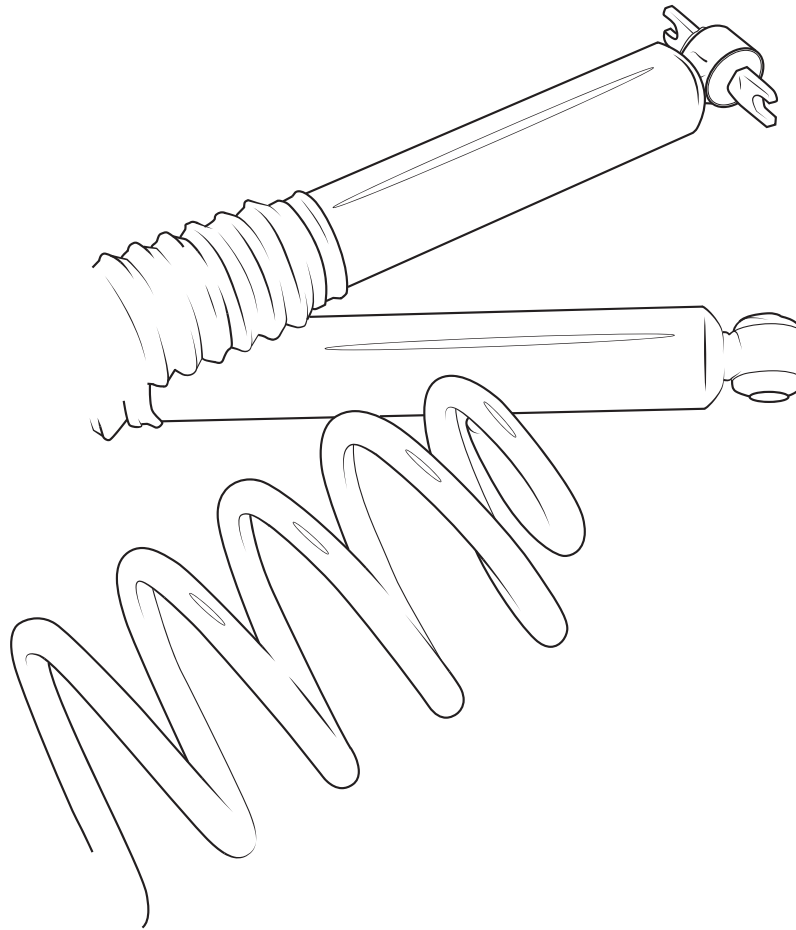




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3.5" – 4.5" DUALSPORT SUSPENSION





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.

