

## Specialty Products A

### Forged Muscle Car Adjustable Arms

Q1: I'm running radial tires, what alignment settings should I use?

A1: Factory specifications for this car were based on bias-ply tires and/or manual steering. Running radial tires with those settings will result in very light steering feel with little return to center, and a somewhat vague on-center feel. Most people report significant improvement in drivability running approximately +3.0 degrees of caster. Recommended camber is between zero and -0.25 degrees. Recommended total toe is +0.25 degrees. SPC suggests you start there and see how it feels with your total system modifications.

Q2: I have aftermarket "tall" knuckles installed; can I use SPC arms? The SPC arms for my application come with a longer ball joint stud.

A2: Yes, you can still use adjustable SPC control arms. However, you will want to get a ball joint stud that has not been extended. Leaving the ½" extended stud in the arm and combining it with a tall knuckle may affect your camber curve too much. SPC's ball joints are easily rebuilt with different length posts. Please contact the SPC Technical Department for different ball joint post options.

Q3: There is about ½" of ball joint stud showing above the knuckle. Is this correct? Is the stud seated properly in the knuckle? Is the boot too short?

A3: The extended length rebuildable ball joint used in many, but not all, of these kits will leave about ½" of stud showing between the knuckle and the boot. If you see about ½" of stud, it is seated properly, and the boot will protect the ball joint as designed. This extended stud is designed to improve the camber curve. It does look a little different than you are used to seeing, but it will work very well. The castle nut should be tightened to 45 ft-lb and then the cotter pin inserted. Tightening the nut farther to "seat" the extended shaft will result in broken or damaged parts and will not change the exposed shaft. Different ball joint shaft lengths are available in rebuild kits.

Q4: I have installed the adjustable upper control arm and cannot achieve the desired caster/camber settings. What can I do?

A4: Most arms have two different size double threaded adjuster sleeves that vary in length. Normally there is plenty of adjustment range with the arm in its original configuration. If needed, SPC offers 4 different adjuster sleeves that can be interchanged to achieve desired alignment angles. Double threaded adjuster sleeves come in 2 inch, 2-3/4 inch, 3-1/2 inch, and 4-1/4 inch.

- Q5: I am installing pivots with Delrin sleeves in my Racing/Muscle Car upper control arms. What is the proper torque value for these pivots?
- **A5:** There is no "correct" torque value for these pivots. Tightening the Delrin bushing too much will damage the bushing flange material. Tighten the supplied lock nut until the washer is snug against the Delrin bushing and there is no side-to-side play along the cross shaft. Recheck at 1000 miles to make sure there is no play and tighten slightly if necessary. After that, it is good to check and grease them at every oil change.
- Q6: Can I use the stock rubber type pivot bushings instead of the Delrin race-style bushings?
- **A6:** Yes, all the current cross-shafts will accept the rubber (Clevite style) bushing or the Delrin race-style bushings.
- Q7: The arm has separated at the ball joint where the pinch bolt is located. What should I do?
- A7: Follow the procedure for securing the clamp legs as stated in installation instructions. A current copy of the instructions can be found on the product website page. IMPORTANT: Make sure the clamp surfaces are free from grease before torquing pinch bolt.
- Q8: Is the small steel retainer on the clamp leg pinch bolt supposed to hold the 2 legs together?
- **A8:** The steel retainer is designed to hold the clamp legs for shipping purposes and while adjusting the arms but is not designed to hold the clamp legs permanently.
- Q9: My SPC control arm is hitting the OE bumper landing pad. What can I do?
- A9: The OE control arms had a rubber bumper which would contact the top of the shock tower at full droop to limit suspension down travel. SPC Muscle Car Arms do not have this feature, as droop should be limited by the shock absorber rather than the control arm. You can carefully hammer down or grind some of the OE droop bumper landing pad from the shock tower for clearance. Be careful not to grind into the spring bucket or frame rail structure. Limiting straps may also be installed.
- Q10: My SPC control arm is touching the cross shaft mounting bracket gusset. What can I do?

#### **SPC-FAQ**

**A10:** The triangular gusset reinforcing the cross shaft mounting bracket is less important now that there is no need to shim the cross shaft which creates a longer lever acting on the mounting face. Carefully bending the gusset with a few well-placed hammer blows is preferred to grinding, but either method will create the necessary clearance.

# Q11: My SPC upper control arms contact the frame when I lift the vehicle with a jack. What should I do?

A11: It is critical that you consider the entire suspension system when you modify your front end. The design of the SPC control arms normally have sufficient clearance but rebound or downward suspension travel should be checked when arms are installed. The shock absorbers should provide a limit for the suspension travel prior to the arm contacting the frame. There are many lengths of shocks available in the aftermarket; some are much too long for the application, so check your shock length in addition to the configuration options.

### Q12: How do I know what length shock I should be running?

A12: SPC has determined lengths for some of our applications and listed them in the directions. For other applications, you can easily lower the arm with the shock removed until the SPC upper arm just touches the frame, then measure the distance from the upper mount to the lower mount and subtract ½"to determine the ideal shock length for your vehicle. Shocks up to ½" shorter than this measurement will also be fine.

### Q13: What about using limiting straps?

**A13:** Limiting straps are a viable alternative as well. This extra device is not needed for most usages; it may be the better option if you use your car very hard (drag racing, rally, etc.). They can also allow you to keep your current shocks or coil overs if they are too long.

Reference Items: 97110, 97120, 97130, 97140, 97150, 97160, 97170, 97180, 97183, 97190, 97260, 97300