# Installation Guide for Rough Country 2.5 inch Lift Kit w/o Shocks (07-15 Wrangler JK) Item # J10212

### Installation Time: 3 Hours

## **Tools Required:**

- ✓ Jack (2 helps, but not needed)
- ✓ Jack stands(2 3-ton, 2 2-ton)
- ✓ Wheel Chalk
- ✓ 3/8 inch drive ratchet (Or air ratchet)
- ✓ ½ inch drive breaker bar (or impact gun)
- ✓ Pry Bar
- ✓ Wood Blocks
- ✓ Cable/Zip Ties
- ✓ Diagonal Cutters
- ✓ Needle nose plyers
- ✓ Ratcheting Wrenchs (Sizes: 11mm, 13mm, 15mm, 18mm, 19mm)
- ✓ Extra 18mm Wrench
- ✓ Sockets (10mm, 11mm, 13mm, 14mm, 16m, 17mm, 18mm, 19mm)
- ✓ ½ to 3/8 reducer
- ✓ Swivel socket
- ✓ Short extension
- ✓ Air Hose

This installation was performed on a 2014 Unlimited Sport.

## Installation Instructions (Rear):

1. Chalk front wheels and lift vehicle using rear differential or axle.



2. Once the wheels are off of the ground, using a 19mm, remove the wheels.



3. Using the 3-ton jack stands, place the jack stands under the frame of the vehicle, and lower the vehicle until it rests on the stands. Keep the axle slightly suspended with the jack.



4. Remove the rear sway bar links lower bolts using an 18mm wrench/socket on both sides. Move up and out of the way.



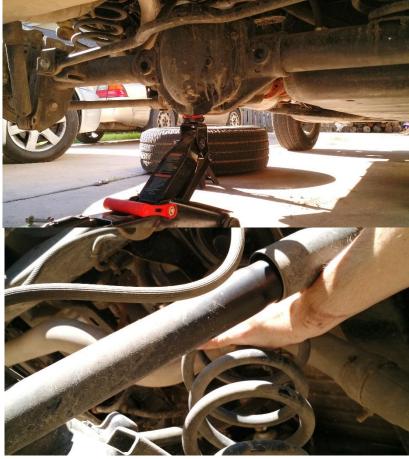
- 5. Remove the top shock mounting bolts using a 16mm socket. Compress the shock by hand and move them from the frame, letting them hang out of the way from the lower mounts. We will reinstall them with the extensions later.
- 6. Unbolt the brake line frame mount. We will reinstall with the extension bracket later.



7. Using needle nose plyers, undo the little plastic clips (picture 1) securing the wheel speed sensor wire so the hanging axle doesn't stretch it. Using a 10mm socket remove both nuts holding the emergency brake bracket to the bottom of the tub (picture 2), so the axle can hang freely.



8. Lower the axle as low as possible. If that is not enough to remove the springs and isolators, using the jack as a teeter, grab a friend and have them stand on one side of the axle. You can also jack or pull up on the other side to get some extra clearance. Wiggle the spring out.



9. Place the rear spacer retainers on top the coil mounts.



10. Use the open end of a 19mm wrench to hold the rear spacer retainers still, install the rear coil spacers with the supplied ½" x 2 ¾" bolt and lock washer. Install the spring isolators on top of the springs and wiggle the springs back into place. There are no spring stops on the rear axles, but make sure the springs are matching/rotated the same way.



11. Install the Brake line bracket using a 10mm socket with the original hardware and 11mm socket/wrench on both sides of the new .250-20 x 1" bolts, washers, and nuts on bottom. I recommend installing the bottom on the back side of the bracket (inside of frame) due to clearance with the rear sway bar. See clearance of upper link bolt in picture 2.



12. Raise the axle up and Compress the shocks by hand in order to line them up to be installed with the shock extension brackets. Compress the shocks as needed to fit the extension brackets in and loosely thread the 10mm x 80mm bolts in before tightening.



