



**DON'T FORGET**

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

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

### INSTALLATION INSTRUCTIONS

QA1 1978-1988 GM A/G-Body Rear Coil-Over Conversion Kit

RCK52451, RCK52366, RCK52367, RK111K

QA1 1978-1988 GM A/G-Body Lower DIY Brackets p/n 9037-1081

### TOOLS AND SUPPLIES REQUIRED

- Floor Jack
- SAE/ Metric Wrench Set
- Tire Chocks
- Spanner Wrench (QA1 P/N T114W or T115W)
- Jack Stands
- SAE/Metric Socket Set
- Torque Wrench
- Permatex® Anti-Seize Lubricant

### Pre-Installation Note:

This rear coil-over suspension was designed for use with the factory axle housing. The included lower bracket may not fit aftermarket housings. For DIY Weld-On lower brackets order QA1 part number 9037-1081. See page 4 for more information.

Some exhaust systems may need modification for clearance when using this rear coil-over suspension.

### Removal:

1. With the vehicle sitting on level ground, measure the vehicle ride height from the ground to the center of the wheel wells and record these measurements. This measurement will aid in setting the final ride height.
2. Jack the car up and ensure that the frame is set securely on jack stands. See the owner's manual for proper jacking techniques.
3. Use a jack under the rear axle to remove tension from the rear shocks and remove them from the vehicle. The lower shock mounting bolts also need to be removed from the axle.
4. Lower the axle to release spring pressure and remove the rear coil springs.

### Coil-over Assembly

1. Remove the upper shock eyelet from the shock using a 7/8" and 5/8" wrench by loosening the jam nut and unscrewing the shock eyelet. **(Figure 1)** This step will be needed to install the spring onto the shock.
2. With anti-seize on the threads of the shock, thread the locking collar onto the shock, shoulder up, **(Figure 2)** followed by the spring seat collar. **(Figure 3)** Thread both collars to the bottom of the shock threads.
3. Install the spring onto the shock followed by the spring cap. **(Figure 1)**
4. Re-install the upper shock eyelet and tighten the jam nut to the eyelet **(Figure 1)** to complete the shock assembly. **(Figure 4)**



**Figure 1**



Figure 2



Figure 3



Figure 4

BALLOON #	ITEM #	DESCRIPTION	QTY.
1	9037-1073	WELDMENT, SHOCK MOUNT, LOWER, LH	1
2	9037-1072	WELDMENT, SHOCK MOUNT, LOWER, RH	1
3	9037-1071	PLATE, SHOCK MOUNT, UPPER	2
4	9037-1008	PLATE, LOWER SHOCK MOUNT	4
5	9033-513	SLEEVE, .395" ID X .625" OD X 1.25"	4
6	7039-338	HARDWARE KIT, RK111K, QA1 PROVIDE LABEL	1

**Bracket Identification:**

Except for the lower shock mounts (**#1 & #2**), all other brackets are the same and not right/left specific.

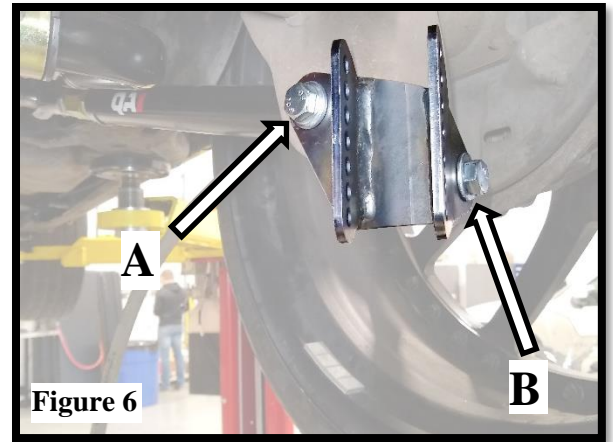
**Installation:**

1. Check the underside of the upper shock mount location on the vehicle for debris where the mounting plate (**#3**) 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.
2. Insert the 3/8" x 1-1/2" bolts down through the original upper shock mounting holes with one washer under each bolt head.
3. Install the shock with the upper mounting plate between the frame and t-bar. Secure using a 3/8" washer and nyloc nut. (**Figure 5**) Torque to 31 lb. ft.



