



## INSTALLATION INSTRUCTIONS

### GM Upper Control Arms

QA1 P/N 52322, 52422, 52365, 52465, 52317, 52417, 52318, 52418

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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## TOOLS AND SUPPLIES REQUIRED

- Floor Jack
- Jack Stands
- Wrench Set
- Ratchet & Socket Set
- Ball Joint Separator

### PRE-INSTALLATION NOTES:

1. 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.*
2. QA1 upper control arms have eccentric cross-shafts. Be sure the upper control arms both have the cross shafts facing the same direction. See **Figure 1**.
  - A. This side of the cross-shaft with the shallow cutout will allow for a factory alignment.
  - B. This side of the cross-shaft with the deep cutout will allow for additional negative camber.

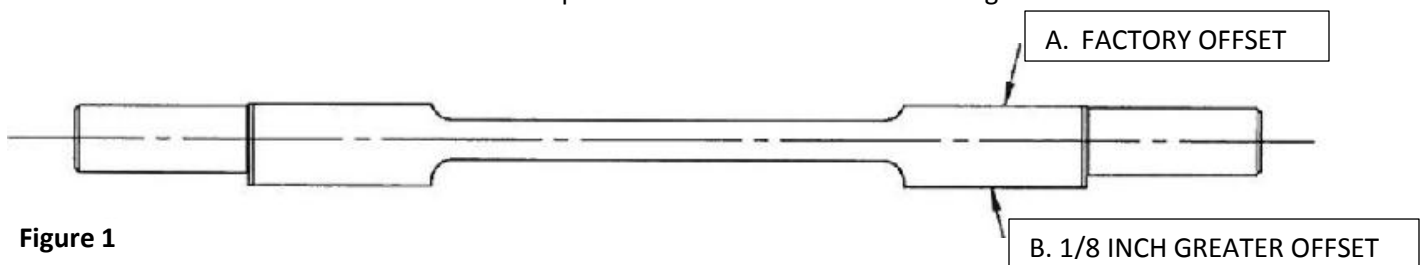


Figure 1

## **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 the droop stop. See **Figure 2**.
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. Note the position of the shims on the cross shaft. Remove the nuts on the cross-shaft and remove the upper control arm from the car. See **Figure 3**. **NOTE: The bolts retaining the cross-shaft are knurled and should be pressed or knocked out of the mount if needed. Do not turn the bolts to remove.**

## **INSTALLATION**

1. Slide the QA1 upper control arm over the mounting bolts making sure to have the cross-shaft facing the same direction for both control arms.
2. Re-insert the shim stacks in the same location on the cross-shaft that they were removed from and tighten the nuts to the factory specification. If the mounting studs have been removed, it may be necessary to hold the head of the bolt to tighten the cross-shaft nuts. **Do not turn the bolt to tighten the nuts or the knurling will strip.**
3. Connect the upper ball joint to the spindle and tighten the ball joint castle nut to the factory specification. Install a new cotter pin.
4. Remove the jack from the lower control arm and reinstall the wheels and tires.
5. A front end alignment is required and should be performed by a qualified alignment shop.

**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.**

### **Recommended Alignment Specifications for Street Driving**

1964-1972 Chevelle and A-Body	Camber:	0 to -1 degree
1967-1981 Camaro and Firebird	Caster:	3 to 5 degrees
	Toe:	1/16" to 1/8" toe in
1978-1988 A-Body and G-Body	Camber:	0 to -1 degree
	Caster:	4 to 7 degrees
	Toe:	1/16" to 1/8" toe in
1982-1992 Camaro and Firebird	Camber	0 to -1 degrees
	Caster	4 to 6 degrees
	Toe:	1/16" to 1/8" toe in

**NOTE: 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.**



Figure 3

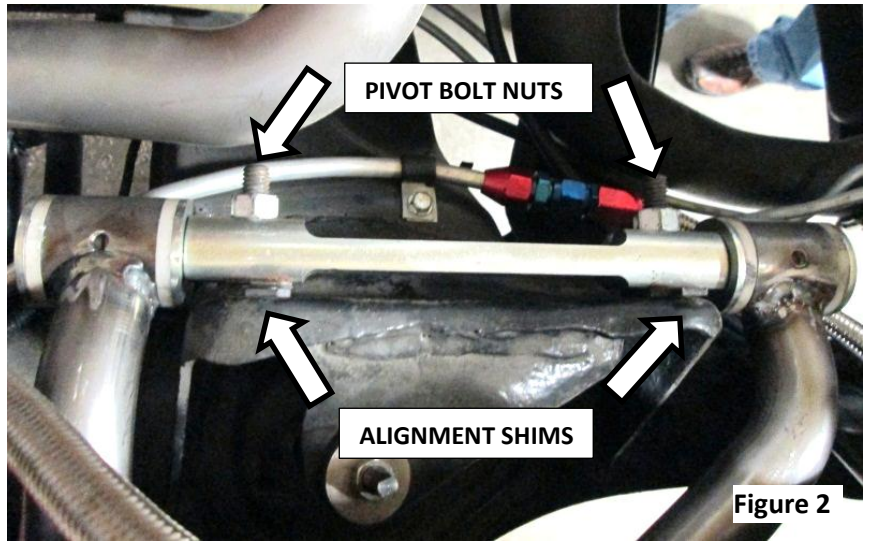


Figure 2

