

IRON ROCK OFF ROAD

**JK 3.5" Foundation Series
Lift Kit Instructions**

1-877-919-JEEP www.ironrockoffroad.com

Parts Checklist:

- ☐ Instructions
- ☐ Iron Rock Off Road Logo Decal 10001 (1)
- ☐ Ironrockoffroad.com decal (1)
- ☐ 3.5" Front coil spring 96027 (2)
- ☐ 3.5" Rear coil spring 96028 (2)
- ☐ JK Front Caster Plate 88152 (4)
- ☐ Rear Track Bar Bracket 80064 (1)
- ☐ **#162 - JK Brake hose bracket front or rear (2)**
 - ☐ Brake hose bracket 80017 (2)
 - ☐ M6 x 18 hex bolt (2)
 - ☐ M6 hex nut (2)
 - ☐ 1/4" USS washer (2)
- ☐ **#196 - Rear Track Bar Bracket Hardware (1)**
 - ☐ M14 x 80 hex bolt, cl10.9 (1)
 - ☐ M14 nylock flange nut (1)
 - ☐ Spacer sleeve 80003 (1)
 - ☐ 3" U-bolt 80071 (2)
 - ☐ 3/8" serrated flange nut (4)



- ☐ JK 0-8" front track bar 80000 (1)
- ☐ **-Standard Track Bar-**
 - ☐ Front Track bar threaded male end, 92004 (1)
- ☐ **#166 - Front Track Bar Hardware (1)**
 - ☐ Track bar bushing half 80014 (4)
 - ☐ Track bar bushing sleeve 80003 (2)
 - ☐ Track Bar clamp 95044 (1)
 - ☐ 5/16-18 x 2 carriage bolt gr5 (1)
 - ☐ 5/16-18 hex flange nut (1)
- ☐ **-Optional Premium Track Bar Upgrade-**
 - ☐ Track bar threaded male end, joint installed 77013 (1)
- ☐ **#254 - Track Bar Flex End Hardware - 14mm (1)**
 - ☐ Inner race (plastic) 91113 (2)
 - ☐ End cap (steel) 91112 (2)
 - ☐ Ball 91142 - M14 bolt (1)
 - ☐ #5-40 x 1 1/4" Socket head cap screw (9)
 - ☐ 3/32" Hex L key, high torque (hex plus) (1)
- ☐ **#281 - Track Bar Clamp Hardware (1)**
 - ☐ Track Bar clamp 95044 (1)
 - ☐ 5/16-18 x 2 carriage bolt gr5 (1)
 - ☐ 5/16-18 hex flange nut (1)

~Standard Front Sway Bar Links~

- ☐ Front Sway Bar Link, 10.75" center to center 92146 (2)

#201 - Sway Bar Link Hardware (1)

- ☐ 12mm sway bar bolt sleeve 92038 (4)
- ☐ 3/4" hourglass bushing 94025 (4)
- ☐ M12 x 65 Hex bolt cl 10.9 (2)
- ☐ M12 Nylock nut (2)
- ☐ 7/16 USS washer (4)



~Optional Front Sway Bar Disconnect Upgrade~

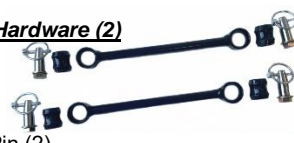
- ☐ Front Sway Bar Link, 10.75" center to center 92146 (2)

#268 - Sway Bar Disconnect Bushings (1)

- ☐ Poly Bushing 94025 (4)

#266 - JK Sway Bar Disconnect Hardware (2)

- ☐ Disconnect Pin 94028 (2)
- ☐ 1/2-20 x 1" Hex Bolt, gr8 (2)
- ☐ 1/2 F436 Hard Washer (2)
- ☐ 1/4" x 1-1/4" Spring Lynch Pin (2)



Shocks

- ☐ **Trail Tamer HD Hydro (Standard)**
 - ☐ Front shock 79001 (2)
 - ☐ Rear shock 79004 (2)

- ☐ **Doetsch Upgrade (Optional)**
 - ☐ Front shock DT 8350 (2)
 - ☐ Rear shock DT 8299 (2)

