PART NOS. 97110, 97120, 97130, 97140, 97150, 97160, 97170, 97180, 97183, 97190, 97260 MUSCLE CAR ARMS



This part should only be installed by personnel who have the necessary skill, training and tools to do the job correctly and safely. Incorrect installation can result in personal injury, vehicle damage and / or loss of vehicle control.

Check out how

to install this

part at:

http://www.spc-tv.com

Plan Ahead - Read All Instructions BEFORE installing part.

Check for loose or worn parts, proper tire pressure, and odd tire wear patterns before beginning alignment.

1. Raise vehicle and support by frame. Remove front tire and wheel assembly. Remove OE upper control arm including any cross-shaft spacers or shims. Support knuckle to avoid straining brake lines.

2. Adjust SPC adjustable control arm to approximate OE dimensions. Control arm leg integrated with ball joint housing should be rearward leg and clamping leg of control arm should be forward. Ensure equal thread is visible beyond both large and small jam nuts when seated, both sides.

NOTE: To allow for proper thread engagement, there should never be more than 1.0" of thread showing past jam nuts on either side of adjusters.

3. Install adjustable control arm onto vehicle. Mount cross-shaft to chassis using OE hardware and torque to manufacturer's specification. See vehicle specific orientation notes below. Nuts at outer ends of cross-shaft should be tight enough to remove play, yet loose enough to rotate pivot brackets by hand.

WARNING: Tightening cross-shaft end nuts with vehicle in raised position may cause premature bushing failure.

4. Install ball joint stud into knuckle tapered hole. Install castle nut onto ball joint stud and torque to 40-46 ft-lb [54-62 Nm]. Tighten more, only as necessary to install provided cotter pin.

Tech Tip: Due to variance in knuckle conditions, a washer may be required to affix ball joint stud properly into your vehicle. If ball joint stud thread is too long and cotter pin hole is above castle nut completely, or you can see taper protruding below knuckle face where castle nut will ride, use a hardened washer to space castle nut enough to ensure proper clamping of knuckle flange and allow sufficient engagement of cotter pin between castle features. For 97180 only, use hole that allows castle nut to be tight against

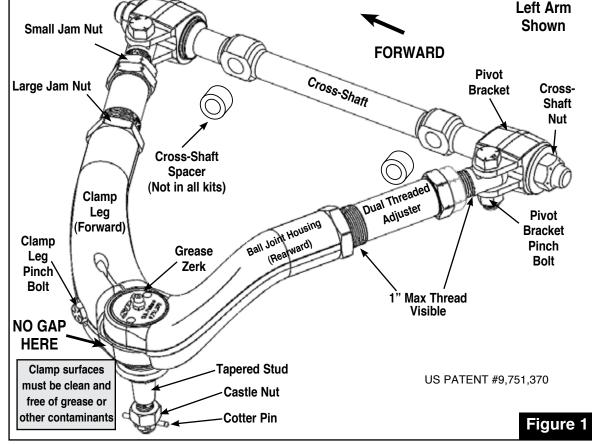
knuckle.

5. Verify there is no gap between ball joint housing and clamp leg, then snug pinch bolt on clamp leg to keep both halves together, see Figure 1. Clamp surfaces must be clean and free of grease or other contaminants for proper grip via pinch bolt.

NOTE: Use pry bar between control arm and knuckle to push clamp leg up until there is no gap between two halves. Use care to not damage rubber boot.

- 6. Reinstall tire and wheel assembly and lower vehicle
- Adjust alignment using dual threaded adjuster on either leg of control arms. Ensure equal thread is visible beyond both large and small jam nuts when seated.

Continued on back





Specialty Products Company®

PART NOS. 97110, 97120, 97130, 97140, 97150, 97160, 97170, 97180, 97183, 97190, 97260 MUSCLE CAR ARMS - CONT.

