



# STAMPED GEOMETRY CORRECTION BRACKETS

JL WRANGLER & GLADIATOR



AEV30413AC

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INSTALLATION GUIDE



## 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
RH Bracket Assembly	1	Common Hand Tools
LH Bracket Assembly	1	Jack and Jack Stands
Hardware Pack	1	

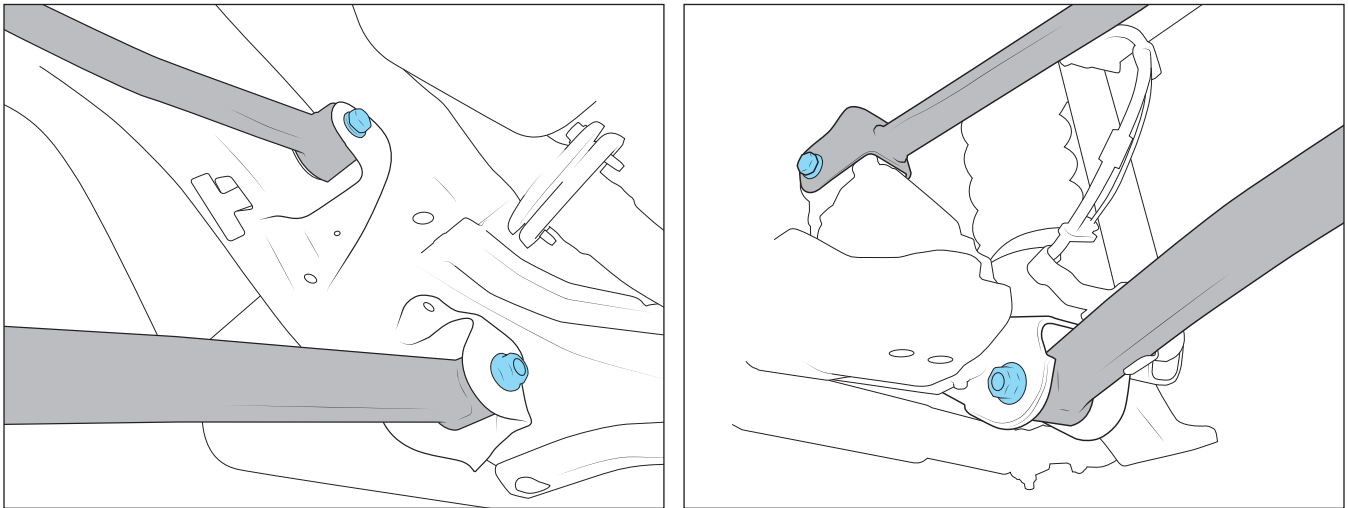


## A. Installation with AEV 2" Spacer and 2.5" DualSport Suspensions

1. These drop brackets are engineered to work with AEV 2" and 2.5" suspensions. They will also work with other suspension brands, however it is important your vehicles ride height falls within the specified range. If you are installing these brackets with a Non-AEV suspension, proceed to Section B for instructions on measuring ride height.

**NOTE:** This installation is best performed with all four wheels on the ground.

2. **WORK ON ONE SIDE AT A TIME!** If not already done from previous suspension work, loosen all 8 upper and lower control arm bolts. Remove the upper and lower control arm bolts at the frame end and save the factory hardware (Fig 1)



*Figure 1: Frame-side (left) Axle-side (right).*

3. Install the brackets as shown (Fig. 2). Use the factory hardware and supplied spacers (which will fill the void for the control arms) in the original lower control arm mounting locations.

**NOTE:** Due to reduced exhaust clearance on Ecodiesel vehicles, the OEM upper control arm bolt must now be installed from the outside of the vehicle instead of the inside. OEM flag nut can be reused on the inboard side, but be careful to position the tab so that it doesn't contact or damage any other components. Excess bolt length can be trimmed if necessary to gain adequate exhaust clearance.

Due to vehicle-to-vehicle variation, some customers may need to lower the exhaust down to get the OEM upper control arm bolt out. It may also help to rotate the top of the axle forward as the bolt is removed in order to angle it away from the exhaust. This requires unbolting both upper control arms simultaneously, which must be done with the vehicle off the ground and the front axle not supporting the vehicle weight.

4. Use the supplied bolts, nuts, and washers to mount the control arms in the new dropped locations. Use M12 fasteners for the upper control arms and M16 for the lower control arms (Fig. 2). For the new upper control arm locations, use the provided square washers to set caster. These have offset holes to allow caster to be set for various ride heights. These fit into the raised pockets on both sides of the upper control arm mounts (see step 5 for proper orientations based on ride height).