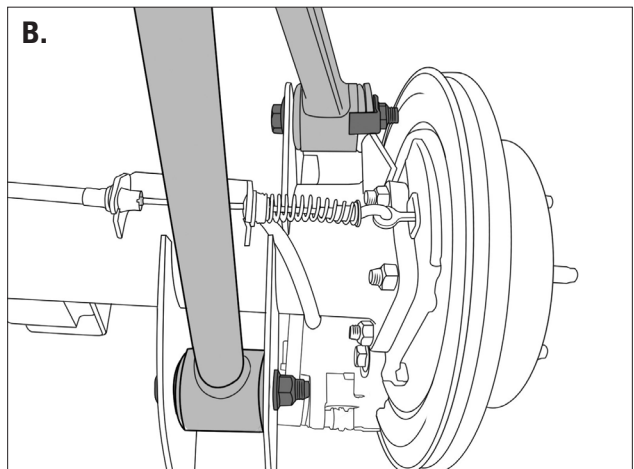
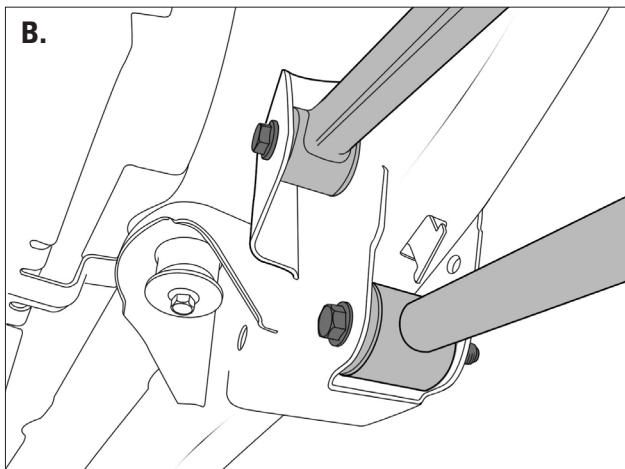
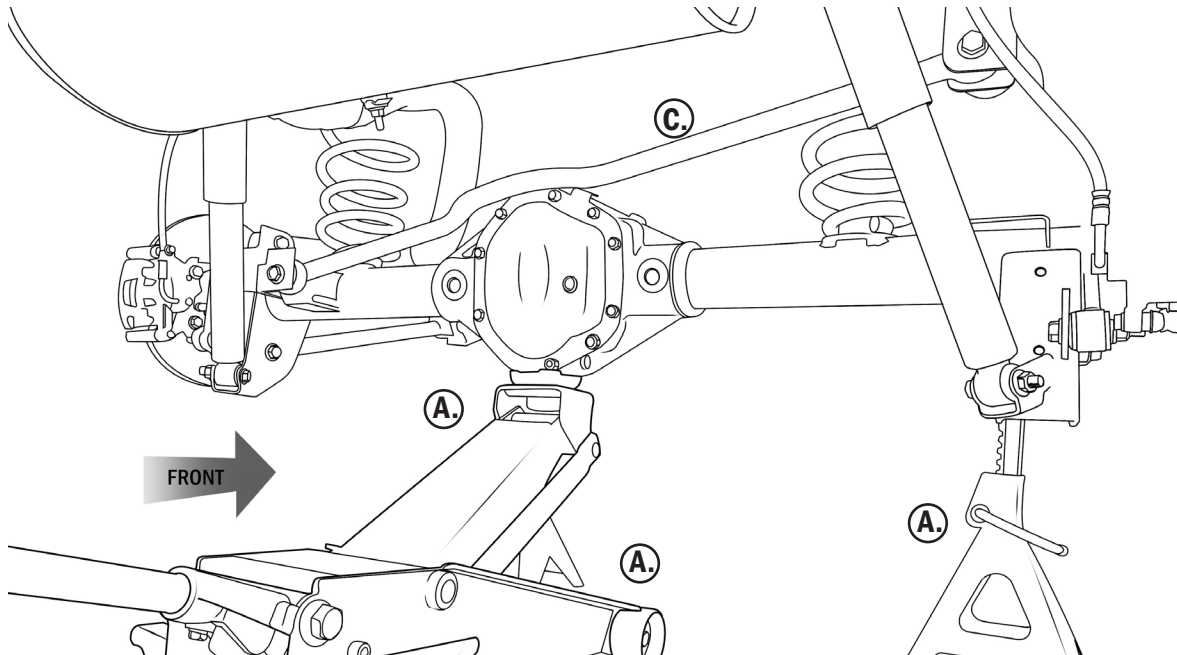
INCLUDED PARTS	QTY	REQUIRED TOOLS
Springs	4	Basic Standard and Metric hand tools
Shocks	4	3/8-in Drill Bit
Bump Stop Spacer Kit	1	
Rear Track Bar (LHD system only)	1	
Rear Track Bar Tower	1	
Brake Line Drop Bracket Set	1	
Front Stabilizer End Link Relocation Brackets (ST)	2	
Rear Sway Bar End Links	2	
High Steer Kit (SC or RS)	1	
Drop Bracket Kit	1	



REAR SUSPENSION

1.