#165 - JK Shock Hardware (1)

- ☐ Rear barpin GS-403261 (2)

- ☐ **Bilstein Upgrade (Optional)**
 - ☐ Front shock 33-230351 (2)
 - ☐ Rear shock 33-185552 (2)

#164 - JK Bilstein Shock Hardware (1)

- ☐ Rear barpin GS-403261 (2)
- ☐ 12mm shock sleeve 404739 (4)



Before you begin:

- ☐ ***Ensure that all parts are present and in good condition using above shipping checklist. ***
- ☐ Read and understand all installation instructions.
- ☐ Tools required:
 - ☐ Floor jack and jack stands
 - ☐ Basic hand tools
 - ☐ Torque wrench
 - ☐ File or angle grinder
 - ☐ Multipurpose grease

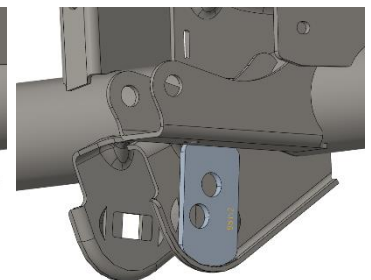
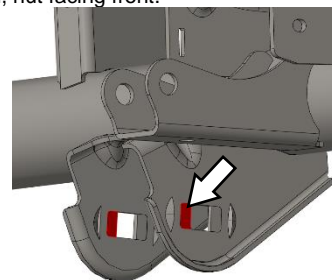
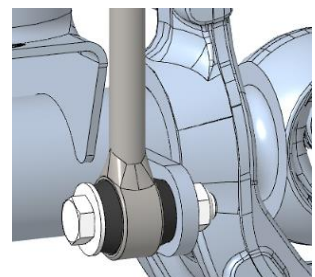
Prepare the parts for installation:

1. **Shocks:** Locate rear shocks and hardware kits.
2. Grind the outer corners on one end of the barpins to ease installation.
3. Grease and install the barpins into the top side of the rear shocks. Clamp the barpin vertically in a bench vise and lower the shock onto the barpin while rotating the shock back and forth. Be sure to grease the barpin and the shock bushing.
4. **Track Bar:** Locate front track bar, track bar hardware kit #166 and track bar threaded male end. If you upgraded to the Premium Track Bar, refer to the instructions at the end of this document.
5. Lubricate track bar bushings and bushing sleeves with multi-purpose grease and install into track bar and track bar threaded male end.
6. Slip clamping bracket onto adjusting end of track bar with the opening toward the rear of the vehicle and insert the 5/16 carriage bolt from rear and nut facing forward.
7. Thread the track bar male end into the track bar and adjust to 32-3/4" as a starting point. Length may need adjustment after a test drive.
8. Tighten the clamping bracket. Make sure the bracket opens downward, and nut faces forward.
9. **Sway Bar Links:** Grease and install the hourglass bushings into the links. If you upgraded to IRO Sway Bar Disconnect system, refer to the instructions at the end of this document.
10. Grease and install the sway bar link bolt sleeves into the bushings. All sleeves are the same (12mm I.D.).



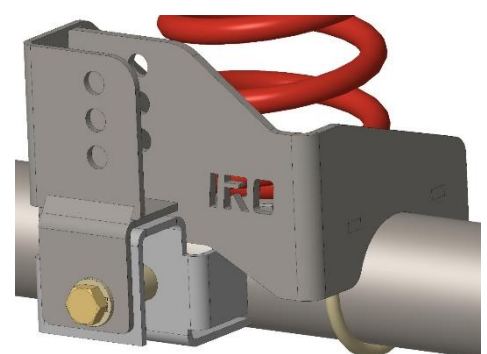
Front installation:

