



• SHOCKS • STRUTS  
 • SPRINGS • ROD ENDS •  
 • RELATED COMPONENTS •  
 Tech Line: (952) 985-5675

## QA1 STRUT INSTRUCTIONS

**IMPORTANT!** Read all instructions thoroughly before starting this project. Products that have been installed are not eligible for return. See your vehicle owner's manual for proper jacking locations and strut/shock/spring removal techniques. Death or serious injury can result if instructions are not correctly followed. A good chassis manual, available at your local parts store, will also aid in your installation.

### **DO NOT VOID YOUR WARRANTY!**

Failure to lubricate the coil-over threads with anti-seize or equivalent prior to making any ride height adjustment will cause damage to your strut and voids the warranty. All ride height adjustments must be made with the vehicle weight completely unloaded from the suspension.

**IMPORTANT NOTE:** Do not push the piston rod into the strut body, as it will go past the seals and will need to be sent to the factory for reassembly. This will never be an issue after installation on the vehicle, and is only a concern if an individual physically pushes the piston rod to that point. If this were to occur, it is not covered under warranty.

### **Tool requirements may vary based on your vehicle**

• Floor jack • Jack stands • Spring compressor (optional) • 5/64 Allen wrench • Metric sockets (24mm) • 13/16" and 15/16" sockets and boxed end wrenches • Air tools are helpful

### **REMOVAL**

Start your strut installation by inspecting your chassis. Look for worn/deteriorated bushings, ball joints, etc. If anything looks suspect, replace it before continuing.

Above the 24mm nut on the existing strut shafts, there are two flat spots to enable use of an adjustable wrench to keep the piston rod shaft from turning. Loosen the two 24mm nuts on the upper end of the piston rods where they come through the caster/camber plates. Do not remove the 24mm nuts at this time.

Jack the car up and ensure that the frame is set in place securely on jack stands. See your owner's manual for proper jacking techniques. Remove the wheels and then unbolt the brake calipers and tie them up out of your way.

Position the floor jack under the ball joint cup. Jack the A-arm up just enough to take the load off of the strut and the spindle, without raising the car off the jack stands. This will retain the factory spring in its location.

Loosen and remove the two (2) nuts and bolts that attach the strut to the spindle knuckle. Remove the 24mm nut at the top of the strut and remove the strut assembly.

Remove the factory dust cover and bump stop. Retain for reuse.

## INSTALLATION

*Now is a good time to lubricate the threads of the strut body with anti-seize lubricant.*

Start the installation of the QA1 strut by extending the strut shaft fully. Slide the factory bump stop down on the strut shaft.

Place the upper threaded end of the strut shaft up into the caster/camber plate and loosely install the 24mm nut.

Position the spindle knuckle into the bracket on the strut.

NOTE: All applications require the use of the supplied spindle knuckle spacers (4 total - 2 for each strut). 2 ¼" bolts are supplied to retain the spacers. They must be installed in such a way that there is one spacer on each side of the knuckle. Due to varying tolerances in the knuckle size, you may have to sand down the surfaces of the spacer plates a small amount to make installation easier.

Install the two spindle mount bolts and nuts. Torque to factory specifications.

Reinstall the brake caliper and wheel. Torque all nuts and bolts to factory specifications.

Torque the upper strut mount nut (24mm) to the factory specifications.

Repeat the entire removal and installation procedures for the other side.

Take the car to a reputable alignment shop and have the car realigned.

## VALVING ADJUSTMENT

Your QA1 struts either have:

- 18 damping settings on one knob that simultaneously adjust compression and rebound (single adjustable);
- 18 damping settings on one knob that adjusts rebound only (drag race "R" series); or
- 18 damping settings on two knobs that independently adjust compression and rebound (double adjustable).

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 ADJUSTER AND CAUSE THE STRUT NOT TO ADJUST. THIS WILL VOID ALL WARRANTIES. DO NOT USE THE STRUT AS A DROOP LIMITER. SEVERE DAMAGE TO THE STRUT COULD OCCUR AND THIS WILL VOID ALL WARRANTIES.

**WARRANTY / DISCLAIMER**

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.

Consequential or incidental damages are not recoverable under this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

In order to be eligible for service under this warranty, you must return the defective part to QA1 together with a R.G.A. number issued from QA1. Tag each item with the part number and the specific explanation of defect. We will inspect the part and determine: a) if it is eligible for repair or replacement; and, b) if so, whether to repair or replace it. All returns must be shipped prepaid to:

QA1 Precision Products, Inc.  
RGA # \_\_\_\_\_  
21730 Hanover Avenue  
Lakeville, MN 55044

THE BUYER UNDERSTANDS AND EXPRESSLY RECOGNIZES that racing parts, specialized street rod equipment, rod end bearings, 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. BUYER ACKNOWLEDGES that QA1 does not have full knowledge of the intended use of the goods, and BUYER WILL DEFEND AND INDEMNIFY QA1 upon demand against all claims, actions, liability, loss and expense (including investigating expense and attorney fees incurred in litigation or because of threatened litigation) for any loss, damage or injury, either to a person or to property, resulting from the 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.**

**OTHER QA1 PRODUCTS THAT MAY INTEREST YOU INCLUDE:**

***Remote Adjust Kits – Adjust your QA1 shocks and struts from inside your vehicle!***

***Springs – Powder coated with chrome appearance OR polished and chrome plated***

***Shocks, struts & springs for every popular street performance, drag racing, circle track racing and street rod application***

***Pro-Drag & Pro-Street Rear Coil-Over Conversion Systems***

***Stocker Star® and Proma Star® shocks for rear applications***

***Rod ends & spherical bearings, clevises, rod eyes, jam nuts, tube adapters, spacers , linkage adjusters, swaged tubes (QA1 is #1 in these products to racing/street performance – over 1,000,000 units sold annually!)***

***Other Products for Mustangs:***

***Caster/Camber Plates with QA1's innovative, exclusive bearing design to eliminate slop and reduce wear.***

***Stocker Star® bolt-in shocks for rear applications***

***Pro-Active Systems including k-members, tubular control arms, coil-over conversion kits, caster/camber plates & struts for hard core drag racing applications***

***K-members for drag racing***

***Tubular control arms (a-arms)***

***Coil-over conversion kits***

***Bump steer kits***

***Adjustable sway bar end link kits***

***Rear lower control arm kits***

***Panhard bar kits***