

UCA6370-LCA6370

1963-1970 C10 UPPER & LOWER TUBULAR CONTROL ARMS



1963-1970 2WD C10 CHEVY/GMC 1/2 TON TRUCKS

TUBULAR CONTROL ARM MOUNTING INSTRUCTIONS



BALL JOINTS BY YEAR REFERENCE CHART FOR 2WD C10 TRUCKS				
YEAR	McQuay-Norris	MOOG	McQuay Norris	MOOG
63-70	FA480GL	K6024	FA481	K6023
71-72	FA683	K6124	FA1014	K6117
73-87	FA903GL	K6136	FA1014	K6117

For drum brakes or disc brakes...

all of the brakes, both of the spindles and the original arms are removed.

TEAR DOWN

1. Jack up the front of the vehicle.
2. Place jack stands under the front frame rails.
3. Set emergency brake and use wheel chocks behind rear wheels.
4. Remove lug nuts and the wheels, keep for re-use.
5. Whether the truck has front drum or disc, remove your dust caps, cotter pins, spindle nuts, spindle washers, and outer bearings for possible re-use.
6. If you have front drum brakes, disconnect your flex hose from the hard line at the frame. Next relax the shoe adjuster lever assembly and remove the brake drum and inner wheel bearing. Remove the drum backing plate by loosening the mounting bolts.
7. If your truck had disc brakes, remove the calipers and brake hoses. We suggest disconnecting the flex hose from the hard line at the frame. Keep all mounting hardware for re-use.

At this point you should be left with the bare spindles. If so, proceed to the next steps.

8. Put a large floor jack under the lower control arm and raise it to make contact with the arm.
9. The coil springs are under a lot of pressure. For safety, run a chain through it to secure it.
10. Remove the cotter pins and loosen the castle nuts on the ball joints, but do not remove them.
11. Disconnect shocks and keep them and all of the bolts and hardware for re-use.
12. Use a ball joint separator tool to loosen the upper and lower ball joints from the spindles.
13. Loosen tie rod ends with a tie rod separator tool (do not twist the tie rod in or out).

Inspect the tie rod boots for tears, and swing the tie rods, drag links and center links away.

14. If your vehicle has a sway bar, detach the end link kits and keep the hardware for re-use.
15. Remove the castle nuts on the upper ball joints.
16. Use your floor jack to slowly lower the lower control arms. Be careful.
17. Remove the coil springs and set them aside.
18. Next, remove the castle nut on the lower ball joints.
19. Remove spindles and set aside for later if re-using them. Inspect all surfaces.

UPPER CONTROL ARM REMOVAL

20. Clean the mounting surface around the upper A arms cross shafts.
21. Scribe the locations of the control arm shafts and note where the bump stops make contact.
22. Remove the control arms mounting nuts and retain for re-use.
23. Count the alignment shims and note their locations.

(tape them together noting front or rear location for re-assembly)

24. Remove the upper control arms.

LOWER CONTROL ARM REMOVAL

25. Note the areas where the bump stops make contact before removing the lower arms.
26. Remove the lower control arm. These arms have U bolts holding the cross shafts to the cross member. The U bolts have a locator tab to position them correctly. Note their orientation.

You will re-use the U bolts and their mounting nuts. Keep for re-assembly.

27. Inspect the mounting area. Repair any damage. Clean and inspect the mounting area.

At this point you should be looking at the frame with no components installed.



Before installing the new control arms, familiarize yourself with them with this picture.

LOWER CONTROL ARM INSTALLATION

28. Position the lower control arm with the bump stop and sway bar closest to the front of the Vehicle as shown above. The shock mounting tab should be towards the **rear** of the vehicle.
29. Install the control arm into the frame with their bushings and nuts. The cross shafts have aligning holes which align with studs inside the mounting saddles. Install both U bolts and make sure you get the holes aligned with the studs. Torque all four U bolts nuts to 85 ft. lbs.
30. Place the floor jack below the new lower control arm. Use rags to protect painted surfaces.

UPPER CONTROL ARM INSTALLATION

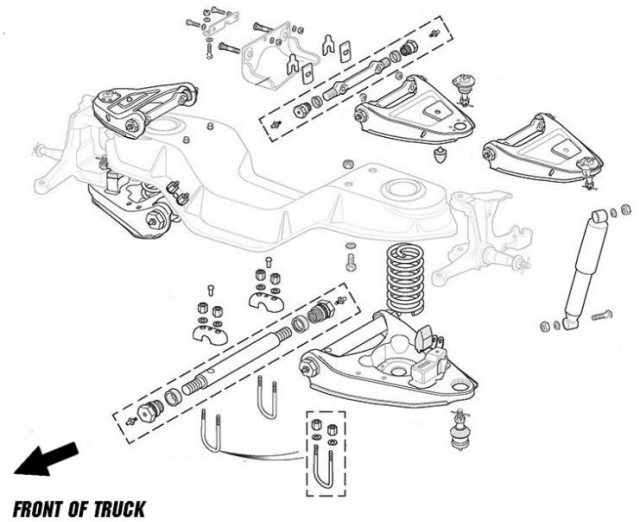
31. Using the shims that you labeled earlier, mount the upper control arm. The straight tube faces the front of the truck and the curved tube is towards the rear of the truck.
32. On some models the factory used press in studs and you will need to replace these with grade 8 hardware. If yours mount with bolts, inspect for damage and replace as necessary.
33. Remove the tape from your shims.
34. Torque the mounting nuts to 70 ft. lbs.

