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INSTALLATION INSTRUCTIONS

QA1 P/N CC104MU Camber Caster Plates

1994-2004 Mustang 5.0/4.6 CC104MU

READ ALL INSTRUCTIONS CAREFULLY AND THOROUGHLY PRIOR TO STARTING INSTALLATION. PRODUCTS THAT HAVE BEEN INSTALLED ARE NOT ELIGIBLE FOR RETURN. USE THE PROPER JACKING LOCATIONS. DEATH OR SERIOUS INJURY CAN RESULT IF INSTRUCTIONS ARE NOT CORRECTLY FOLLOWED. A GOOD CHASSIS MANUAL, AVAILABLE AT YOUR LOCAL PARTS STORE, MAY ALSO AID IN YOUR INSTALLATION.

• DISCLAIMER / WARRANTY •

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THE USER UNDERSTANDS AND RECOGNIZES THAT RACING PARTS, SPECIALIZED STREET ROD EQUIPMENT, AND ALL PARTS AND SERVICES SOLD BY QA1 ARE EXPOSED TO MANY AND VARIED CONDITIONS DUE TO THE MANNER IN WHICH THEY ARE INSTALLED AND USED. QA1 SHALL BEAR NO LIABILITY FOR ANY LOSS, DAMAGE OR INJURY, EITHER TO A PERSON OR TO PROPERTY, RESULTING FROM THE INSTALLATION, DIRECT OR INDIRECT USE OF ANY QA1 PRODUCTS OR INABILITY BY THE BUYER TO DETERMINE PROPER USE OR APPLICATION OF QA1 PRODUCTS. WITH THE EXCEPTION OF THE LIMITED LIABILITY WARRANTY SET FORTH ABOVE, QA1 SHALL NOT BE LIABLE FOR ANY CLAIMS, DEMANDS, INJURIES, DAMAGES, ACTIONS, OR CAUSES OF ACTION WHATSOEVER TO BUYER ARISING OUT OF OR CONNECTED WITH THE USE OF ANY QA1 PRODUCTS. MOTORSPORTS ARE DANGEROUS; AS SUCH, NO WARRANTY OR REPRESENTATION IS MADE AS TO THE PRODUCT'S ABILITY TO PROTECT THE USER FROM INJURY OR DEATH. THE USER ASSUMES THAT RISK!

INSTALLATION INSTRUCTIONS

Suggestion: Before dismantling anything on the vehicle, lay a straight edge across the top of the fenders and measure down to the top of the strut shaft. Try to match that dimension when installing the strut with the provided spacers.

1. Jack up the front of the vehicle and place jack stands securely under the frame of the car.
2. Remove front wheels using a 13/16" socket
3. Place floor jack under the control arm and jack up until spring is slightly loaded.
4. Remove the strut shaft top mounting nut. QA1 struts will use a 7/16" and 15/16" wrench to remove.
5. If your car is using coil-overs you'll want to lower the spring seat collar to release the tension before moving to step 6.
6. Remove the three nuts that hold the factory upper strut mounting plate in place and remove it from the car.
7. Carefully lower the jack to bring the strut shaft down through the strut tower center hole, but do not completely unload the jack: the spring may become dislodged and fly out, causing injury and/or damage to the vehicle.
8. Remove the spindle mounting bolts using a 21mm socket and 15/16" wrench.
9. Remove all washers, collars, bushings, etc., from the strut shaft.
10. Collapse the strut shaft down into the strut body far enough to remove the factory bottom plate and dust boot.
11. Remove the factory dust boot and discard. Leave the factory bump stop on the strut shaft.
12. Identify the driver's side and passenger's side bottom plates. See (**Figure 1**)