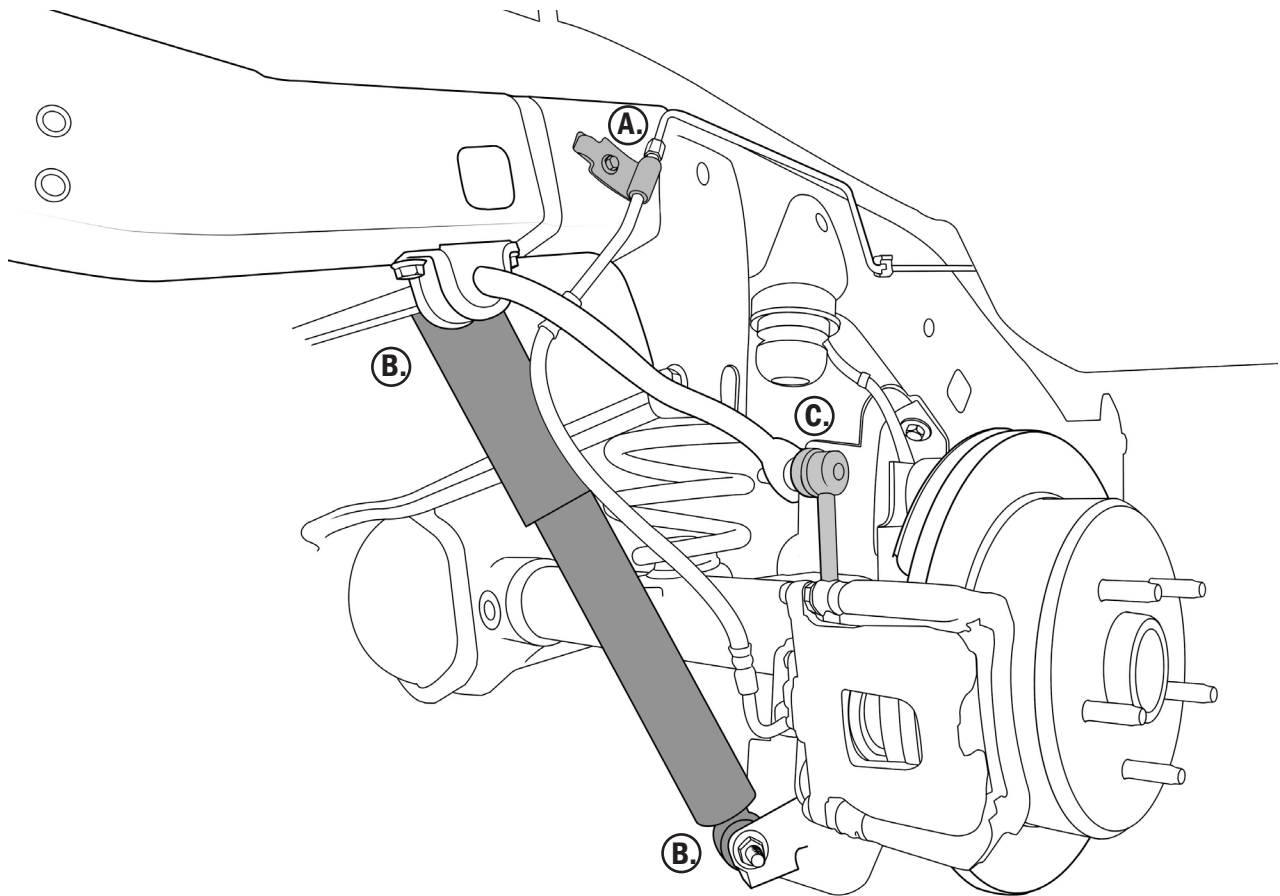
- A. Raise Jeep and support the frame using jack stands or a hoist, such that the rear axle can be lowered enough to remove the springs. Support the axle by placing floor jack under the center of the axle. Remove the wheels.
- B. Loosen but DO NOT remove all 8 control arm bolts.
- C. Remove the track bar. (NOTE: Right hand drive vehicles will reuse the factory track bar)





2.

- A. Remove the bolts that hold the brake lines to the frame.
- B. Remove the shocks.
- C. Remove the swaybar end links and save. You will reuse the hardware for the rear and the end links will be installed on the front of the vehicle. Note the orientation of the end links, the new end links will be installed in the same way.





3.

