Jeep ZJ Installation Instructions

www.core4x4.com
936 INDUSTRIAL PARK
RD, OREM UT. 84057

The Optional Hardware Kit(s):

ZJ Front Lower Hardware

- (4) 9/16”x4” coarse thread bolts
- (8) 9/16” washers
- (4) 9/16” top-lock nuts

ZJ Lower Rear Hardware

- (4) 9/16”x4” coarse thread bolts
- (8) 9/16” washers
- (4) 9/16” top-lock nuts

ZJ Upper Front Hardware

- (4) 10mmx80mm bolts
- (8) 10mm washers
- (4) 10mm top-lock nuts

ZJ Upper Rear Hardware

- (4) 10mmx80mm bolts
- (8) 10mm washers
- (4) 10mm top-lock nuts

Required Tools

- Basic hand tools
- Torque Wrench
- Tools to torque down jam nuts, can be an adjustable wrench or appropriate sized crows foot adapters

Torque Specs

- 9/16”: 125-130 ft-lbs
- 10mm: 50-55 ft-lbs.
- 1-⅝” jam nut: 250 ft-lbs
- 1-½” jam nut: 200 ft-lbs

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Installation Notes:

- We leave the grease fittings out of our control arm when we assemble them so that they do not break off during shipping. They are tapered fittings and may not sit flush with the sleeve on the control arm. Do not force the grease fitting to be flush as it might break the fitting off in the sleeve resulting in needing to extract the broken part or to send it back in to us to repair the threads.
- For 1997-2006 Jeep Wrangler TJ and LJ models, the below length chart for the rear upper and rear lower control arms might not be accurate for your vehicle. Many things like slip yoke eliminator kits, control arm or rear track bar relocation brackets, or others might change how you need to adjust the control arms. An SYE kit will change the pinion angle your vehicle needs in the rear.

Length Chart:

ZJ Length Chart						
	Stock	2"	3"	4"	5"	6"
Front Lowers	15-3/4"	15-7/8"	16"	16-3/8"	16-5/8"	17"
Front Uppers	15"	15"	15"	15-1/8"	15-1/4"	15-1/2"
Rear Lowers	16.625"	16.875"	17"	17.125"	17.385"	17.675"
Rear Uppers	13.5"	13.75"	14"	14.25"	14.5"	14.75"
Front Track Bar	31.562"	31.66"	31.75"	31.875"	32"	32.125"
Rear Track Bar	31-1/8"	31-1/4"	31-3/8"	31-1/2"	31-5/8"	31-3/4"

*Note: these are only starting lengths and might not be accurate for your application.

Control Arm Identification

1. Adjustable Front Upper Control Arms.

2. Adjustable Front Lower Control Arms.

3. Adjustable Rear Upper Control Arms.

4. Adjustable Rear Lower Control Arms.

*Note: Camp Series control arms are shown in the above image.

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Jeep ZJ Front Lower Control Arms Installation

REMOVAL

Raise and support the front of the vehicle. If the vehicle is equipped with ABS, remove the sensor wire from the inboard side of the arm. Remove and install only one arm at a time, then proceed to the next arm.

Step 1: Remove the axle side bolt and nut with a 21mm socket/wrench.

Step 2: Remove the frame side bolt and nut with a 21mm socket/wrench.

Step 3: Remove the control arm.

Installation

Unscrew the new arms and apply anti-seize to the threads. Set the new adjustable control arms to length. Reference the chart provided with the arms. *Note, the bend goes downward toward the ground and the adjusting end goes to the frame/body.

Step 4: Slide the control arm into the axle end bracket, insert bolt and tighten only finger tight.

Step 5: Slide the other end of the control arm into the frame side bracket, insert bolt and tighten only finger tight. *Note that in order to line up the holes, using something like a ratchet strap to pull the axle into place might be necessary.

Step 6: Repeat steps 1-5 for the other lower front control arm. Set the Jeep on the ground under its own weight.

Step 7: Tighten all bolts to factory torque specifications. If the Jeep is equipped with cam bolts, torque those to 85 ft-lbs. and the frame side bolts to 130 ft-lbs. If using other hardware (grade 8 or stronger), 130 ft-lbs. is sufficient for both ends.

Step 8: Tighten the jam nuts on the adjusting end to the tube of the control arms. *Note: keeping the jam nuts tight is a part of regular maintenance and failure to do so will result in premature thread damage and will not be covered under warranty.