11. Lift front of vehicle and support with jack stands under frame rails.
**Tip: break lug nuts loose before lifting vehicle.
12. Remove front wheels
13. Remove front sway bar links.
14. Support front axle with jack stands and remove shocks.
15. Remove brake line bracket from frame rail.
16. Remove front track bar.
17. Remove coil springs.
18. Loosen the upper and lower control arm bolts at the frame and the axle (do not remove).
19. Install new coil springs. Front springs will have a larger diameter pig tail than the rear springs.
20. Install brake hose extension bracket on frame in factory location using factory bolt.
21. Reinstall brake hose on new bracket using provided bolt and nut in **HK #162**.
22. **Re-route ABS wires as needed to allow full suspension droop.**
23. Install new shocks.
24. Install new front sway bar links. Use bolts from **HK #201** for the top and reuse the original bolt for the lower. Washers go outside the bushing.
25. Install new front track bar threaded end to axle side. The clamp hangs down, nut facing front.
26. Disconnect front lower control arms at the axle and grind the sharp corner of the lower control arm mount, toward the center of the Jeep. See photo.
27. Remove caster "knock-outs" from lower control arm mounts.
28. Reinstall lower control arms with the caster plate offset hole toward the rear for maximum caster angle.
29. Reinstall front wheels.
30. Lower vehicle onto ground.
31. Torque lug nuts to factory spec.
Typical specification is 85-115 ft-lbs., depending on your wheels
32. With the vehicle weight on the suspension, tighten all lower control arm bolts to 130 lb-ft. Tighten upper control arm bolts to 75 lb-ft.



Rear installation:

33. Lift rear of vehicle and support with jack stands under frame rails.
**Tip: break lug nuts loose before lifting vehicle.
34. Remove rear wheels.
35. Remove sway bar link bolts at axle.
36. Support the rear axle with jack stands and remove shocks.
37. Remove brake line bracket from frame rail.
38. Remove coil springs.
39. Loosen the upper and lower control arm bolts at the frame and the axle (do not remove).



40. Disconnect track bar from the axle.
41. Install new rear track bar bracket over factory track bar bracket. Secure with U-bolts, 3/8" serrated flange nuts, M14 x 80 bolt, nylock nut and spacer sleeve from hardware kit #199.
42. Reinstall track bar into rear track bar bracket (middle hole) using the factory track bar bolt and flag nut.
*Be careful of track bar to exhaust clearance. The two may contact if bumpstops are too short.
43. Install new coil springs. Rear springs will have a smaller diameter pig tail than the front springs.
44. Install brake hose extension bracket on frame in factory location using factory bolt.
45. Reinstall brake hose on new bracket using provided bolt and nut in hardware kit #162.
46. **Re-route ABS wires as needed to allow full suspension droop.**
47. Reinstall sway bar links.
48. Install new shocks.
49. Reinstall rear wheels.
50. Lower vehicle onto ground.
51. Torque lug nuts to factory spec.
Typical specification is 85-115 ft-lbs., depending on your wheels
52. With the vehicle weight on the suspension, tighten all upper and lower control arm bolts to 130 lb-ft.

Adjustments:

53. With the vehicle weight on the suspension, check that the front axle is centered left to right, adjust track bar as needed. Length may need adjustment after a test drive.
54. The draglink **must** be adjusted to center the steering wheel before driving the vehicle. Failure to do so will cause an error with the factory traction control system and will result in odd handling and decreased performance.
55. Check all components for clearance for suspension to fully cycle up and down and wheels to turn lock to lock. Pay special attention to brake lines, axle vent hoses, and ABS wires. Reposition as needed by bending the brackets, relocating, or extending hoses and wiring.

Final Safety Warning:

56. * Re-torque all fasteners after 100 miles, and frequently inspect all safety critical suspension components. It is the responsibility of the installer to be sure all fasteners are properly tightened after installation and to ensure the owner knows his/her ongoing responsibility. It is the responsibility of the owner of the vehicle to be sure all safety critical components are inspected frequently, especially after off road or other demanding use.