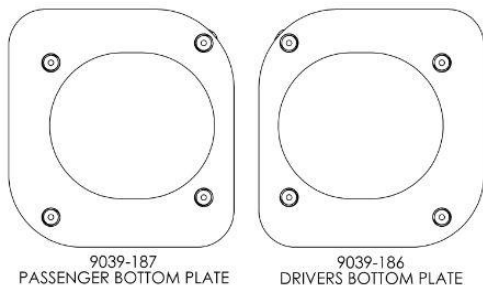


Figure 1

13. A fourth hole will need to be drilled for installation (**Figure 2**). Place the appropriate bottom plate on top of the strut tower, visually aligning the three existing holes of the chassis with the rear most position of the bottom plate slots. Trace the complete fourth hole onto the chassis.
14. Slide plate towards the firewall visually lining up all three existing chassis holes at the forward most point of the plates slotted holes and trace the fourth hole again.
15. Mark a point exactly between the two marks you've just made. This middle mark is where you will drill for the fourth Stud.
16. Center-punch, drill a pilot hole, then drill a 3/8" hole through the strut tower top. De-bur the hole.

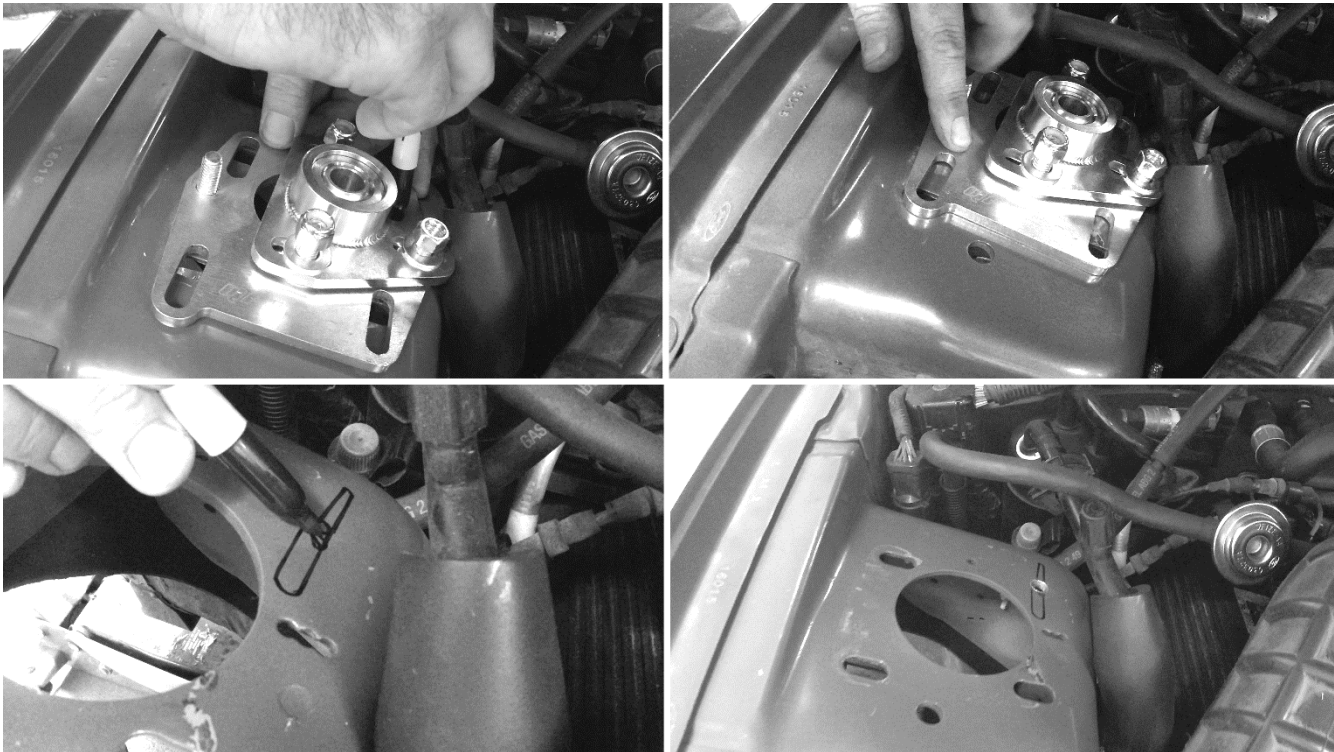


Figure 2

17. Install the bottom plate beneath the strut tower with studs protruding upwards through the factory mounting slots. Make sure the bottom plate bolts move freely in the adjusting slots of the strut tower.

