

#### Technical Support Line: (952) 985-5675 Fax Line: (952) 985-5679

21730 Hanover Ave. Lakeville, MN 55044 www.QA1.net

#### **INSTALLATION INSTRUCTIONS**

QA1 1964-1972 GM A-Body Rear Coil-Over Conversion Kit RCK52334, RCK52335, RCK52336, RCK52337, RCK52338, RCK52339, RCK52340, RCK52341, RK106K

#### DO NOT VOID YOUR WARRANTY!

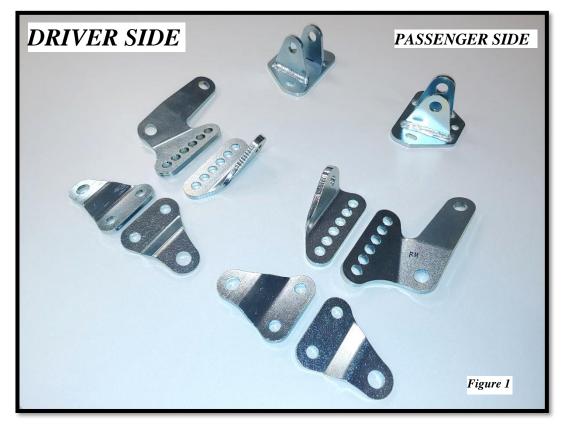
# FAILURE TO LUBRICATE THE COIL OVER THREADS WITH ANTI-SIEZE OR EQUIVALENT PRIOR TO ADJUSTING RIDE HEIGHT WILL CAUSE DAMAGE TO YOUR SHOCK ABSORBER THUS VOIDING THE WARRANTY. ALL RIDE HEIGHT ADJUSTMENTS MUST BE MADE WITH THE VEHICLE WEIGHT COMPLETELY UNLOADED FROM THE SUSPENSION

#### **TOOLS AND SUPPLIES REQUIRED**

<ul> <li>Floor Jack</li> <li>Drill, 1/2" and 3/8" Drill I</li> </ul>	<ul> <li>Jack Stands</li> <li>Bits</li> </ul>	• Tire Chocks • Common Hand Tools	• T114W Spar • Torque Wrench	nner Wrenches • Anti-Seize
• 2-Proma Star <sup>®</sup> Shocks	• Two Sprin	KIT CONTAINS ngs • Mounting Brac	kets • All Nec	cessary Hardware

## **REMOVAL:**

- 1. With the rear of the car secured in the air on jack stands remove the factory coil springs.
- 2. With a jack supporting the axle, remove the factory shocks.



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#### **INSTALLATION:**

- 1. Identify the driver and passenger side upper and lower mounting brackets. (Figure 1)
- 2. Check the underside of upper mount location on the vehicle for debris where the bracket will sit. This area must be free of any undercoating, dirt or other debris to ensure the bracket will sit flat against the sheet metal.

3. Install the upper mounting bracket to the driver and passenger side with supplied 5/16"-18 x 1" hardware with two washers per bolt/nut. (Figure 2) The long edge of the upper bracket will sit towards the center of the car using the two factory shock mounting holes. With the brackets on the correct side of the car the welded tabs will be slightly leaning towards the rear of the car. The hardware kit comes with two clipped washers as to not interfere with the tab weld on the rear tab. Install upper brackets with one clipped washer per side in the rear-most connection. (Figure 3) Torque to 178 in.-lb.



Install the clipped washer in the rear connection of driver and passenger side where a full washer would interfere with the tab weld.

Figure 3

4. Use a 5/16" drill bit to drill the third hole for the upper brackets. Install the remaining 5/16"-18 hardware using two washers per bolt/nut. Torque all upper bracket hardware to 178 in.-lb.



### NOTE:

The long lower brackets will mount onto the vehicle in place of the factory brackets using 1/2" x 1.5" bolts. The bracket will mount perpendicular to the axle tube. A second anchoring bolt is supplied for bracing. This 1/2" x 1.5" bolt will be installed in the top hole in the QA1 bracket. Figure 5 (Driver Side)

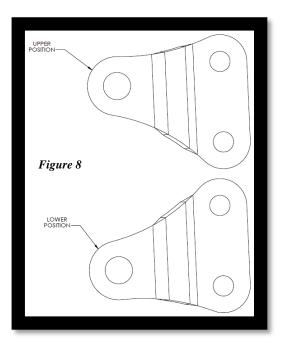
- 5. The side support bracket will also need to have a hole marked/drilled. (Figure 4) Before marking any holes, assemble both brackets with coil-over mounting tabs using the six adjustment holes. Bolt both brackets and both coil-over mounting tabs together using the 3/8" x 1.75" hardware with two washers per bolt/nut. (Figure 5) This will ensure your new bolt hole marks are in the correct location.
- 6. With the bracket assembly bolted together, mount it to the existing factory shock mount hole.

