Parts Checklist:

- ❑ Iron Rock Off Road Logo Decal 10001 (1)
- ❑ Ironrockoffroad.com decal (1)
- ❑ 2.5" Front coil spring 96025 (2)
- ❑ 2.5" Rear coil spring 96026 (2)
- ❑ ***#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)

- ❑ 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~***
    - ❑ ***#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 Lower Control Arms~

- ❑ JK LCA Front Right, bushing installed 80011B (1)
- ❑ JK LCA Front Left, bushing installed 80012B (1)
- ❑ LCA Rubber Bushing Male End, Straight 91243B (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 Front Lower Control Arms~

- ❑ JK LCA Front Right, bushing installed 80011B (1)
- ❑ JK LCA Front Left, bushing installed 80012B (1)
- ❑ LCA Flex Joint Male End, Angled 91109 (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)

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 79008 (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.
  - ❑ Multipurpose grease
  - ❑ Basic hand tools
  - ❑ Torque wrench
  - ❑ File or angle grinder
  - ❑ Anti-seize compound.
  - ❑ Multipurpose grease

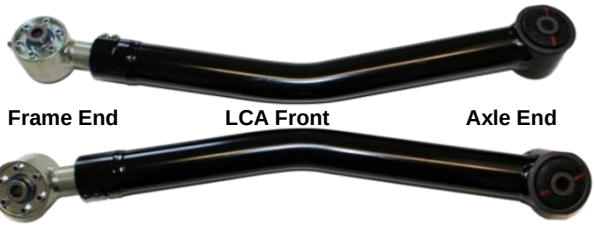
Prepare the parts for installation:

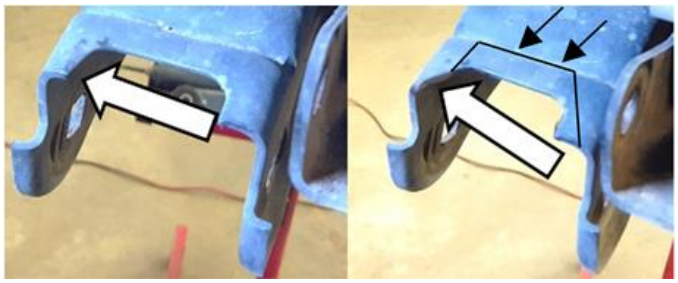
1. **Shocks:** Locate rear shocks and hardware kits.
2. Grind the outer corners on one end of the barpins to ease installation if needed.
3. Grease and install the barpins into the top side of the rear shocks. Clamp the barpin vertically in a bench vise and lower the shock onto the barpin while rotating 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 down 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 32-9/16" as a starting point. Length may need adjustment after a test drive. Tighten the clamping bracket. Make sure the bracket opens downward, and nut faces forward.
8. **Adjustable Control Arms:** Using the instructions on the last page assemble the flex ends into the threaded male ends for LCAs.
9. Use a light coat of anti-seize then thread the male ends into the control arms and adjust to 23-1/4" as a starting point.
10. Install the clamping hardware into the control arms, do not fully tighten at this time.

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 sway bar link bolts at axle.
14. Support front axle with jack stands and remove shocks.
15. Remove front track bar
16. Remove brake line bracket from frame rail.
17. Remove coil springs.
18. Loosen factory upper control arms at the axle and frame, do not remove bolts.
19. Remove the factory lower control arms.
20. Grind both of the sharp corners inside the lower control arm mounts. See photo. Jeeps with long shocks can gain flex by grinding up to the crease in the LCA bracket.





21. Install new lower contol arms using the factory hardware. Do not tighten bolts at this time. The bend goes up for ground clearance and in for tire clearance. The rubber bushing goes to the axle and the flex end at the frame.
22. Install new coil springs. Front springs will have a larger diameter pig tail than the rear springs.
23. Install brake hose extension bracket on frame in factory location using factory bolt.
24. Reinstall brake hose on new bracket using provided bolt and nut. Gently bend steel hard line as needed to connect to the new bracket.
    Re-route ABS wires as needed to allow full suspension droop.
25. Install new shocks.
26. Reinstall sway bar links.
27. Install new front track bar, threaded end to axle side. The clamp hangs down, nut facing front.
28. Reinstall front wheels.
29. Lower vehicle onto ground.