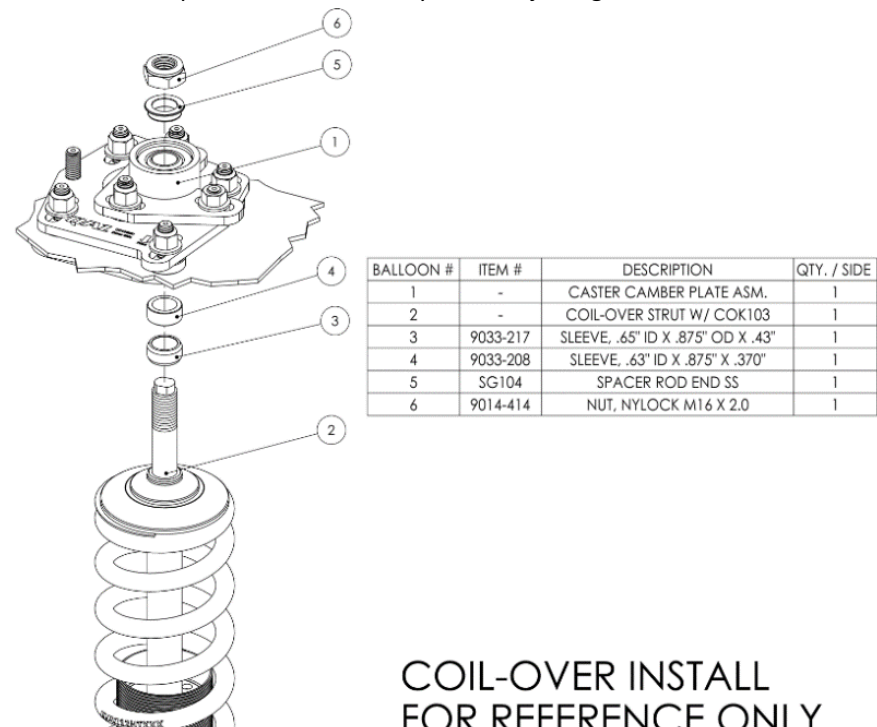
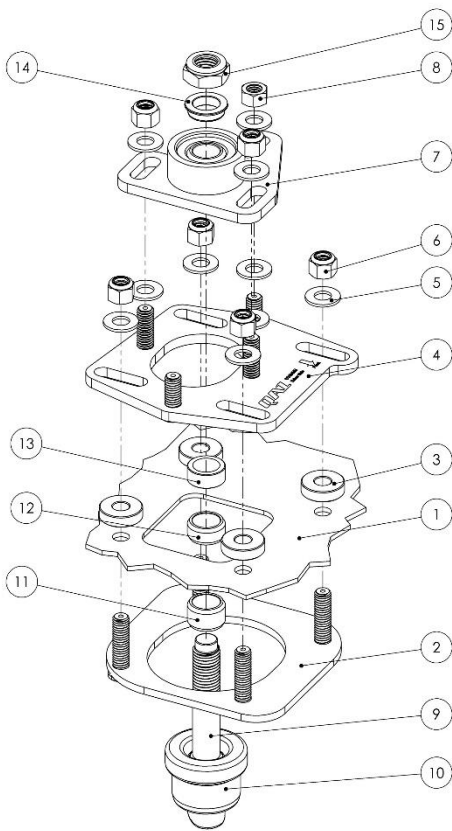


Figure 3

COIL-OVER INSTALL
FOR REFERENCE ONLY

Coil-Over & Non-Coil-Over Installation : Pull the strut rod up out of the strut body. Install spacers onto strut rod (**Figure 3&4**) making sure to note that spacer placement for coil-over and non-coil-over setups is different. Carefully jack up the control arm until the strut shaft is back in position, protruding through the large center hole. *Note: You may not end up using all spacers from the spacer kit.