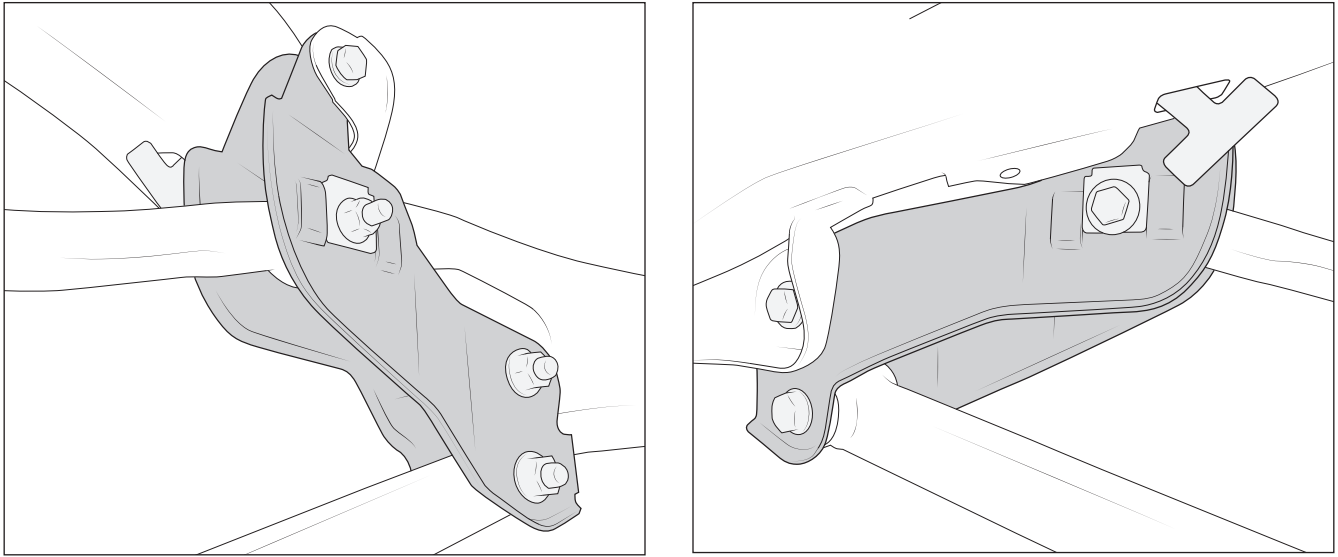
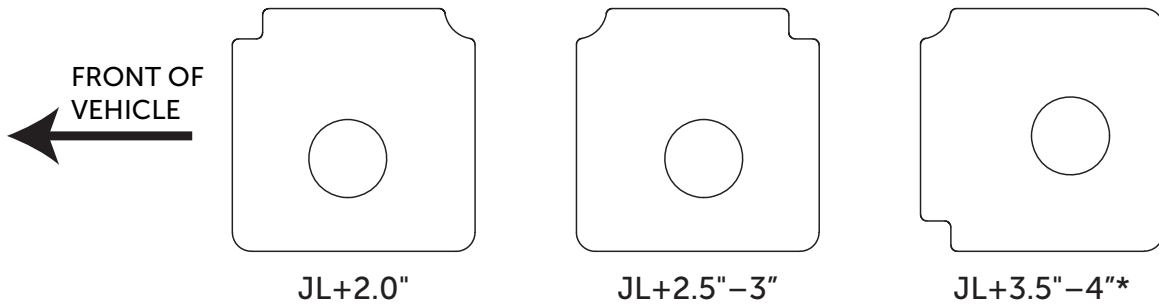


Figure 2: Inboard View (left) Outboard View (right)

5. Use the figure below to set square washers to the correct orientation for your vehicle's ride height.



\*NOTE: This setting can be used up to 4.5" of lift but caster will be at the low end of factory spec.

Figure 3

6. Torque using the chart below.

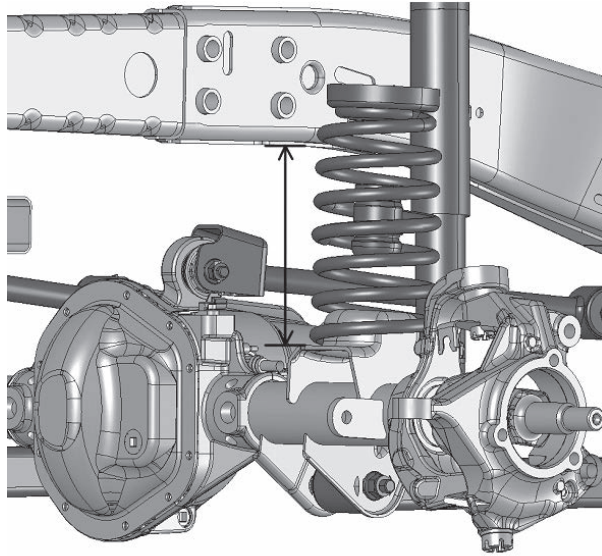
JOINT	TORQUE (FT-LB)
Front UCA to Axle	80
Front UCA to Frame and AEV Brackets	80
Front LCA to Axle	190
Front LCA to Frame and AEV Brackets	190



## B. Installation with Non-AEV Suspensions

1. You'll first need to get a measurement from your vehicle to determine whether or not you should be using the drop brackets. Measure from the bottom of the frame to the top of the spring seat (Fig. 4). Many suspensions vary from advertised height based on vehicle options, accessories, and manufacturing tolerances. We recommend measuring the height of your vehicle even if you know the advertised lift height. This will help ensure you set caster to the proper spec.

**NOTE:** If your measurement is less than 5 inches we do not recommend these brackets.



*Figure 4*

2. If your measurement is greater than 7.5 inches adjustable control arms may be required to achieve the proper caster angle.
3. You can now proceed to part A to finish the installation of the drop brackets.