



**DON'T FORGET**  
These instructions can be found in  
color and expandable at QA1.net

Technical Support Line: (952) 985-5675 Email: sales@QA1.net

### INSTALLATION INSTRUCTIONS

QA1 P/N 52616 Lower Control Arms  
'67-86 Chevy/GMC C20, '87-'91 Chevy/GMC R20

### TOOLS AND SUPPLIES REQUIRED

- Floor Jack
- Jack Stands
- Drill & Drill Bit Set
- Torque Wrench
- SAE Wrench Set
- 1891-106 Ball Joint Tool Kit
- Ratchet & SAE Socket Set

### Pre-Installation Notes

QA1 C20/R20 suspension is designed to be used with '71-'91 C20/R20 disc brake spindles.

This suspension can be used to convert '67-'70 C20 from drum brakes to disc brakes using QA1 5256 tie rod sleeves.

QA1 52896 front sway bar is recommended as the factory front sway bar is not compatible with this suspension.

### Disassembly Instructions

1. Raise and support the vehicle by the frame rails with jack stands on a stable surface.
2. Remove the front wheels.
3. Unbolt the sway bar from the lower control arms if equipped with a sway bar.
4. Disconnect the lower shock mount from the lower control arm.
5. Remove the cotter pins from the lower ball joints and loosen the castle nuts. Do not remove the castle nuts at this time. Only loosen the castle nut on the lower control arm.
6. Strike the flat surface on the spindle near the ball joint with a hammer to separate the ball joints from the spindle. A ball joint separating tool (pickle fork) may be required. See **Figure 1**.
7. Using a spring compressor, compress the front springs to take pressure off the lower control arm.
8. Place a floor jack under the lower control arm and remove the ball joint castle nuts. Lower the control arm out of the way. The spindle and spring can now be removed from the vehicle.
9. Remove the U-bolts retaining the lower control arm to the cross member and remove the lower control arms from the vehicle.

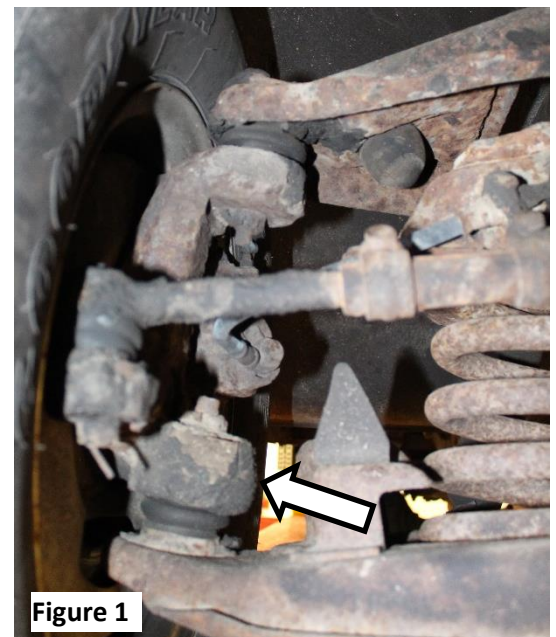
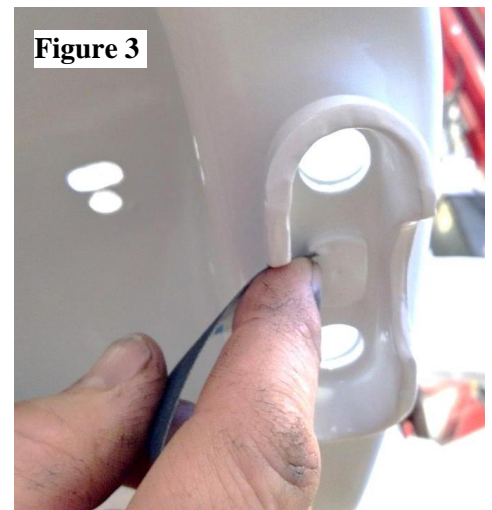
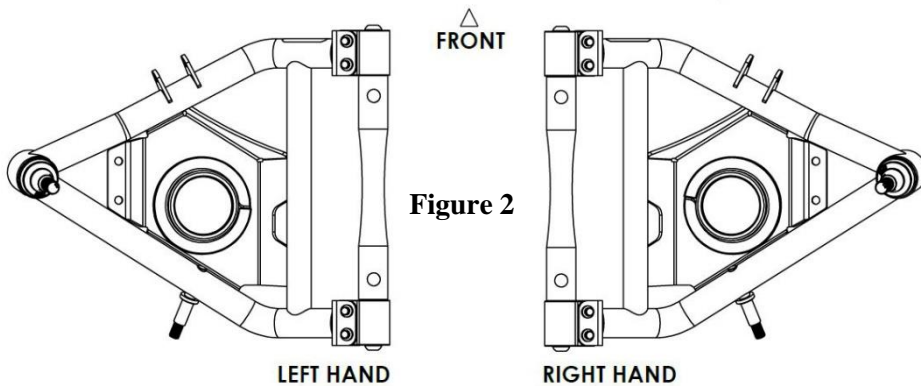


