



## EVO-1109 – JK Rear Bolt-On Coilover Kit



|                          | QTY | PART#       | DESCRIPTION                        |
|--------------------------|-----|-------------|------------------------------------|
| <input type="checkbox"/> | 1   | EVO-12025B  | Rear DRVR Mount Bolt On Coilover   |
| <input type="checkbox"/> | 1   | EVO-12026B  | Rear PASS Mount Bolt On Coilover   |
| <input type="checkbox"/> | 1   | EVO-10041B  | DRVR Rockstar Skid                 |
| <input type="checkbox"/> | 1   | EVO-10040B  | PASS Rockstar Skid                 |
| <input type="checkbox"/> | 1   | EVO-12028B  | RCC Trackbar Bracket               |
| <input type="checkbox"/> | 1   | EVO-7700021 | RCC Trackbar Bracket HARDWARE Pack |
| <input type="checkbox"/> | 1   | EVO-600067  | Brakeline Pack                     |

**Caution: This kit requires drilling and cutting of metal. Wheel backspacing adjustments may be required. Due to so many variations and combinations of ACTUAL tire sizes, wheel widths, tire inflation pressures etc.**

**By purchasing this kit you are starting the next level of performance. To install this kit it requires work and finesse. This high quality system will truly enhance your vehicle to another level. Cutting and Grinding required; not bitching and moaning. This is a toy, it should be fun! EVO recommends install by a trained professional.**

**\*At a minimum the JK should be equipped with rear adjustable upper control arms to adjust pinion angle. Full control arm packages or long arm upgrade kits are recommended. 2 Door JK: rear aftermarket driveline required. 4 Door JK: rear aftermarket driveline recommended.**

**\*Re-torque all bolts after first 100 miles**

**High Clearance Fenders Recommended**

**\*Re-torque all bolts every 3000 miles and after every off road use.**

1. Elevate rear of vehicle securely
2. Remove rear wheels
3. Secure frame with adjustable jack stands
4. Remove rear sway bar end links
5. Remove rear shocks
6. Remove rear springs and parking brake cable bracket from under body
7. Using 15mm wrench, loosen small nuts on body mounts of JK from the middle of the JK to the rear. 2007-2011 JKs will have 3 sets of body mounts on both sides of frame. 2012+ will have 2 sets.
8. On driver side. Remove bolt between frame and body that holds gas filler tube to the body.
9. Remove muffler from vehicle. Loosen clamp just in front of axle on the exhaust. Spray lubricant on rubber hangers, pry hangers from frame.



10. On passenger side rear exhaust hanger at frame. Bend hanger upwards about  $\frac{3}{4}$ " with pry bar.



11. Using a jack, carefully apply pressure to rear tube lifting rear of body from frame. There needs to be about a  $\frac{1}{2}$ " gap between body and frame.



12. With rear body lifted from frame. On both driver and passenger side, insert rear upper strengthening bracket above original shock mount. If difficult to insert. Raise body more. On 2007-2011 JKs the front section of the bracket (2 slotted holes) needs to be inserted under the body mount flange. OR remove these two body mounts.



13. After strengthening bracket is inserted. Lower Jack, tighten all body mount bolts.

14. Remove driver rear lower control arm bolt at axle.

15. With a paint pen, mark 1.5" down from center of lower control arm hole in the factory axle bracket

16. Carefully, with a Cutoff Wheel/Reciprocating Saw, cut along line, all the way around the control arm pocket and factory swaybar tab.





17. Sand remaining shock tabs, swaybar tab, and cut surface smooth

18. Paint all exposed metal surfaces

19. Install driver side Rock Star as seen in the photo

20. Install the 3/8" bolts, washers on both sides and lock nuts into the rear two holes on the driver side control arm bracket. The lower 3/8" bolt should be inserted from front to rear. The upper 3/8" should be inserted from the rear to the front.

