



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

**INSTALLATION INSTRUCTIONS** 

QA1 P/N 52737, 52719, 52720, 52764, 52766 Street Performance Lower Control Arms

### **TOOLS AND SUPPLIES REQUIRED**

Floor Jack
 Jack Stands
 Wrench Set
 Ratchet & Socket Set
 Spring Compressor
 Ball Joint Separator
 Internal & External snap ring pliers
 Razor blade or box cutter knife

### PRE INSTALLATION NOTES:

These control arms require the use of coil-over shocks and will not work with a factory style spring.

QA1 front coil-overs come with bushings and t-bars installed in the lower shock connection for customers using factory control arms. QA1 control arms require the installation of the included spherical bearing mounts. Refer to page 3 for installation instructions.

QA1 does not recommend driving the vehicle until it has been properly aligned. A front-end alignment should be performed by a qualified alignment shop after any changes to the suspension system.

**QA1 Street Performance** control arms feature polyurethane bushings and low maintenance QA1 ball joints. Only periodic greasing will be needed.

### **Disassembly With Factory Springs**

- 1. Raise and support the vehicle by the frame with jack stands on a stable surface and remove the front wheels.
- 2. Remove the sway bar end links. (if equipped)
- 3. Unbolt the upper shock mounts from the inside the engine bay.
- 4. Unbolt the lower shock mount and remove the shock.
- Remove the cotter pin and loosen the lower ball joint castle nut.
  Do not remove the nut at this time.
- 6. With the castle nut still threaded onto the stud, separate the lower ball joint from the spindle using a ball joint separator.
- 7. Support the lower control arm with a jack to take pressure off the droop stop and to contain the spring pressure. (Figure 1)
- 8. Remove the lower ball joint nut.
- Slowly lower the jack supporting the lower control arm to release any remaining spring pressure. Do not continue to step 10 until all of the spring pressure has been released. A spring compressor may need to be used to safely release all pressure.
- 10. Remove the spring.
- 11. Remove the lower control arm pivot bolts noting the direction they are installed and remove the arm.



### **Disassembly With Coil-over Shocks**

- 1. Raise and support the vehicle by the frame with jack stands on a stable surface and remove the front wheels.
- 2. Remove the sway bar end links. (if equipped)
- 3. Remove the cotter pin in the lower ball joint stud and loosen the castle nut. **Do not remove the nuts at this time.**
- 4. With the castle nut still threaded onto the stud, separate the lower ball joint from the spindle using a ball joint separator.
- 5. Lower the spring seat collar to the bottom of the coil-over shock to release any spring pressure.
- 6. Support the lower control arm with a jack to take pressure off the droop stop and to contain and remaining spring pressure. (Figure 1)
- 7. Unbolt the upper shock mount from inside the engine bay.
- Slowly lower the jack supporting the lower control arm to release any remaining spring pressure. Do not continue to step 8 until all the spring pressure has been released. A spring compressor may need to be used to safely remove the pressure.
- 9. Unbolt the lower shock mount and remove the shock and spring.
- 10. Remove the lower ball joint castle nut and swing the lower control arm down out of the spindle.
- 11. Remove the lower control arm pivot bolts noting the direction they are installed and remove the arm.

### **PRE-INSTALLATION NOTES:**

For 1967-1969 Camaro/Firebird, install the supplied bump stop in the same location as the factory bump stop. 1967- Chassis mounted- contacts rear of arm

1968- Arm mounted- rear position

1969- Arm mounted- front position

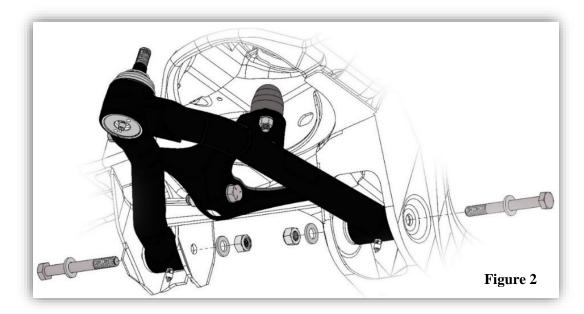
QA1 Coil-over shocks come with poly bushings and t-bars installed in the lower shock connection for customers who are using factory control arms. QA1 control arms require the lower shock bushing to be swapped out with the included spherical bearing mount.

1. Install the provided spherical bearing kit into the lower shock mount using the following steps:



### **INSTALLATION-**

- 2. Install the lower shock connection to the control arm before mounting the arm.
- 3. Hold the new QA1 lower control arm in place and insert the included pivot bolts. (Figure 2) If the control arm has a wider bushing mount (G-Body & S10), install into the front pivot point with the longer mounting bolt. S10 arms use a 14mm bolt in the front pivot and a shorter 12mm in the rear connection. The G-body uses 12mm mounting bolts with the longer bolt in the front connection. A-Body and 1<sup>st</sup> Gen Camaro use 1/2" hardware. 1970-1981 camaro will use either 1/2" or 14mm (9/16") bolts. Control arm mounting bolts should be torqued after the installation is complete and the vehicle is at ride height to 80 lb. ft.



- 4. Refer to the instructions included with the shocks for coil-over assembly.
- 5. Connect the lower ball joint into the spindle. Tighten the lower ball joint nut to the following specification and install a new cotter pin.
- 6. Re-install sway bar end links.
- 7. Lightly grease control arm and ball joint zerk fittings using a quality lithium bearing grease.
- 8. Re-install wheels.

### **Ball Joint Torque Spec**

Follow minimum initial torque specs, then tighten till the first available slot aligns with the cotter pin hole.

7/16" & 12mm	40 ft. lbs.
1/2"	55 ft. lbs.
9/16" & 14mm	65 ft. lbs.
5/8" & 16mm	75 ft. lbs.
Aluminum Spindles	50 ft. lbs.
Aluminum Spindles	50 ft. lbs.

## A PROFESSIONAL ALIGNMENT SHOULD BE PERFORMED BEFORE DRIVING THE VEHICLE

# (Recommended alignment specs on reverse)

### **Alignment Information**

QA1 upper and lower control arms are designed to add positive 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.

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

1964-1972 A-Body 1967-1981 Camaro and Firebird 1968-1974 Nova, X-Body 1973-1977 A-Body 1975-1979 Nova, X-Body	Camber: Caster: Toe:	0° to -1° 3° to 5° .1° to .3° toe in
1978-1988 A-Body and G-Body 1982-2003 S Series	Camber: Caster: Toe:	0° to -1° 4° to 7° .1° to .3° toe in
1982-1992 Camaro and Firebird	Camber Caster Toe:	0° to -1° 4° to 6° .1° to .3° toe in

### **NOTE ON ALIGNMENT SPECS:**

Alignment specifications will vary based on the vehicles use and the above are based on street vehicles. Autocross and track prepped cars will typically use up to 2 degrees of negative camber, max out the available caster, and use 1/8" toe-out alignment spec. Drag racing will typically use similar specs to a street car while maxing out the positive caster with varying toe-in settings to increase straight line stability. Consult with your alignment professional for the specifications that will work best for your application.



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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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