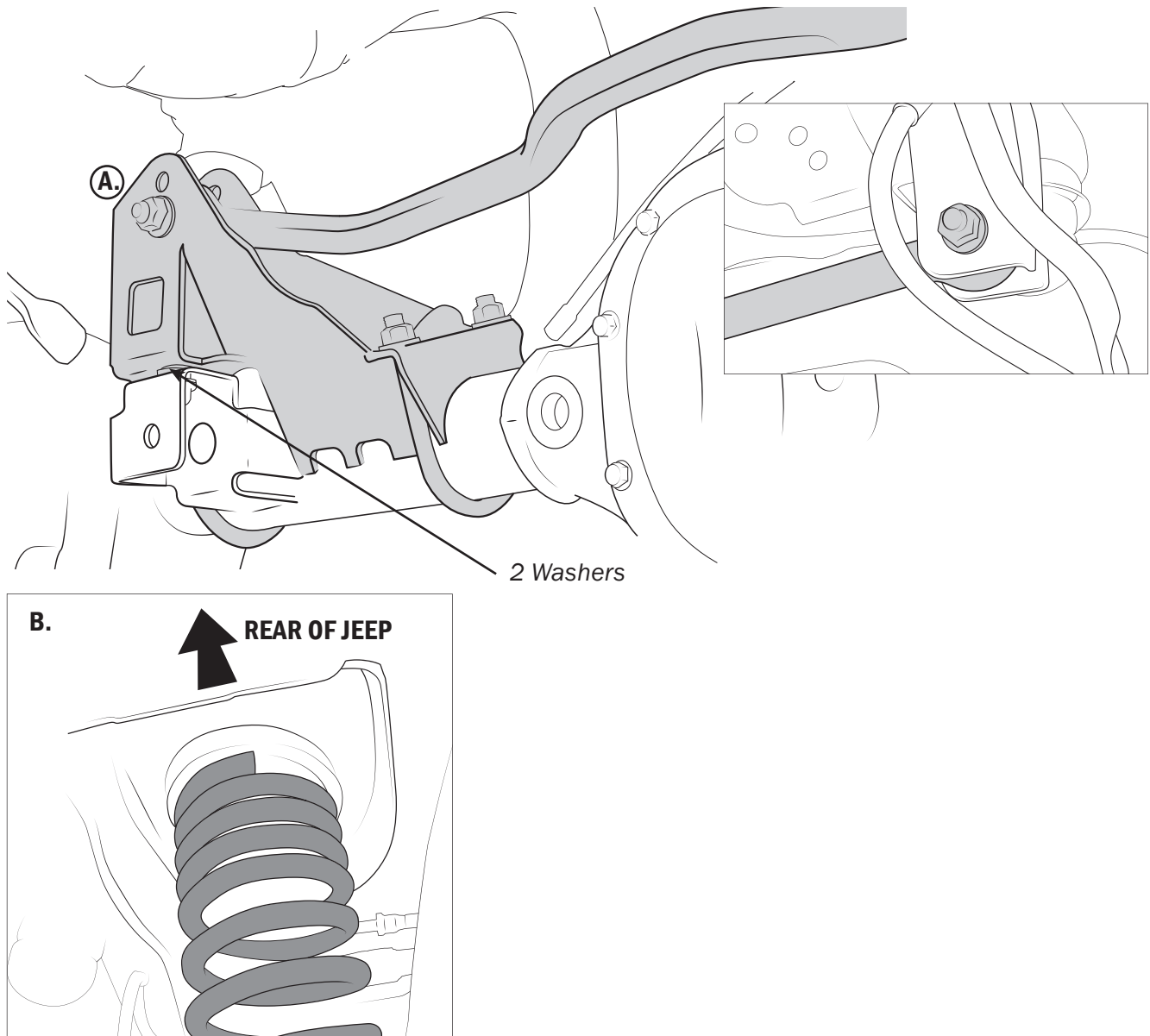
Carefully lower the axle using the floor jack enough to remove the springs. DO NOT overextend the wheel speed sensor or locker wiring.

Remove the factory springs.

4.

Install the track bar tower as shown. Tighten the U-bolt to NO MORE than 40 ft lbs. NOTE: The trackbar bolts will be reinstalled in the opposite direction from factory (A.) Use the lower mounting hole for 3.5" suspensions (shown) and the upper for 4.5" suspensions.

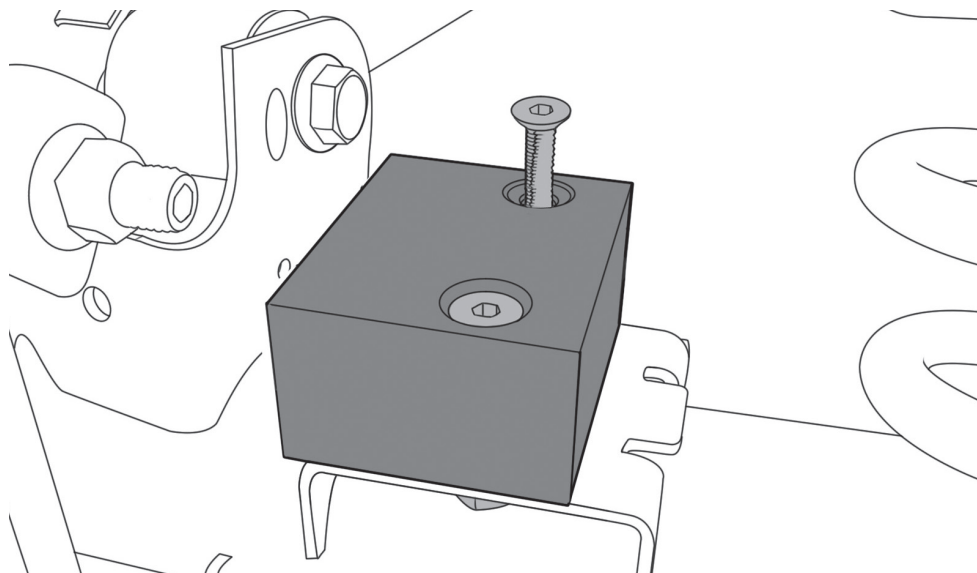
Install AEV springs making sure to properly index them on the axle spring seat (B.)





