



PART NOS. 81351, 81352, 81353, 81358 • 81361, 81362, 81363, 81368 • 81371, 81372, 81373, 81378

Installation Instructions FRONT ADJUSTABLE CONTROL ARM SET



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.

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 front of vehicle by body so front suspension hangs free and remove front tire and wheel assembly.
2. Remove upper ball joint studs from knuckle by removing pinch bolt and using a spreader such as a screw driver or chisel in slot. Support knuckle assembly so it does not strain axle joints or brake lines.
3. With the original control arms free from the knuckle and held up in their normal position, note the angle to the strut top plate. This will become important to reinstall SPC control arms at the same angle as OE control arms.
4. Check OE control arm articulation angles with respect to strut top plate through entire suspension travel and make sure SPC adjustable arms can reach same angles without contacting strut top plate.

NOTE: Part numbers beginning with 8135 may require light trimming of strut top plate to allow clearance for SPC upper control arms to reach the same angles as OE. If clearance is needed, use an aluminum rotary file (SPC #85137) to grind strut top plate. See Figures #1 and #2.

5. Remove bolts fastening control arms to strut top plate and remove upper control arms one at a time.



Tech Tip: For part numbers beginning with 8135 and 8137: entire strut top plate, upper control arms, and strut assembly must be removed to gain access to remove inboard upper control arm mounting bolts. Part numbers beginning with 8136 can remove inboard control arm mounting bolts without removal of strut assembly.

6. Adjust new control arms to approximately same length as OE arms. Make sure equal thread is showing on either side of hex adjuster.

CAUTION: Maximum length of arm is reached when milled flat is visible on adjuster at end of aluminum housing. Do not lengthen arm beyond this point.

7. Install SPC adjustable control arms to strut top plate one at a time in same relative position that OE arms were installed, as noted in step 3. This will keep bushings centered in a mid-travel position near normal vehicle ride height. Tighten bolts fastening control arms to strut top plate to manufacturer's specifications.

NOTE: Tightening bushing fasteners at a different angle than OE may cause premature bushing failure.

8. If removed in step 5, now reinstall complete strut assembly in reverse order of removal. Torque fasteners to manufacturer's specifications.
9. Install outer ends of control arms to knuckle using supplied pinch bolt and torque to 30 lb-ft [40Nm].
10. Reinstall tire and wheel assembly and attach alignment equipment. With alignment equipment attached, adjust control arms by rotating center hex adjusters to desired camber or caster settings.

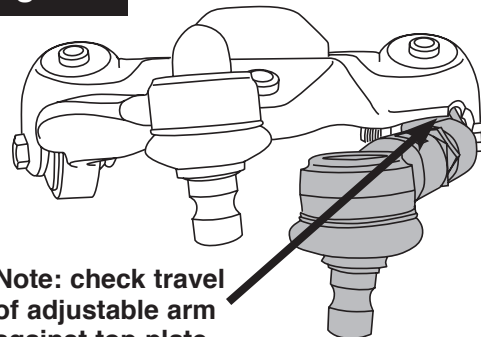


Tech Tip: Use alignment equipment's "jack up selected axle" option to make adjustment easier.

NOTE: At certain alignment settings during suspension travel, outer ball joint may contact metal flange at inner fender. Check flange clearance when wheels are turned and when straight. If contact is noted you may either limit camber adjustments or trim problematic flange at inner fender.

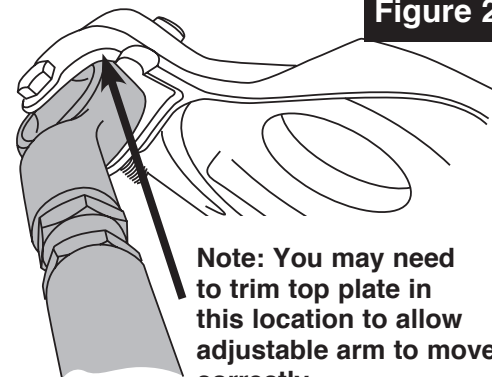
NOTE: Lowered vehicles may introduce contact between control arms and wiring harness at inner fender. If contact appears possible, re-route wires away from control arms.

Figure 1



Note: check travel of adjustable arm against top plate

Figure 2



Note: You may need to trim top plate in this location to allow adjustable arm to move correctly

NOTE: Because of "Virtual Steering Axis" suspension on these vehicles, Audi does not publish a specification for caster angle. For best arm fitment and improved handling, suggested caster between 5° and 6° as measured by normal alignment procedure.

11. After adjustment is complete, tighten lock nuts on each hex adjuster. Make sure ball joints remain centered in housing.
12. Reset toe and road test vehicle.

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