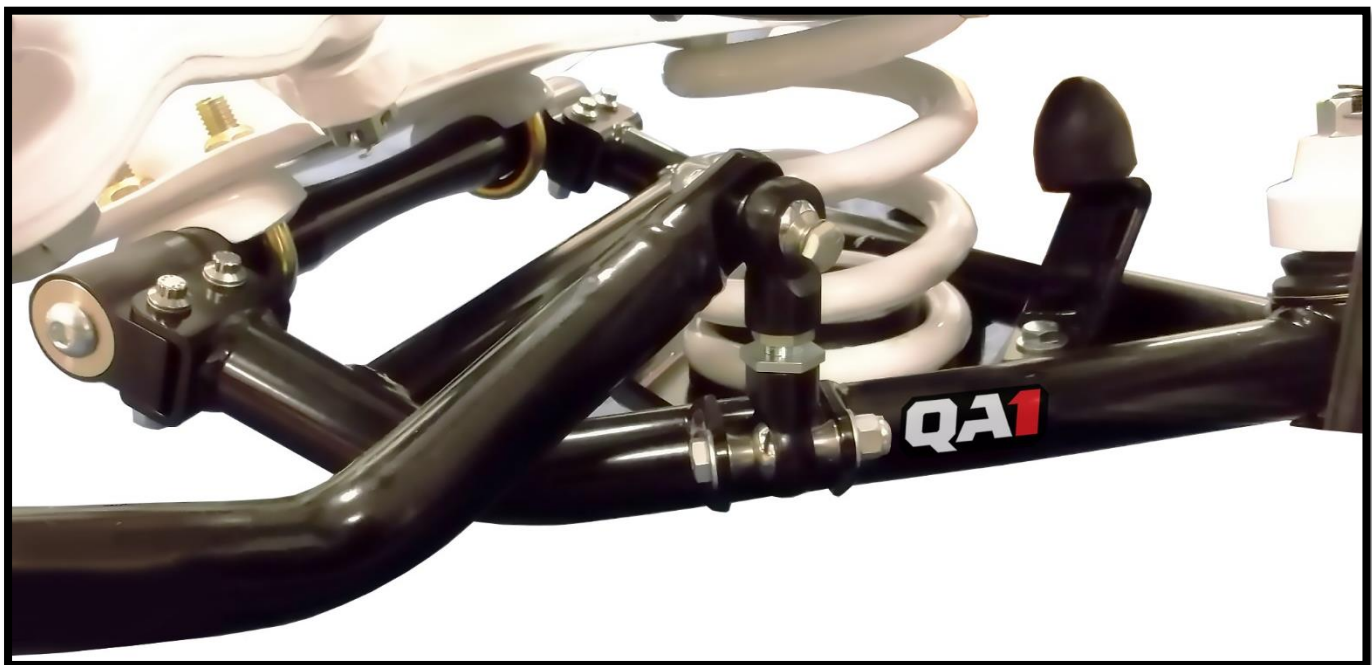
Figure 1

## Installation Instructions

1. Identify the left and right control arms using **Figure 2**.



2. The lower control arm U-bolt holes on the cross member will need to be enlarged to 9/16" for '72 and earlier trucks to accept the supplied 9/16" U-bolts.
3. Inspect the lower control arm mounts on the cross member for burrs or sharp edges that could dig into the cross shaft and clean up as necessary. See **Figure 3**.
4. Install the bump stop mount and bump stop on the lower control arm with the supplied 3/8" hardware as shown in **Figure 4** on page 3. These brackets are right and left had specific and should be installed with the steering stop towards the rear of the arm.
5. Install the QA1 lower control arm with the supplied U-bolts. The **front (only)** alignment dowel on the cross member must be seated into the front cross shaft. The rear alignment dowel does not need to line up with indent in the cross shaft. Torque the U-bolt nuts evenly to 70 lb. ft.
6. Reinstall the coil spring making sure to rotate the spring in the upper spring pocket so it is indexed into the recess and raise the lower control arm up to spindle and reconnect the ball joint. The spring isolator on the lower control arm should be rotated to match up with the end of the spring at this time.