IRON ROCK OFF ROAD

Track Bar Flex End Assembly Instructions

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Parts Checklist:

#122 - Track Bar Flex End Hardware - 12mm (1)

- ☐ Inner race (plastic) 91113 (2)
- ☐ End cap (steel) 91112 (2)
- ☐ Ball 91104 – M12 bolt (1)
- ☐ #5-40 x 1 1/4" Socket head cap screw (9)
- ☐ 3/32" Hex L key, high torque (hex plus) (1)

#254 - Track Bar Flex End Hardware - 14mm (1)

- ☐ Inner race (plastic) 91113 (2)
- ☐ End cap (steel) 91112 (2)
- ☐ Ball 91142 – M14 bolt (1)
- ☐ #5-40 x 1 1/4" Socket head cap screw (9)
- ☐ 3/32" Hex L key, high torque (hex plus) (1)



Safety Warning:

Installation and assembly of this part requires knowledge of steering and suspension systems. Failure to precisely adhere to installation procedure may cause a part failure resulting in vehicle damage and serious injury or death. This part only fits Iron Rock Off Road track bars in good condition. Iron Rock Off Road makes no claims that this part will fit track bars from other manufacturers. Improper fitment may cause a part failure resulting in vehicle damage, serious injury, or death.

Before you begin:

- o Read and understand installation instructions.
- o Contact Iron Rock Off Road with any questions before, during, or after installation.
- o **Ensure that all parts are present and in good condition per attached shipping checklist!**
- o Ensure that you have high strength threadlocker (such as red Loctite) and multi-purpose grease.

Fitment:

This kit replaces the poly bushings and inner sleeve in your Iron Rock Off Road track bar. This part only fits track bars manufactured by Iron Rock Off Road after 2009 with an inside diameter of 1.510", a width of 1.250", and a radiused inside corner.

*****To verify fitment: Remove the track bar from your vehicle, remove the poly bushings, clean the parts, and verify the following is true: *****

- ☐ The plastic races fit tight inside the inside bore.
- ☐ Both end caps fit the inside bore with just a bit of "wiggle room".
- ☐ Both end caps slide in freely until the flat shoulder rests firmly against the end of the outer tube.
- ☐ The overall width of the outer tube is 1.250". This can be measured with a caliper or verified after flex end is fully assembled. Once fully assembled (bolts torqued to spec.) the shoulders of the end caps should rest firmly against the ends of the outer tube. At the same time, the ball should fit tight inside the assembly. It should require a tool (such as a screwdriver) to pivot or rotate the ball. The ball should pivot smoothly with even resistance in any position.



If any of those steps cannot be verified, please contact us to order a new track bar.

Bolt size: This bushing replacement assembly is only available to fit a 12mm & 14mm bolt at this time. Those with a 10mm fastener may wish to upgrade to 12mm hardware for more strength (drill your bracket and install a 12mm bolt).

Assembly:

1. Verify fitment per the "Fitment" section above.
2. Insert four socket head cap screws into one end cap and one race. (Race should have spherical bore facing away from end cap.)
3. Install this small assembly into the track bar outer bushing tube. The races are a light press fit, use a wide punch and hammer to assist you if needed.
4. Apply a thin coat of multi-purpose grease to the ball and the spherical mating surface of the races. Coat both mating surfaces but leave no excess grease that would interfere with the threadlocker adhesive on the bolts.
5. Place the ball into the race inside the housing. The ball should fit the contour of the race perfectly.
6. Insert the other race on top of the ball so that the spherical bore is contacting the ball. Once again, the races are a light press fit, use a hammer and wide punch if needed. (The four screws should be through one end cap and both races at this point.)
7. Apply a generous coating of high strength threadlocker (such as red Loctite) to all 8 screws (including the ones already installed).
8. Install the second end cap, aligning the screws with the tapped holes. When completed 4 screws will be inserted from each side.
9. Insert the last four screws and tighten them all snug.
10. Torque screws in sequence using a crisscross pattern, like torquing lug nuts. Tighten all 8 screws evenly in small steps. Take your time and do not rush. Tighten all 8 screws to 20 in/lbs.



