

# IRON ROCK OFF ROAD

WJ 4" Benchmark Lift Kit  
Instructions

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

## Parts Checklist:

- 4" Front springs 96006 (2)
- 4" Rear springs 96007 (2)
- Iron Rock Off Road logo decal (1)
- Rear sway bar link, 13.5" center to center 92148 (2)
- WJ 4-hole transfer case drop spacers 92026 (2)
- A-arm spacer 92023 (1)

### #2 - Rear Sway Bar Link Hardware (1)

- 3/4" hourglass bushing 94025 (4)
- 12mm sway bar bolt sleeve 92038 (2)
- 10mm sway bar bolt sleeve 92037 (2)
- M10 x 70 sway bar link bolt (2)
- M10 X 1.5 nylock flange nut (2)
- 7/16 USS washer (2)

### #3 - Shocks Hardware (1)

- 12mm shock bolt sleeve 404739 (2)
- 7/16" washer (6)
- 5/16 x 1 hex bolt (4)
- 5/16-18 hex nut (4)
- 5/16 washer (8)

### #5 - T-Case Drop Hardware (1)

- M10 x 150mm class 10.9 bolt (4)
- 3/8" USS washer (4)

### #19 - A-arm Spacer Hardware (1)

- M14 x 80 cl10.9 hex bolt (3)
- 1/2" USS washer (3)

- Double adjustable track bar 92305 (1)
- Double adjustable track bar male end 92297 (1)
- Double adjuster, track bar 91235 (1)



### -Standard Front Track Bar-

#### #253 - WJ Double Adjustable Track Bar Hardware (1)

- Track bar bushing half 80014 (4)
- 12mm track bar bushing sleeve 92035 (2)
- Track bar clamp 92303 (2)
- M12-1.75 x 80 hex bolt (2)
- M12-1.75 hex nut (2)
- 7/16" USS flat washer (4)

### -Optional Front Track Bar-

#### #122 - Track Bar Flex End Hardware - 12mm (2)

- 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)

#### #305 - WJ Premium Track Bar Hardware (1)

- Track bar clamp 92303 (2)
- M12-1.75 x 80 hex bolt (2)
- M12-1.75 hex nut (2)
- 7/16" USS flat washer (4)

### Standard Front Sway Bar Links

- Front Sway Bar Link, 11.25" center to center 92147 (2)

#### #4 - Front Sway Bar Link Hardware - 10046 (1)

- 3/4" hourglass bushing 94025 (4)
- 12mm sway bar bolt sleeve 92038 (4)

### Optional Front Sway Bar Disconnect Upgrade

- Front Sway Bar Link, 11.25" center to center 92147 (2)

#### #268 - Sway Bar Disconnect Bushings (1)

- Poly Bushing 94025 (4)

#### #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)

### Standard: Front Rubber Bushing Lower Control Arms 13029 (1)

- Adjustable lower control arm, bushing installed 92347B (2)
- LCA male end, bushing installed, straight 99070B (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)

#### #66 - LCA Spacers Hardware (1)

- Lower control arm bushing spacer 90194 (2)

#### #78 - LCA Spacers Hardware (1)

- Lower control arm bushing spacer 90194 (4)

### Optional: Front Flex Joint Lower Control Arms 13028 (1)

- Adjustable lower control arm, bushing installed 92347B (2)
- LCA male end, flex joint, straight 92186 (2)



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

- Inner race 91118 (2)
- Thrust washer 91119 (2)
- Ball 91117 (1)
- 10-32 x 1-3/4" Socket Head Cap Screw (6)
- 10-32 Nylock Nut (6)
- 90 Degree 1/4"-28 Grease Zerk Fitting (1)

#### #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)

#### #66 - LCA Spacers Hardware (1)

- Lower control arm bushing spacer 90194 (2)

#### #78 - LCA Spacers Hardware (1)

- Lower control arm bushing spacer 90194 (4)

### Shocks

#### Trail Tamer HD Hydro (Standard)

- Front Shock 79001 (2)
- Rear Shock 79004 (2)