7. Tighten the lower ball joint castle nut to 90 lb. ft. Once torqued, tighten the nuts until the cotter pin is able to be installed. Never loosen a castle nut to line up the cotter pin hole.



8. If the truck has QA1 shocks, remove the sleeve from the lower shock eyelet by removing the snap rings on the sleeve and pressing it out of the bushing. **Note:** If using a brand of shock other than QA1, it will need to have a 5/8" ID for the lower shock mount.
9. QA1 Sway bar P/N 52896 can now be installed. Refer to the instructions included with the sway bar for this step.
10. Double check all work before reinstalling the wheels.

**Caution: QA1 does not recommend driving the vehicle until it has been properly aligned due to major changes in suspension geometry that will affect the handling characteristics of the vehicle. A front end alignment should be performed by a qualified alignment shop after any changes to the suspension system.**

#### Alignment Information

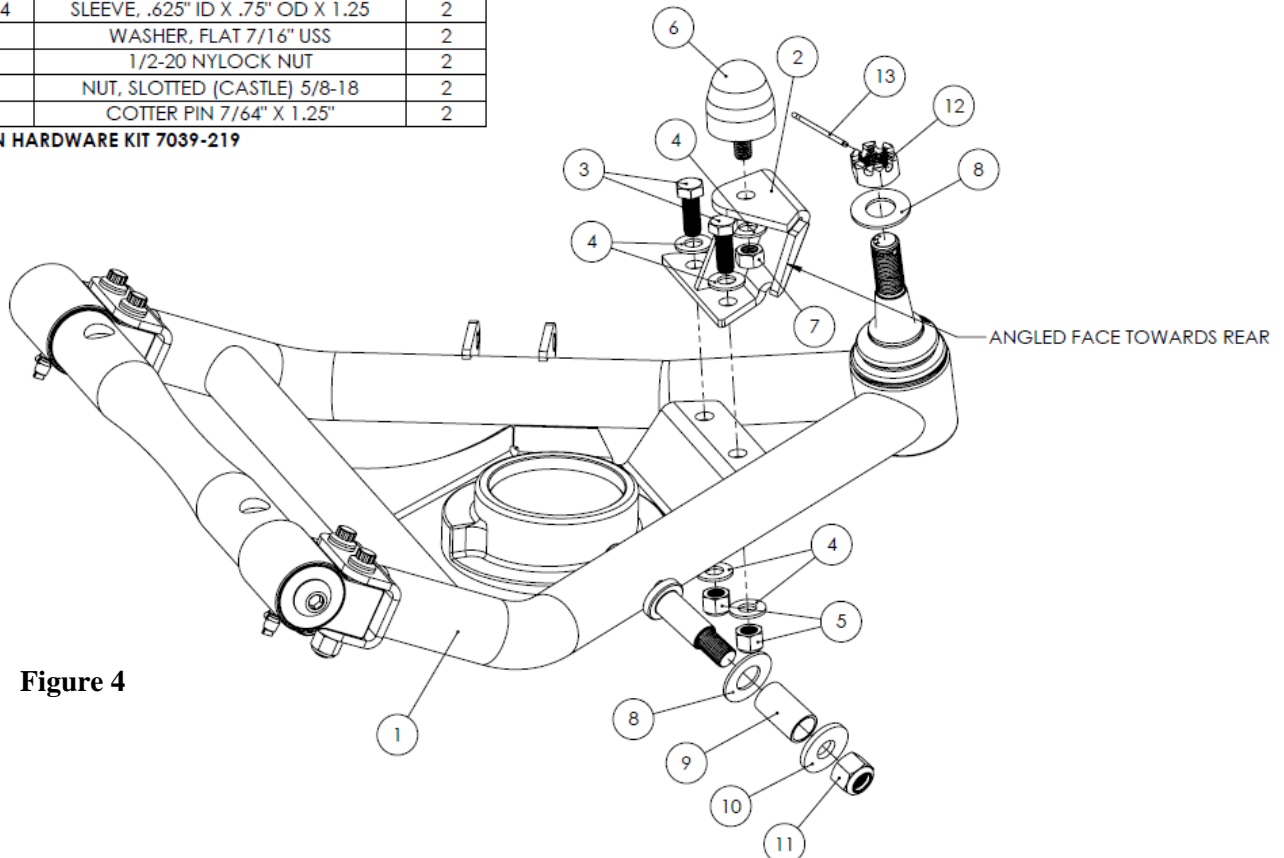
These components are designed to add more caster and negative camber. It is a good idea to make the alignment shop aware of this, as the alignment shop will only try to align the vehicle to factory specs. These alignment specifications are for vehicles equipped with both QA1 upper and lower control arms. Vehicles with other configurations may not be able to achieve these alignment specifications.

