

Z1 370Z / G37 / Z FRONT UPPER CONTROL ARMS (FUCA) INSTALLATION MANUAL



This Installation Manual is intended for the following models:		
2009-2020	Nissan 370Z	
2008-2015	Infiniti G37 Coupe	
2009-2015	Infiniti G37 Sedan	
2023+	Nissan Z	

PROLOGUE:

Study these instructions completely before proceeding to assembly. The installer must have a thorough knowledge of automotive systems operation. If unfamiliar with any of the concepts outlined in this instruction, we recommend the installation be completed by a qualified professional.

WARNING!

Extreme caution should be taken when performing maintenance or performance upgrades to your vehicle. Please observe and abide by any Warning or Caution labels placed on the various components and tools used when servicing your vehicle. If you have any questions regarding installation or the various components included with the Z1 Motorsports 370Z / G37 / Z Rear Toe Arm Set, consult with a Professional Mechanic or contact Z1 Motorsports for more information.

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PARTS INCLUDED:

Item	Quantity	Description		
1	1	Red Loctite		
2	1	FUCA Arm – Passenger With Heim Joint		
3	1	FUCA Arm – Driver With Heim Joint		
4	3	M6-1.0 x 30mm Bolt w/ washer		
Track Version FUCA will provide the following:				
5	2	Pre-assembled Camber Arm with Solid Heim Joint Assembly		
Street Version FUCA will provide the following:				
6	2	Pre-assembled Camber Arm with Urethane Bushing Assembly		

TOOLS REQUIRED:

- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- Wheel Chock
- Ratchet
- 10mm Socket
- 14mm Wrench & Socket
- Crescent Wrench

- Lanyard Strap
- Soft-blow Hammer
- Pry Bar
- Torque Wrench
- 8mm Hex Key
- 17mm wrench

SAFETY REQUIREMENTS:

- Always wear safety glasses and any necessary protective garments. If using any fluids, chemicals, or solvents, a respirator is recommended.
- Always turn the ignition to the OFF position and disconnect the NEGATIVE battery terminal.
- Always use properly rated jack stands when working under your vehicle.
- Always keep limbs and parts away from moving drivetrain parts.
- Only operate drivetrain in safe space and well-ventilated areas.

BEFORE YOU BEGIN:

Remove contents from the Z1 Motorsports 370Z / G37 / Z Rear Toe Arm Set and verify that ALL necessary hardware is present.

PROCEDURE:

- 1. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.
- 2. Unlatch and raise the vehicle's hood. Apply hood prop.
- 3. Replace bolts attaching power steering reservoir to chassis with (3) M10-1.0 x 30mm bolt with washer (circled at right).
- 4. Release tension to lug nuts at front wheels. DO NOT Remove lug nuts!



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- 5. Locate proper jacking points on vehicle's chassis (refer to vehicle's Owner Manual). Raise and support vehicle using jack & jack stands.
- 6. Remove front wheel and lug nuts.
- 7. Locate the OEM front upper control arms (FUCA). They are located at the front left & right ends of the vehicle, between the chassis and front axle.
- 8. Wrap lanyard strap around steering knuckle and strut assembly. Lanyard will prevent brake line from becoming stretched/damaged during installation process.
- 9. Remove nut and bolt securing OEM FUCA to steering knuckle (see image at right).
- 10. Separate OEM FUCA ball joint from steering knuckle.

Note: Ball Joint may be seized in steering knuckle. Use pry bar or a soft blow hammer to separate.

11. Remove (2) bolts that attach OEM FUCA to Chassis (see image at right).

<u>Note</u>: Strut assembly may need to be compressed and/or loosened from Chassis in order for bolts to be removed. See factory service manual in reference to the removal of strut assembly.

