

### INSTALLATION NOTES

PROFESSIONAL INSTALLATION IS STRONGLY RECOMMENDED!

If you intend to do this installation yourself, please use extreme caution when working under a vehicle that is supported with jack stands. Serious injury or death can occur.

Read through entire installation manual to ensure that you understand all of the steps before proceeding with installation. If these instructions are not properly followed, severe frame, suspension, and tire damage may occur. Product failure or vehicle damage caused by improper installation will not be covered under warranty!

Remove all contents from the package and inspect for any damage. Also, verify that all components listed are included before you begin installation. If anything is missing or damaged please contact us at [customerservice@cyc-engineering.com](mailto:customerservice@cyc-engineering.com) - IMPORTANT: DO NOT INSTALL DAMAGED PARTS!

### TECH NOTES

RSO Suspension upper control arms have been engineered to allow for the most possible caster, while still allowing for proper alignment of your vehicle. Notify your professional alignment shop of this information so you can achieve the best ride quality.

Do NOT exceed 2 3/8in adjustment from the center of the rod end to the edge of the upper control arm. Failure caused by excessive adjustment will not be covered under warranty!

The upper control arms come with matching dust caps to keep dirt and debris out, but we recommend a visual inspection of the uniball every 10-15K miles to check for any buildup. We also recommend a visual inspection of the rod ends at every oil change to check for any buildup. If you notice dirt accumulation on the uniball or rod ends you may use suspension cleaner to clean and wipe them down, then wait 2-3 days for the solvents to dissolve and then proceed with lubing with a dry lubricant that contains PTFE.

### COMPONENTS

Qty: 2 - Upper Control Arms (Driver & Passenger)  
Qty: 1 - Billet Dust Caps  
Qty: 2 - Uniball Pins  
Qty: 8 - High Misalignment Spacers: (4) .625in Wide, (4) .950in Wide  
Qty: 4 - 1/4in x 20 Socket Head Cap Screws

### TOOLS REQUIRED

Jack  
Jack Stands  
Small 4lb Hammer  
Torque Wrench  
15mm Socket  
21mm Socket  
27mm Socket  
30mm Socket

# BILLET ALUMINUM UPPER CONTROL ARMS

SKU# 130204-441400

**RSO**  
SUSPENSION

- 1.** Using a jack properly rated for your application, raise the front of the vehicle and support the frame rails with jack stands. Ensure that the jack stands are secure and set properly before lowering the jack. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove the front wheels.
- 2.** Remove the coilover/strut to gain access to the upper control arm bolts: Remove the lower coilover bolt and then remove the (3) nuts on top of the coilover (use a 15mm, 27mm & 30mm sockets for the factory hardware). Removing the lower coilover end out of the pocket in the arm can be difficult because you are fighting the bushing stiffness from the lower control arm and sway bar tension. Disconnect the swaybar links and/or the top of the other coilover to relieve some of the tension.
- 3.** Loosen the taper nut on the upper ball joint and the tie rod end using a 21mm socket/wrench. Use a hammer to separate the upper ball joint taper and tie rod end. Take care not to damage the threads. Support the spindle so that it does not over extend the CV joints when detached.
- 4.** Using a jack, support the lower control arm to prevent the suspension from being at full droop.
- 5.** With the upper control arm detached from the spindle, begin to loosen the upper control arm from its mounts in the frame using a 21mm socket/wrench and remove the OEM assembly.
- 6.** Before installing the new upper control arms, make sure that the heim spacers are pointing in the right direction. The shorter spacers go on the inside and the long spacers go on the outside.
- 7.** Place the driver side upper control arm into the mounts on the chassis and loosely fasten the OEM hardware. Reinstall the coilover assembly.
- 8.** Take care when inserting tapered pin into the spindle to not damage the threads. Use a 21mm socket/wrench to fasten the supplied lock nut onto the tapered pin to get it to seat properly. Torque to 75 ft-lbs.
- 9.** Install the upper unibal spacer cap and secure using the M12 Socket Head Cap Screw and torque to 100ft/lbs using a 12mm Hex Head Socket.
- 10.** Tighten the upper control arm bolts using a 21mm socket/wrench. Torque to factory spec.
- 11.** Upper control arms utilize heim joints at each pivot to allow alignment using the adjusters on the upper control arms as well as cam adjusters on the lower control arms. The heims can be extended or contracted by turning the collar. Make sure that the slit in the collar lines up with the slit in the housing and then tighten the pinch bolts in an opposing pattern at least 3 times. Torque to 35 ft-lbs
- 12.** Repeat steps on opposite side of the vehicle.
- 13.** Reinstall wheels and tighten lug nuts. Torque to factory spec
- 14.** Install the dust cover. Make sure that the o-ring is seated in the groove in the cap and apply anti-seize to the (4) allen head screws. DO NOT OVER TIGHTEN. Doing so can cause damage to product.

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15. Have the vehicle professionally aligned. Once aligned, apply red thread locker to the outer pinch bolts located on the sides of the arm. Tighten the pinch bolts in an opposing pattern at least 3 times. Torque to 35 ft-lbs.