- 13. Reconnect the bracket that holds the parking brake lines to the tub. Reinsert the clips that hold the wheel speed sensor wires.
- 14. Jack the vehicle up from the differential until the frame is off of the jack stands. Remove jack stands from under the vehicle.
  - a. TIP: Lower the rear sway bar. If it is too high and you install the wheels, you will not be able to lower it past the tires.
- 15. Reinstall wheels with a 19mm socket and tighten to 95 ft.lbs. in a star pattern. Lower vehicle to the ground and remove jack.
- 16. Once on the ground install the rear sway bar end link lower bolts using 18mm wrenches on either side.



#### Installation Instructions (Front):

- 1. Chalk the rear wheels and jack up the front wheels from the axle until you can fit the 3-ton jack stands under the frame.
- 2. Remove the wheels with a 19mm socket and lower the vehicle onto the jack stands.

3. Disconnect the Front sway bar end link lower bolts with an 18mm wrench on either side.



4. Remove the lower bolt for the front shocks with an 18mm socket/wrench on either side.



5. Using a 10mm socket, remove the upper brake line bracket connected to the frame (picture 1) and the lower bracket attached to the axle (picture2).



6. If the axle is not drooping enough to remove the springs, use the teeter totter method, have someone stand on one side of the axle and jack up the other side of the axle until you can pull the spring and isolator from its position.



- 7. The new spacer slides over the factory bump stop with the spring isolator below the spacer.
- 8. Place the spring back in its location with the new spacer installed above the isolator. Make sure to rotate the spring until it hits the spring stop notched in the axle.
- 9. Install the shock extension bracket over the existing shock lower mounting location. There is a left and a right version of each bracket.

Note: Scrape any paint runs off of the bottom side of the stock mounting point. This will ensure the bracket bolts squarely to the axle. It should take some wiggling and maybe some tapping with an object to get the holes to line up. In my install, the piece with the last two digits of 27 went on the driver side and 28 on the passenger side.



10. Use the large 12mm x 65mm bolts and small 5/16" x ¾" bolts to secure the bracket to the original mount on the axle. Tighten using an 18mm socket/wrench on either side for the large bolt and a 1/2" socket/wrench on either side of the small bolt.



Note: You might need to use a pry bar to line everything up.

11. Reroute the brake line and the lower brake mounting bracket behind the shock (to the rear of the vehicle) before bolting the shock into the extension bracket. This will give you plenty of slack while at full droop. Jack the axle back up enough for the bottom of the shock to reach the extension bracket. Using an 18mm socket/wrench on either side, bolt the shock into the extension bracket.

Note: You may need to use the pry bar to open the bracket in order to fit the shock in between.





12. Looking at the sway bar end link at full droop, this is a great reason to buy "quick disconnect" sway bar end links from ExtremeTerrain. If longer end links are not used, at full droop, you run the risk of flipping the sway bar forward, bending suspension equipment or breaking the Rubicon's electronic disconnect motor. Always disconnect on the trail, and reconnect the end links when back on level pavement.



13. Use cable ties or Zip ties to tie the lower brake mounting bracket to the lower end of the shock. This bracket used to be connected in front of the shock absorber (where I am pointing) and has now been routed behind it. Note: you may remove this bracket from the brake line, but proceed with extreme caution. One wrong move and you'll be buying a new brake line.



- 14. Jack the vehicle up from the axle until the frame is off of the jack stands. Remove jack stands from under the vehicle.
- 15. Reinstall wheels with a 19mm socket and tighten to 95 ft.lbs. in a star pattern. Lower vehicle to the ground and remove jack.
- 16. Once on the ground install the front sway bar end link lower bolts using 18mm wrenches on either side.

17. Have a friend sit in the driver seat and tell you if your steering wheel is straight. If it is off center, use a 15mm socket to loosen the two bolts on the drag link turnbuckle. Rotating one way or the other will center your steering wheel. Have your assistant tell you, or periodically jump up and check yourself, when the steering wheel looks straight. Tighten the bolts with the 15mm socket. You will have to drive it to really feel if it is absolutely straight and it may take a few tries.

Note: My steering wheel was only off a hair to the left and I could only tell on a very straight road. This photo is exaggerated for illustration.



#### Final Notes:

- Check your lug nuts and all bolts after 50 miles to make sure none have come loose.
- I could not make use of the front brake line drop brackets, the hard lines and wheel speed sensor wires were already very tight (no slack) coming from the engine bay. This might vary based on year.