



Heavy Duty Adjustable Lower Control Arms

JL / JT 2018+

NEW PRODUCT

Please visit www.aev-conversions.com to view the most current installation guide for this product.

This is a new product and we want to make sure that you receive the latest and most accurate information based on customer feedback, product revisions, and/or model year updates. We value customer feedback, so we encourage you to contact our Technical Support department if you have any suggestions on how to make the installation of this product easier or if you have any questions regarding the installation of this product. AEV's Technical Support can be reached by email at tech@aev-conversions.com or by giving us a call at (248)-926-0256.



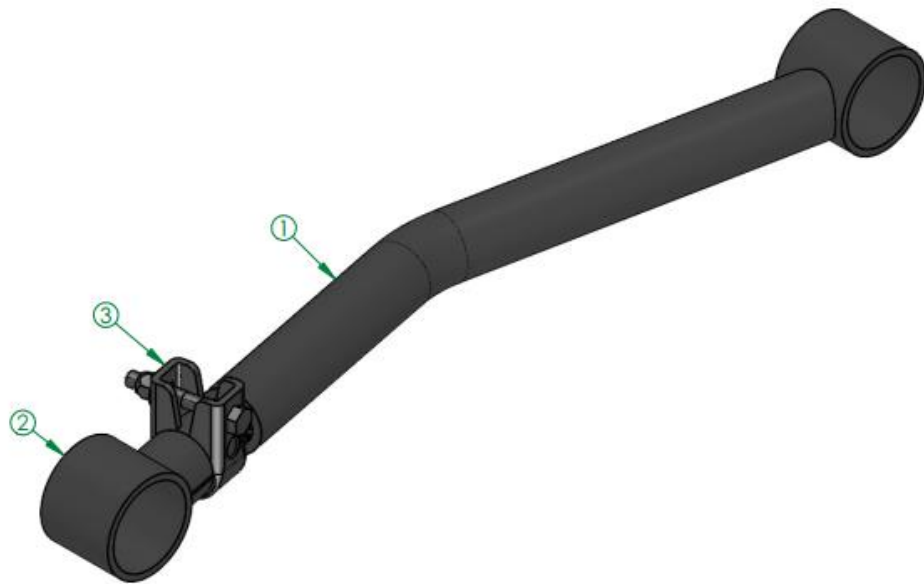
PLEASE READ BEFORE YOU START

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
JL / JT Front Lower Control Arm ASM	2	Common Hand Tools
JL Rear Lower Control Arm ASM	2	Pliers / Vice Grips
JT Rear Lower Control Arm ASM	2	Torque Wrench
		Anti-Seize
		Jack Recommended

