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

How to Install the NEW 64-72 GM A-Body Rear Coil-Over Kit

INSTALLATION INSTRUCTIONS

QA1 1964-1972 GM A-Body Rear Coil-Over Conversion Kit RCK52334 THRU RCK52341, RCK52440 THRU RCK52442, RK106K '69-'72 Grand Prix, '70-'72 Monte Carlo RCK52358, RCK52359 (200 lb. springs)

# TOOLS AND SUPPLIES REQUIRED

<ul> <li>Floor Jack</li> </ul>	<ul> <li>Jack S</li> </ul>	tands	• Tire Chocks	• T114W Spai	nner Wrenches
• Drill, 1/2" and 3/8"	Drill Bits	Common	Hand Tools	• Torque Wrench	<ul> <li>Anti-Seize</li> </ul>

# **KIT CONTAINS**

- 2-Proma Star<sup>®</sup> Shocks
- Two Springs
   Mounting Brackets

• All Necessary Hardware

### **PRE-INSTALLATION NOTE:**

This kit is designed to work with stock 1964-1972 A-body 10/12 bolt axle housings. Modifications may be required to use this kit with a non-factory axle.

At full suspension droop the angle of the coil-over may allow contact between the shock and the axle. Once ride height is set, this angle is reduced and no contact occurs.

# **REMOVAL:**

- 1. Support the rear of the car on the frame with jack stands.
- 2. With a jack supporting the axle, remove the factory shock. The fully extended shocks will still have a small amount of spring pressure stored in the spring which should be contained supporting the axle.

# **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 shorter flat edge of the upper bracket will face inboard and the stud of the bracket will sit in the rearward position (Figure 2). With the brackets on the correct side of the car the shock mounting tabs will be slightly leaning towards the rear of the car.. Torque to 178 in.-lb.
- 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:

On some '64-'67 cars an additional gusset will be part of the chassis, which will prevent the shock from being attached to the QA1 mount after the mount is installed. Cars with this factory gusset should attach the shock to the QA1 mount before mounting to the chassis.





# NOTE:

The long lower brackets will mount onto the axle at the factory lower shock location 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.



5. The side support bracket will also need to have a hole marked/drilled. (Figure 3) 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 4) 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.

#### NOTE:

Aftermarket axles may not have enough material for the side mounted hole of the bracket and will be plenty strong with the two main bolts correctly mounted. If the side mounted hole isn't used, the same portion of bracket will still need to be installed to keep the correct overall mount width. In this instance, the side hole portion can be trimmed off of the bracket or flipped upside down.

- 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 5 & 6) Torque to 30 lb.-ft.



SIDE SUPPORT BRACKET FLIPPED WHEN NO MATERIAL AVAILABLE ON AFTERMARKET AXLE.





#### 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 7) and raised or lowered (Figure 8) 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" x 2.5" hardware with two washers per connection. If MOD Shocks are being installed, the thin 1/8 washers (p/n SLV107) will also need to be installed in the upper shock connection to fill the 1/25" wide bracket. Single and double adjustable shocks will already have a 1.25" wide bushing connection on top and will only need the 1/8" spacers on the lower connection. Torque to 50 lb. ft.
- 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 9 & 10.
- Install the lower shock connection to the axle bracket using 1/2" x 2.5" hardware with two washers per connection and one nyloc nut. Torque to 50 lb. ft.





### NOTE:

At full suspension droop the angle of the coil-over may allow contact between the shock and the axle. Once ride height is set, this angle is reduced and no contact occurs.

- 18. Place the vehicle on the ground and check vehicle ride height. Raise the car and adjust the spring seat adjuster nut up or down the threaded shock body to gain your desired ride height.
- 19. After the ride height is set, snug the locking collar into the spring adjusting collar and check to ensure you have proper shock travel. The recommended length (center/center) measured at the shock mounting bolts is 14" to 15" at ride height. If the ride height shock length is not correct, damage to the shock may occur as a result of bottoming or topping out the shock.
- 20. Check for a minimum clearance of 3/8" between the spring seat jam nut, spring seat and the axle with the vehicle at ride height. Check around the 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		

0-6 clicks

0-6 clicks

6-12 clicks

13-18 clicks

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:
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Drag Racing: Nice ride and handling: Firm ride & improved handling: Aggressive handling:

Shocks with two adjuster knobs:

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



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