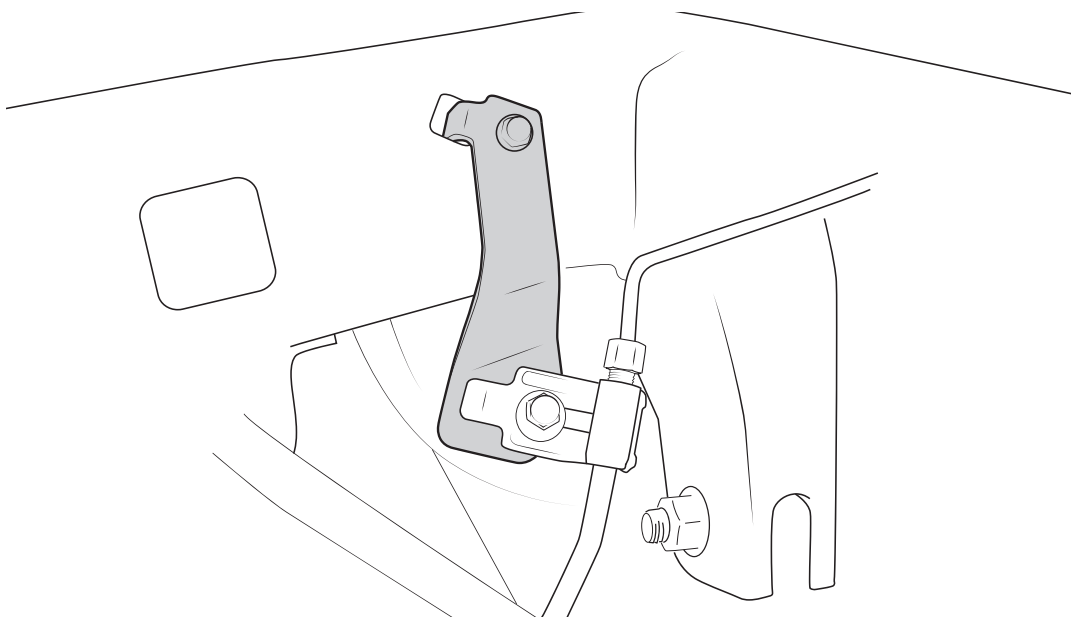
5.

Install new Bump Stop Spacers on axle as shown using the supplied hardware. DO NOT reverse the orientation from what is shown (screws should be inboard.)



6.

Install new shocks at upper mount. Raise axle slowly and guide springs into position. Install AEV swaybar end links and tighten.* Re-install lower shock nut and bolt and tighten* (refer to step 2B.) Install brake line drop brackets as shown below and tighten.* Reinstall wheels and tighten lug nuts, working in a star pattern.*