Step 9: Grease all joints and bushings and grease every 6 months. Re-torque all bolts and nuts after 300 miles and check suspension for tightness every 3,000 miles thereafter.

Jeep ZJ Front Upper Control Arms Installation

Removal

Raise and support the vehicle. Remove no more than two arms at a time.

Step 1: Remove the axle end bolt and nut.

Step 2: Remove the frame end bolt and nut.

Step 3: Remove the control arm.

Installation

Unscrew the new arms and apply anti-seize to the threads. Set the new adjustable control arms to the length listed on the chart provided with the control arms.

Step 4: Position the arm in the bracket. Install the axle side nut and bolt. Tighten the nut finger tight.

Step 5: Install the frame side nut and bolt. Tighten only finger tight.

Step 6: Repeat steps 1-5 for the other front upper control arm. Set the Jeep on the ground under its own weight.

Step 7: With the Jeep on the ground, tighten all upper control arm bolts to 50-51 ft-lbs.

Step 8: Tighten the jam nuts on the adjusting end to the tube of the control arms. *Note: keeping the jam nuts tight is a part of regular maintenance and failure to do so will result in premature thread damage and will not be covered under warranty.

Step 9: Grease all joints and bushings and grease every 6 months. Re-torque all bolts and nuts after 300 miles and check the suspension for tightness every 3,000 miles thereafter.

Jeep ZJ Rear Lower Control Arms Installation

Removal

Raise and support the rear of the vehicle. Remove and install only one arm at a time, then proceed to the next arm.

Step 1: Remove axle side nut and bolt with a 21mm socket/wrench.

Step 2: Remove frame side nut and bolt with a 21mm socket/wrench.

Step 3: Remove the control arm.

Installation

Unscrew the new arms and apply anti-seize to the threads. Set the new arms to the correct length for your application. Length varies based on lift height, desired axle position, and desired pinion angle. (Some research may be required to determine the correct length for your application, usually the same length as the front lowers on TJs and LJs) The adjusting end goes to the frame/body. *Note: TJs and LJs only: the lower rear control arms are the same as the front, they have a bend in them, that bend is meant to go down towards the ground.

Step 4: Slide the control arm into the axle bracket. Insert the bolt, tighten the nut only finger tight.

Step 5: Slide the other end of the control arm into the frame side bracket, insert bolt and tighten only finger tight. *Note that in order to line up the holes, using something like a ratchet strap to pull the axle into place might be necessary.

Step 6: Repeat steps 1-5 for the other lower rear control arm. Set the Jeep on the ground under its own weight.

Step 7: Tighten all bolts to 130 ft-lbs.

Step 8: Tighten the jam nuts on the adjusting end to the tube of the control arms. *Note: keeping the jam nuts tight is a part of regular maintenance and failure to do so will result in premature thread damage and will not be covered under warranty.

Step 9: Grease all joints and bushings and grease every 6 months. Re-torque all bolts and nuts after 300 miles and check suspension for tightness every 3,000 miles thereafter.

Jeep ZJ Rear Upper Control Arms Installation

REMOVAL

Raise and support the rear of the vehicle. Remove and install only one arm at a time, then proceed to the next arm.

Step 1: Remove the axle side bolt and nut.

Step 2: Remove the frame side bolt and nut.

Step 3: Remove the control arm.

Installation

Unscrew the new arms and apply anti-seize to the threads. Set the new arms to the correct length for your application. Length varies based on lift height, desired axle position, and desired pinion angle. (Some research may be required to determine the correct length for your application)

Step 4: Slide the control arm into the axle end bracket, insert bolt and tighten only finger tight.

Step 5: Slide the other end of the control arm into the frame side bracket, insert bolt and tighten only finger tight. *Note that in order to line up the holes, using something like a ratchet strap to pull the axle into place might be necessary.

Step 6: Repeat steps 1-5 for the other rear upper control arm. Set the Jeep on the ground under its own weight.

Step 7: Tighten all bolts to factory torque specifications. (55 ft.lbs.)

Step 8: Tighten the jam nuts on the adjusting end to the tube of the control arms. *Note: keeping the jam nuts tight is a part of regular maintenance and failure to do so will result in premature thread damage and will not be covered under warranty.

Step 9: Grease all joints and bushings and grease every 6 months. Re-torque all bolts and nuts after 300 miles and check suspension for tightness every 3,000 miles thereafter.