

### **INSTALLATION INSTRUCTIONS**

QA1 1964-1972 GM A-Body Rear Coil-Over Conversion Kit RCK52334, RCK52335, RCK52336, RCK52337, RCK52338, RCK52339, RCK52340, RCK52341, RK102K

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!

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**

• Floor Jack

• Drill, 1/2" and 5/16" Drill Bits

Jack Stands

• Tire Chocks

Square

• Common Hand Tools

Torque Wrench

• Anti-Seize

#### KIT CONTAINS

• 2-Proma Star® Shocks

Two Springs

• Mounting Brackets

• All Necessary Hardware

#### **REMOVAL:**

1. Following the factory service information to remove rear shock absorbers and spring assembly.

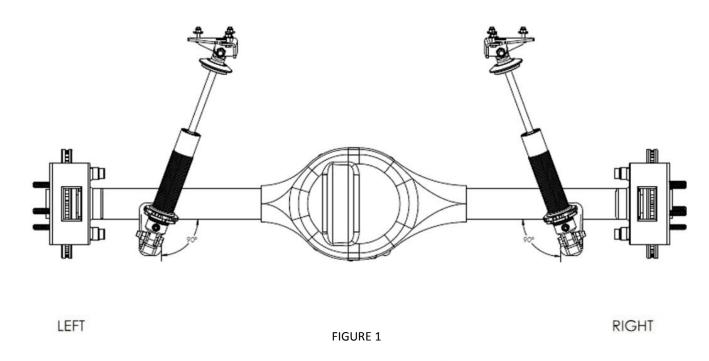
### **COIL-OVER SHOCK ASSEMBLY:**

- 1. 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**.
- 2. QA1 highly recommends using the QA1 thrust bearing kit (part #7888-110) 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**.

- 3. 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.
- 4. 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.

## **INSTALLATION:**

- 1. Mount the lower brackets onto the vehicle in place of the factory brackets. Install the 1/2" washer and Nylock nut. The bracket will mount perpendicular to the axle tube.
- 2. A second anchoring bolt is supplied for bracing. This bolt will be installed in the hole in the QA1 bracket just above the primary mounting bolt. Mark this hole with a marker/punch to reference the spot to be drilled.
- 3. Remove the lower shock mount bracket and drill a 1/2" hole in the spot marked in step 2.
- 4. After the hole has been drilled, re-install the lower shock mount bracket and torque the mounting studs to 50ft. lbs.
- 5. 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.
- 6. Fit the upper shock mount bracket in the vehicle. Note the orientation of the brackets in Figure 1 below. The two inner most bolt holes will line up with the factory shock mounting holes.
- 7. Install the 5/16" mounting bolts to secure the plate in position. The third mounting hole facing the outside of the vehicle will need to be drilled. Mark this hole with a marker/punch to reference the spot needing drilling.
- 8. Remove the upper shock brackets from vehicle and drill a 5/16" hole in the spot marked in step 7.
- 9. Install the upper shock mount bracket to the shock absorber using the supplied ½" bolt and Nylock nut. Note the orientation of the shock in figure 1 below.



## VIEW FROM BACK OF VEHICLE

NOTE: OBSERVE THE INSTALLED ORIENTATION OF THE HARDWARE (FIGURE 1) IN RELATION TO THE SHOCKS - SPRINGS NOT SHOWN.

10. Install the coil-overs into the vehicle with the adjuster knobs facing rearward. Install the lower bearing mount into the lower bracket and align holes, it may be necessary to spread the bracket slightly to fit the lower bearing into the mount. Install the ½ in. X 2-1/4 in. bolt and ½ in. Nylock nut into the lower mount hole and tighten to 50 ft.-lbs.

- 11. Lower the weight of the vehicle on its tires slowly while guiding the upper shock mounting bracket into its mounting location. DO NOT PLACE FINGERS BETWEEN BODY AND UPPER MOUNT, USE THE SHOCK SPRING AS A HANDLE TO GUIDE THE SHOCK. Line each bracket up with the 3 corresponding mounting holes. Install the 5/16" bolts, washers and Nylock nuts with washers on the top of the factory spring pocket.
- 12. 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 ride height is set, 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.
- 13. 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.

# **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:

O-6 clicks compression,

Nice ride and handling:

O-6 clicks compression,

O-6 clicks compression,

Eirm ride & improved handling:

O-6 clicks compression,

O-6 clicks compression,

O-6 clicks compression,

O-6 clicks compression,

O-8 clicks rebound

O-8 clicks compression,

O-8 clicks rebound

O-9 clicks compression,

O-9 clicks

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 CIRCUM-STANCES. 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.