#### Doetsch Upgrade (Optional)

- Front shock DT 8352 (2)
- Rear shock DT 8299 (2)

#### #9 - Shock Hardware (1)

- Front Shock barpin 403827 (2)

#### Bilstein Upgrade (Optional)

- Front shock 33-230351 (2)
- Rear shock 33-185552 (2)

#### #9 Shock Hardware (1)

- Front shock barpin 403827 (2)



952-210-7185  
877-919-JEEP

# Installation Instructions:

## **Safety Warning: \*\*\*Important! Read before installation.\*\*\***

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 makes the vehicle's track width wider (wheels with less backsparing). 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:**

- Read all safety warnings.
- Read and understand installation instructions.
- Check all steering and suspension components for wear and replace as needed.
- Contact Iron Rock Off Road with any questions before, during, or after installation.
- 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
  - Multi-purpose grease (all poly bushings should be greased before installation)
  - Anti-seize compound.



**Figure 1**

## **Prepare the parts for installation:**

1. Locate hardware kit 3 and the rear shocks.
2. Grease and install the 5/8" I.D. shock bushings included with the shocks.
3. Grease and install the four 12mm shock bolt sleeves (two from **hardware kit #3**, two included with the shocks). The rear shocks use 12mm sleeves at the top and bottom.
4. Grease and install barpins into the lower end of the front shocks as shown in **figure 1**.
5. Leave the rest of the hardware in the bag for future use.
6. Locate track bar, track bar male end, double adjuster, and **HK #253**. Install clamps onto the double adjuster.  
\*\*If you upgraded to the Premium Track Bar refer to the instructions at the end of this document.
7. Apply anti-seize to all the threads then thread the track bar and male end into the double adjuster. Ensure the ends are equally threaded into the double adjuster then adjust the length to 32-3/4" center to center.
8. Lubricate track bar bushings and steel bushing sleeves with multi-purpose grease and install into track bar.
9. Locate the rear sway bar links (13.5" center to center) and **HK #2**.
10. Grease and install the hourglass bushings.
11. Grease and install the sway bar link bolt sleeves. Each link gets one 12mm I.D. sleeve and one 10mm I.D. sleeve.
12. Leave the rest of the hardware in the bag for future use.
13. If you upgraded to IRO Front Sway Bar Disconnect system, refer to the instructions at the end of this document.
14. Locate the front sway bar links (11.25" center to center) and **HK #4**.
15. Grease and install the hourglass bushings.
16. Grease and install the sway bar link bolt sleeves. All sleeves are the same (12mm I.D.).
17. Locate front lower control arms and **HK #65**, adjust length to 15-7/8" as a starting point. Install clamping bolts loosely.

## **Front suspension:**

18. Lift front of vehicle and support with tall jack stands under the unibody frame.  
\*\*Tip: break lug nuts loose before lifting vehicle.
19. Ensure that vehicle is safely supported.
20. Remove front tires.
21. Place a floor jack under the center of the front axle for support (do not lift vehicle).
22. Remove front shocks.
23. Remove the track bar.
24. Remove front sway bar links.
25. Loosen all upper control arm bolts (do not remove). \*Note: Bushing damage will occur if you skip this step.
26. Remove Lower control arms.
27. With the axle hanging as low as possible, remove coil springs and lower spring isolators.
28. Snap the spring isolators into the new springs.
29. Install new springs in vehicle being careful to align isolator pin with the hole in the spring bucket.
30. Install lower control arms with adjusting threads at uniframe side.  
\*\*Lower control arm length may need to be adjusted based on front driveshaft and desired caster angle. \*\*
31. Install new lower control arms with spacers on the outboard side of the bushings, 2 at each axle bushing, 1 at each unibody bushing. Do not tighten bolts at this time.
32. 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.
33. Install new front shocks using provided bolts, washers, and nuts. Tighten upper stud mount nuts just enough to slightly compress the bushings. Over compressing these bushings will result in damage to the bushings and premature bushing failure.
34. Install new sway bar links. Re-use the existing bolts and nuts. Torque all four nuts to 78 ft-lbs.
35. Install track bar. Torque both bolts to 105 ft-lbs. Do not tighten clamps at this time.  
**Note:** The short end of the track bar goes to the axle mount.
36. Any remaining loose bolts will be tightened after installing the rear suspension.

