



INSTALLATION INSTRUCTIONS

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

RCK52350, RCK52351, RCK52352, RCK52353, RCK52354, RCK52355, RCK52356, RCK52357, RK103K

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.

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!

DO NOT VOID YOUR WARRANTY!

Permatex® Anti-Seize Lubricant should be used on coil-over threads to prevent galling. Failure to lubricate the coil-over threads with Anti-Seize prior to making ride height adjustments will cause damage to your shock absorber and will void any warranty. All ride height adjustments must be made with the vehicle weight completely unloaded from the suspension.

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**

KIT CONTAINS

- 2-Proma Star® Shocks
- Two Springs
- Mounting Brackets
- All Necessary Hardware

Coil-Over Shock Assembly:

1. Using a snap ring pliers, install a snap ring into one of the grooves in the lower shock eye followed by the spherical bearing and the other snap ring. If pressing the bearing in, only press on the race of the bearing.
2. Screw the aluminum jam nut (shoulder up) and the spring seat adjuster nut (shoulder up) down to the last thread - **NO FURTHER**. Now is a good time to lubricate the threads of the shock body with **Permatex® Anti-Seize Lubricant**.
3. QA1 highly recommends using the QA1 thrust bearing kit (part #7888-109) for ease of adjustment. If the thrust bearing kit is used, coat both washers with **Permatex® Anti-Seize Lubricant**. Install the stainless steel spring seat washer, then the

bearing, then the second washer. If the thrust bearing kit is not used, coat one side of the stainless steel spring seat washer with **Permatex® Anti-Seize Lubricant**.

4. Place the lubricated side of the washer down on the spring seat. Slide the spring over the shock body and down onto the spring seat. Slip the spring cap in place, making sure that it is set in the spring squarely.
5. Adjust the spring seat up until the spring is slightly compressed. This ensures that the spring cap, spring and spring seat washer remain in place and aligned.

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.
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. Remove the rear springs.

Installation:

1. 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.
2. The upper mounting bracket bolts to the frame using the factory shock mounting location using the 3/8" x 1 1/4" bolts and nuts.
3. Install the 1/2" ID sleeve into the bushing in the upper eyelet and bolt the upper eyelet of the shock to the upper mount using the 1/2" x 2 1/2" bolt.
4. The lower coil-over shock mounting brackets attach using the factory shock mounting hole and the trailing arm mounting bolt. Only unbolt one side at a time to prevent the axle from rotating. Mount the lower coil-over brackets over the lower shock mount/trailing arm mount with the 12mm x 110mm bolt and washers provided. Do not tighten the bolt yet. See **Figure 2**.
5. Insert the lower shock eyelet into the lower mounting bracket with the knob(s) facing toward the center of the vehicle and install the 1/2" x 3" bolt. Torque to 70 lb.-ft.
6. Torque the trailing arm mounting bolt to 70 lb.-ft.
7. Repeat steps one through six on the other side of the car.
8. Lower the car to the ground and check the vehicle ride height referring to your notes from step 1 of disassembly. Raise the car off the ground and adjust the ride height as necessary with the suspension unloaded using a spanner wrench. Once you have the ride height set, tighten the lock nut against the spring seat adjuster.



Figure 1



Figure 2

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

NOTE: DO NOT FORCE THE ADJUSTER KNOB. DO NOT USE PLIERS OR ANY OTHER TOOLS ON THE PISTON ROD OR THE ADJUSTER KNOB. DO NOT EXCEED 18 CLICKS UNDER ANY CIRCUMSTANCES. THIS COULD DAMAGE THE SHOCK AND CAUSE IT NOT TO ADJUST. THIS WILL VOID ALL WARRANTIES. DO NOT USE THE SHOCK ABSORBER AS A SUSPENSION/TRAVEL LIMITER. SEVERE DAMAGE TO THE SHOCK WILL OCCUR AND DOING SO WILL VOID ALL WARRANTIES.

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