by rotating the Axle End (A) until the Bushing Sleeve (F) aligns with the mounting holes on the axle bracket. **HINT:** *If Bushing Sleeve at Axle End is not parallel with axle bracket mounting holes, it may be necessary to slightly bend the Axle End of trackbar using a hydraulic press. Variations in the axle bracket position are typically the result of modifications to related suspension parts.*
- Apply anti-seize lubricant to original mounting bolt threads and adjustment threads of trackbar.
- Install Axle End (A) of Adjustable Trackbar to the axle bracket by securing with the original mounting hardware.
- Take measurements again to ensure axle housing is perfectly centered and make any final adjustments if necessary.
- Once all adjustments are complete, fully tighten the Jam Nut (C) to prevent Adjustable Trackbar length from changing. **HINT:** *It may be easier to tighten Jam Nut with the Adjustable Trackbar removed from the vehicle.*
- Tighten original mounting bolt on axle bracket to 75 ft-lb. using a torque wrench.

Maintenance

Check torque specifications regularly.

Regular cleaning with pressurized water is recommended to maximize reliability.



Kevin's Offroad Secondary Stabilizer Kit for 99-04 WJ Jeep Grand Cherokee Installation Guide

Time and Difficulty:

This installation ranks at about level 2 on a 1 to 5 scale (fairly easy). It should take approximately 45 minutes to complete.

Tools Needed:

- 1/2" drill bit; Drill; Channel Lock pliers; Socket set; An assistant; Loc-Tite (if you wish)
- First, inspect all the parts and visualize how the install will go. In the hardware kit, you should have 2 clamps (depending on the version you ordered, you may have one larger and one smaller clamp, or two equal clamps), two bolts, two 1/2" nuts, two lock washers, four flat washers, two 5/8" spacer nuts, and one bushing sleeve. You might also want to use some Loc-Tite or similar product.
- For each end, installation order is: Bolt, flat washer, shock loop, flat washer, 5/8" spacer nut, clamp, lock washer, nut. You might also want to use some loc-tite or similar product to the threads during install.
- The included sleeve needs to be pushed into the end of the stabilizer that does not have one.
- If you have the factory WJ Track Bar, place the SMALLER clamp around the Track Bar. If you have the aftermarket Track Bar version, then both clamps will be the same size.

Install Instructions:

Using the included clamps and a pair of Channel Lock pliers, pry the clamp mouths apart and slide one over the drag link and one over the track bar. Use the enclosed hardware to clamp it down, similar to the WJ primary stabilizer hardware kit (KOR-1012), or as I discussed above. I'd like to see the stabilizer as close to parallel with the drag link as possible, so flip the clamps either over the top, under the bottom, or one up and one down to achieve the right angle of the stabilizer, depending on the amount of lift on your rig.

BE EXTREMELY CAUTIOUS that you mount the stabilizer so that it will clear all of the moving parts, so after you have it in position, tighten it down loosely, and have your assistant **SLOWLY** move the steering wheel back and forth from lock to lock, assuring that you don't over compress or extend the stabilizer, and that your hardware doesn't hit anything.

The foolproof way to locate the stabilizer left to right is to have the tires turned all the way to the right, compress the stabilizer all the way, and then draw the stabilizer out 1/2" and mount it in that location. FYI, the stroke on the WJ is offset... 3.5" to the right and 2-5/8" to the left, so don't mount the stabilizer in the center of its stroke or you will bottom it out when turning left.

Make sure to have your assistant hold the steering wheel all the way or you will get an incorrect starting spot, rather than turning off the engine and allowing the wheels to move after the engine is shut down.

You should get a measurement of around 15.75" +/- .25" when the wheels are straight ahead. Before you tighten everything down, check for clearance one more time, and to assure that you don't have the stabilizer rotated too far upward or downward by having your assistant slowly turn the wheel leftward and rightward to assure that it's not hitting anything, and you're good to go. Tighten it down on both ends, and enjoy your **MUCH** more DW-resistant steering, or your increased ground clearance if you purchased it to get the factory one up and out of the way of rocks.



KevinsOffroad Steering Stabilizer for 99-04 Jeep Grand Cherokee WJ (KOR 9309-1002)

By the Members of JeepsUnlimited.com Grand Cherokee Forum.

Tools you'll need: a 1/2" drill bit and drill motor, a vice and/or block of wood and a rubber mallet.

1. First, take the stock stabilizer out by removing the bolt from the axle mount end of the stabilizer. The nut on the bottom of the axle mount is welded on, so just leave it alone. Remove the bolt from the tie-rod clamp end of the stabilizer and remove the stock stabilizer. You may need to pry the metal apart at the axle mount end to loosen it enough to pull the stabilizer out. It doesn't take much, so be persistent.

2. Drill the tie-rod clamp holes out to 1/2". The holes in the tie-rod clamp also need to be drilled out to 1/2" diameter to accommodate the larger bolt. You may need to use a C-Clamp to tighten the tie-rod clamp into position for drilling, or it will spin around and make this a major task to accomplish.