### **Rear Suspension:**

37. Lift rear of vehicle and support with tall jack stands under the unibody frame.  
\*\*Tip: break lug nuts loose before lifting vehicle.
38. Ensure that the vehicle is safely supported.
39. Remove rear tires.
40. Place a floor jack under the center of rear axle for support (do not lift vehicle).
41. Remove rear shocks.
42. Remove Sway bar links.
43. Loosen lower control arm bolts (do not remove).
44. Allow suspension to droop as much as possible.
45. Remove coil springs.
46. Locate a-arm spacer block and **HK #19**.
47. Raise rear axle up to a comfortable position to access the 3 a-arm retaining bolts on top of the differential.
48. Place a jack stand under the pinion to keep the axle from rotating.
49. Remove the 3 a-arm bolts on top of the differential.
50. Install the a-arm spacer between the a-arm and the top of the differential using supplied hardware.
51. Torque a-arm spacer bolts to 100 ft. lbs.
52. Install new coil springs being careful to align the spring to the isolator.
53. Raise rear axle and install new shocks.
54. Install sway bar links using existing upper bolt and the new lower bolt, washer, and nut. Torque to 78 ft. lbs. (upper bolt) and 50 ft. lbs. (lower bolt).

### **Transfer case drop kit:**

55. Locate the transfer case drop spacers and **HK #5**.
56. Place a floor jack under the center of the transmission/transfer case crossmember for support.
57. On one side remove the 4 bolts that hold the crossmember to the unibody.
58. Lower the crossmember away from the unibody enough to install the spacer.
59. Install the spacer using the 2 long existing bolts and the 2 new bolts and washers.
60. Repeat for the other side.
61. Torque bolts to 50-ft-lbs.

### **Final Torque:**

62. With full vehicle weight on the suspension, check if the front axle is centered. Adjust the track bar, if necessary, by turning the double adjuster.
63. When the axle is centered, tighten the track bar clamps to 60 ft-lbs.  
\*\*Be sure the position of the clamps does not interfere with any of the other suspension components.
64. Torque all front lower control arm nuts to 135 ft-lbs.
65. Torque upper control arm nut at axle to 60 ft-lbs.
66. Tighten control arm jam nuts very tight.
67. Torque any remaining loose bolts to spec.
68. Install tires and place the vehicle on the ground.
69. Torque lug nuts to spec. (85-115 ft-lbs. depending on your wheels)

### **Final Inspection:**

70. 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.
71. Re-center steering wheel by adjusting the drag link (longer) until the steering wheel is centered. You can get the wheel very close to straight without an alignment. The steps below cover how to center your steering wheel yourself:
  - Ensure all suspension joints are in good condition without excessive wear.
  - Ensure all fasteners are torqued to spec and cotter pins are installed.
  - Go for a short test drive.
  - Note steering wheel angle when driving straight and steady on a flat road.
  - Drive straight into your working area making sure steering wheel angle matches angle during test drive.
  - Adjust your drag link until the steering wheel is centered.
  - Test drive again, recheck steering wheel angle.
  - Repeat steps if necessary.

\* A professional front end alignment is recommended after installation.

We recommend the following alignment settings:

**Caster:** +3.75 to +5.75 (+4.5 is preferred if possible)

**Toe-in:** .20 degrees (1/16" to 1/8" at the tire)

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

# **Steering Shimmy Elimination Checklist**

**Note:** Steering Shimmy is also known as “death wobble” or speed wobble. It is a violent shaking of the vehicle caused by the front tires turning side to side repeatedly until you slow down. It usually occurs after hitting a bump or pothole at various speeds above 30MPH. If you experience this steering shimmy just **remain calm, you still have steering and braking control**. Just gently apply the brakes and slow down until the shimmy disappears.

