

IRON ROCK OFF ROAD

TJ 4" Benchmark Series Lift Kit

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

Instructions

Parts Checklist:

- TJ 4" Front springs 96016 (2)
- TJ 4" Rear springs 96005 (2)
- Iron Rock logo decals (2)
- Ironrockoffroad.com decal (1)
- Rear track bar relocation bracket 85031 (1)
- TJ 0-8" Adjustable front track bar 85096 (1)
- Track bar male threaded end 92004 (1)
- TJ 0-8" double shear TB bracket 85124 (1)
- Adjustable rear upper control arm 99069B (2)
 - Rear UCA Threaded Male End 99063B (2)
 - 1-14 Jam Nut (2)

#11 - Brake Line Relocation (1)

- 1/4 x 1" Self drilling sheet metal screw (2)

#53 - Rear Track Bar Bracket (1)

- 12mm Track Bar Sleeve 92035 (1)
- 7/16 x 1 1/4 gr8 hex bolt (3)
- M12 x 70 cl10.9 hex bolt (2)
- 7/16 gr8 hex nut (3)
- M12 cl10.9 hex nut (2)
- 7/16 USS washer (7)

#129 - Front Track Bar Hardware (1)

- Track bar bushing half M20919 (4)
- 7/16" TB bushing sleeve 92036 (1)
- 12mm TB bushing sleeve 92035 (1)
- 7/16 x 2-1/2" lg gr8 hex bolt (1)
- 7/16 gr8 hex nut (1)
- M12 x 65 hex bolt, cl10.9 (1)
- M12 nylock nut cl10.9 (1)
- 5/16 x 2.0 carriage bolt gr5 (1)
- 5/16-18 flange nut (1)
- Clamping bracket 95044 (1)

#130 - TJ 0-8" Track Bar Bracket Hardware (1)

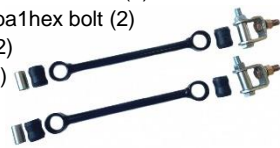
- 1/2-20 x 2 hex bolt, gr8 (1)
- 1/2 SAE hardened washer (2)
- 1/2-20 nylock nut, gr8 (1)
- 3/8-16 x 2 hex bolt, gr8 (1)
- 3/8-16 nylock nut, gr8 (1)
- 3/8 USS washer (2)
- 1/2" Tapered sleeve 95043 (1)

~Standard Front Sway Bar Links~

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

#58 - TJ Sway Bar Link Hardware (1)

- 3/4" I.D. hourglass shock bushings 94025 (4)
- 12mm I.D. sway bar bolt sleeves 92038 (4)
- 12mm x 60mm class 10.9 ba1hex bolt (2)
- 12mm class 10.9 hex nut (2)
- M10 x 30 cl10.9 hex bolt (2)
- 3/8 USS washer (2)
- M10 cl10.9 hex nut (2)
- Sway bar link u-bracket 99000 (2)



~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)

#286 - TJ 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)

Standard Rubber Bushing Lower Control Arms (Rear)

- Adjustable bent lower control arm, bushing installed 99169B (2)
- LCA Threaded Male End, bushing installed 99070 (2)

#65 - Adjustable LCA Clamping Hardware (1)

- 1/4"-28 x 1-1/8" socket head cap screw (4)
- 1/4"-28 hex nut, gr8 (4)



Optional Flex Joint Lower Control Arms (Rear)

- Adjustable bent lower control arm, bushing installed 99169B (2)
- LCA Threaded Male End 92186 (2)

#65 - Adjustable LCA Clamping Hardware (1)

- 1/4"-28 x 1-1/8" socket head cap screw (4)
- 1/4"-28 hex nut, gr8 (4)

#127 - 2 5/8" 6 Bolt IRO Flex End Hardware (2)

- Inner race 91118 (2)
- Thrust washer 91119 (2)
- 2-5/8" Flex End Ball 91117 (1)
- 10-32 x 1-3/4" Socket Head Cap Screw (6)
- 10-32 Nylock Nut (6)
- 1/4"-28 90° Grease zerk Fitting (1)

T-case Drop Kits

Optional: 1997 to 2002 (15201)

- Transfer case drop spacer 85039, 23 5/8" long (1)
- Transfer case drop spacer 85040, 20 5/8" long (1)