3. Attach the hardware to the piston end of the stabilizer as follows: Put one of the large flat washers on the large bolt. Put the bolt and washer into the eyelet of the stabilizer. Place another large washer on the bolt so that the large end of the stabilizer is now sandwiched between two large flat washers. Now, slide the larger nut onto the bolt, this will act as a spacer to move the stabilizer into proper alignment with the axle. You are now ready to install the stabilizer onto your WJ.

4. First, rotate the tie-rod clamp 180° so that the clamp's bolt hole is on TOP of the tie rod, saving your stabilizer about 2" of ground clearance.

5. Attach the body end of the stabilizer to the axle mount, and just like before when you removed the stock stabilizer, you may have to pry the metal mount apart just a little to get the stabilizer's end into the mount.

6. Attach the piston end of the stabilizer (with all of the assembled hardware) to the inverted tie-rod clamp of the WJ from the back heading forward. Once you have the bolt through tie-rod clamp, add your lock washer, and lastly, thread on the smaller nut. Hand tighten the nut enough to keep the parts from falling out, then tighten the hardware on the large end of the stabilizer to spec. (i.e.; tighten it enough so it won't fall off. I don't have a torque recommendation). You might also want to use some lock-tite or similar product.

VERY IMPORTANT!!! Inspect the location of the stabilizer housing versus the bottom of the track bar mount. When you turn the wheels to the right, will it hit? Have someone turn the steering wheel slowly to the right as you watch for clearance. Assure that you have at least 1/4" clearance...and 1/2"

would be even better, as when you articulate, the clearance changes. **TRIPLE CHECK** the clearance by moving the steering wheel in both directions before you leave the driveway!!! Your power steering gear will **EASILY** puncture a hole in the stabilizer if you have it rotated too high!!! Enjoy the new, tighter feeling of a **GOOD** quality steering stabilizer versus the puny stock one.



KOR-9906 Retrofit Sleeve and Bolt Kit Install Guide

List of Tools You'll Need For This Installation:

13/16"socket | Large Flat Blade screwdriver or pry bar | 9/16"drill bit | Electric Drill Optional
tools: Air Impact Driver | Torque Wrench

Important Note - Please read first! You may be asking yourself why the bolts do not slide into the sleeves right now, and only fit up to the shoulder of the bolt. Worry not! This kit is designed for interference fit. In order to provide the snuggest fit possible, it is necessary to tap the bolt into the sleeves in order to seat the bolt. As long as the bolt threads fit inside the sleeves, you are in good shape. The bolts can be tapped back out for bushing service. All kits are test fit prior to shipment to ensure clearance, but please let us know if you have any questions. Thank you!

Step 1: Move Jeep forward and backward two times in its parking space, without touching the steering wheel, to eliminate any bind on the steering mechanism.

Step 2: Locate axle-side connection of track bar, which is held in with one bolt facing forward, and a nut (typically with a steel tab welded to it) facing rearward, on the front axle.

Step 3: Remove track bar bolt. Common hex sizes are 15mm and 16mm.

Step 4: Spread the bracket "tabs", if necessary, allowing the axle side of the track bar to drop away from the bracket. Let it hang safely.

Step 5: Remove the sleeve from the aftermarket track bar by sliding it out of the bushing set. If you have a factory style rubber bushing, you will need to press it out using a vice. (Often, removing the upper track bar bolt will allow you to do this easier)

Step 6: Check the fitment of the new sleeve in the existing bushings, or remove and replace the existing bushings with new bushings and then check the fitment. It needs to be nice and snug, but shouldn't need to be "forced" in using a vice.

Step 7: If the sleeve fits well, then remove it again, lube it with a mineral-oil based lubricant, such as our KOR-1109 poly bushing lube tube, and reinstall. DO NOT use petroleum-based lubricant, which softens polyurethane.

Step 8: Drill out the track bar bolt hole on the axle side using your 9/16" drill bit. You will want to drill through the factory captured nut that is welded to the axle mount. Do not bother trying to remove it for this install. The tabbed nut will slide in behind it.

Step 9: Rotate the track bar up and into position. Assuming there was no side load on the steering components when you removed the old bolt, it should almost perfectly align. If not, have an assistant slowly turn the wheel to the right if the track bar is too short, or to the left if the track bar is too long. This will effectively move the body of the Jeep left and right, floating over the top of the axle, and allow you to re-center the hole.

Step 10: Slide the new 9/16" bolt through the hole and fish the 9/16" tabbed nut inside the rear side of the bracket behind the factory captured nut (if it is still welded in there- if not, just place the tabbed nut where the factory nut was).

Step 11: If you have an air impact driver, now is a GREAT time to put it to use...it'll make your life a lot easier.

Step 12: Tighten down the bolt to 125lb/ft of torque, which is just a bit tighter than a lug nut on a wheel, if you don't have a torque wrench.

Step 13: Enjoy your new tighter steering feel from the steering wheel, and the reduced propensity for Death Wobble.