Continued from front

- 8. When finished adjusting, tighten hardware in the following order:
 - 8.1. Torque pinch bolts at pivot brackets to 60 ft-lb [81Nm].
 - 8.2. Torque cross-shaft end nuts to 80 ft-lb [108Nm].
 - 8.3. Re-verify there is no gap between ball joint housing and clamp leg from step 5, then torque pinch bolt on clamp leg to 36 ft-lb [49 Nm].

NOTE: Failure to properly torque pinch bolts may result in damage to control arm and surrounding components.

- 8.4. Small adjuster jam nuts (1-1/8" hex).
- 8.5. Large adjuster jam nuts (1-3/8" hex).
- 9. Grease ball joint with an NLGi #2, Grade LB with 3%-5% Molybdenum Disulfide grease. 3 to 6 pumps of grease is sufficient at each lubrication. WARNING: FAILURE TO GREASE AND MAINTAIN THIS BALL JOINT MAY RESULT IN PREMATURE FAILURE.
- 10. Complete alignment and road test vehicle.



Tech Tip: SPC adjustable upper control arms allow for non-OE alignment settings when radial tires are installed in place of OE bias ply tires. In this case, general recommended starting place for front end alignment settings are as follows: Caster: +3.0° / Camber: -0.25° / Total Toe: +0.25°

11. Check fitment and packaging clearances after test drive to make sure no contact with other components has occurred. Re-verify there is no gap between ball joint housing and clamp leg. Re-torque fasteners immediately after test drive and after 50-100 miles.

Always check for proper clearance between suspension components and other components of vehicle.

Maintenance:

Lubrication Interval - SPC recommends adding 3 to 6 pumps of grease to ball joint at each oil change, or after operating vehicle in wet or dusty conditions.

Specific Body Style Notes:

'A' Body Note (SPC P/N 97110): On some GM A-body cars (mostly 2nd gen) there is a brace extending out from forward end of control arm mounting bracket to outer edge of frame. This end MUST be trimmed to resemble shorter rear end of mount in order to mount adjustable control arm properly. Failure to do so will result in extreme difficulty in assembling suspension and will likely damage control arm if driven.

1st Generation 'F' Body Note (SPC P/N 97120): An aftermarket tall knuckle will provide additional wheel clearance at steering limits.

'58-'64 Belair/Biscayne/Caprice/Impala/'58-'63 El Camino Body Note (SPC P/N 97150): Cross-shaft should be installed so arm is offset to front of vehicle. Orient notched side of cross shaft outward to clear formed shock mounting tower. Install washer (referenced in Step #4 tech tip) to adequately locate ball joint to knuckle if needed.

'55-'57 Tri-5 Note (SPC P/N 97170): Cross-shaft should be installed so arm is offset to front of vehicle. Install included spacers to move cross-shaft inboard so it will clear formed shock mounting tower. A maximum shock length of 13-3/8" will prevent contact between arms and frame of vehicle. Install washer (referenced in Step #4 tech tip) to adequately locate ball joint to knuckle if needed.

'73-'87 Chevy C10 Note (SPC P/N 97180 & 97183): Install included spacers behind cross-shaft to move it outboard. Down-travel limiting is absolutely necessary to avoid contact between SPC upper control arms and spring mount at full droop.

'84-'96 Corvette C4 Note (SPC P/N 97190): Install included spacers on both sides of cross-shaft to maintain OE axis of rotation and camber curve.

There is no warranty stated or implied due to the inability to monitor the part's modification, installation, and use, except that Specialty Products Company warrants its products to be free from defects in material and workmanship for 90 days after purchase under normal use. In that case, parts returned must be determined by Specialty Products to be defective and Specialty Products's obligations under that warranty are solely limited to repairing or replacing, at its option, any part proven defective.

Final determination of the suitability of the parts for use contemplated by the buyer is the sole responsibility of the buyer. Specialty Products Company shall not be liable for any special, direct, indirect, incidental, or consequential damages that might be claimed as a result of the failure of any part, including claims for delay, loss of profits or labor. Specialty Products Company shall not be liable for any damage or injury to persons or property resulting from improper installation or misuse of any part subject to this warranty. There are no other warranties expressed or implied extending beyond those set forth above.