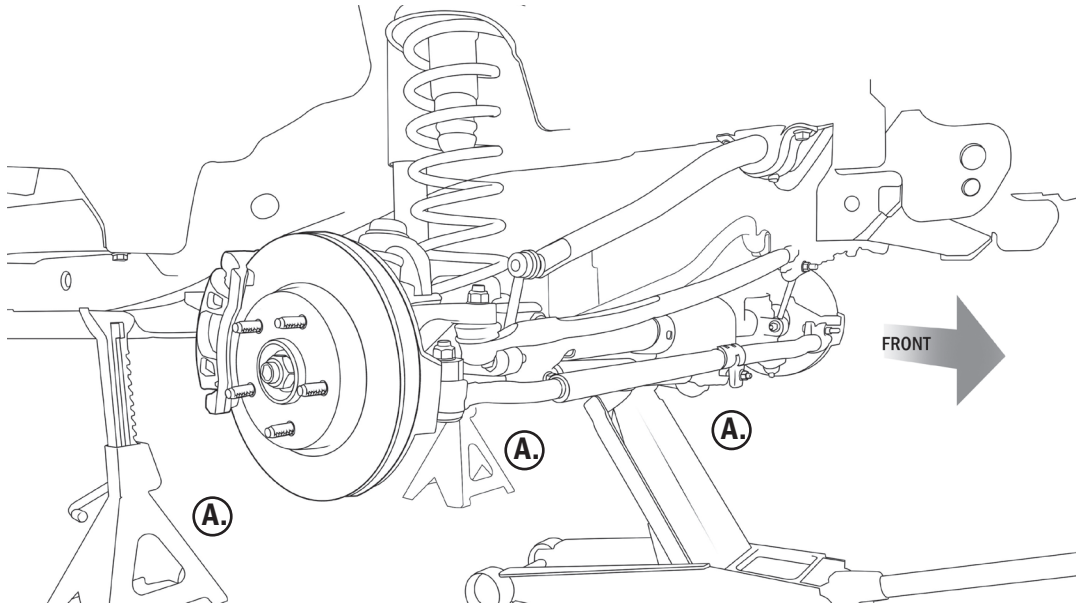




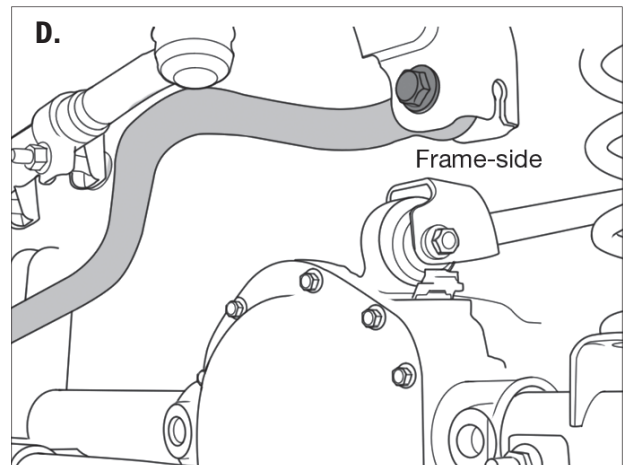
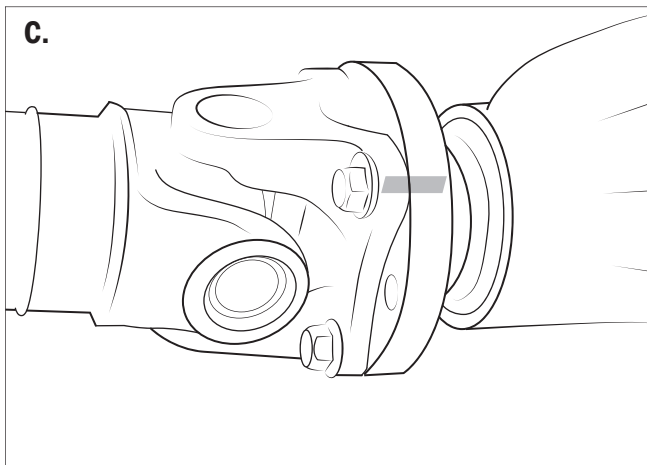
FRONT SUSPENSION

7.

- 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. Disconnect the drive shaft. Make sure to mark both sides of the connection so you can properly align it when you reconnect it. Tie loose end of the drive shaft up so it will not hang down. **Failure to follow this step may result in damage to your drive shaft.**
- D. Loosen but DO NOT remove the frame-side track bar bolt. Remove and save the axle-side track bar bolt and flag nut.

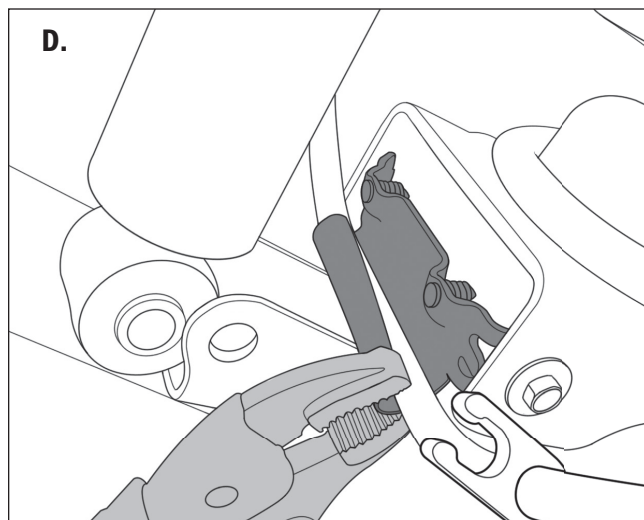
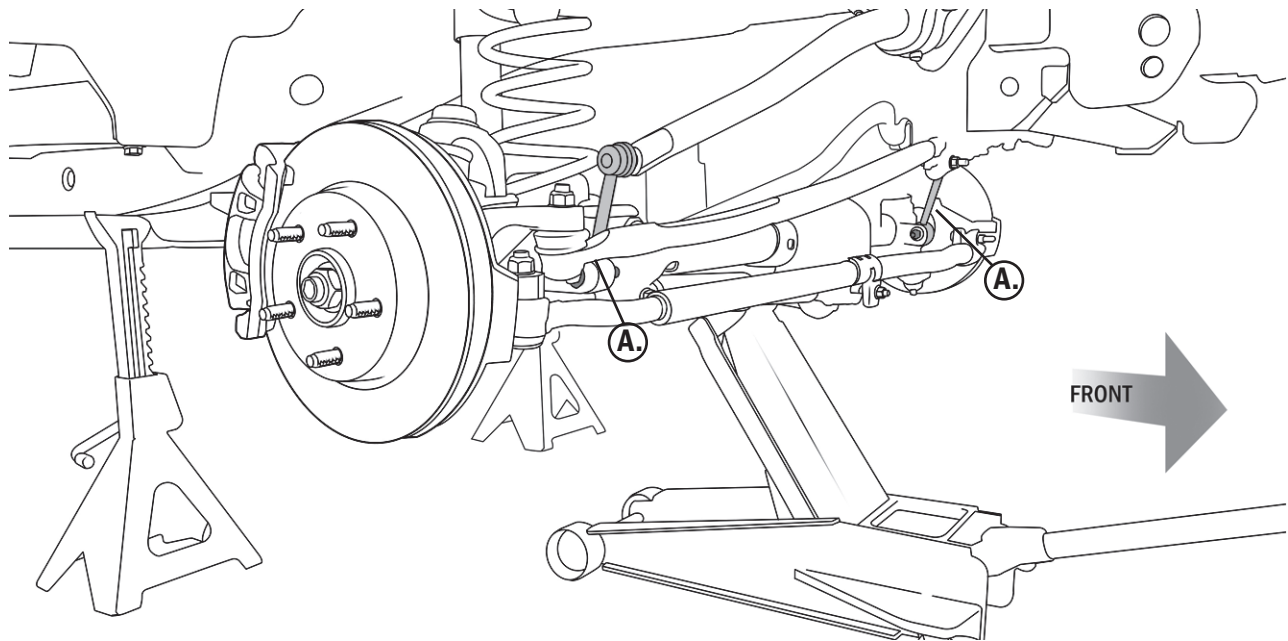