21. Reinsert lower control arm into the axle mounting brackets

22. Using the factory bolt, reinsert into factory hole with Rock Star brackets in place through control arm

23. Tighten 3/8" hardware to 40 ft-lbs

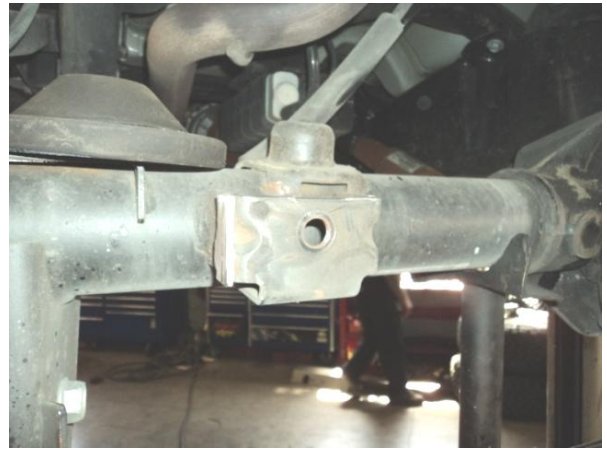
24. Repeat previous Rockstar steps on passenger side



25. Remove rear trackbar bolt at axle, leave trackbar bolt at frame installed

26. Cut factory rear trackbar bracket at axle as shown. Only remove the rear most part of the bracket.

27. Sand all cuts smooth with flat mounting plate.



28. Install rear trackbar bracket as shown with supplied 9/16 bolt and u-bolts.

29. Recommended: Weld on rear trackbar bracket to axle where ever possible.

30. Reinstall trackbar into new higher location with factory bolt. (torque to factory specifications)



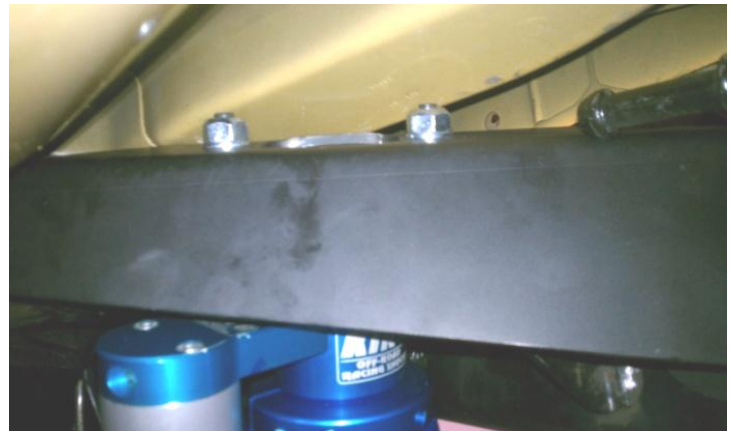
once vehicle is on ground and at ride height.)

31. Install bumpstop extension to axle. Upper pad should be angled forward of axle. Use supplied 5/16" hardware.

32. Assemble upper shock bracket to coilover as shown. Reservoir should be angled to middle of JK on both pass and driver sides.



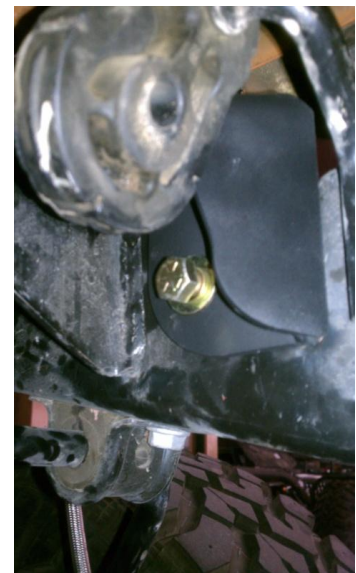
33. Thread two mounting bolts into stock threaded frame bolts. This needs to be done in iterations. Walk the bracket up by threading one bolt a few turns then the other and continue until fully seated. Bolts need to go through 2 holes in the EVO upper strengthening brackets.