IRON ROCK OFF ROAD

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**Sway Bar Disconnect
Links Instructions**

Parts List:

#268 – Sway Bar Disconnect Bushings (1)

- ☐ Poly Bushing 94025 (4)

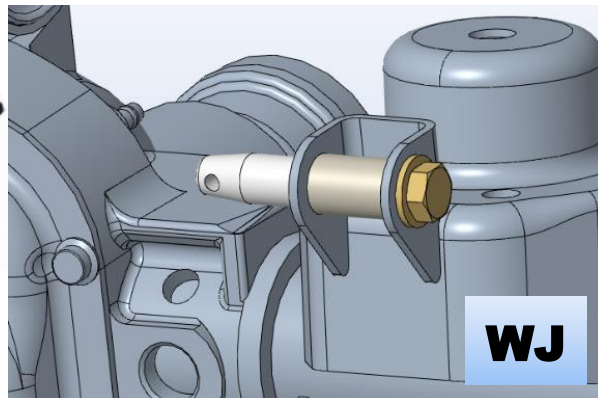
WJ ~Optional~

#267 – WJ Sway Bar Disconnect Hardware (1)

- ☐ Disconnect Pin 94028 (2)
- ☐ Spacer Sleeve 94032 (2)
- ☐ 1/2-20 x 2-1/2" Hex Bolt, gr8 (2)
- ☐ 1/2 F436 Hard Washer (2)
- ☐ 1/4" x 1-1/4" Spring Lynch Pin (2)

#288 – WJ Sway Bar Disconnect Sleeves (1)

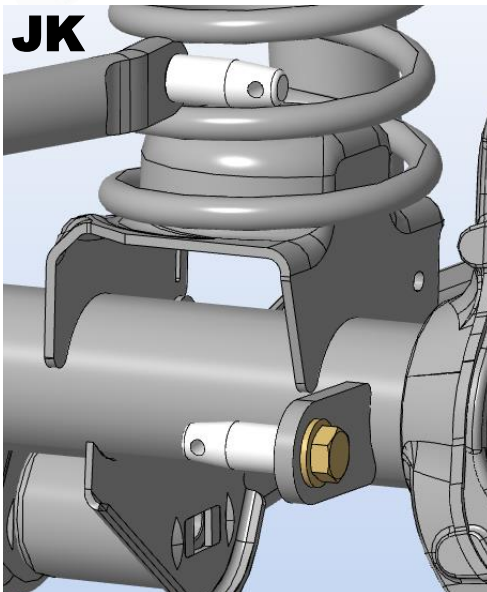
- ☐ 12mm bushing sleeve 92038 (2)



JK ~Optional~

#266 – JK Sway Bar Disconnect Hardware (2)

- ☐ Disconnect Pin 94028 (2)
- ☐ 1/2-20 x 1" Hex Bolt, gr8 (2)
- ☐ 1/2 F436 Hard Washer (2)
- ☐ 1/4" x 1-1/4" Spring Lynch Pin (2)



XJ ~Optional~

#287 – XJ Sway Bar Disconnect Hardware (1)

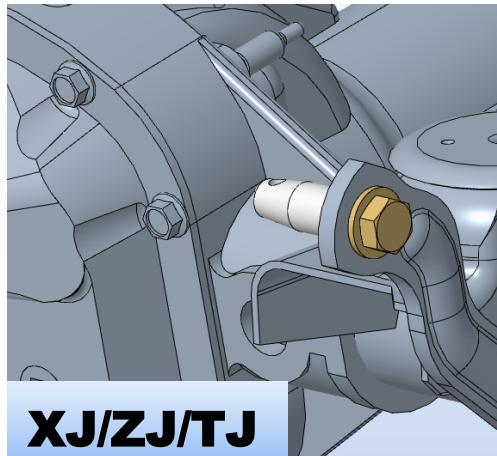
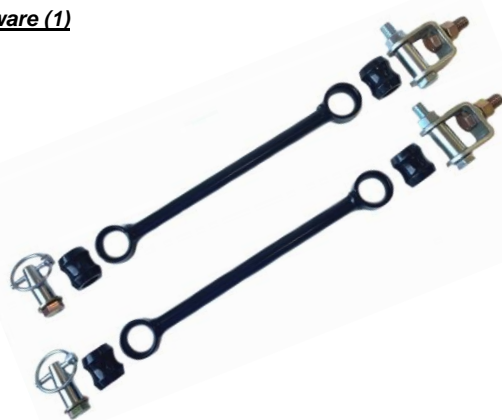
- ☐ Disconnect Pin 94028 (2)
- ☐ 1/2-20 x 1" Hex Bolt, gr8 (2)
- ☐ 1/2 F436 Hard Washer (2)
- ☐ 1/4" x 1-1/4" Spring Lynch Pin (2)
- ☐ 12mm bolt sleeve 92038 (2)
- ☐ M12 x 70 cl10.9 hex bolt (2)
- ☐ M12 cl10.9 hex nut (2)
- ☐ 1/2 x 1 1/2" gr8 hex bolt (2)
- ☐ 1/2 gr8 lock washer (2)
- ☐ 1/2 gr8 hex nut (2)
- ☐ U-Bracket 99000 (2)