12. Remove OEM FUCA from vehicle.

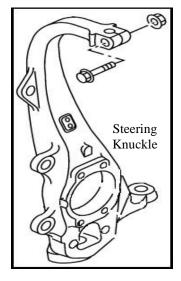
FOR STREET VERSION CONTINUE TO STEP 13. FOR TRACK VERSION CONTINUE TO STEP 14

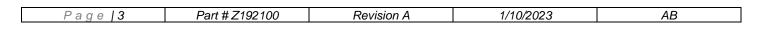
13. Locate Z1 FUCA. Thread (2) pre-assembled urethane bushing assemblies into Z1 FUCA ends. Continue to step 15.

<u>Note</u>: Z1 street version FUCAs come equipped with serviceable grease fittings. It is recommended that you add grease after installation and every 5,000 miles to assure long product life.

Z1 recommends use of Energy Suspension Formula 5 Prelube or other synthetic water-resistant marine-grade grease.

- 14. Locate Z1 FUCA. Thread (2) pre-assembled solid heim joint assembly into Z1 FUCA ends. Remove zip ties that secure conical spacers to heim joint.
- 15. Thread (1) pre-assembled outer joint into Z1 FUCA end.
- 16. Measure and set Z1 FUCA length to the same as OEM FUCA specification.
 - Note 1: Assure exposed threads of each mount do not exceed 15mm.
 - <u>Note 2</u>: Assure chassis-side mounts are threaded equally in length. Failure to do so may result in catastrophic damage to FUCA and/or vehicle.
 - Note 3: If equipped with street version bushings, assure serviceable grease fittings face downward.
- 17. Once Z1 FUCA length is set, loosen inboard jam nuts and apply red thread locker to exposed threads nearest to control arm. Thread jam nut over thread locker and tighten against control arm.





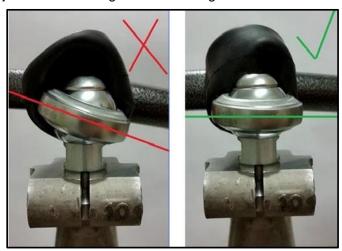
18. Position Z1 FUCA into chassis.





Note: It is very important you use the correct FUCA for each side of the vehicle. Z1 FUCAs should orient the ball joint to the rear of the arm, and at a downward angle. Please refer to images above.

- 19. Install (2) bolts which attach the Z1 FUCA to chassis. Torque to 52ft-lbs.
- 20. Position Z1 FUCA ball joint into mounting hole of steering knuckle.



Note: Ensure the body of ball joint is parallel with mating surface of steering knuckle (as shown).

- 21. Install the bolt and nut that attaches Z1 FUCA ball joint to steering knuckle. Torque to 41ft-lbs.
- 22. Apply the supplied thread locker to exposed threads of ball joint nearest to control arm, thread jam nut over thread locker and tighten against control arm.
- 23. Remove lanyard strap that is holding the knuckle/upright in place.
- 24. Install front wheel and lug nuts.
- 25. Repeat steps 8-25 for the opposite side of vehicle.
- 26. Lower vehicle from jack stands.
- 27. Torque lug nuts to 80ft-lbs.
- 28. Perform an alignment check & adjust front upper control arms accordingly.
- 29. Adjustment on the Z1 FUCA's must be done when removed from the steering knuckle or vehicle for full adjustment. Removing the ball joint from the steering knuckle will allow you to rotate the outer ball joint on the arms for camber adjustment, remember to retighten the jam nut and follow ALL the notes in step # 16.

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- 30. If you want more adjustment then the outer ball joint supplies you will need to remove the nuts and bolts securing the FUCA to the chassis. Then, remove the FUCA and adjust the inboard mounts. Remember to retighten the jam nut and follow ALL the notes in step # 16.
- 31. Repeat steps # 28-30 until you reach your desired alignment specs.
- 32. Perform a final test drive of the vehicle.

END

Additional Technical Support:

Contact Z1 Motorsports at info@z1motorsports.com Or call 770-838-7777 between 9am and 6pm ET

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