Barpin Installation

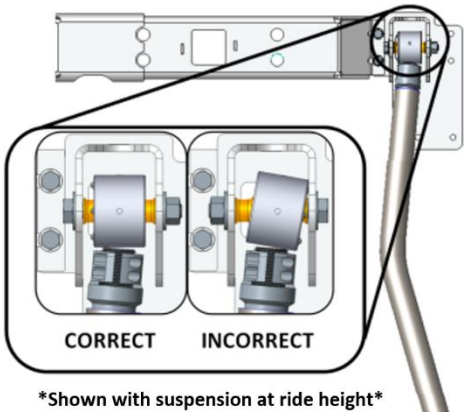
Rear installation:

30. Lift rear of vehicle and support with jack stands under frame rails.
    **Tip: break lug nuts loose before lifting vehicle.
31. Remove rear wheels.
32. Remove sway bar link bolts at axle.
33. Support rear axle with jack stands and remove shocks.

34. Loosen factory upper and lower control arms at the axle and frame, do not remove bolts.
35. Remove brake line bracket from frame rail.
36. Remove coil springs.
37. Install new coil springs. Rear springs will have a smaller diameter pig tail than the front springs.
38. Install brake hose extension bracket on frame in factory location.
39. Reinstall brake hose on new bracket. Gently bend steel hard line as needed to connect to the new bracket. **Re-route ABS wires as needed to allow full suspension droop.**
40. Install new shocks.
41. Reinstall sway bar links.
42. Reinstall rear wheels.
43. Lower vehicle onto ground.

Final Torque and Adjustments:

44. 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.
45. Check that axles are centered side to side and adjust track bar as needed.
46. With the vehicle weight on the suspension, tighten front lower control arm bolts to 130 lb-ft. Tighten front upper control arm bolts to 75 lb-ft.
47. Tighten rear upper and lower control arm bolts to 130 lb-ft.
48. Torque lug nuts to factory spec. (85 to 115 ft-lbs)
49. Ensure flex 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.
50. 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.



Shown with suspension at ride height

Final Safety Warning:

51. * 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.

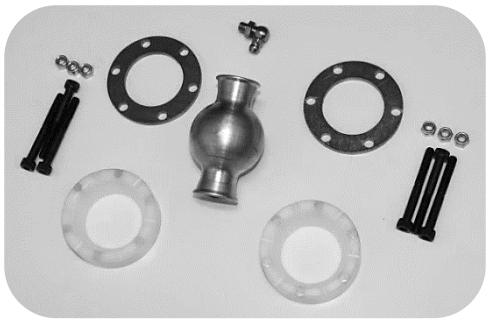
IRON ROCK OFF ROAD

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° ¼"-28 grease zerk fitting (1)

Figure 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.

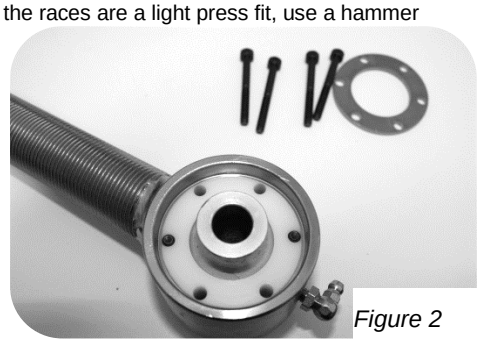
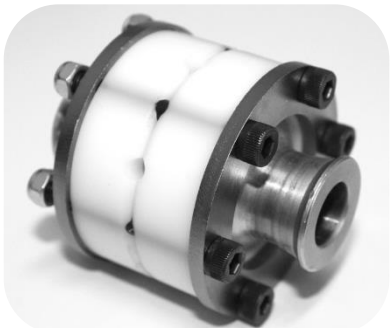


Figure 2



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

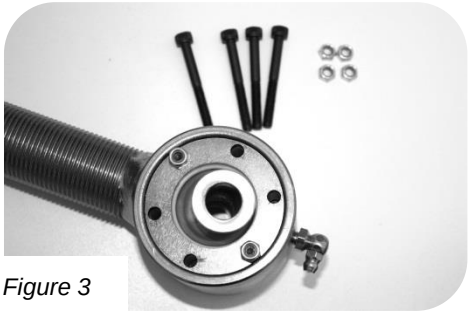


Figure 3

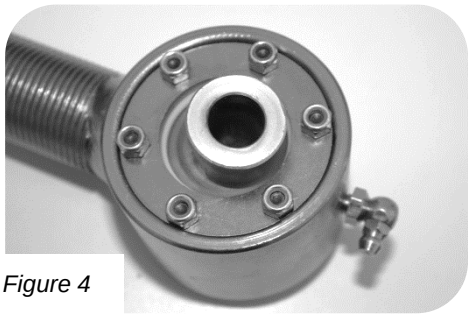


Figure 4

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:

- 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 "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.