TJ & ZJ ~Optional~

#286 – TJ & ZJ Sway Bar Disconnect Hardware (1)

- ☐ Disconnect Pin 94028 (2)
- ☐ 1/2-20 x 1" Hex Bolt, gr8 (2)
- ☐ 1/2 F436 Hard Washer (2)
- ☐ 1/4" x 1-1/4" Spring Lynch Pin (2)
- ☐ 12mm bolt sleeve 92038 (2)
- ☐ M12 x 60 hex bolt, cl10.9 (2)
- ☐ M12 hex nut, cl10.9 (2)
- ☐ M10 x 30 hex bolt, cl10.9 (2)
- ☐ 3/8" USS washer (2)
- ☐ M10 hex nut, cl10.9 (2)
- ☐ U-Bracket 99000 (2)



Installation Instructions:

Safety Warning: *Important! Read before installation. *

We recommend this system be installed by a qualified professional. Knowledge of suspension component function is necessary for safe installation and post installation inspections. Be sure to re-torque all suspension components after the first 100 miles of use, and frequently inspect all safety critical suspension components frequently.

Notes:

- ☐ Do not operate vehicle with only one side of the sway bar connected. Both sides of the sway bar must either be disconnected or both sides must be connected.

Before you begin:

- ☐ Read all safety warnings.
- ☐ Read and understand installation instructions.
- ☐ Contact Iron Rock Off Road with any questions before, during, or after installation. 952-210-7185
- ☐ **Ensure that all parts are present and in good condition using the included shipping checklist.**
- ☐ Be sure you have the following tools and supplies:
 - ☐ Floor jack and jack stands.
 - ☐ Basic hand tools (wrenches, sockets, etc.).
 - ☐ Multi-purpose grease

Prepare for installation:

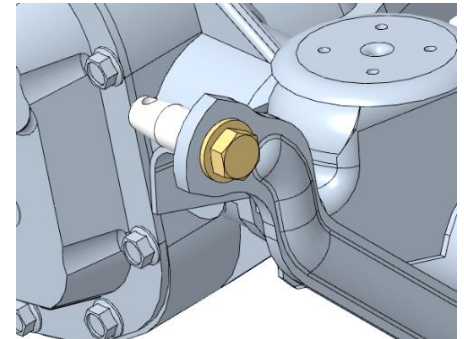
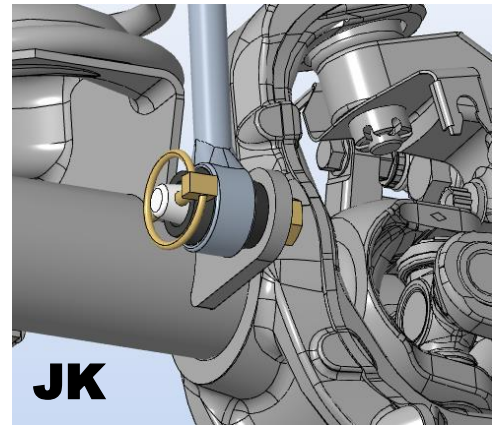
1. Locate the front sway bar links, bushings, and bolt sleeves.
2. Grease and install the hourglass bushings.
3. Grease and install the sway bar link inner sleeves in only one end of each link.
4. Raise the vehicle and secure on jack stands under the frame.
5. Remove the front tires.
6. Disconnect the original front sway bar links from the axle and sway bar.