**Safety Warning:** Some of these adjustments will reduce steering shimmy, but also reduce steering stability and steering responsiveness. Test drive carefully after every modification if you feel any modification is unsafe do not proceed. Keeping your vehicle safe to drive is the responsibility of the person making the adjustments and the driver. The driver must notice any unsafe actions of the vehicle and correct the problem immediately (e.g. wandering or unresponsive steering). Iron Rock Off Road promotes these modifications for low speed off road use only, some of these modifications may not be safe for use on public or private roads, especially at highway speeds. We recommend working with an experienced alignment shop that has the ability, knowledge, and experience to keep your vehicle safe to drive at highway speeds.

- Check all tie rod ends for wear and replace as needed.
- Adjust toe-in to exactly zero. Note: a slight toe-in is preferred for stability, toe out will reduce steering shimmy. See safety warning at the top of this sheet.
- Adjust caster to 3.0 to 5.5 degrees (more caster will improve stability; less caster will reduce steering shimmy). See safety warning at the top of this sheet.
- Check steering stabilizer including bushings, replace if condition is less than perfect. We have researched extensively and found the best steering stabilizers available with the least amount of free play.
- Balance tires and put the best-balanced tires in front. The front tires **MUST** be dynamically balanced, meaning they must have wheel weights on both the inner and outer rim flanges as directed by the balancing machine. If you don't like hammer-on weights on the outer flange either for appearance reasons or because of frequent rock damage, then use stick-on weights for the outer weights – in this case function must precede form...don't balance 'statically' with weights just on the inner rim edge. If a tire/wheel requires more than 6 ounces of total balance weights (inner and outer combined), do not use it on the front axle.
- Check all suspension bushings for wear and loose fasteners including control arms and track bar. Any rubber bushing with cracks, or where the rubber is separating from the steel should be replaced.
- Check steering gearbox for wear and adjust or replace as needed.
- Check wheel bearings for wear.
- Check ball joints for wear.
- Install dual steering stabilizer kit.
- Reduce tire air pressure (try 29psi for OEM size tires, less for larger tires). Note: Reducing air pressure too far can cause tires to overheat and blowout at highway speeds. See safety warning at the top of this page.
- Check vehicle stance. Hub to fender measurements should be minimum ¼" higher in the rear (like OEM stance) for maximum stability (this transfers weight to the front tires). Measure on a level surface with normal cargo and ½ tank of gas for maximum accuracy.

# 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:**

- Read and understand installation instructions.
- Contact Iron Rock Off Road with any questions before, during, or after installation.
- **Ensure that all parts are present and in good condition per attached shipping checklist!**
- Have these tools handy:
  - 5/32" Allen head socket
  - 3/8" open end wrench
  - Inch-lb. torque wrench
  - 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