8.

Note: On Rubicon models, remove the “fir tree” zip ties holding the speed sensor wiring to the frame and upper control arm.

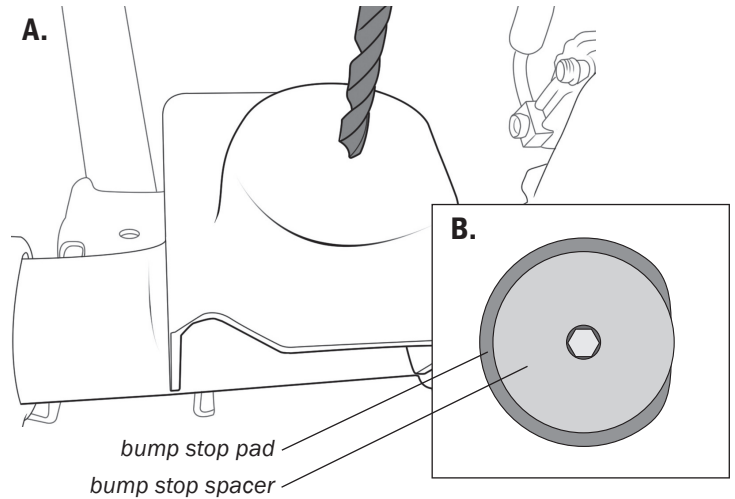
- A. Remove and save all anti-sway bar link hardware. Note orientation, new links will be installed in the same way
- B. Remove shocks and save all shock mounting hardware.
- C. Lower axle and remove springs. DO NOT remove factory isolator.
- D. For 2011 and newer models, remove and discard factory bracket from the brake line.





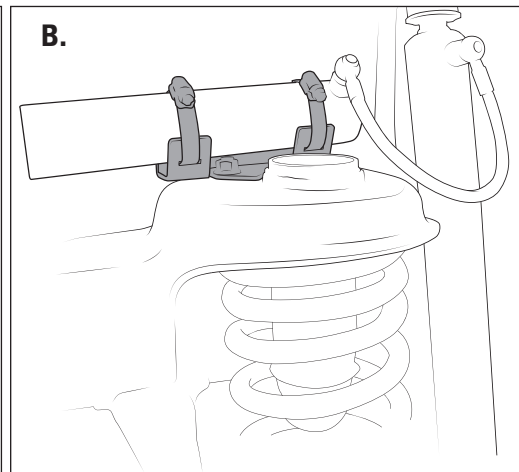
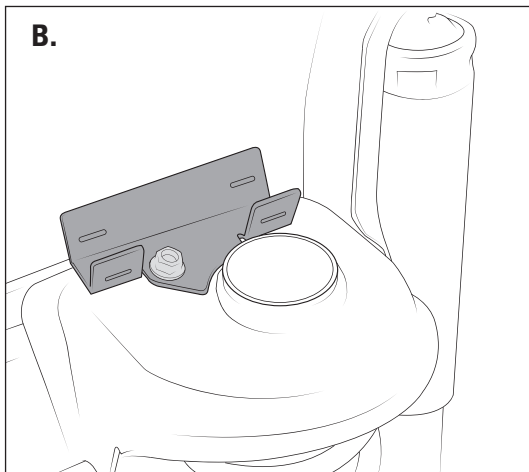
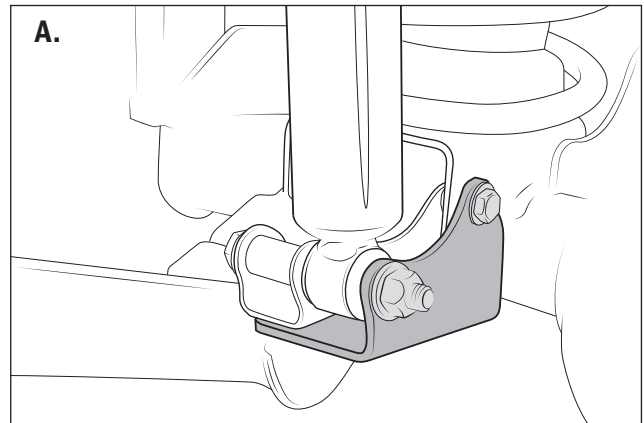
9.