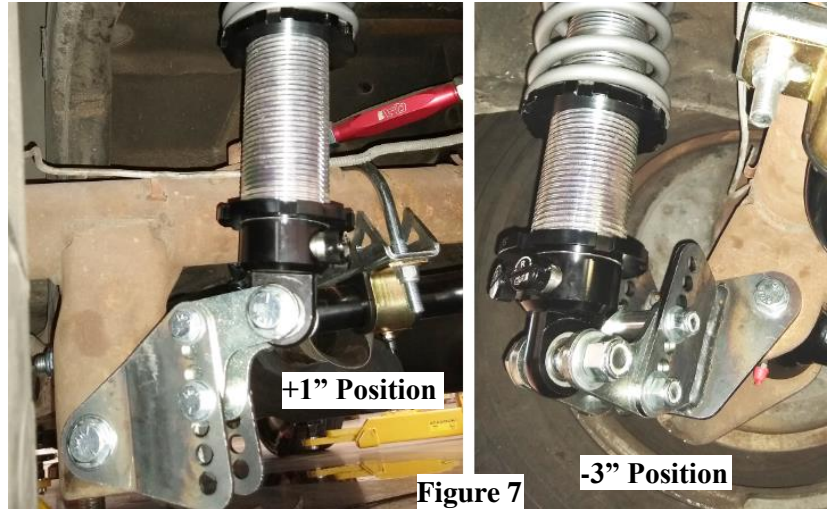
Figure 5

4. Identify the right/left lower bracket and mount to the vehicle using one M12 x 1.75" through the factory trailing arm mounting bolt. **(Figure 6, Arrow A)**
5. Install the 1/2" x 1-1/2" hardware into the original shock mounting hole using two washers and one nylock nut. **(Figure 6, Arrow B)**
6. Evenly tighten the 12mm and 1/2" hardware to secure the mount. Torque the 1/2" hardware to 50 lb. ft. and the longer 12mm hardware to 55 lb. ft.

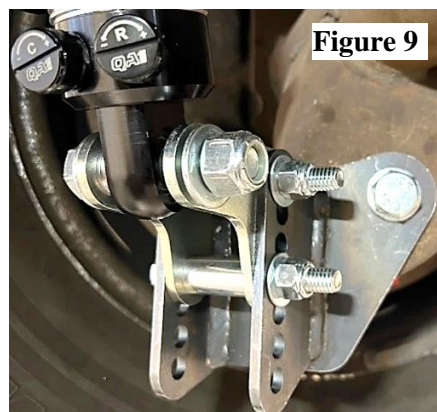


**Note:**

This rear coil-over kit has a ride height range of +1" higher than stock to -3" lower depending on how the "L" brackets (#4) are mounted to the base bracket. The "L" brackets can be flipped to achieve this range. **(Figure 7)** The shock included has a recommended length of 14" to 15" at ride height, measured center/center on the shock eyelets. Determine the best "L" bracket height to achieve both your ride height and the recommended shock length before continuing.



7. Install the "L" brackets (#4) to the inside of the mounting bracket at the desired height using 3/8" x 3" hardware. Install the sleeve (#5) within the brackets with washers under the bolt heads and nyloc nuts. **(Figure 8)** Torque to 31 lb. ft.
8. Mount the shock to the lower bracket using 1/2" x 2-1/2" mounting bolt with two washers and one nyloc nut per connection. **(Figure 9)** Torque to 50 lb. ft.
9. Adjust the spring seat collars on the coil-overs up the shock body so that there is 2" of threads under the collars before slowly lowering the vehicle down to check the ride height. Use caution as the vehicle may sit lower than anticipated.
10. Raise the vehicle and adjust the collars up or down to achieve the desired ride height. When the desired ride height is achieved, tighten locking collar against the spring seat collar.

