



**DON'T FORGET**

These instructions can be found in color and expandable at QA1.net

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### INSTALLATION INSTRUCTIONS

C1500 UPPER CONTROL ARMS

P/N 52607

### TOOLS AND SUPPLIES REQUIRED

- Floor Jack
- Jack Stands
- Spring Compressor
- Wrench Set
- Socket Set

### PRE-INSTALLATION NOTES:

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 to the QA1 specs at the end of these instructions should be performed by a qualified alignment shop after installation.*

These control arms are equipped with QA1 Low Friction Ball Joints; please refer to the ball joint instructions on page 2 for setting the initial preload. Preload is set from the factory, but the ball joint stud should be checked for play before installing the control arms.

### DISASSEMBLY

1. Raise and support the vehicle by the frame with jack stands on a stable surface and remove the front wheels.
2. Support the lower control arm with a jack to take weight off of the droop stop.
3. Remove the cotter pin and loosen the upper ball joint nut. **Do not remove the nut at this time.**
4. Separate the upper ball joint from the spindle using a ball joint separator.
5. Remove the ball joint nut. Support the spindle and brakes making sure they are not hanging by the brake hose as this may cause damage to the brake hose.
6. Remove the brake line hose from the upper control arm.
7. Locate and note orientation of the factory cam adjuster bolts on the upper control arms.
8. Make an alignment mark on the eccentric washer and control arm mount with a marker or punch.
9. Unbolt the upper control arm mounting bolts and remove the arm.



Figure 1



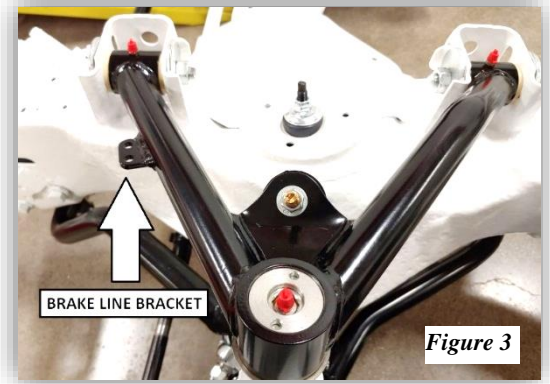
Figure 2

### ASSEMBLY

1. Install the aluminum sleeves into the control arm pivot points. The two sleeves are different lengths and should match the lengths of the control arm pivot points. See **Figure 1**
2. Install the droop stop onto the control arm using 3/8" washer and nut. Torque to 30 lb. ft. See **Figure 2**
3. Re-using the original hardware, set the new QA1 upper control arm in place and insert the camber bolts in the same orientation they were removed. Torque to 129 lb. ft.
4. Connect and tighten the upper ball joint. Torque to 65 lb. ft. and insert a new cotter pin.

5. Attach the brake line to the brake line bracket on the new control arm using 1/4" button head bolts and nylock nuts. See **Figure 3**
6. Reinstall wheels and tires

**Note: A front wheel alignment should be performed by a qualified alignment shop after any changes to the suspension system.**



### **Recommended Alignment Specs**

Camber:	-.5 (+/- .5degree
Caster:	4 to 7 degrees
Cross Caster:	.5 degrees
Toe	.20 degrees toe in (+/- .100 degrees)
Toe:	1/16" to 1/8" toe in

### **Maintenance of QA1 Ultimate Ball Joints**

**Grease using high quality lithium 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 and the ball joint taper is free from the spindle. Preload can also be set prior to installing the ball joint.

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 1/2" 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.
5. Using a grease gun, lubricate and rotate the ball stud by hand until the grease is visible on the bottom of the ball. If the ball joint is on the car, move the suspension up and down to get the same effect. Note: Excessive grease may result in hydraulic lock. If this occurs, move the ball stud until pressure is relieved and the ball stud freely rotates.



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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