

Rusty's Off-Road Products 7161 Steele Station Road Rainbow City, AL 35906 1-256-442-0607

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# Rusty's XJ Cherokee Budget Boost Shackle Kit RK-BB40-XJ INSTALLATION INSTRUCTIONS

Last Revised: 1/10/2018

#### Introduction:

Rusty's recommends that this installation be performed by a certified automotive technician or a person with professional mechanical knowledge. Installing this kit without this expertise may jeopardize the handling and safety of the vehicle.

Read instructions several times before starting. Be sure you have all the needed parts and know where they install. Read each step completely as you go. Exhaust modifications may be necessary. Prior to drilling or cutting, check behind the surface being worked on for any wires, lines, or hoses that could be damaged. After any drilling or cutting, remove burrs and grind smooth any surfaces. An inclinometer or similar tool may be needed to measure driveshaft angles before and after the installation.

## Warning:

- It is the owners' responsibility to inspect all Rusty's products for proper torque specs to prevent loosening of components.
- Seat belts and shoulder harnesses should be worn at all times.
- Re-check all bolts and nuts after the first 100 miles and after any off-road usage during the first 300 miles.
- Although all of our products are made from the highest quality materials possible, they are not a substitute for Safe and Careful driving. In other words, have good safe on-road / off-road sense. Know the terrain, the speed limitations, and any obstacles that may lie ahead. Please remember to preserve our right to enjoy public land through the proper use of off-road vehicles.

# **Before Starting Installation:**

- 1. Carefully Read all warnings and instructions completely before beginning.
- 2. Verify all parts have been received in this kit by checking the parts list on page#2 of this document.
- 3. Only install this kit on the vehicle for which it is specified.
- 4. Park the vehicle on a clean, dry, flat, level surface and block the tires so the vehicle cannot roll in either direction.
- 5. Be certain the vehicle is safely secured on jack stands or a vehicle lift prior to working around or under a vehicle. Never rely on a jack alone to support a vehicle's weight; use appropriately rated stands to support the vehicle's frame an any other heavy components.



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#### **Parts List:**

**Note:** Please be sure that you have all the provided parts listed below before continuing with the installation.

| Part #      | DESCRIPTION:                                       | <u>Quantity</u> |
|-------------|--|-----------------|
| RC-SP175-UV | Rusty's 1.75" Poly Coil Spring Spacer (Pair)       | 1               |
| RC-SH150-XJ | Rusty's XJ 1.5" Extended Greaseable Shackle (Pair) | 1               |

#### Front Installation Instructions

Note: Save all factory components and hardware for reuse, unless noted.

- 1. Raise vehicle and place jack stands under the frame. Chock the rear tires to prevent any accidental movement.
- 2. Remove the tires and wheels.
- 3. Remove the factory shocks at the top inside of the fender well and at the bottom, do not discard hardware. The hardware will be reused.
- 4. Unbolt the sway bar links on both sides, don't discard hardware. The hardware will be reused.
- 5. Support the front axle with the floor jack.
- 6. Remove the bolt at the axle end of the track bar.
- 7. On each side, remove the bolt that holds the factory coil spring retainer clip, it's located on the lower coil spring mount.
- 8. Remove the factory coil springs from the vehicle. Lower the jack used to support axle if needed to remove the coil springs. (**Note:** If using a coil spring compressor, take special care.)
- 9. Remove the stock coil spring spacers.
- 10. Install the new coil spring spacers with the lip side towards the ground. (**Note:** Using a little dishwashing detergent on the spacer shaft and the inside of each spacer will make this step easier. Tapping the spacer on with a light hammer may also help.)
- 11. Re-install the stock soft coil spring spacers so that the springs contact them.
- 12. Re-install the coil springs and bolt factory coil spring retainer clip into place. (Torque to 15 ft. lbs.)
- 13. Install the factory shocks into their upper mounts inside the fender well with the factory hardware. (Torque to 17 ft. lbs.)
- 14. Install the lower end of the shock to the axle using the factory hardware. (Torque to 20 ft. lbs.)
- 15. Reinstall the factory sway bar links at this time using factory hardware.



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# Front Installation Instructions (Continued)

Note: Save all factory components and hardware for reuse, unless noted.

- 16. Install tires and wheels.
- 17. Jack up the vehicle and remove the jack stands in order to lower the vehicle back to the ground.
- 18. Unlock the steering wheel and have an assistant rotate the steering wheel in order to line the track bar back to its axle side mounting point.
- 19. Reinstall the factory bolt removed in step 6. (Torque to 35 ft. lbs.)

#### **Rear Installation Instructions**

Note: Save all factory components and hardware for reuse, unless noted.

- Raise vehicle and place jack stands under frame. Chock the front tires to prevent any accidental movement.
- 21. Remove the tires and wheels.
- 22. Disconnect the rear shocks at the axle to allow the axle to fully extend. The hardware will be reused.
- 23. Support the rear axle with a floor jack.
- 24. Remove the upper shackle bolt in order to allow the leaf spring and shackle to detach from the frame. The hardware will be reused.
- 25. Remove the lower shackle bolt connecting the factory shackle to the leaf spring. The hardware will be reused.
- 26. Apply grease to the supplied shackles.
- 27. Attach the supplied shackle to the leaf spring using the factory bolt. (**Note:** Do not torque hardware at this time.)
- 28. Use caution and raise or lower the jack used to support the rear axle in order to align the shackle to the factory shackle mounting location, then insert the factory bolt to secure to frame. (**Note:** Do not torque hardware at this time.)
- 29. Repeat steps 25-29 on the opposite side of the vehicle.
- 30. Reinstall the rear shocks at the axle mounts with the factory hardware. (Torque to 40 ft. lbs.)
- 31. Reinstall the tires and wheels and lower vehicle.
- 32. Remove the jack stands and lower the vehicle to the ground.
- 33. Tighten the lug nuts to the factory torque specifications.
- 34. Tighten the shackle bolts to factory torque specifications at this time.
- 35. Installation Completed!



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#### **Final Notes:**

At this point there should be no parts left but installing the stickers. The vehicle will need to have an alignment as soon as possible, if you don't you may get the "death wobble", poor tire wear or just a bad handling vehicle.

# **Alignment Recommended Specifications**

Toe: Should be set at 0 to 1/32" Toe Out

Castor: 7.5 Degrees Positive

Camber: 0

# WARNING

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