

# EVO MFG

## EVO1107 – JK Rear Bolt On Coilover Kit



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

\*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 installed. 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 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. Factory hardware on upper mount.

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

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. Add 1/2" washers to both sides of shock. This will help prevent shock rotation. 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 ½" drill bit.
36. Install supplied ½" bolt
37. Install lower shock mounts to EVO Rockstars using supplied silver spacers, one on each side of shock. Remove spacers if any are installed on the lower end of the shocks. Use supplied M12 bolt.
38. Assemble rear swaybar endlinks. Tap hourglass into endlink ends with mallet. Insert sleeve into center of hourglasses.
39. Install, outside of swaybar, outside of axle mount.
40. Remove factory brakeline and install supplied lines and washers.
41. Install wheels/tires.
42. Carefully cycle suspension to make sure you have appropriate clearances.
43. Follow factory procedures on bleeding brakes.
44. 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.

- 45.Reinstall exhaust.
- 46.Carefully remove jack stands and lower to ground
- 47.Torque wheels to factory or aftermarket specifications.
- 48.Set vehicle onto ground. Move vehicle forward and backwards a few feet each way while turning wheel to right and left to settle vehicle.
- 49.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.
- 50.Repeat previous steps until desired ride height is achieved, tighten spanner clamping bolt on coilover after desired right height is set (all 4 coilovers).
- 51.Torque all supplied bolts to chart below. All factory bolts to factory specifications. Clean and verify no fluid leaks at Brakelines 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