

QA1 MOD™ Series Pro Coil Installation





Figure 1

<u>Pro Coil Installation</u> (addendum to MOD shock instructions)

QA1 MOD Series Pro Coil kits are designed to be used with QA1 control arms and feature spherical bearings in the lower shock eyelets. If the control arms being used require a "T-Bar" style mount, use the included 3.5" T-Bar conversion kit with 2.125"-2.875" bolt spacing (P/N BAR355K).

- 1. To remove the spherical bearings from the shock eyelet, remove the snap rings from one side of the bearing and slide the bearing out of the eyelet.
- 2. To install the T-bar, remove the snap rings from the T-bar. See **Figure 1**
- 3. Slide the T-bar and bearing into the eyelet and install the other snap ring in the eyelet.
- 4. Reinstall the two snap rings on the T-bar.

These shocks have remote canisters that need to be mounted to the control arms or adjacent sheet metal. QA1 offers two styles of canister mounting bracket kits that are sold separately from the coil-over kits.

Flat Panel Mount P/N 9039-308 1-¼" Tube Mount P/N 9039-305

Shock & Spring Installation

- 1. Measure the vehicle ride height from the ground to the center of the wheel wells and record this measurement.
- 2. Raise and support the vehicle with jack stands on a stable surface.
- 3. Remove the wheels, existing shocks and springs. See a factory service manual for safe removal techniques.

- 4. The eyelet on the body of the QA1 MOD Series shock can be indexed to suit the application by removing the five (5) 8-32 x 3/8" screws in the eyelet base with a 9/64" hex key. It is recommended that the shock be mocked up in the mounting position before installing the spring to make installation and adjustment easier. Torque the screws to 15 inlbs. once the final position is established. Having the adjustment knobs face towards the front or rear of the vehicle will likely be best.
- 5. Thread the spring seat adjuster onto the shock body with the spring locator flange towards the piston rod. Engine oil should be used for spring seat/shock body thread lubrication.
- 6. Install the thrust bearing kit on the spring seat adjuster in the following order: washer, bearing, washer. Apply a light coat of marine grease to the needles of the bearings to prolong the life of the thrust bearing.
- 7. Install a washer and bushing on the piston rod.
- 8. Slide the small diameter end of the spring over the shock down to the spring seat adjuster.
- 9. Insert the assembly into the upper spring pocket. Install the other bushing, washer and nut. Do not tighten the nut at this time. Align the pig tail on the spring with the recess in the upper spring pocket if the spring has a pigtail.
- 10. Install the lower control arm shock mount bracket on the lower eyelet of the shock with the one of the provided 1/8" spacers on each side of the spherical bearing.

Note: If a T-bar mount is being used, the T-bar should be mounted on the top side of the control arm so the suspension loads are transferred from the shock to the control arm. The weld nuts on the control arms may need to be removed.

- 11. Remount the shock mounting bracket to the control arm.
- 12. Raise the lower control arm with a jack to reattach the lower ball joint to the spindle.
- 13. Tighten the ball joint castle nut to the manufactures' specifications and install a new cotter pin.
- 14. Route the canister hose away from all moving components such as steering linkage, sway bars and tires. The hose is recommended to be routed at least 6 inches away from exhaust heat sources. Securely mount the canister using the QA1 mounts listed on page 1.
- 15. Repeat on the other side of the vehicle.
- 16. All ride height adjustments should be made with the suspension in droop with the high speed compression and rebound damping and the low speed bleeds set on the softest setting to prevent the shock force from holding the vehicle up or down. Adjust the ride height with QA1 T121W Spanner Wrench by moving the spring seat towards the spring to raise the vehicle. Moving the spring seat away from the spring will lower the vehicle.

Note: Moving the spring seat adjuster will not change the spring rate, only the vehicle ride height.

- 17. Re-install the sway bar end links and front wheels.
- 18. Lower the car to the ground and bounce the suspension to seat the springs. Check the vehicle ride height referring to your notes from step 1. Raise the car off the ground and adjust the ride height as necessary using a spanner wrench. Once the ride height is set, tighten the Nylon setscrew on the spring seat nut in one of the seven (7) threaded holes.
- 19. An alignment should be performed by a reputable alignment shop after any changes to the suspension.