#74 '97-'02 T-case Drop Hardware (1)

- Plastic end cap 1-1/2 x 2 RER1-1/2x2-10-14(4)
- 1/2 x 3" flat head cap screw (6)

Optional: 2003 to 2006 (15202)

- Transfer case drop spacer 85041, 23" long (2)

#75 '03-'06 T-case Drop Hardware (1)

- Plastic end cap 1 1/2 x 2 RER1-1/2x2-10-14 (4)
- 1 1/4" tall, round spacer block 88073 (2)
- M12 x 70 cl10.9 hex bolt (8)
- 7/16 USS washer (6)

- TJ 0-8" Adjustable front track bar 85096 (1)

- Track bar male threaded end 92004 (1)

- TJ 0-8" double shear TB bracket 85124 (1)



~Standard Front Track Bar~

#129 - Front Track Bar Hardware (1)

- Track bar bushing half M20919 (4)
- 7/16" TB bushing sleeve 92036 (1)
- 12mm TB bushing sleeve 92035 (1)
- 7/16 x 2 1/2" lg gr8 hex bolt (1)
- 7/16 gr8 hex nut (1)
- M12 x 65 hex bolt cl10.9 (1)
- M12 nylock nut cl10.9 (1)

Installation Instructions

Safety Warning: Installing a suspension lift kit raises the center of gravity of the vehicle. This increases the possibility of a rollover accident. Avoid sudden maneuvers at high speed and avoid all situations where a side rollover may occur. In addition, larger tires decrease braking performance, please drive accordingly. We recommend a tire and wheel combination that make the vehicle's track width wider (wheels with less backspacing). This will lower the center of gravity and add stability. We also recommend that 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.

Before you begin:

- ***Ensure that all parts are present and in good condition using above shipping checklist.***
- Read all safety warnings.
- Read and understand installation instructions.
- A coil spring compressor will make installation easier but is not required. You may wish to borrow, rent, or buy one if you don't have one.
- You will need a hand drill with 1/4", and 7/16" drill bit.
- Check all steering and suspension components for wear and replace as needed.
- Contact Iron Rock Off Road or authorized dealer with any questions before, during, or after installation.

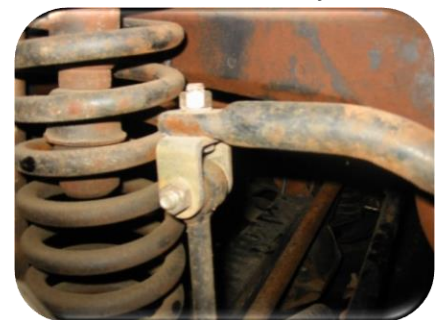
Front suspension:

1. Lift front of vehicle and support with tall jack stands under the frame.
*Tip: break lug nuts loose before lifting vehicle.
2. Ensure that vehicle is safely supported.
3. Remove front tires.
4. Place a floor jack under front axle for support (do not lift vehicle).
5. Remove front shocks.
6. Remove front sway bar links.
7. Remove front track bar.
8. Loosen all upper and lower control arm bolts (do not remove).
9. Locate **HK #11**.
10. On one side, remove the bolt that holds the brake hose to the frame.
11. Any rusted, worn, cracked, or damaged rubber or steel brake line should be replaced.
12. Pull brake line down as far as possible without over-stressing or causing a kink in the line.
*Note: Your brake line may appear different from the photo. Do not pull too far and damage the brake line.
13. Using two adjustable wrenches bend brake line bracket mounting surface so brake line points out toward the brake caliper. See photo.
14. Mark location and drill a 1/4" hole for the brake line locating tab.
15. Fasten brake line to the frame using provided self-drilling sheet metal screw.
16. Repeat for other side.
17. If you upgraded to Flex Joints in your control arms or track bar, refer to the instructions at the end of this document.
18. Locate the front track bar and **HK #129**. *Optional Flex Joint at the frame. *
19. Install the clamp onto the threaded end of the track bar. Apply anti-seize compound to male threads. Thread male end into track bar. Install carriage bolt and nut into clamp finger tight. Nut must face forward when installed.
20. Adjust the length to 32-5/8" center to center as a starting point. This may need to be adjusted after a short test drive.



