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## **INSTALLATION INSTRUCTIONS**

QA1 Rear Coil-Over Conversion Kit 1979-2004 Mustang P/N RCK52342, RCK52343, RCK52344, RCK52345, RCK52346, RCK52347, RCK52348, RCK52349, RK100K

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

- •SAE/ Metric Socket Set
- Tire Chocks
- Spanner Wrench (QA1 P/N T114W or T115W)

Jack Stands

- Snap Ring Pliers
- 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 eyelet followed by the spherical bearing and the other snap ring. If pressing the bearing in, only press on the race of the bearing.
- 2. Install the ½" ID sleeves into the bushings in the upper shock eyelets.
- 3. 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.
- 4. 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.
- 5. 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.

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- 6. 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.
- 7. Install the upper coil-over bracket on the upper poly bushing of the shock with the  $\frac{1}{2}$ " x 2  $\frac{1}{2}$ " bolt and lock nut. Tighten the bolt and nut to 50 lb. ft.

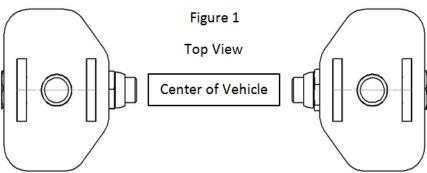
#### Removal:

- 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 release tension from the rear shocks. Remove the shocks and lower shock mounting bolts from the vehicle.
- 4. Slowly lower the jack and remove the rear springs.

**NOTE:** If the vehicle is equipped with factory Quadra-Shocks, the shocks and rear frame mounts must also be removed as these will contact the new coil-over springs.

## Installation:

- Install the lower brackets onto the vehicle in place of the factory lower shock mounts.
  Install the ½" washer and lock nut on the lower stud and tighten to 50 lb. ft.
- 2. Install the supplied 3/8" x 1 ½" bolt in the top hole. It may be necessary to enlarge the upper hole slightly to install the bolt. Install the 3/8" washer and nut and tighten to 30 lb. ft.
- 3. Check the underside of upper shock 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.
- 4. Install the coil-overs into the vehicle guiding the upper bracket stud through the factory shock mount hole with the brackets turned in the correct orientation per Figure 1. Install the 5/8" washer and 5/8" lock nut and torque to 60 lb. ft.
- 5. With the adjuster knobs facing rearward (**Figure 2**) install the lower bearing mount into the lower bracket and align the holes, it may be necessary to spread the bracket slightly to fit the lower bearing into the mount. Install the ½" x 2 ¼" bolt and ½" lock nut into the lower mount hole and tighten to 50 lb. ft. It may be





necessary to raise or lower the axle to connect the lower shock mounts.

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- 6. 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. The shocks should measure 13 ½" to 15" with the vehicle sitting on the ground at ride height.
- 7. Check for a minimum clearance of 3/8" between lock nut, spring seat and the axle per **Figure 2** with the vehicle weight supported by the tires. It may be necessary to trim a small amount off the factory axle bracket in order to obtain correct ride height and proper clearance between the spring seat and the axle. Check around shock and spring assembly and verify proper clearance for brake lines, cables and exhaust.

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- Quick Tips
- Install Information
- Tuning and Repair Guides
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