## **EVO MFG**

## EVO1106 – JK Front Bolt-On Coilover Kit



Caution: This kit requires drilling and cutting of both metal and plastic. 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 front adjustable lower control arms to adjust castor. Full control arm packages or long arm upgrade kits and steering upgrades are recommended. Front aftermarket driveline required. 2012+ will require exhaust spacers, relocation and/or custom to install.

<sup>\*</sup>Re-torque all bolts after first 100 miles

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

- 1. Elevate front of vehicle securely
- 2. Remove front wheels
- 3. Secure frame with adjustable jack stands
- 4. Remove front sway bar end links
- 5. Remove front shocks
- 6. Remove front springs









- 7. Insert front plate over factory bump stop. Align at top with existing hole and centered around bump stop. Mark two holes to be drilled.
- 8. Drill marked holes with 7/16" drill



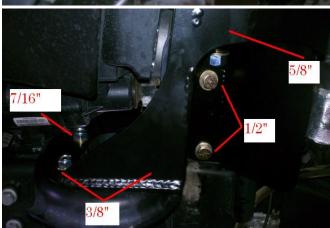
- Place front coilover tower over upper front bump stop tube.
- 10.Rotate reward until contact with plastic wheel well. Note where tower makes contact.
- 11. Make sure all wires and

- hoses are out of way.
- 12. Using a grinder, slowly cut away plastic ribs, test tower and repeat. This will take a few iterations of testing, marking and cutting to clean away the

plastic. Only the ribs need to be removed. Continue until tower seats onto top of factory spring perch and shock mount. Install hardware.









- 13.Cut lower axle shock mount as shown. This is to give clearance for coilover
- 14.Install lower axle bracket on the outside (tire side) of factory shock mount.
- 15. Holes on underside of factory shock mount and side of spring mount may need to be enlarged with drill. Passenger

side will need one hole drilled completely.

- 16.Install EVO lower shock mount with 3/8" hardware on the underside of current shock mount and 5/16" of side of spring mount
- 17. Remove brake lines.

18.Install new supplied longer brake line and washers to factory hard-line and caliper











- 19.Install new mounting bracket at frame stacking EVO lower reservoir mount on outside of brake line bracket using factory bolt. Align as shown.
- 20. Install front coilover where fitting at top of coilover is directed toward rear of JK. Use supplied ½" hardware and shock spacers both top and bottom mounts
- 21.On both driver and passenger side, drill a 5/16" hole in the center of the spring mount on axle.
- 22. Using supplied self
  threading bolt, place the
  bump stop extensions
  over the drilled hole on
  the axle and thread

through the center with supplied self threading bolt on both driver and passenger sides. Press down on bolt firmly while threading.

23. Twist and raise reservoir and place in

mount behind rear of upper coilover tower.

24. Using supplied hose clamps mount to both upper and lower mounts.

- 25. Assemble front swaybar endlinks. Tap hourglass into endlink ends with mallet. Insert sleeve into center of hourglasses.
- 26.Install, outside of swaybar, inside of axle mount.
- 27.Install wheels/tires.
- 28. Carefully cycle suspension, turning wheels left and right as you go up and down to make sure you have clearance.
- 29. Follow factory procedures on bleeding brakes.



- 30. Turn spanner nut on top of coil spring, compressing the spring until the distance of the threaded portion between the shock end cap and the spanner is approximately 1.25". This is a starting point. This will vary on a lot of factors (added weight). Screw down if you want more lift, screw up for less. Added vehicle weight will make this vary.
- 31. Carefully remove jack stands and lower to ground
- 32. Torque wheels to factory or aftermarket specifications.
- 33.Set vehicle onto ground. Move vehicle forward and backwards a few feet each way while turning wheel to right and left to settle vehicle.
- 34. Verify desired ride height. If ride height is undesirable, carefully lift front of vehicle by frame until wheels are off the ground. Turn spanner up to lower ride height, down to raise ride height.
- 35. Repeat previous steps until desired ride height is achieved
- 36. Torque all supplied bolts to chart below. All factory bolts to factory specifications. Clean and verify no fluid leaks at Brakelines after brake application.

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
1/4	4	4.7	6.3	7.3	9	10	6.3	7.8	5.7	7.3	5.1	6.4
5/16	8	9	13	14	18	20	11	11.8	10.3	10.9	8.9	9.7
3/8	15	17	23	26	33	37	20	22	18	20	16	18
7/16	24	27	37	41	52	58	31	33	29	31	26	27
1/2	37	41	57	64	80	90	43	45	40	42	35	37
9/16	53	59	82	91	115	129	57	63	53	58	47	51
5/8	73	83	112	128	159	180	93	104	86	96	76	85
3/4	125	138	200	223	282	315	128	124	104	102	118	115
7/8	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