XJ Installation:

7. Locate front sway bar links, two u-brackets, and **HK #287**.
8. Install sway bar link u-brackets to the sway bar using 1/2 x 1-1/2" grade 8 hex bolts, lock washers, and nuts. Brackets mount to the bottom of the sway bar with the bolt facing up and the lock washer and nut on top of the sway bar. Rotate the bracket so it is offset away from the center of the vehicle. Align brackets, torque bolts to 80 ft-lbs.
9. Install sway bar links driver's side first using provided M12 x 60mm class 10.9 hex bolt and nut through the u-bracket with the nuts toward the outside of the vehicle. Tighten all bolts to 78 ft-lbs.
10. Install the disconnect pin on the axle, pin pointing in-board. Use the 1/2" x 1" bolt with a washer.
Tip: Before tightening determine your desired orientation for the retaining pin.
11. Hold the disconnect pin in your desired orientation and torque the bolt to 70lb-ft.
12. Apply grease to the disconnect pin and slide the sway bar link onto the disconnect pin.
13. Secure the sway bar link in place using the spring lynch pin.
***NOTE:** The spring lynch pin should take some effort to install. This is done on purpose to keep the link secure and noise free.
14. Reinstall tires and torque lug nuts to spec.
15. Lower vehicle to the ground.
16. With the vehicle back on the ground, pull the spring pins and slip the sway bar links off the disconnect pins.
17. Swing the sway bar links up to the sway bar then swing the sway bar up to its highest position.
18. Flex the suspension and steer fully left and right. Check for possible interference between the tires and sway bar.
19. Reconnect the sway bar links to the axle.
20. For ease of installation and best performance, re-grease the sway bar bushings periodically.

ZJ and TJ Installation:

21. Locate front sway bar links, two u-brackets, and **HK #286**.
22. Install sway bar link u-brackets to the sway bar using M10 x 30 hex bolts nuts and washers. Brackets mount to the bottom of the sway bar with the bolt facing up and the washer and nut on top of the sway bar. Align brackets with offset holes pushing the brackets toward the outside of the vehicle. Torque to 60 ft-lb.
23. Install sway bar links driver's side first using provided M12 x 60mm class 10.9 hex bolt and nut through the u-bracket with the nuts toward the outside of the vehicle. Tighten all bolts to 78 ft-lb.
24. Install the disconnect pin on the axle, pin pointing in-board. Use the 1/2" x 1" bolt with a washer.
Tip: Before tightening determine your desired orientation for the retaining pin.
25. Hold the disconnect pin in your desired orientation and torque the bolt to 70lb-ft.
26. Apply grease to the disconnect pin and slide the sway bar link onto the disconnect pin.
27. Secure the sway bar link in place using the spring lynch pin.
***NOTE:** The spring lynch pin should take some effort to install. This is done on purpose to keep the link secure and noise free.
28. Reinstall tires and torque lug nuts to spec.
29. Lower vehicle to the ground.
30. With the vehicle back on the ground, pull the spring pins and slip the sway bar links off the disconnect pins.
31. Swing the sway bar links up to the sway bar then swing the sway bar up to its highest position.
32. Flex the suspension and steer fully left and right. Check for possible interference between the tires and sway bar.
33. Reconnect the sway bar links to the axle.
34. For ease of installation and best performance, re-grease the sway bar bushings periodically.

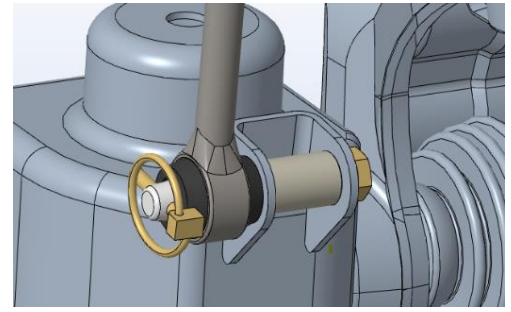


WJ Installation:

35. Install the sway bar links onto the sway bar using the original hardware.
36. Install the disconnect pin on the axle, pin pointing in-board, spacer sleeve inside the mount.
Use the 1/2" x 2-1/2" bolt with a washer.
Tip: Before tightening determine your desired orientation for the retaining pin.
37. Hold the disconnect pin in your desired orientation and torque the bolt to 70lb-ft.
38. Install the new bushings into your sway bar links using plenty of multi-purpose grease.
39. Reinstall your sleeves into the top of the sway bar link bushing using multi-purpose grease.
40. Reinstall your sway bar link onto the sway bar and torque the bolts to 70lb-ft.
41. Apply grease to the disconnect pin and slide the sway bar link onto the disconnect pin.
42. Secure the sway bar link in place using the spring pin.

***NOTE:** The spring pin should take some effort to install. This is done on purpose to keep the link secure and noise free.

43. Reinstall tires and torque lug nuts to spec.
44. Lower vehicle to the ground.
45. With the vehicle back on the ground, pull the spring pins and slip the sway bar links off the disconnect pins.
46. Swing the sway bar links up to the sway bar then swing the sway bar up to its highest position.
47. Flex the suspension and steer fully left and right. Check for possible interference between the tires and sway bar.
48. Reconnect the sway bar links to the axle.
49. For ease of installation and best performance, re-grease the sway bar bushings periodically.



JK Installation:

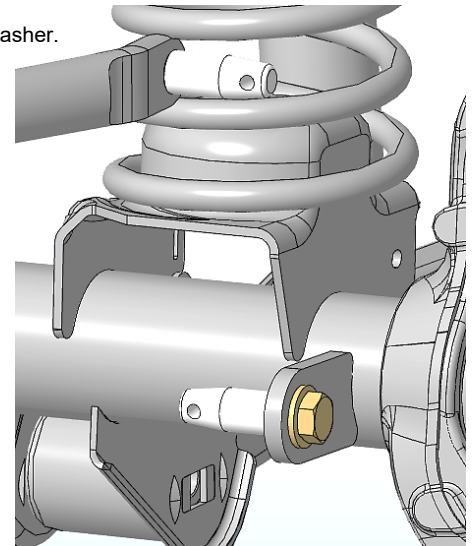
50. Use a 1/2" drill bit to slightly enlarge the bolt hole in the sway bar. Only a very minor amount of material will be removed.
51. Install the disconnect pin on the axle, pin pointing in-board. Use the 1/2" x 1" bolt with a washer.
52. Install the disconnect pin on the sway bar, pin pointing out-board. Use the 1/2" x 1" bolt with a washer.

Tip: Before tightening determine your desired orientation for the retaining pin.

53. Hold the disconnect pin in your desired orientation and torque the bolts to 70lb-ft.
54. Install the bushings into the sway bar links using plenty of multi-purpose grease.
55. Apply grease to the disconnect pins and slide the sway bar link onto the disconnect pins.
***NOTE:** Twist the passenger side link onto the lower pin first, then slide it onto the upper pin. It is a snug fit with the factory track bar bracket, but it is achievable.
56. Secure the sway bar link in place using the spring pins.

***NOTE:** The spring pin should take some effort to install. This is done on purpose to keep the link secure and noise free.

57. Reinstall tires and torque lug nuts to spec.
58. Lower vehicle to the ground.
59. With the vehicle back on the ground, pull the spring pins and slip the sway bar links off the disconnect pins.
60. Swing the sway bar up to its highest position.
61. Flex the suspension and steer fully left and right. Check for possible interference between the tires and sway bar.
62. Reconnect the sway bar links to the axle.
63. For ease of installation and best performance, re-grease the sway bar bushings periodically.



Final Safety Warning:

***Both sides of the sway bar must be disconnected. Do not operate vehicle with only one side of the sway bar connected.**

Re-torque all fasteners after 100 miles, and frequently inspect all safety critical suspension components. It is the responsibility of the installer to ensure all fasteners are properly tightened after installation and to ensure the owner knows his/her ongoing responsibility. It is the responsibility of the owner of the vehicle to be sure all safety critical components are inspected frequently, especially after off road or other demanding use.