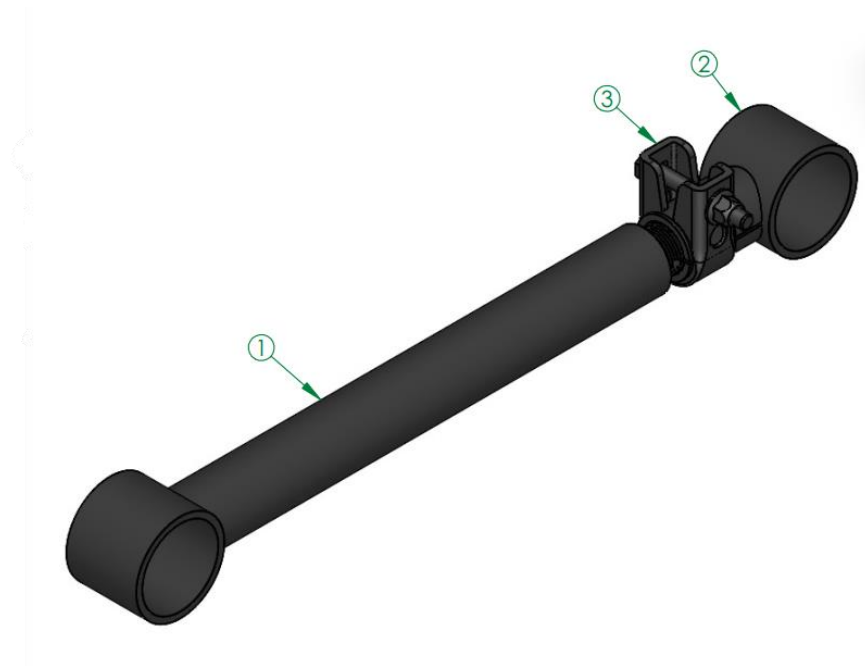


AJLS0021AB JL / JT Common Front Lower Control ARM



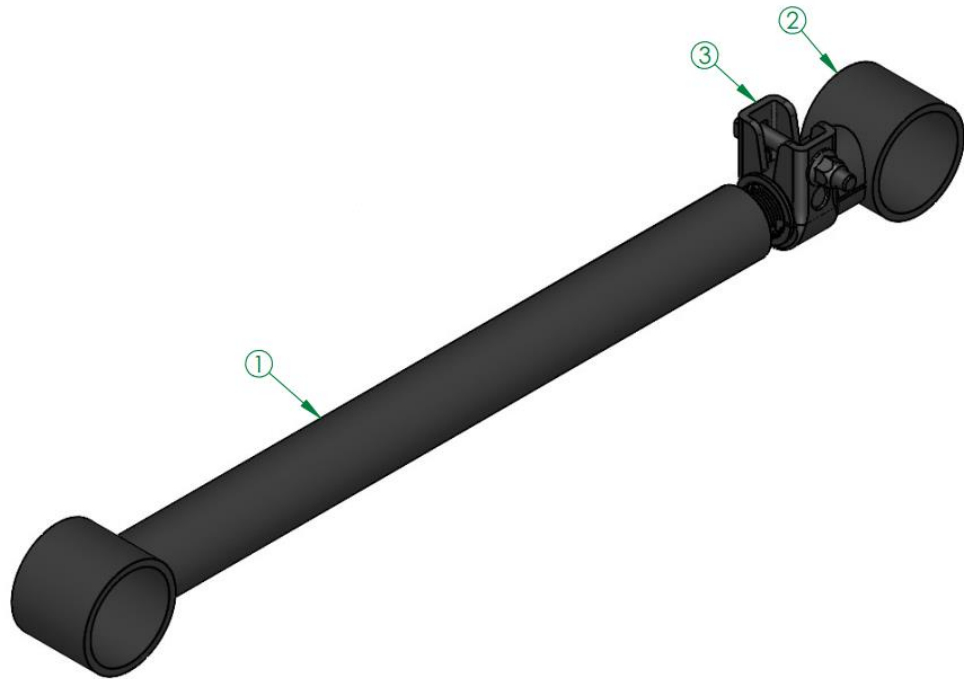
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	AJLS0225AB	Weldment, Front Lower Arm - Adjustable, 'Long End'
2	1	AJLS0224AA	Weldment, Front Lower Arm - Adjustable, 'Short End'
3	1	CE-STRG-1892	Assy, TieRod Clamp - 1.62" I.D.

AJLS0022AB JL Rear Lower Control Arm



ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	AJLS0227AB	Weldment, JL Rear Lower Control Arm - 'Long Half'
2	1	AJTS0228AA	Weldment, JL JT Rear Lower Arm - 'Short Half'
3	1	CE-STRG-1892	Assy, TieRod Clamp - 1.62" I.D.

AJTS0023AB JT Rear Lower Control Arm



ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	AJTS0227AB	Weldment, JT Rear Lower Arm - 'Long Half'
2	1	AJTS0228AA	Weldment, JL JT Rear Lower Arm - 'Short Half'
3	1	CE-STRG-1892	Assy, TieRod Clamp - 1.62" I.D.