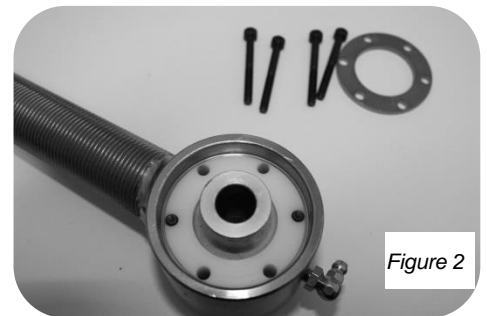


Figure 2

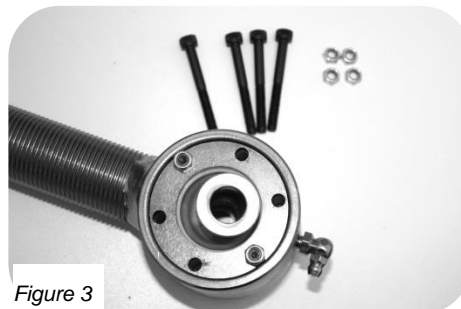


Figure 3

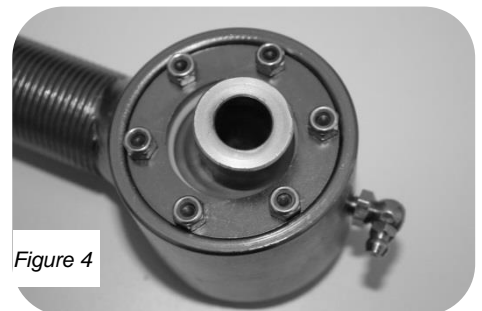


Figure 4

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

# IRON ROCK OFF ROAD

## Track Bar Flex End Assembly Instructions

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### Parts Checklist:

#### #122 - Track Bar Flex End - 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, hi torque (hex plus) (1)

#### #254 - Track Bar Flex End - 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, hi 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:

- Read and understand installation instructions.
- Contact Iron Rock Off Road with any questions before, during, or after installation.
- Ensure that all parts are present and in good condition per attached shipping checklist!
- 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.



# 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)

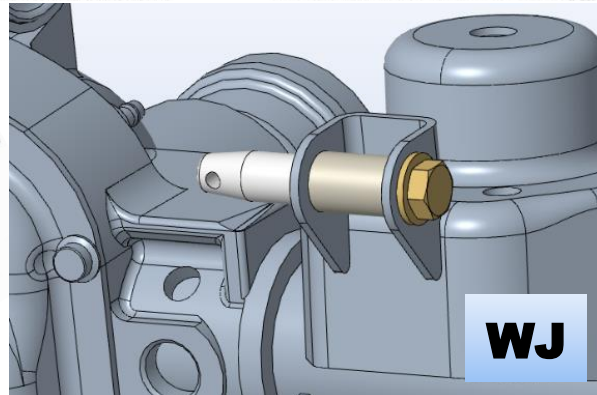
### WJ ~Optional~

### #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)

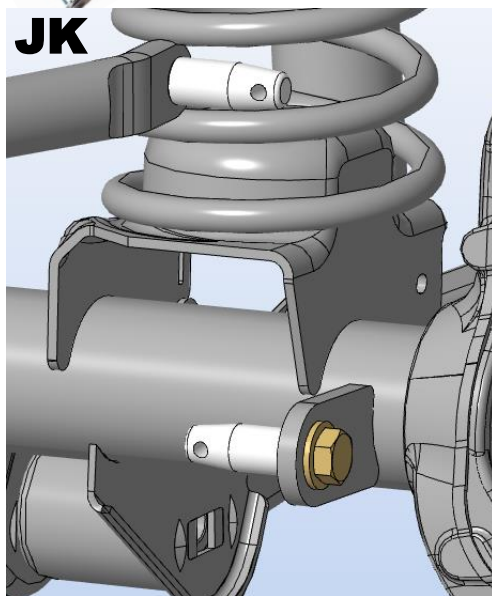
- ❑ 12mm bushing sleeve 92038 (2)



### 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)

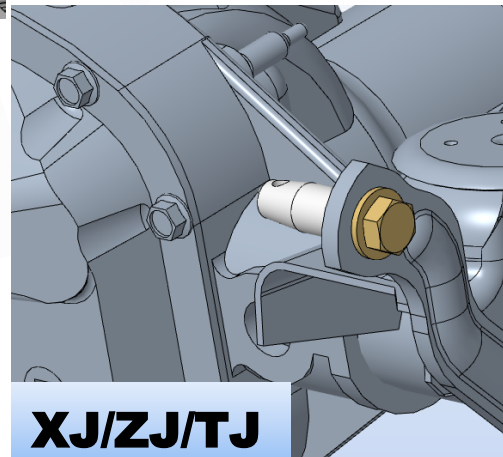
- ❑ Disconnect Pin 94028 (2)
- ❑ 1/2-20 x 1" Hex Bolt, gr8 (2)
- ❑ 1/2 F436 Hard Washer (2)
- ❑ 1/4" x 1-1/4" Spring Lynch Pin (2)
- ❑ 12mm bolt sleeve 92038 (2)
- ❑ M12 x 70 cl10.9 hex bolt (2)
- ❑ M12 cl10.9 hex nut (2)
- ❑ 1/2 x 1 1/2" gr8 hex bolt (2)
- ❑ 1/2 gr8 lock washer (2)
- ❑ 1/2 gr8 hex nut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



