

# 2.0" SPACER SUSPENSION SYSTEM



AEV30211AE Last Updated: 11/06/14



#### PLEASE READ BEFORE YOU START

TO GUARANTEE A QUALITY INSTALLATION, WE RECOMMEND READING THESE INSTRUCTIONS THOROUGHLY BEFORE BEGINNING ANY WORK. THESE INSTRUCTIONS ASSUME A CERTAIN AMOUNT OF MECHANICAL ABILITY AND ARE NOT WRITTEN NOR INTENDED FOR SOMEONE NOT FAMILIAR WITH AUTO REPAIR.

INCLUDED PARTS	QTY	<b>REQUIRED TOOLS</b>
Front Spring Spacers	2	Common hand tools
Rear Spring Spacers	2	Jack stands
Front Bump Stop Spacers	2	Floor Jack
Rear Bump Stop Spacers	2	
Shock Extension Brackets	4	
Front End Link Brackets	2	
Front End Links (RHD ONLY)	2	
Hardware Pack	1	
Front Brakeline Drop Brackets	2	
Zip Ties	4	

This product is covered under the AEV Parts Limited Warranty, a copy of which can be found at aev-conversions.com/warranty.



# **REAR SUSPENSION**

- A. Raise Jeep and support the frame using jack stands or a hoist, such that the rear axle can be lowered enough to remove the springs. Support the axle by placing floor jack under the center of the axle. Remove the wheels.
- B. Loosen but DO NOT remove all 8 control arm bolts.
- C. Loosen but DO NOT remove Track Bar hardware.







- A. Remove the bolts that hold the brake lines to the frame.
- B. Remove the shocks.
- C. Remove the lower bolt for each sway bar end link.







- A. Carefully lower the axle using the floor jack enough to remove the springs. DO NOT overextend the wheel speed sensor or locker wiring.
- B. Remove the factory spring isolator located on top of the spring (this will provide a more level vehicle, you may keep the factory isolator in place to maintain factory rake). Install the AEV Spring Spacer on top of factory springs making sure the top of the spring and spacer are properly located.





- A. Install new Bump Stop Spacers on axle as shown using the supplied hardware. DO NOT reverse the orientation from what is shown.
- B. Install the supplied upper shock spacers, washers and bolts. Tighten to 37 ft lbs.





- A. Raise axle slowly and guide springs into position.
- B. Reinstall lower sway bar link bolt and tighten to 60 ft lbs. (Refer to step 2C.)
- C. Reinstall lower shock nut and bolt then tighten to 56 ft lbs. (Refer to step 2B.)
- D. Reinstall brake line bolt (Refer to step 2A.)
- E. Reinstall wheels and tighten to 105 ft lbs.





# **FRONT SUSPENSION**

### 6.

A. Raise Jeep and support the frame using jack stands or a hoist, such that the front axle can be lowered enough to remove the springs. Support the axle by placing floor jack under the center of the axle. Remove the wheels.



- B. Loosen but DO NOT remove all 8 control arm bolts.
- C. Loosen but DO NOT remove the frame-side track bar bolt. Remove and save the axle-side track bar bolt and flag nut.





Note: On Rubicon models, remove the push pins holding the speed sensor wiring to the frame and upper control arm.

- A. Remove the sway bar end links lower attachments at axle and save hardware.
- B. Remove shocks and save all shock mounting hardware.
- C. Lower axle and remove springs. DO NOT remove factory isolator.
- D. For 2011 or newer models, remove and discard factory bracket from the brake line.





- A. Drill a 3/8 inch hole in the center of the axle bump stop pad.
- B. Place bump stop spacer inside springs.
- C. Install Front Spring Spacers, keeping factory isolator in place. Make sure to properly index the springs on the lower spring seat.
- D. Install and tighten supplied bump stop spacer hardware.







- A. Install new sway bar end link brackets and tighten to 80 ft lbs. Reinstall end link to bracket and tighten to 75 ft lbs. NOTE: Right Hand Drive systems include replacement end links NOT brackets. Install the supplied end links.
- B. Install shock extension brackets as shown using supplied hardware.
- C. Reinstall factory lower shock hardware.
- D. For 2007-2010 model year JK's, install the front brake line drop brackets



NOTE: Right Hand Drive systems include replacement end links NOT brackets. Install the supplied end links.





For 2011 and newer models, use supplied zip ties to secure the brake line to the shock as shown.

Reinstall wheels and tighten lug nuts, working in a "star pattern." Place Jeep on level ground. Reconnect the drive shaft making sure to properly align your marks.

Reconnect the track bar at the axle side using the hardware saved from disassembly. Tighten all fasteners, front and rear, to factory specifications (See Appendix).

# **APPENDIX**

# **JK FACTORY TORQUE SPECIFICATIONS**

\*nominal torque shown in ft. lbs.

Front Suspension & Steering		
UCA bushings	M12	75
LCA bushings	M14	125
Track bar bushing frame	M14	125
Track bar bushing axle	M14	125
Stabilizer end link top	M12	65
Stabilizer end link bottom	M12	75
Shock Absorber	upper M12 bayonet	20
	lower M12	56
Steering gear		87
P/S pump to engine		21
High pressure hose pump		22
Hoses to steering gear		21
Intermediate shaft, all points	M10	42
Intermediate shaft toe plate		100 in. Ibs.
Steering damper	axle M12	50
	cross-link M12	50
Pitman arm to gear	7/8	195
Pitman to drag link nut	M14	78
Drag link to knuckle nut	M14	63
Tie rod to knuckle nut	M14	63
Tie rod clamp	M10	45
Drag link clamp	M10	26

Powertrain Mounts		
	M10 bracket to block	45
	M12 bracket to block	90
	M12 Isolator to frame	85
diesel	bracket to engine	85
diesel	M12 Hydro mt to bracket	65
diesel	M12 Hydro mt to frame	65

Transmission Mount		
	M10 trans to mount	40
	M10 mount to frame	40

Wheels		
(5" bolt circle/1.75" offset)	5 x 1/2" stud	105

Driveline			
T-case companion flange nut		210	
Front driveshaft	to front axle	80	
	to t-case	22	
Rear driveshaft	to rear axle	22	
	to t-case	22	

Rear Suspension		
UCA bushings	M14	125
LCA bushings	M14	125
Track bar bushing frame	M14	96
Track bar bushing axle	M14	111
Stabilizer bar sill bushing	M10	45
Stabilizer bar to link	M12	66
Stabilizer bar link to axle	M12	75
Shock Absorber	upper M8	37
	lower M12	56

Cab Mounts		
	M10 short bolts	45
	M12 stud FESM	80