1967-69 Camaro/Firebird Control Arms

Installation Instructions

Note: Always refer to the vehicle owner's manual for correct torque specifications when installing kit.
TEAR DOWN

1. Jack up vehicle and place on jack stands
2. Set emergency brake and use wheel chocks
3. Remove wheels and lug nuts
4. Remove caliper and brake hose and tie caliper out of the way. (Do not let the caliper hang by the hose.)
5. Remove rotor.
6. Install coil spring compressor and collapse spring
7. Disconnect shock.
8. Remove shock and compressed spring together.
9. Loosen the upper and lower ball joints with a ball joint separator tool.
10. You can save time by leaving the tie rod ends still attached to the spindle and swinging it out of the way. Or you can loosen tie rod ends with a tie rod separator tool (do not twist the tie rod in or out). Either way, inspect the tie rod boots for tears.
11. So if you removed the tie rods ends, remove spindle and caliper bracket. If not, simply tie spindle out of the way.
12. Disconnect sway bar from the spindle.

ASSEMBLY DIAGRAM

< FRONT OF CAR

FIG.1
UPPER CONTROL ARM REMOVAL

1. Clean the cross member surface around the upper A arms cross shafts
2. Scribe the locations of the control arm shafts
3. Count the alignment shims and note their location for reassembly (once off, tape them together and label their location)
4. Remove the control arms
5. Retain nuts for reassembly

LOWER CONTROL ARM REMOVAL

1. Remove the lower control arm
2. Inspect the cross member mounting area. Repair any damage. Wire brush and degrease the cross member thoroughly.
3. Note location of the bump stops so you know where they should be located on the new control arms.

LOWER CONTROL ARM INSTALLATION

1. Install the control arm into the frame with their bushings and nuts
2. Position the urethane bump stop on new control arm as it was on the original. It should be on the front tube.
3. torque nuts to: Lower Ball Joint = 90 ft. lbs. Shaft to frame bolt = 80-90 ft. lbs.
4. Reconnect to spindle

UPPER CONTROL ARM INSTALLATION

1. Using the shims that you labeled earlier, mount the upper control arm. Remember the long tube is towards the front. Please note caster block orientation in FIG. 2
2. On some models the factory used press in studs and you will need to replace these with grade 8 hardware. For additional header clearance consider putting the bolt head towards the engine.
3. Torque the mounting nuts to: Upper Ball Joint = 65 ft. lbs. Tie Rod End = 40 ft. lbs.

SPRING AND SHOCK INSERTION AND FINAL ASSEMBLY

1. Whether you are using old or new shocks, verify that the new shock mounting bolt from the new control arm fits through the eyelet end of the shock. Inspect the bushing, replace if necessary.
2. If using new shocks, leave the wire shock used to compress the shock in place for now.
3. If using and old shock, it would be helpful to fashion a shock compressor from wire and collapse the shock for ease of installation.
4. Install coil spring, with compressor still installed onto lower control arm and mount the bottom of the shock using the bolt provided. Torque to 40-55ft. lbs.
5. Mount the spindle to the lower control arm and torque the lower ball joint nut to 90ft. lbs.
6. Using a hydraulic jack, gradually raise the lower control arm and attach the upper ball joint into the top of the spindle.
7. Position the shock into its’ mounting hole and release tension from the wire compressing the shock. Install the shock bushings, washer and nut. Torque to 14-26 ft lbs.
8. Release the coil from the spring compressor and guide it into position as you do.
9. Slowly release the hydraulic jack.
10. You should now have the upper and lower control arms, the coil spring and shock absorber installed.
11. Tighten the castellated upper ball joint nuts onto the spindle and set them to 60ft.lbs of torque. Attach tie rod ends, torque to 35-47 ft. lbs.
12. Install cotter pins.
13. Grease upper and lower ball joints, tie rod ends and the control arm bushings using a grease gun.
14. Re-pack bearings and install the rotors, bearings, grease seals, spindle washers, spindle nuts and cotter pins.

FIG. 2

Caster blocks- both holes align the same orientation toward fender.