### TJ & ZJ ~Optional~

### #286 – 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 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:**

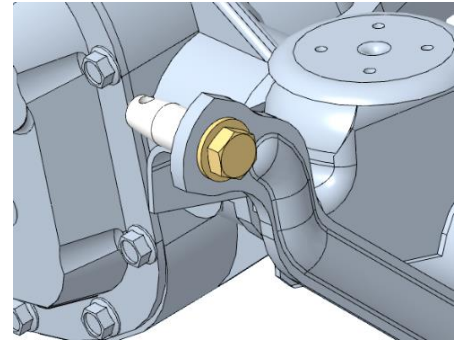
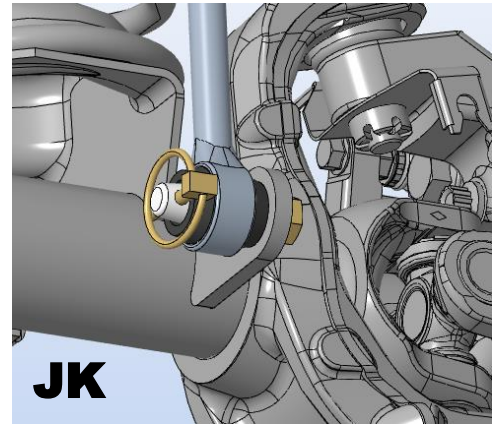
1. Locate the front sway bar links, bushings, and bolt sleeves.
2. Grease and install the hourglass bushings.
3. Grease and install the sway bar link inner sleeves in only one end of each link.
4. Raise the vehicle and secure on jack stands under the frame.
5. Remove the front tires.
6. Disconnect the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

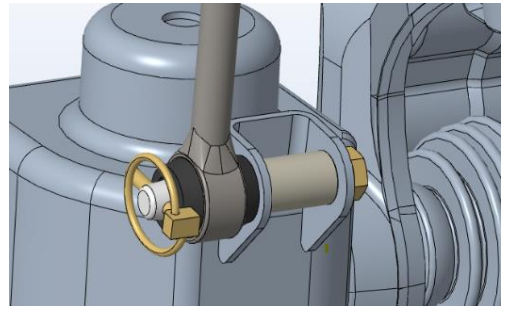
21. Locate front sway bar links, two u-brackets, and **HK #286**.
22. Install sway bar link u-brackets to the sway bar using M10 x 30 hex bolts nuts and washers. Brackets mount to the bottom of the sway bar with the bolt facing up and the washer and nut on top of the sway bar. Align brackets with offset 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.





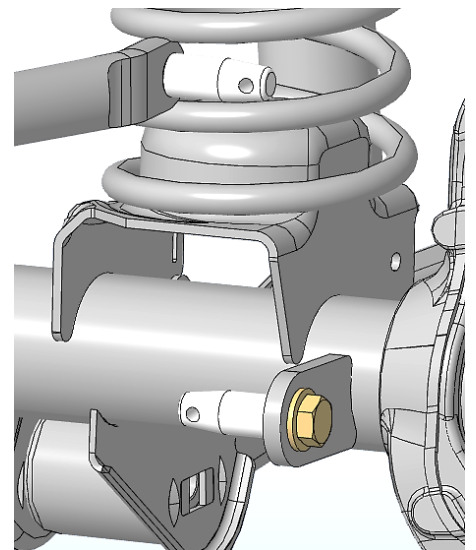
### **WJ Installation:**

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.