I. VEHICLE PREPARATION

1. Securing and lifting the vehicle:

- A. Make sure the vehicle weight is placed fully on the axles / suspension via jackstands or by having the wheels on the ground. If using a hoist, make sure the vehicle is securely supported by the frame while lifting the vehicle on the hoist. Jack up the front and rear axles to compress the suspension (Fig. 1).

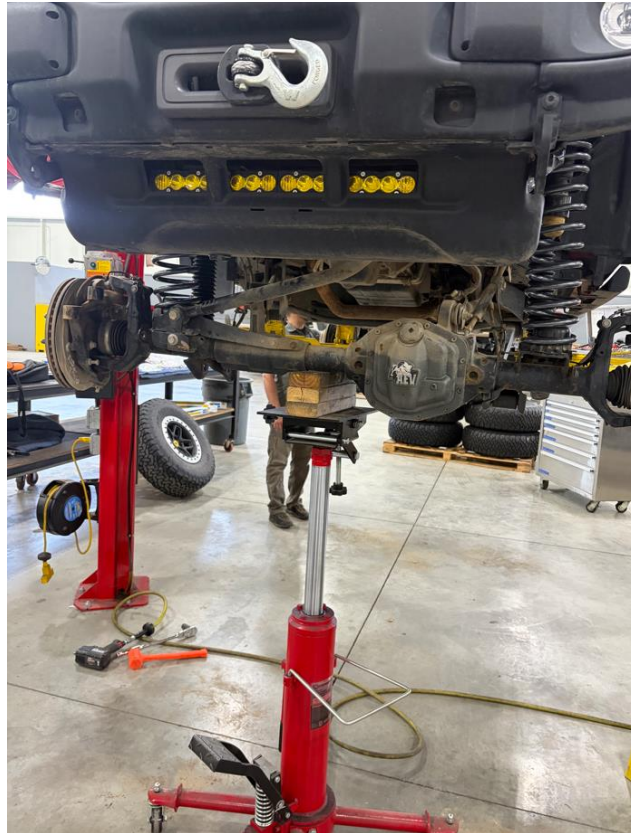


Figure 1

Please refer to the recommended lower control arm lengths on the table below prior to installation. Be sure to apply anti-seize to the threads of the weldments when assembling the two halves of the control arms:

		OE Length		Minimum		Maximum		Nom.Ideal +2.5" Lift		Nom.Ideal +4.0" Lift	
Arm	GEO brackets ?	mm	in	mm	in	mm	in	mm	in	mm	in
JLT FrtLower	Yes	609.6	24.000	599.4	23.600	627.1	24.690	609.6	24.000	609.6	24.00
	No							616.5	24.272	616.0	24.25
JL RrLower	Yes	502.0	19.764	491.0	19.331	515.0	20.276	n/a	n/a	502.0	19.76
	No							502.0	19.764	508.8	20.03
JT RrLower	Yes	603.0	23.740	592.0	23.307	616.0	24.252	n/a	n/a	603.0	23.74
	No							603.0	23.740	596.0	23.46



2. Remove the factory lower control arms & install the AEV adjustable lower control arms:

Important Note:

Remove and install one control arm at a time. Removing both lower control arms at the same time will leave the axle floating in space and could lead to safety concerns.

- A. Using a pair of pliers or vice grips, you will need to open up the bracket holding the brake lines to the factory control arms. Grab the bottom of the bent tab and peel the bracket upwards to release the line. Use caution to not damage the line. (Fig. 2)