34. Install the supplied M10 nuts and washers to the shock bolts above the EVO strengthening plate.

35. On frame side, just below exhaust hangers, drill hole through frame with 1/2" drill bit.

36. Install supplied 1/2" bolt



37. Install lower shock mounts to EVO Rockstars using supplied larger spacers, one on each side of shock. Do not use small spacers that may be attached to the lower end of the shocks. Use supplied M12 bolt.



38. Remove Factory Swaybar from frame.  
39. Install EVO MFG Rear Swaybar Relocation Spacers which relocates the OE swaybar back approximately 1". Use the 20MM Black Hex bolts included in the hardware pack to mount the relocation spacers through the larger un-threaded hole and into the OE swaybar mounting location. Repeat this for driver and passenger sides. ( Note the last hole closest to the rear of the vehicle should be threaded ).



40. Re-Install OE Swaybar to EVO MFG Swaybar Relocation Spacers using 2x 16MM Black Hex Bolts and a washer on each bolt. Repeat on opposite side of vehicle.  
41. Assemble rear swaybar endlinks. Tap hourglass into endlink ends with mallet. Insert sleeve into center of hourglasses.  
42. Install, outside of swaybar, outside of axle mount.  
43. Remove factory brakeline and install supplied lines and washers.  
44. Install wheels/tires.  
45. Carefully cycle suspension to make sure you have appropriate clearances.  
46. Follow factory procedures on bleeding brakes.

47. Turn spanner nut on top of coil spring all the way to the top. This is a starting point. This will vary on a lot of factors (added weight). Screw down if you want more lift. Added vehicle weight will make this vary.
48. Reinstall exhaust.
49. Torque wheels to factory or aftermarket specifications.
50. Set vehicle onto ground. Move vehicle forward and backwards a few feet each way while turning wheel to right and left to settle vehicle.
51. Verify desired ride height. If ride height is undesirable, carefully lift front or rear of vehicle by frame until wheels are off the ground. Turn spanner up to lower ride height, down to raise ride height.
52. Repeat previous steps until desired ride height is achieved, tighten spanner clamping bolt on coilover after desired right height is set (all 4 coilovers).
53. Torque all supplied bolts to chart below. All factory bolts to factory specifications. Clean and verify no fluid leaks from brake lines after brake application. Torque all bonded rubber control arm and trackbar bushing while vehicle is sitting on its weight.

| Size        | Recommended Torque |      |         |      |         |      |          |      |        |      |        |      |
|-------------|--------------------|------|---------|------|---------|------|----------|------|--------|------|--------|------|
|             | Grade 2            |      | Grade 5 |      | Grade 8 |      | 18-8 S/S |      | Bronze |      | Brass  |      |
|             | Coarse             | Fine | Coarse  | Fine | Coarse  | Fine | Coarse   | Fine | Coarse | Fine | Coarse | Fine |
| <b>1/4</b>  | 4                  | 4.7  | 6.3     | 7.3  | 9       | 10   | 6.3      | 7.8  | 5.7    | 7.3  | 5.1    | 6.4  |
| <b>5/16</b> | 8                  | 9    | 13      | 14   | 18      | 20   | 11       | 11.8 | 10.3   | 10.9 | 8.9    | 9.7  |
| <b>3/8</b>  | 15                 | 17   | 23      | 26   | 33      | 37   | 20       | 22   | 18     | 20   | 16     | 18   |
| <b>7/16</b> | 24                 | 27   | 37      | 41   | 52      | 58   | 31       | 33   | 29     | 31   | 26     | 27   |
| <b>1/2</b>  | 37                 | 41   | 57      | 64   | 80      | 90   | 43       | 45   | 40     | 42   | 35     | 37   |
| <b>9/16</b> | 53                 | 59   | 82      | 91   | 115     | 129  | 57       | 63   | 53     | 58   | 47     | 51   |
| <b>5/8</b>  | 73                 | 83   | 112     | 128  | 159     | 180  | 93       | 104  | 86     | 96   | 76     | 85   |
| <b>3/4</b>  | 125                | 138  | 200     | 223  | 282     | 315  | 128      | 124  | 104    | 102  | 118    | 115  |
| <b>7/8</b>  | 129                | 144  | 322     | 355  | 454     | 501  | 194      | 193  | 178    | 178  | 159    | 158  |
| <b>1+</b>   | 188                | 210  | 483     | 541  | 682     | 764  | 287      | 289  | 265    | 240  | 235    | 212  |