Camber:	-0.5° ± 0.5°
Caster:	+2.0° ± 0.5°
Toe:	+0.2° ± 0.1°

ITEM #	PART #	DESCRIPTION	QTY
1	52601 LH & RH	LOWER CONTROL ARM	2
2	9037-613 RH 9037-614 LH	BRACKET, STEERING STOP, OE	2
3	*	BOLT, HEX 3/8-16 X 1"	4
4	*	WASHER, FLAT 3/8" SAE	10
5	*	NUT, NYLOCK 3/8-16	4
6	*9047-113	BUMP STOP, BULLET 1.5" OD X 1.56" TALL	2
7	*	NUT, HEX 3/8-16	2
8	*	WASHER, FLAT 5/8" SAE	4
9	*9033-104	SLEEVE, .625" ID X .75" OD X 1.25	2
10	*	WASHER, FLAT 7/16" USS	2
11	*	1/2-20 NYLOCK NUT	2
12	*	NUT, SLOTTED (CASTLE) 5/8-18	2
13	*	COTTER PIN 7/64" X 1.25"	2

\* INCLUDED IN HARDWARE KIT 7039-219

#### RH (PASSENGER) SIDE COMPONENTS SHOWN



**Figure 4**

### Maintenance of QA1 Ultimate Ball Joints

Grease using high quality NLGI #2 GC-LB Lithium based grease and check preload on a regular basis. Check and set ball joint preload at least annually or every 3,000 miles, whichever comes first. NOTE: Preload on the ball stud can be set with the ball joint attached to the control arm if the spring is unloaded.

1. Using the QA1 spanner socket from Ball Joint Tool Kit (p/n 1891-106) loosen the lock nut by turning counter clockwise.
2. Using the QA1 hex key, torque the torque nut to 25-30 in. lbs. and then back off 90°.
3. Using the QA1 hex key, a ½" open-ended wrench or socket, and the QA1 spanner wrench, tighten the lock nut while holding the torque nut, locking them together to 25 ft. lbs.
4. Re-check the lash on the ball stud and adjust as needed. The ball stud should not have any axial lash.



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READ ALL INSTRUCTIONS CAREFULLY AND THOROUGHLY PRIOR TO STARTING INSTALLATION. PRODUCTS THAT HAVE BEEN INSTALLED ARE NOT ELIGIBLE FOR RETURN. USE THE PROPER JACKING LOCATIONS. DEATH OR SERIOUS INJURY CAN RESULT IF INSTRUCTIONS ARE NOT CORRECTLY FOLLOWED. A GOOD CHASSIS MANUAL, AVAILABLE AT YOUR LOCAL PARTS STORE, MAY ALSO AID IN YOUR INSTALLATION.

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- Frequently Asked Questions
- Quick Tips
- Install Information
- Tuning and Repair Guides
- Other technical information

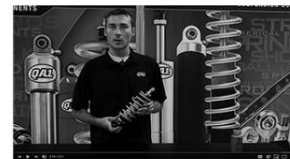
Or call to speak with one of our experts: 1.800.721.7761

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