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INSTALLATION INSTRUCTIONS

GM Lower Control Arms

P/N 52337, 52437, 52364, 52464, 52319, 52419, 52320, 52420, 52321, 52421

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.

• DISCLAIMER / WARRANTY •

QA1 WARRANTS THAT THE PRODUCTS WILL BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR ONE YEAR FROM DATE OF SALE TO THE ORIGINAL PURCHASER. QA1 MAKES NO OTHER WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED. QA1 SHALL HAVE NO OBLIGATION UNDER THE FOREGOING WARRANTY WHERE THE DEFECT IS THE RESULT OF IMPROPER OR ABNORMAL USE, YOUR NEGLIGENCE, VEHICLE ACCIDENT, IMPROPER OR INCORRECT INSTALLATION OR MAINTENANCE, NOR WHEN THE PRODUCT HAS BEEN REPAIRED OR ALTERED IN ANY WAY. QA1'S LIABILITY IN THE CASE OF DEFECTIVE PRODUCTS SUBJECT TO THE FOREGOING WARRANTY SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT, AT QA1'S OPTION, OF THE DEFECTIVE PRODUCTS.

THE USER UNDERSTANDS AND RECOGNIZES THAT RACING PARTS, SPECIALIZED STREET ROD EQUIPMENT, AND ALL PARTS AND SERVICES SOLD BY QA1 ARE EXPOSED TO MANY AND VARIED CONDITIONS DUE TO THE MANNER IN WHICH THEY ARE INSTALLED AND USED. QA1 SHALL BEAR NO LIABILITY FOR ANY LOSS, DAMAGE OR INJURY, EITHER TO A PERSON OR TO PROPERTY, RESULTING FROM THE INSTALLATION, DIRECT OR INDIRECT USE OF ANY QA1 PRODUCTS OR INABILITY BY THE BUYER TO DETERMINE PROPER USE OR APPLICATION OF QA1 PRODUCTS. WITH THE EXCEPTION OF THE LIMITED LIABILITY WARRANTY SET FORTH ABOVE, QA1 SHALL NOT BE LIABLE FOR ANY CLAIMS, DEMANDS, INJURIES, DAMAGES, ACTIONS, OR CAUSES OF ACTION WHATSOEVER TO BUYER ARISING OUT OF OR CONNECTED WITH THE USE OF ANY QA1 PRODUCTS. MOTORSPORTS ARE DANGEROUS; AS SUCH, NO WARRANTY OR REPRESENTATION IS MADE AS TO THE PRODUCT'S ABILITY TO PROTECT THE USER FROM INJURY OR DEATH. THE USER ASSUMES THAT RISK!

TOOLS AND SUPPLIES REQUIRED

- | | | | |
|------------------------|---------------------|------------------------|----------------------------------|
| • Floor Jack | • Jack Stands | • Wrench Set | • Permatex® Anti-Seize Lubricant |
| • Ratchet & Socket Set | • Spring Compressor | • Ball Joint Separator | • Hex Key Set |

PRE-INSTALLATION NOTES:

1. QA1 Lower Control Arms are designed for use with QA1 parts or O.E. parts. Please find the section that applies to your vehicle. When using a QA1 Pro Coil system go to page 2. When using factory type springs go to page 3.

Note: Spring Seat Kit is required for use with factory type springs

7720-168 for control arm kits 52319, 52419, 52337, 52437

7720-203 for control arm kits 52364, 52464, 52320, 52420

***Part number 52321 and 52421 must be used with coil-over struts. These control arms do not have a provision for a spring in the factory locations. If an OE spring is to be used, part number 52364 or 52364 is needed along with 7720-203.**

2. 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.*
3. When greasing the control arm pivots, only use two to three pumps. Over greasing could fill the control arm with grease.
4. If your control arms are equipped with QA1 Low Friction Ball Joints please refer to the ball joint instructions for setting the initial preload. Preload is not set from the factory and should be set before installing the control arms.

DISASSEMBLY WHEN USING QA1 PRO COIL COIL-OVER SYSTEM

1. Measure the vehicle ride height from the ground to the center of the wheel wells and record these measurements.
2. Raise and support the vehicle by the frame with jack stands on a stable surface and remove front wheels.
3. Remove the sway bar end links. See Figure 1.
4. Turn the spring seat adjuster down to the bottom of the threads on the shock body. Lubricate the threads on the shock body with Permatex® Anti-Seize Lubricant. Failure to do so could result in damage to the shock body and void any warranty.
5. Unbolt lower shock mounting bolts. See Figure 2.
6. Remove the cotter pin from the lower ball joint and loosen the castle nut. Do not remove the nut.
7. Separate the lower ball joint from the spindle using a ball joint separator.
8. With a jack under the lower control arm, remove the ball joint nut and lower the control arm. See Figure 3.
9. Remove the control arm pivot bolts noting the direction they are installed.
10. Remove one of the snap rings from the T-bar and press the T-bar out of the shock. See Figure 4

INSTALLATION WHEN USING QA1 PRO COIL COIL-OVER SYSTEM

Note: For 1967-1969 Camaro/Firebird, install the supplied bump stop in the same location as the factory bump stop either on the frame or on the new control arm.