### Set-Up and General Coilover Notes:

Please read before and after installation. Included are things you should know before and after installation of coilovers and some final setup tips to maximize the performance advantages of coilovers. Coilovers can have a tendency to make some sliding sounds when installed on the vehicle. We are stepping into race car parts and some level of sound is expected. There are now 2 springs, and a coil isolator attached to the shock body that are consistently sliding up and down while in use. Once final adjustments have been made on spring compression and the vehicle is at a lift/ride height that you are satisfied with. Rotate the top and bottom springs so that that the end of the top and bottom coil that rest on the coil isolator are 180 degrees opposite each other. This will help balance the spring isolator



and keep the springs from rubbing on the shock body less. If this is still unsatisfactory for your needs there are aftermarket spring isolators that can be purchased additionally that will help alleviate this noise. Please give us a call for information on this accessory product.

Spring compression applied with the coil nut on top of the springs will VARY between all vehicles and WILL be different at all 4 corners. This is due to added and or removed weight to the vehicle. The fact that all 4 corners have different weight from the factory, added accessories and or removing factory components all play a part in the vehicles corner weight and ALL are different. Do not be afraid to adjust each coilover spring nut differently on each corner. This is one of the coolest parts of coilovers. You set them up to a lift height that you like. You are not stuck with an amount of lift you get from whatever springs you end up with. You want it taller turn the coil nut down more or up for less lift. We recommend if 3" or more spring compression is needed to achieve your desired lift height, our HD Coilover Spring set should be used and they are sold separately. Lastly the passenger side is always going to need more spring compression as this side is always heavier due to gas tank and other factory components that are installed passenger side of centerline.

Achievable lift height will vary between each vehicle due to the added and/or reduced weight of the vehicle. Secondly actual lift is subjective. All Jeeps come from the factory with different heights based on accessories and spring packages etc so they don't even start the same. General lift increases are made by an average and or an understanding of what a 3" or 4" lift etc should be. Add the added and removed accessories weight (front bumper and winch, 37 out back and no rear seat as an example) and we are all over the map. Therefore in order to achieve the desired height you are looking for, spring changes may be needed and are sold separate to our standard kit. We have done extensive testing on these kits with many variables and know we have an excellent spring package straight out of the box, but your vehicle and or needs may vary and therefore a spring change may be needed to accomplish your desired setup. For more lift, EVO-S101F Front HD Coilover Spring Set or EVO-S101R Rear HD Coilover Spring Set.

Once the desired right height is achieved and is sitting on level ground (all ride height/lift changes and or added or removed weight changes will require this process to be readjusted), lower the 2 secondary coil rings (2 silver rings inside the top coil spring) so that they are about 1/2" from the top of the coil isolator (gap). The 2 secondary coil rings can be moved by a tap with a flat head screw driver against the machined groove to break the 2 loose from each other. Once loose, thread them down paying attention that there is a rubber O-ring between that will need to be pushed/rolled down as well. Set the lower ring at about ~1/2" distance from the spring isolator, screw the 2 rings into each other with O-ring set in internal groove of the secondary ring and tap with flathead screw driver to tension them into each other. This 1/2" is a rough dimension and can be adjusted to your liking.