# NISSAN TITAN/ARMADA FRONT ADJUSTABLE CONTROL ARM

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.

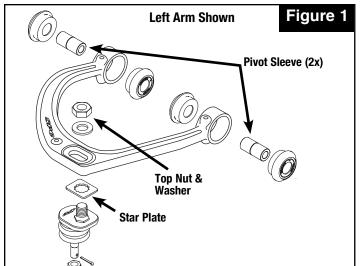
- 1. Take initial alignment readings and determine camber change needed.
- 2. Raise front of vehicle by frame and securely support.
- 3. Remove front tire and wheel assembly.
- 4. Set lower control arm cam bolts to center, neutral position and lightly tighten.
- 5. Remove cotter pin and nut holding OE ball joint to knuckle and discard both. Break taper between OE ball joint stud and knuckle and remove ball joint. Support knuckle so no strain is applied to ABS wiring or brake lines.
- 6. Loosen and remove OE upper control arm mounting bolts. Remove OE control arm.

#### NOTE: To provide clearance, additional components in the engine compartment may need to be removed

- 7. Push supplied bushings into each SPC control arm, see Figure 1. Do not grease outside of bushings when installing.
- 8. Using SUPPLIED GREASE ONLY, liberally coat inside of all SPC control arm bushings, verifying all small voids are filled with grease. Press a pivot sleeve into each bushing pair until flush to outside of bushings. This will push some grease out, which is normal.
- 9. Test fit SPC arm into spring pockets on vehicle to verify there is no interference with back of the pocket.

NOTE: Due to manufacturing variances, occasionally vehicles may need to have left side rear pocket "clearanced". This may require some grinding to obtain 1/8" (3mm) minimum clearance between back of SPC arm and top of mounting pocket. Confirm end ring of SPC arm does not contact bracket.

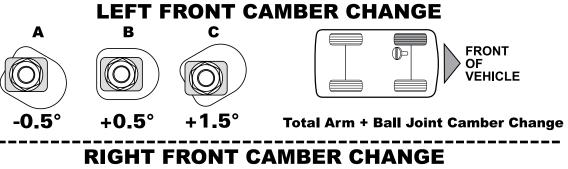
10. Apply a coating of supplied grease to outer faces of bushings where they will contact frame pockets.



- 11. Insert SPC control arm into frame pockets using OE mounting bolts. Tighten control arm bolts to manufacturer's specifications.
  - NOTE: Unlike OE rubber bushings, SpecRide $^{\text{TM}}$  bushings pivot freely and can be torqued without applying vehicle weight.
- 12. Install star plate over hex on SPC ball joint per chart below to achieve desired camber change determined in Step 1.
  - NOTE: For most trucks with 2-3" of lift, setting "B" should return camber to manufacturer's specifications, but it may be necessary to use different positions on each side to achieve desired camber settings.
- 13. Insert SPC ball joint up through the bottom of the arm, indexing star plate in machined slot, and then install supplied top washer and nut. Position ball joint in middle of slot and snugly tighten nut.
- 14. Insert SPC ball joint stud into knuckle, install supplied castle nut, and torque nut to 45 ft-lb [61 Nm]. Tighten further, but only until cotter pin can be installed. Install supplied cotter pin.
- 15. Re-install tire and wheel assembly. Lower vehicle.
- 16. Take alignment readings. If additional camber adjustment is necessary, loosen top nut and reposition star plate to rotate ball joint relative to arm. Adjust caster by loosening top nut and sliding ball joint in control arm slot.

NOTE: It will be necessary to raise vehicle to make camber/caster adjustments with SPC arm.

17. With full vehicle weight on suspension, fine-tune alignment using OE lower control arm cam bolts.



- When final camber/caster settings are achieved, torque top ball joint nut to 200 ft-lb [271 Nm]. Torque lower cams to manufacturer's specifications.
- Adjust toe and road test vehicle.

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

## Maintenance:

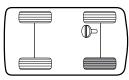
This ball joint is fully sealed and features a lifetime grease. No maintenance is required after installation.











FRONT OF VEHICLE

**Total Arm + Ball Joint Camber Change** 



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