1. Lubricate and install the $\frac{3}{4}$ " O.D. sleeve (included with the control arms) into the lower shock eye bushing and install the adaptor plate on the shock using the $2 \frac{1}{4}$ " x $\frac{1}{2}$ " bolt and $\frac{1}{2}$ " locking nut and tighten. Install the adaptor plate with the arrow pointing towards the lower ball joint if marked. See figure 5.
1. Hold the new QA1 control arm in place and reinsert the pivot bolts. Leave the bolts loose at this time.
2. With a jack under the lower control arm, bolt the lower shock plate to the control arm with the adjuster knob facing the ball joint. See Figure 6. Start all bolts before tightening.
3. With the shock installed, connect the lower ball joint. Tighten the lower ball joint nut to factory specification and install a new cotter pin.
4. Re-adjust the spring seat adjuster to previous position. If you have not done so already, lubricate the threads on the shock body with Permatex® Anti-Seize Lubricant. Failure to do so could result in damage to the shock body and void any warranty.
5. Re-install sway bar end links. See Figure 1
6. Set the vehicle back on the ground or on wheel stands and tighten the lower control arm pivot bolts to the factory specifications.
7. Recheck the vehicle ride height measurement and adjust as necessary.
8. A front end alignment is required and should be performed by a qualified alignment shop. See page 4 for recommended alignment specifications.

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.

DISASSEMBLY WHEN USING FACTORY TYPE SPRINGS

1. Unbolt front upper shock mounts from inside the engine bay.
2. Raise and support the vehicle by the frame with jack stands on a stable surface and remove front wheels.
3. Remove the sway bar end links. See Figure 1.
4. Unbolt lower shock mount bolts and remove shocks from the car. See Figure 2.
5. Remove the cotter pin from the lower ball joint and loosen the castle nut. Do not remove the nut.
6. Separate the lower ball joint from the spindle using a ball joint separator.
7. With a spring compressor, compress the coil spring to remove tension from the lower control arm.
8. With the spring tension off of the control arm remove the ball joint nut and spring from the car.
9. Remove the control arm pivot bolts noting the direction they are installed.

INSTALLATION WHEN USING FACTORY STYLE SPRINGS

Note: Spring Seat Kit is required for use with factory type springs

7720-168 for control arm kits 52319, 52419, 52337, 52437

7720-203 for control arm kits 52364, 52464, 52320, 52420

***Part number 52321 and 52421 must be used with coil-over struts. These control arms do not have a provision for a spring in the factory locations. If an OE spring is to be used, part number 52364 or 52364 is needed along with 7720-203.**

Note: For 1967-1969 Camaro/Firebird, install the supplied bump stop in the same location as the factory bump stop either on the frame or on the new control arm.

2. Install the lower spring plate (P/N 7720-168 or 7720-203) with the paint mark pointing towards the lower ball joint.
3. Hold the new QA1 control arm in place and re-insert the pivot bolts. Leave the bolts loose at this time.
4. With the coil spring compressed, re-install in car and connect the lower ball joint. Tighten the lower ball joint nut to the factory specification and install a new cotter pin.
5. Align the coil spring in the upper spring pocket and with the lower spring seat isolator. Carefully release the spring compressor.
6. Re-install sway bar end links. See Figure 1.
7. Re-install shocks. See Figure 2.
8. Set the vehicle back on the ground or on wheel stands and tighten the lower control arm pivot bolts to the factory specifications.
9. A front end alignment is required and should be performed by a qualified alignment shop. See page 4 for recommended alignment specifications.

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 1



Figure 2

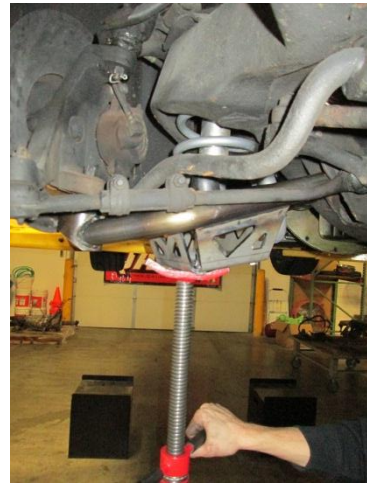


Figure 3

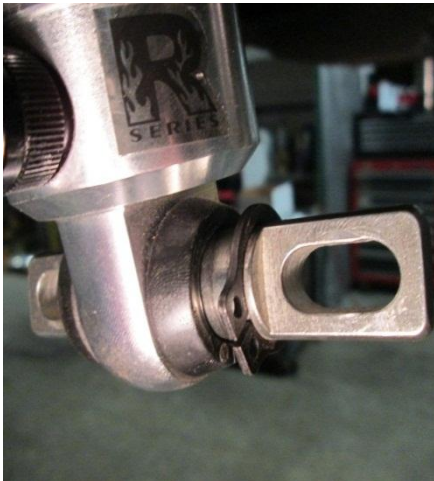


Figure 4



Figure 5

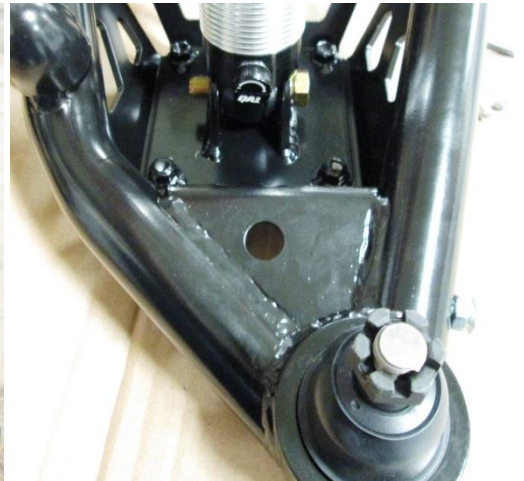


Figure 6

To further upgrade your suspension, use other QA1 suspension products such as coil-overs, shocks, struts, springs, K-members, torque arms, panhard bars, sub-frame connectors, strut tower braces, rod ends, sway bars, tubular control arms, spherical bearings, and more. For more information, please visit www.QA1.net.