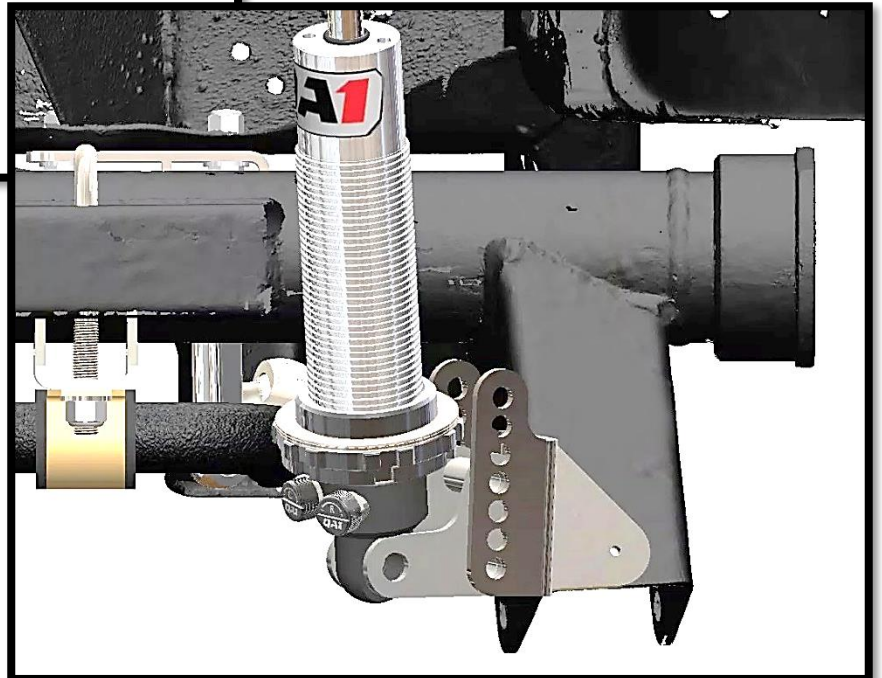
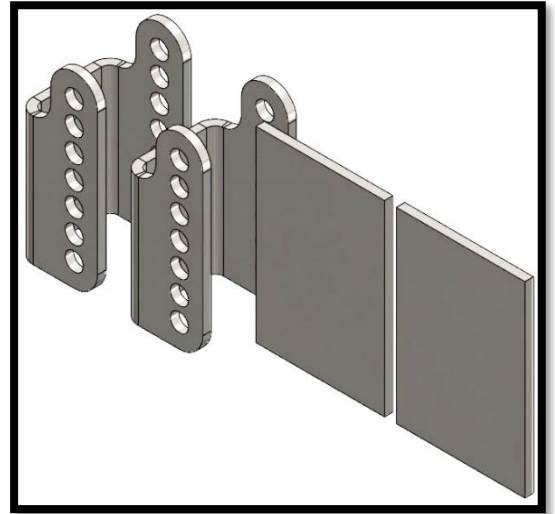


## 9037-1081 DIY Weld-On Lower Brackets:

### **NOTE:**

The QA1 Weld-On Lower brackets were designed for vehicles using aftermarket axles that differ from the factory lower shock mounts. These brackets come with a steel plate to be shaped and welded to the axle by a competent welder/fabricator. These DIY brackets use the lower mounting hardware and "L" brackets from the rear coil-over kit.

1. Assemble the brackets as described in step 7.
2. Locate the lower brackets so the shocks will be 14" to 15" long (measured center/center on the eyelets) when the vehicle is sitting at the desired ride height.
3. Check ride height, shock length at ride height and shock clearance throughout the suspensions travel before final welding.



## Rear Valving Adjustments

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

### **Shocks with two adjuster knobs:**

Drag Racing:	0-6 clicks compression	4-10 clicks rebound
Nice ride and handling:	0-6 clicks compression	2-8 clicks rebound
Firm ride & improved handling:	6-12 clicks compression	8-14 clicks rebound
Aggressive handling:	13-18 clicks compression	14-18 clicks rebound

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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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