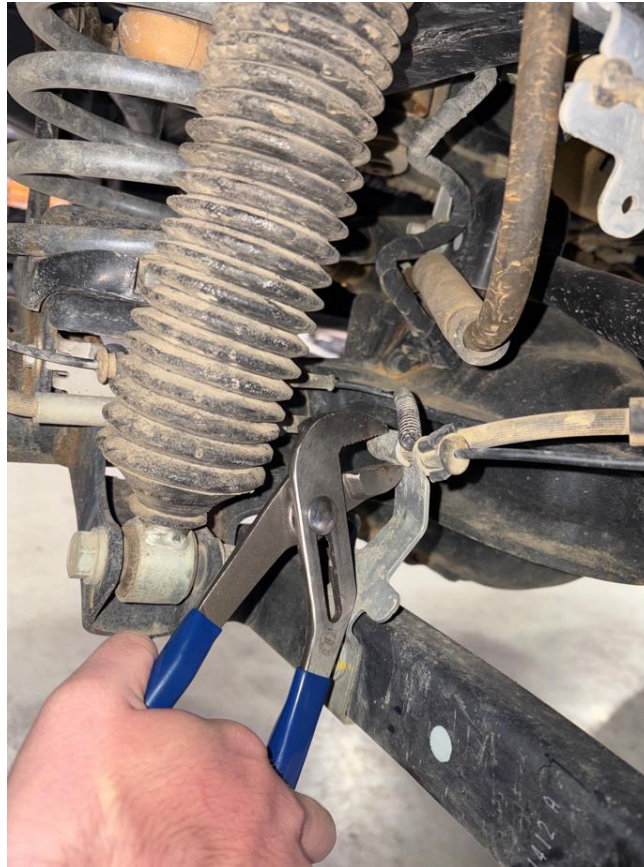


Figure 2

JL / JT Front Lower Control Arm:

- B. Working on one side of the vehicle at a time, remove the two factory nuts and bolts attaching the lower control arm to frame and axle. Save hardware for use later. Both JL and JT use M16's on the front lower control arms. (Fig. 3).
- C. Once you have removed the fasteners on the factory lower control arm it will now be free to remove from the vehicle. Make sure to leave the suspension compressed for ease of installation of the AEV adjustable control arm.
- D. Install the AJLS0021AB JL / JT Front Lower Control Arm using the factory M16 hardware saved from earlier. Make sure the bend angle of the arms point towards the center of vehicle to allow greater tire clearance. Also make sure the clamp end of the control arm is installed on the axle side of the assembly. Apply light anti-seize on the threads of the M16 bolts and loosely fasten one end of the



control arm to allow you to swing the arm into place on the vehicle and install the other M16 bolt and nut. If there's any difficulty in getting the hole lined up, a pry bar or slipper bar can be used, or a ratchet strap between the axle and frame to pull the axle in the appropriate direction. Fasten the two M16 nuts and bolts before repeating the steps on the other side, do not fully torque them down. Final torquing will be done once all lower arms are installed and the full weight of the vehicle is on the axles, this will ensure the vehicle is at its final ride height while torquing to prevent bushing bind. (Fig. 4 & 5).

- E. Position the provided control arm clamp towards the inner top side of the control arm to prevent any low snagging points and making sure they stay clear of any suspension components in the area. Make sure to install the clamp bolt from inside to out to allow proper tool clearance. Snug the clamp bolt so it stays in place. Final torquing will be done once all lower arms are installed and the full weight of the vehicle is on the axles, this will ensure the vehicle is at its final ride height while torquing (Fig. 5).



Figure 3

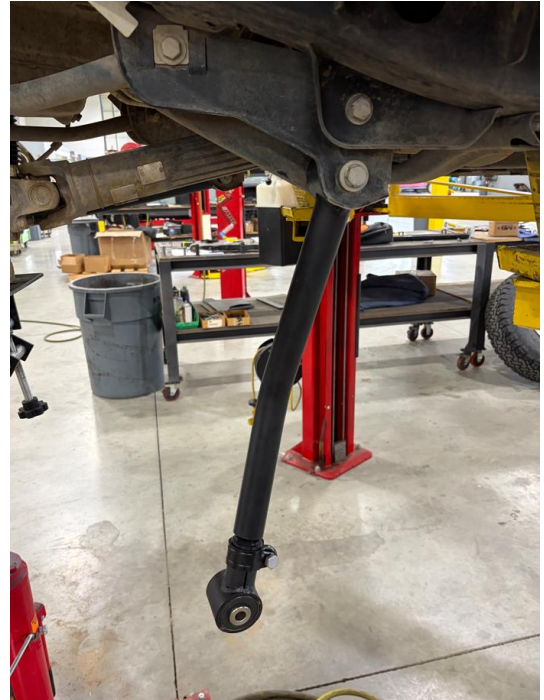


Figure 4



Figure 5

JL Rear Lower Control Arm:

- F. Remove the two factory M14 nuts and bolts on the factory control arm. Again, please make sure to work on one side at a time and save the hardware for later. (Fig. 3).
- G. Once you have removed the fasteners on the factory lower control arm it will now be free to uninstall from the vehicle. Make sure to leave the suspension compressed for ease of installation of the AEV adjustable control arm.
- H. Install the AJLS0022AB JL Rear Lower Control Arm using the factory M14 hardware saved from earlier. Make sure the provided clamp end of the control arm is installed on the axle side of the assembly. Apply anti-seize on the threads of the M14 bolts and loosely fasten one end of the control arm to allow you to swing the arm into place on the vehicle and install the other M14 bolt and nut. Fasten the two M14 nuts and bolts before repeating the steps on the other side, do not fully torque them down. Final torquing will be done once all lower arms are installed and the full weight of the vehicle is on the axles, this will ensure the vehicle is at its final ride height while torquing (Fig. 4 & 5).
- I. Position the provided control arm clamp towards the inner top side of the control arm to prevent any low snagging points and making sure they stay clear of any suspension components in the area. Make sure to install the bolt from inside to out to allow proper tool clearance. Snug the clamp bolt so it stays in place. Final torquing will be done once all lower arms are installed and the full weight of the vehicle is on the axles, this will ensure the vehicle is at its final ride height while torquing (Fig. 5).

JT Rear Lower Control Arm:



- J. Remove the two factory M16 nuts and bolts on the factory control arm. Again, please make sure to work on one side at a time and save hardware for later.
- K. Once you have removed the fasteners on the factory lower control arm it will now be free to uninstall from the vehicle. Make sure to leave the suspension compressed for ease of installation of the AEV adjustable control arm.
- L. Install the AJTS0023AB JL Rear Lower Control Arm using the factory M16 hardware saved from earlier. Make sure the clamp is installed on the axle side. Apply Anti-Seize to the threads and loosely bolt one end to allow you to swing the arm into place. Tighten the two nuts and bolts before repeating the steps on the other side. Final torquing will be done once the full weight of the vehicle is on the axles, allowing the vehicle to be at final ride height (Fig. 4 & 5).
- M. Position the control arm clamp towards the inner top side of the control arm to prevent any low snagging points and making sure they stay clear of any suspension components in the area. Snug the clamp bolt, final torquing will be done once the full weight of the vehicle is on the axles (Figure 5).

3. **Final Torquing:**

- A. You will want to lower the axles onto jackstands or install the wheels and tires back on the vehicle to rest it back on the ground so the vehicle weight is fully supported by the suspension.

JL / JT Front Lower Control Arms:

- B. Torque the two M16 control arm bolts on each arm to 190 lb-ft.
- C. Torque the two control arm clamp bolts to 60 lb-ft.

JL Rear Lower Control Arms:

- D. Torque the two M14 control arm bolts on each arm to 122 lb-ft.
- E. Torque the two control arm clamp bolts to 60 lb-ft.

JT Rear Lower Control Arms:

- F. Torque the two M16 control arm bolts on each arm to 190 lb-ft degrees rotation.
- G. Torque the two control arm clamp bolts to 60 lb-ft.

4. **Install the AEV Dualsport Suspension Decals:**

- A. For the front lower control arms, install the AEV Dualsport Suspension decals ~4" away from the frame side attachment. For visual, you will want to take a step back from the vehicle and locate the opening between the wheel well and tire where the control arm is visible. (Fig.6 &7)
- B. For the rear lower control arms, install the AEV Dualsport Suspension decals ~1" away from the frame side attachment.



Figure 6



Figure 7