*****Safety Warning: Maximum track bar length is approx. 33-1/4" center to center. If you are near this maximum length, you MUST verify that you have at least 1" of thread engagement. Failure to perform this simple double check can cause track bar failure, which may result in serious injury or death.**

21. Lubricate track bar bushings and bushing sleeves with multi-purpose grease and install into track bar. The smaller I.D. bushing sleeve is installed at axle end (with adjusting threads), and the larger I.D. sleeve at frame end (without adjusting thread).
22. Leave the rest of the hardware in the bag for future use.
23. Install track bar bracket. Use tapered sleeve. Install 1/2" bolt facing up (nut on top) with an SAE washer under the bolt and nut. Ensure the bracket sits flush, grind down any high spots as needed. Tighten 1/2" bolt before drilling the 3/8" hole. Drill the upper hole through the bracket using a 3/8" drill bit. Peck drill and use plenty of oil. Install 3/8 bolt with nut on the inside (toward engine). Torque 1/2" bolt to 85 ft-lbs.
24. Install new track bar. If necessary, use the steering wheel and/or a floor jack to align the track bar to the bolt holes. Do not use washers on the bolts. For clearance purposes, frame side nut must face rearward and bolt head forward. Use M12 x 65mm bolt and nylock nut at frame, and 7/16 x 2 1/2 bolt and nut at axle.
25. If you are not using a coil spring compressor, unbolt the driver's side lower control arm at frame.
26. Remove the coil spring clamps (at the axle).
27. Lower axle as far as needed to remove coil spring.
28. Install new spring in vehicle being careful to align the spring to the spring bucket on the axle.
29. Re-install lower control arm at frame, do not tighten bolt at this time.
30. Repeat for passenger side of vehicle.
31. Install new front shocks. Tighten upper stud mount nuts just enough to slightly compress the bushings. Over compressing these bushings will result in premature bushing failure.
32. Locate front sway bar links (10.75" center to center) and **HK #58**. If you upgraded to IRO Sway Bar Disconnect system, refer to the instructions at the end of this document.
33. Install sway bar link u-brackets to the sway bar using M10 x 30 hex bolts, washers, and nuts. Brackets mount to the bottom of the sway bar with the bolt facing up and washer and nut on top of the sway bar (see photo). Align brackets with offset holes pushing the brackets toward the outside of the vehicle. Torque nuts to 60 ft.-lbs.
34. Lubricate sway bar link bushings and bushing sleeves with multi-purpose grease and install into sway bar links.



35. Install sway bar links passenger side first using provided M12 x 70mm hex bolt and nut through the u-bracket with the nuts toward the outside of the vehicle, and the original bolt, nut, and washer at the axle. Torque all nuts to 78 ft.-lbs.
36. Raise vehicle from jack stands and place jack stands under the axle (front and rear).
37. Install coil spring clamps.
38. With the vehicle's weight on the suspension, torque upper control nuts to 60 ft.-lbs.
39. Torque lower control arm nuts to 120 ft.-lbs.
40. Install front tires.
41. Torque lug nuts to spec.
42. Torque any other loose bolts to spec.

Rear Suspension:

43. Locate upper and lower control arms.
 - Remove male threaded end and apply anti-seize to threads.
 - Adjust to these lengths: Lower control arm, 16-1/2" center to center, Upper 13-5/8" center to center.
 - Install clamping bolts **HK #65** or tighten jam nut. Jam nut will be tightened again after installation in the Jeep.
44. If you upgraded to Flex Joints in your control arms refer to the instructions at the end of this document.
45. Lift rear of vehicle and support with tall jack stands under the frame.
 - *Tip: break lug nuts loose before lifting vehicle.
46. Ensure that the vehicle is safely supported.
47. Remove rear tires.
48. Place a floor jack under the axle for support (do not lift vehicle).
49. Remove rear shocks.
50. Remove rear track bar.
51. Loosen upper and lower control arm bolts (do not remove).
52. Remove upper control arm on one side and install new upper control arm. Do not tighten bolts at this time.
53. Repeat for other side.
54. Remove driver's side lower control arm.
55. Allow suspension to droop as much as possible.
56. Remove brake hose center mounting bracket by unbending with 2 pliers.
57. Bend rear brake hose hard line at axle as needed to allow for full suspension droop.
58. Remove rear coil springs.
59. Locate track bar relocation bracket and **HK #53**.
60. Install bracket with 12mm I.D. track bar sleeve in place of original track bar. Ensure proper alignment and tighten bolt.
61. Drill 3 additional bolt holes using a 7/16 drill bit (a close quarters drill is very helpful, or a drill bit can be shortened if needed).
62. Install 7/16 x 1-1/4" bolts, washers and nuts, and torque to 60 ft.-lbs.
63. Install driver's side coil spring and lower control arm. Do not tighten bolts at this time.
64. Remove passenger side lower control arm.
65. Install passenger side coil spring and lower control arm. Do not tighten bolts at this time.
66. Ensure male ends are parallel with control arm mounts then torque lower control arm clamping bolts to **140 in-lb**. Be sure to go back and forth between both bolts several times to ensure even clamping.
67. Install original rear track bar but do not tighten bolts at this time.
68. Install new shocks.
69. Raise vehicle from jack stands and place jack stands under the axle.
70. With the vehicle's weight on the suspension, torque upper control arm nuts to 60 ft.-lbs.
71. Torque lower control arm nuts to 120 ft.-lbs.
72. Torque track bar bolts to 78 ft.-lbs.
73. Install rear tires.
74. Torque lug nuts to spec.
75. Torque any other loose bolts to spec.
76. Lower vehicle from jack stands.



Adjust Front Track Bar:

1. With the weight of the vehicle resting on the tires and the tires on the ground, bounce the front end up and down to seat the springs.
2. Measure from each front tire to the frame (left to right) and adjust front track bar length until these measurements are equal.
3. Torque track bar thread clamp very tight.

Transfer Case Drop Kit:

4. Locate transfer case drop spacers and **HK #74** or **HK #75** (depending on model year of your Jeep).
5. Loosen four tranny mount nuts near the center of the belly skid plate (do not remove).
6. Place a floor jack under the center of the belly skid plate for support.
7. On one side of the Jeep, remove 3 bolts that hold the belly skid to the frame.
8. Lower the belly skid enough to insert a spacer between the frame and belly skid.
9. Install new longer bolts (do not tighten at this time).
10. Repeat for other side.
11. Torque all bolts to spec. including tranny mount nuts near the center of the belly skid.

Adjustments and Safety Inspection:

12. 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 line length and location of all brake lines, axle vent hoses, and ABS wires. Reposition as needed.
13. Verify transfer case shifter will lock into each position. Adjust as needed.
14. A professional front end alignment is required after installation. Your toe-in will be affected and may cause unpredictable steering and accelerated tire wear.
 - Recommended caster setting: +3.00 to +6.0 (+4.5 degrees is preferred)
 - Recommended toe in setting: 0 degrees

* Re-torque all fasteners, including lug nuts, after 100 miles, and frequently inspect all safety critical suspension components.

IRON ROCK OFF ROAD

2-5/8" IRO Flex End (6 bolt)
Assembly Instructions

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

Fits All Iron Rock Off Road Long Arm Systems, WJ A-Arms, and Build Your Own Flex End Assemblies.

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 Have these tools handy:
 - o 5/32" Allen head socket
 - o 3/8" open end wrench
 - o Inch-lb. torque wrench
 - o Multipurpose grease/grease gun

Parts Checklist:

- Outer housing, weld on (may already be attached to your existing control arm)

#127 - 2-5/8" IRO Flex End (6 bolt)

- 2-5/8" flex end race 91118 (2)
- Thrust washer 91119 (2)
- 2-5/8" flex end ball 91117 (1)
- #10-32 nylock nut (7)
- #10-32 x 1-3/4" socket head cap screw (6)
- 90° 1/4"-28 grease zerk fitting (1)

Assembly:

1. Insert two #10-32 socket head cap screws into one thrust washer and one plastic race. Spherical bore of race facing away from thrust washer. (Figure 1)
2. Install this small assembly into the flex end housing. The races are a light press fit, use a wide punch and hammer to assist you if needed.
3. Apply a thin coating of multi-purpose grease to the mating surfaces of the ball and both races.
4. Place the ball in the race (inside the flex end). The ball should perfectly fit the contour of the race. (Figure 2)
5. Insert the other race onto 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 two screws should be through one washer and both races at this point)
6. Insert the second thrust washer on top of the flex end housing, sliding the bolts through the holes. (Figure 3)
7. Start nylock nuts on the two bolts that are in the flex end assembly. Hold the nut and turn the bolt.
8. Insert the remaining four cap screws through the remaining holes and install nuts. (Figure 4)
9. Snug up all of the bolts fairly tight.
10. Torque bolts evenly, starting at one bolt and continuing using a crisscross pattern. Torque all six bolts to 70 in-lbs., then to 85 in-lbs.
11. Install 90° grease zerk fitting so that it is easily accessed in the vehicle.
12. Grease flex end until grease comes out of the races around the ball.
13. Re-torque bolts to 85 in-lbs. after 5 minutes.



Figure 1



Figure 2



**Reference Only* Complete joint shown fully assembled without housing*



Figure 3



Figure 4

IRON ROCK OFF ROAD

Sway Bar Disconnect Link Instructions

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Parts List:

#268 – Sway Bar Disconnect Bushings (1)

- Poly Bushing 94025 (4)

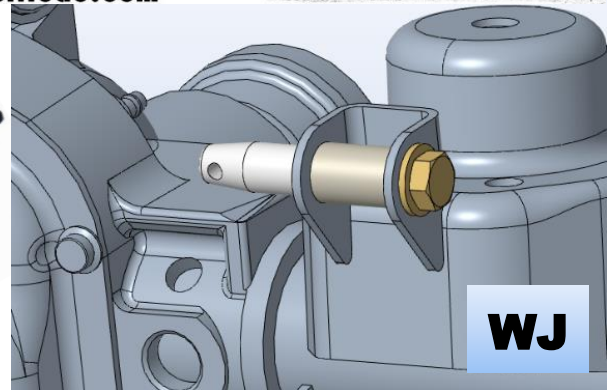
WJ ~Optional~

#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)

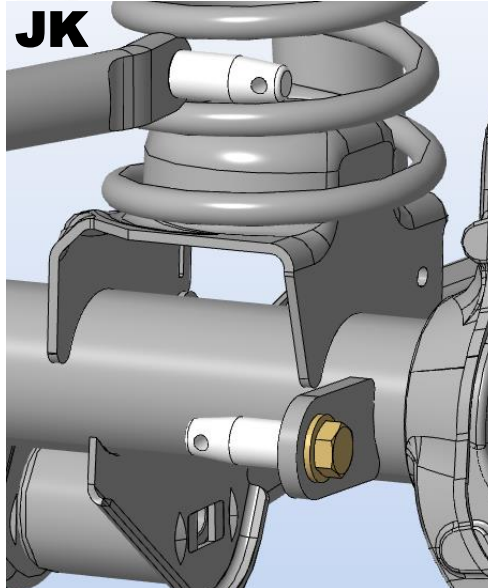
- 12mm bushing sleeve 92038 (2)



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)

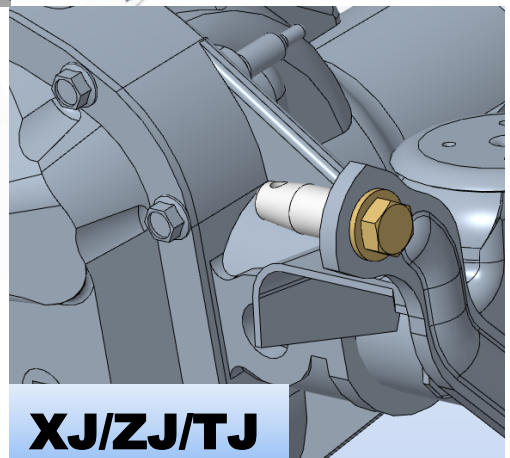
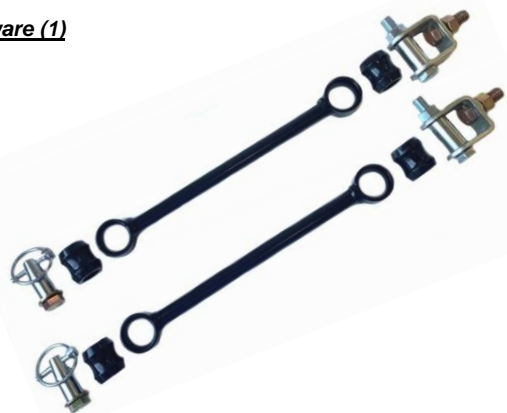
- Disconnect Pin 94028 (2)
- 1/2-20 x 1" Hex Bolt, gr8 (2)
- 1/2 F436 Hard Washer (2)
- 1/4" x 1-1/4" Spring Lynch Pin (2)
- 12mm bolt sleeve 92038 (2)
- M12 x 70 cl10.9 hex bolt (2)
- M12 cl10.9 hex nut (2)
- 1/2 x 1 1/2" gr8 hex bolt (2)
- 1/2 gr8 lock washer (2)
- 1/2 gr8 hex nut (2)
- U-Bracket 99000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