- 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 AEV springs, 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.



10.

- A. Install Shock Doubler brackets on both sides as shown using supplied hardware.
- B. Install AEV Shocks. If you are installing Remote Reservoir Shocks install the reservoir bracket and use the supplied hose clamps to secure the reservoir portion of the shock into it.



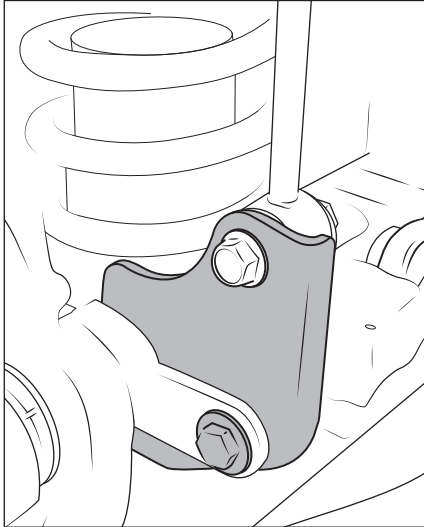
NOTE: If you purchased a SC or RS suspension install High Steer Kit now (refer to instructions contained in kit P/N: IJKS1002-E) then continue with step 12. For ST suspensions continue to step 11.



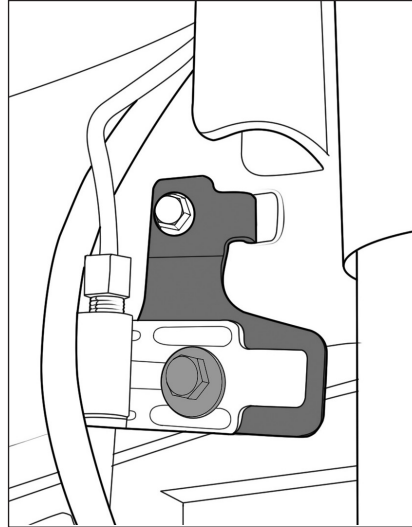
11.

- A. Install new sway bar end link brackets and tighten to 80 ft lbs. (ST only)
- B. Install sway bar end links (reusing the factory end links from the rear.)
- C. For 2007–2010 model year JK's install the front brake line drop brackets tightening to 8 ft lbs. (2011 or newer refer to step 12)

A-B.



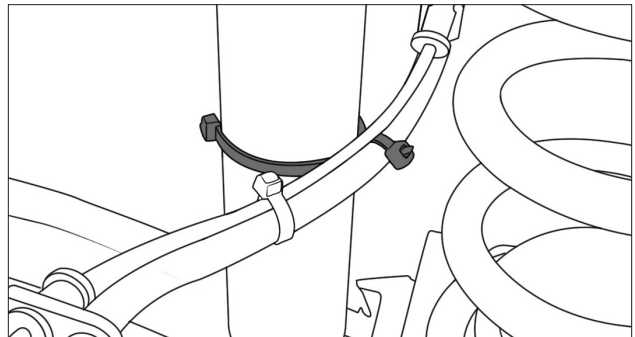
C.



12.

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.



13.

Install JK Geometry Correction Front Control Arm Drop Brackets (instructions included with kit.)

14.

Tighten all fasteners listed below to factory specifications.*

TIP: It is good practice to mark each major bolted suspension connection such as these with a paint pen. Draw a line that runs from bolt head or nut to the adjacent bracket material. This will allow a visual inspection to easily catch bolts that work loose. After approximately 100 miles, you should perform a complete visual inspection and re-torque any suspect bolts as well as your wheel lug nuts.

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. lbs.
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

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

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