INSERT THE COIL SPRINGS

35. If you have not done so already, place the floor jack under the lower arm.
36. Set the coil spring into the lower control arm spring pocket.
37. While holding it in place, pull up on the control arm so the spring will stay in.
38. If you are using a safety chain to hold the spring, insert it now.
39. Jack up the lower arm and make sure to rotate the spring into the seat and get it aligned in the index in the spring bucket on the lower arm.
40. Make sure the spring is inserted correctly into the upper and lower arms.

MOUNT THE SPINDLE

41. Place the spindles on the lower ball joint stud and start the nut a few threads so it doesn't come off. (The steering arms should be towards the front of the truck)
42. Slide the top ball joint into the top of the spindle and hand tighten the nut.
43. Torque the upper ball joint castle nuts to 50 ft. lbs and then an additional twist to align the cotter pins, (Do not exceed 90 ft. lbs.)
44. Insert cotter pins and bend the end of the pins to lock them in.
45. Torque the lower ball joints to 90 ft. lbs. (do not exceed 130 ft. lbs.) and then an additional twist to align the cotter pins.
46. Insert cotter pins and bend the end of the pins to lock them in.
47. Before lowering the jack, install the bottom of the shock to the lower control arm , and torque the lower shock bolt nuts to 60. Ft. lbs.
48. Now, torque the upper shock bolts to 140ft. lbs.
49. If you used a safety chain in the spring, remove it now.
50. Connect the outer rod ends, torque the castle nuts to 41 ft. lbs., insert the pins & bend tabs.
51. Double check that all mounting hardware and nuts have been torqued down.
52. Remove the floor jack from under the lower control arm.
53. Test the steering by turning the steering wheel lock to lock.
54. Make sure nothing is binding. Adjust as necessary.
55. Grease all fittings: upper/ lower ball joints, inner/outer tie rod ends, idler and pitman arm.
56. If you have a sway bar, attach the end link kits.
57. Attach the brake splash shields to the knuckle. Torque the bolts to 120 inch lbs.



At this point the installation of the control arms and spindles is complete.

ROTOR AND CALIPER INSTALLATION

58. Inspect the bearing landings on your spindle. Dress with emery paper if needed.
59. Re-pack bearings and install the rotors, bearings, grease seals, spindle washers, spindle nuts and cotter pins.
60. Torque the spindle nut to 12 ft. lbs. Back the nut off slightly and test spin the rotors.
61. Install the calipers with bleeder screws up. Be sure to grease the caliper pins and use disc brake quiet on the rear of the pads. Tighten the caliper mounting bolts to 35 ft. lbs.
62. Spray the rotor surfaces with brake cleaner.
63. Connect the flex brake hoses.
64. Install copper crush washers on the bolt end on both surfaces.
64. Add fluid to the master and bleed the brakes in order: RR, LR, RF, LF
65. Mount the wheels and hand tighten the nuts.

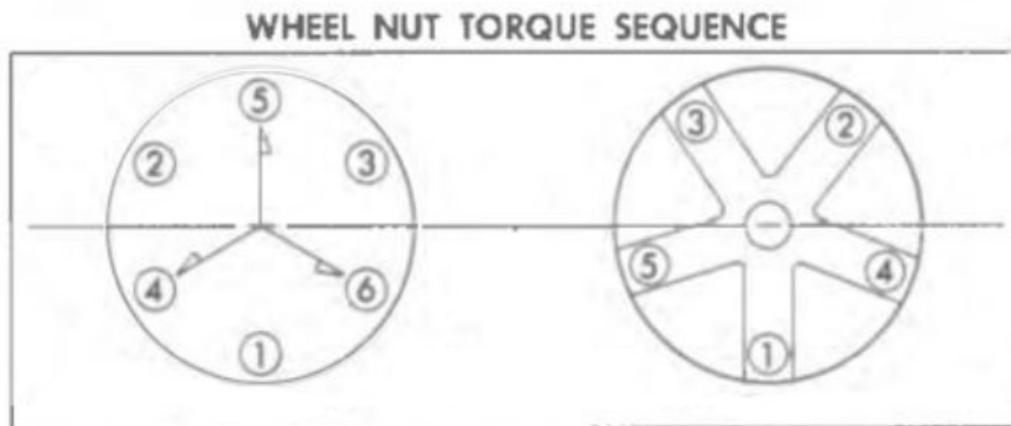
Install banjo bolt with 2 washers shown here.



Orient block like shown on caliper.

C10 2wd trucks came with 2 different stud patterns stud sizes based on the year they are.

5 stud rotors (1/2") torque the lug nuts to 65-90 ft. lbs. 6 stud rotors (7/16") torque the lug nuts to 55-75 ft. lbs.



66. Remove jack stands.
67. Test brakes in a safe location.
68. Get a wheel alignment.