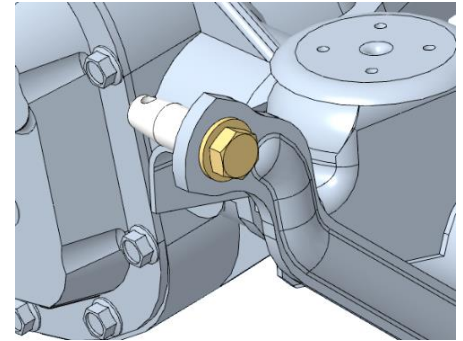
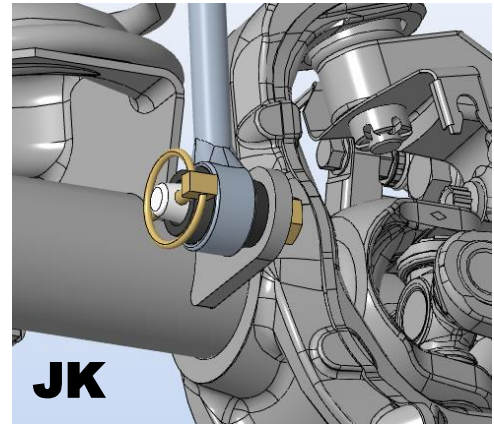
1. Locate the front sway bar links, bushings, and bolt sleeves.
2. Grease and install the hourglass bushings.
3. Grease and install the sway bar link inner sleeves in only one end of each link.
4. Raise the vehicle and secure on jack stands under the frame.
5. Remove the front tires.
6. Disconnect the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

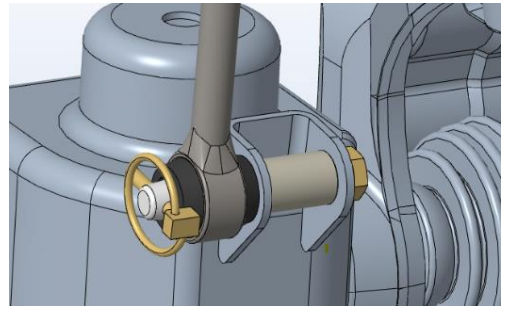


WJ Installation:

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.

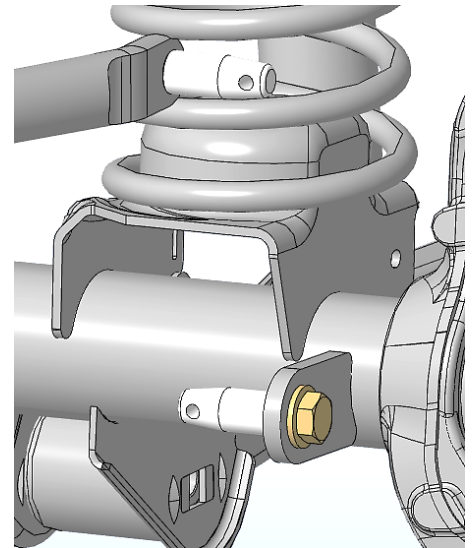


JK Installation:

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.



IRON ROCK OFF ROAD

Track Bar Flex End Assembly Instructions

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

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 "wobble 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.

