

**Product: Adjustable Lower Control Arms** 

Part Number: JKS1650

Applications: Wrangler TJ, 1997-06 (front or rear)

Gr. Cherokee ZJ, 1993-98 (front or rear) Grand Cherokee WJ, 1999-04 (front only)

Cherokee XJ, 1984-01 (front only) Comanche MJ, 1986-92 (front only)



#### Welcome

CONGRATULATIONS on purchasing a set of new Adjustable Control Arms from JKS Manufacturing. We are committed to providing you with the best products available and your satisfaction is our first priority.

PLEASE READ these Installation Instructions carefully, and save them for future reference, as they contain important installation and maintenance information.

# **Tools Required**

- O Metric/Standard Socket Wrench Set
- O 1-7/8" Wrench (JKS1695 Compact Jam Nut Wrench)
- O Torque Wrench
- O Tape Measure
- O Anti-Seize Lubricant
- O Hydraulic Floor Jack & Jack Stands
- O Heavy Duty Ratchet Strap \*
- Factory Service Manual (recommended)
- \* Asterisk denotes tools that are not required for some applications. Thoroughly read instructions first to determine which tools will be required for your application.

# **Important**

SUSPENSION COMPONENTS THAT HAVE RUB-BER BUSHINGS must be tightened with vehicle on level ground and at normal ride height. The springs must be supporting the weight of the vehicle when the hardware is torqued; or else ride comfort could be affected and premature bushing wear may occur.

RUBBER BUSHINGS MUST NEVER BE LUBRI-CATED, as doing so will impair performance and longevity.

COMPATIBLE WITH original 4-link suspension configuration and vehicle ride height up to 6.0"

REFER TO FACTORY SERVICE MANUAL for information and procedures not covered in these instructions.

## **Pre-Installation Note**



# AGRAND CHEROKEE WJ NOTE

# IMPORTANT NOTE REGARDING CONTROL ARM SPACERS FOR GRAND CHEROKEE WJ MODELS

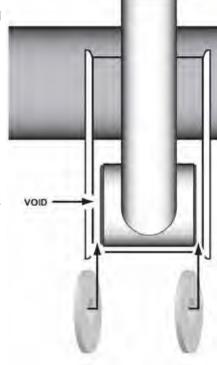
The factory suspension arm brackets on the chassis and axle are wider than the control arm bushings. Therefore, it

is necessary to insert spacer washers between the bracket and bushing to fill this void as illustrated.

Both front and rear control arms require the same spacers. Enough spacers for 1 set of arms is included in JKS6109.

The axle mount reauires one 1/4" thick washer on each side of the control arm.

The frame mount requires one 1/8" thick spacer on each side fo the control arm.





# **ATTENTION INSTALLER**

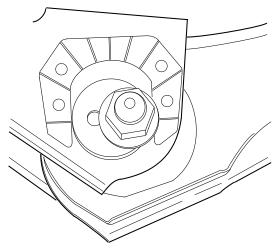
Install Adjustable Control Arms ONE AT A TIME for easiest alignment of mounting hardware.

# Installation

# **REMOVE ORIGINAL LOWER SUSPENSION ARM**

- Raise and support the vehicle chassis with jack stands.
  - FRONT INSTALLATION Position behind front lower suspension arm brackets.
  - REAR INSTALLATION Position in front of rear lower suspension arm brackets.
- Raise the axle housing back into position and support with a hydraulic jack. HINT: The axle housing should be evenly supported and the suspension

- at normal ride height. Do not attempt removal or installation with the suspension extended, or the axle drooped, as this will place tension on suspension arm mounting hardware.
- Remove the lower suspension arm nut and bolt from the axle housing bracket. Retain the original mounting hardware.
- FRONT INSTALLATION If front axle is equipped with cam adjusters (see illustration below), scribe or paint alignment marks for re-installation reference.



- Remove the nut and bolt from the chassis rail bracket. Retain the original mounting hardware.
- Remove the original lower suspension arm from the vehicle.

#### □ 2. SET CONTROL ARM LENGTH

Adjustable Control Arms are fully collapsed when supplied from JKS and must be adjusted to the desired lengths before installation.

- Determine ideal Control Arm length for your application by considering factors such as:
  - Length of OE suspension arm
  - Tire Clearance
  - Pinion Angle / Caster
  - Rotate adjustable end of Control Arm until the desired length is achieved.
  - Recommended length for 3-4" of lift is 16-1/4"
- Adjust corresponding Control Arm to exact same length.

#### □ 3. INSTALL CONTROL ARM

- Apply anti-seize lubricant to bolt threads of original mounting hardware.
- O Mount the adjustable flex eye end of the adjustable control arm to the frame with the grease fitting facing <u>UP</u>.
  - ➡ GRAND CHEROKEE WJ ONLY Insert two (2) 1/8" shims – one on each side of bushing – to fill the void between the frame bracket and flex eye. Install the original mounting bolt and finger tighten the nut. DO NOT torque mounting hardware until instructed.
- O Mount the <u>rubber bushing</u> end of Adjustable Control Arm to the axle housing bracket.
  - GRAND CHEROKEE WJ ONLY Insert two (2) 1/4" shims – one on each side of the control arm bushing - to fill the void between the frame bracket and Control Arm bushing.



O Install the original mounting bolt and finger tighten the nut. Remember to realign cam adjuster on front axle if equipped. DO NOT torque mounting hardware until instructed.

HINT: If mounting bolt is difficult to install due to misalignment of Control Arm bushing with mounting bracket, either (1) adjust height of axle housing with hydraulic jack, (2) move axle housing into position with a heavy-duty ratchet strap, or (3) temporarily disconnect track bar until mounting holes align.

## □ 4. TIGHTEN MOUNTING HARDWARE

Once all Adjustable Control Arms have been properly installed, lower the vehicle to the ground until coil springs are supporting the full weight of vehicle.  Using a torque wrench, tighten the mounting hardware to the factory torque specifications for your vehicle.

### **Wrangler TJ, 1997-06**

- Tighten nut at FRONT <u>axle</u> and <u>chassis</u> brackets to 130 ft-lbs.
- Tighten nut at REAR <u>axle</u> and <u>chassis</u> brackets to 150 ft-lbs.

## Grand Cherokee ZJ, 1993-98

- → Tighten nut at FRONT <u>axle</u> and <u>chassis</u> brackets to 130 ft-lbs.
- → Tighten nut at REAR <u>axle</u> and <u>chassis</u> brackets to 130 ft-lbs.

#### Grand Cherokee WJ, 1999-04

→ Tighten nut at FRONT <u>axle</u> and <u>chassis</u> brackets to 130 ft-lbs.

#### **Cherokee XJ, 1984-01**

→ Tighten nut at FRONT <u>axle</u> and <u>chassis</u> brackets to 130 ft-lbs.

#### □ 5. POST-INSTALLATION INSTRUCTIONS

- Adjustable Control Arms are supplied pre-lubricated, although it will be necessary to add more grease after they have been adjusted and installed on the vehicle. Refer to Maintenance section for specific lubrication instructions.
- Have vehicle professionally aligned before driving on highway.

#### **Maintenance**

Control Arms flex eyes should be greased regularly as part of vehicle maintenance schedule. Lubricate using a non-petroleum based grease.