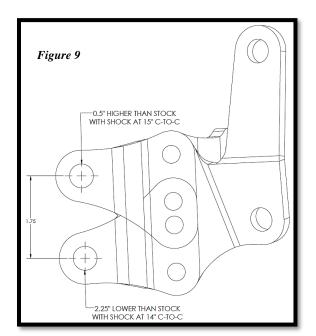
- 7. Mark your new upper and side mounting bolt holes.
- 8. Drill the new top bracket/rear facing hole using 1/2" drill bit.
- 9. Drill the side mounted hole using 3/8" drill bit.
- 10. Install the two rear facing connections using 1/2" x 1.5" hardware with washers and nylock nut. Torque to 50 lb.-ft.
- 11. Install side bracket connection using 3/8" x 1.25" hardware with washers. (Figure 6 & 7) Torque to 30 lb.-ft.



# SHOCK MOUNTING TAB ADJUSTMENT

The shock mounting tabs on the rear bracket can be adjusted to expand the ride height adjustability further than just the shock by itself. The tabs can be flipped (Figure 8) and raised or lowered (Figure 9) to achieve a ride height 1/2" higher than stock down to 2.25" lower than stock. Choose your mounting location based on your desired ride height.





12. Install shock mounting tabs using 3/8" x 1.75" hardware with two washers per bolt. Torque to 30 lb.-ft.

13. Evenly draw the bracket into the axle mount. Torque the two larger 1/2" bolts to 50 lb.-ft. Torque the 3/8" hardware to 30 lb.ft.

# Refer to the coil-over shock assembly instructions included with your QA1 shocks

- 14. Install the upper shock connection to the upper shock mount using  $1/2" \times 2.5"$  hardware with two washers per connection.
- 15. With the floor jack still supporting the rear axle, jack the axle up to the lower coil-over.
- 16. The lower shock connection will come with four small 1/2" x .125" spacers (P/N SLV107). Two spacers per shock will be installed between the inner shock brackets and the shock bearing. See **Figures 10 & 11**.





- 17. Install the lower shock connection to the axle bracket using 1/2" x 2.5" hardware with two washers per connection. Torque to 50 lb.-ft.
- 18. Place the vehicle on the ground and check vehicle ride height. Adjust the spring seat adjuster nut up or down the threaded shock body to gain your desired ride height. After each adjustment, it is recommended to roll the vehicle back and forth to un-scrub the tires and show the true ride height.
- 19. After ride height is set, snug the locking collar into the spring adjusting collar and check to ensure you have proper shock travel. A good rule of thumb is that 60% of the stroke should be available for compression. If the ride height is not correct, damage to the shock may occur as a result of bottoming and will not be covered under warranty.
- 20. Check for a minimum clearance of 3/8" between spring seat jam nut, spring seat and the axle with the vehicle weight supported by the tires. Check around shock and spring assembly and verify proper clearance for brake lines, cables and exhaust.

ITEM # 7039-221					
64-72 GM A-BODY REAR COIL OVER HARDWARE KIT					
1st Description	2nd Description	Qty.			
BOLT, HEX 1/2-20 X 1.5"	GRADE 5, CLEAR ZINC	4			
BOLT, HEX 1/2-20 X 2.5"	GRADE 5, CLEAR ZINC	4			
WASHER, FLAT 1/2", AN	.875" OD X .065", CLEAR ZINC	16			
NUT, NYLOCK 1/2-20	GRADE 5, CLEAR ZINC	8			
BOLT, HEX 5/16-18 X 1"	GRADE 5, CLEAR ZINC	6			
NUT, NYLOCK 5/16-18	GRADE 5, CLEAR ZINC	6			
WASHER, FLAT 5/16", SAE	.69" OD X .065", CLEAR ZINC	10			
WASHER, FLAT 5/16", SAE, CLIPPED	.69" OD X .065", CLEAR ZINC	2			
BOLT, HEX 3/8-24 X 1.25"	GRADE 5, CLEAR ZINC	2			
BOLT, HEX 3/8-24 X 1.75"	GRADE 5, CLEAR ZINC	4			
NUT, NYLOCK 3/8-24	GRADE 5, CLEAR ZINC	6			
WASHER, FLAT 3/8" SAE	.78" OD X .065", CLEAR ZINC	12			

# **<u>Rear Valving Adjustments</u>**

QA1 shocks have 18 damping settings per knob. There are 6 clicks per revolution of each knob, and each knob has 3 complete revolutions. The knob set fully counter clockwise is the softest setting - start adjustments from that point. Recommended base settings to begin testing with are as follows:

# Shocks with one adjuster knob:

Drag Racing:	0-6 clicks	
Nice ride and handling:	0-6 clicks	
Firm ride & improved handling:	6-12 clicks	
Aggressive handling:	13-18 clicks	
<i>Shocks with two adjuster knobs:</i> Drag Racing: Nice ride and handling: Firm ride & improved handling: Aggressive handling:	0-6 clicks compression, 0-6 clicks compression, 6-12 clicks compression, 13+ clicks compression,	4-10 clicks rebound 2-8 clicks rebound 8-14 clicks rebound 14-18 clicks rebound



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, EXPRESS 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.

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

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Or call to speak with one of our experts: 1.800.721.7761 \*Our technical support and order lines are open Monday - Friday. 8 am to 5 pm CST.





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