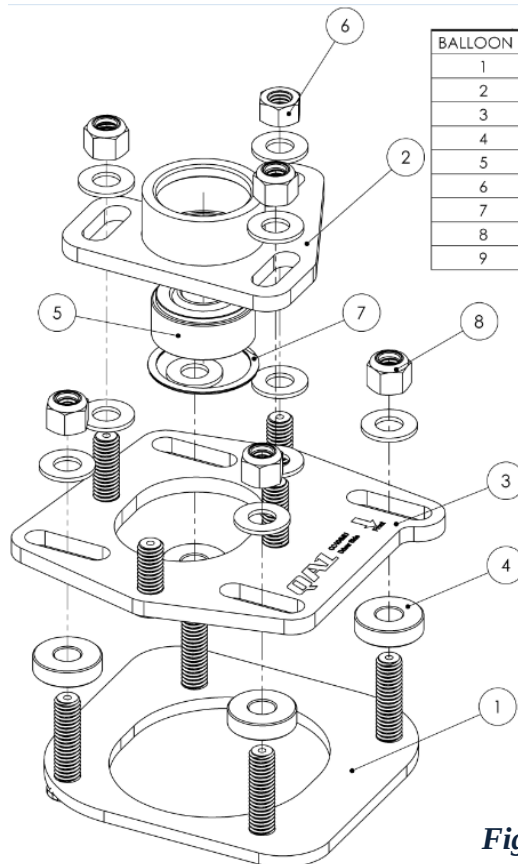


BALLOON #	ITEM #	DESCRIPTION	QTY. / SIDE
1	OEM STRUT TOWER	STRUT TOWER	1
2	9039-186	BOTTOM PLATE DRIVERS SIDE	1
3	9033-303	SPACER WASHER, 7MM THICK	4
4	9039-185	TOP PLATE, DRIVERS SIDE	1
5	9005-256	WASHER, FLAT 3/8" SAE	10
6	9014-253	NUT, NYLOCK 3/8-16	6
7	9039-179	BEARING HOUSING WELDMENT, RIGHT	1
8	9014-333	NUT, HEX 3/8-16	1
9	STRUT SHAFT	STRUT SHAFT	1
10	BUMPSTOP	FACTORY BUMPSTOP	1
11	9033-221	SLEEVE, .65" ID X .875" OD X .57"	1
12	9033-217	SLEEVE, .65" ID X .875" OD X .43"	1
13	9033-208	SLEEVE, .63" ID X .875" X .370"	1
14	SG104	SPACER ROD END SS	1
15	STRUT SHAFT NUT	NUT, M16 X 2.0	1

NON-COIL-OVER INSTALL FOR REFERENCE ONLY

Figure 4

18. Install a 7mm thick washer (**Balloon #4**) over each stud of the bottom plate. These washers will rest directly on top of the car's strut tower (see **Figure 5**).



BALLOON #	ITEM #	DESCRIPTION	QTY./SIDE
1	9039-186	BOTTOM PLATE DRIVERS SIDE	1
2	9039-179	BEARING HOUSING WELDMENT, RIGHT	1
3	9039-185	TOP PLATE, DRIVERS SIDE	1
4	9033-303	SPACER WASHER, 7MM THICK	4
5	MSLB16-101	BEARING (MSLB) STEEL, 52100 CP	1
6	9014-433	NUT, HEX 3/8-16	1
7	9007-146	1.5" SPIRAL INTERNAL RETAINING RING	1
8	9014-253	NUT, NYLOCK 3/8-16	6
9	9005-256	WASHER, FLAT 3/8" SAE	10

Figure 5

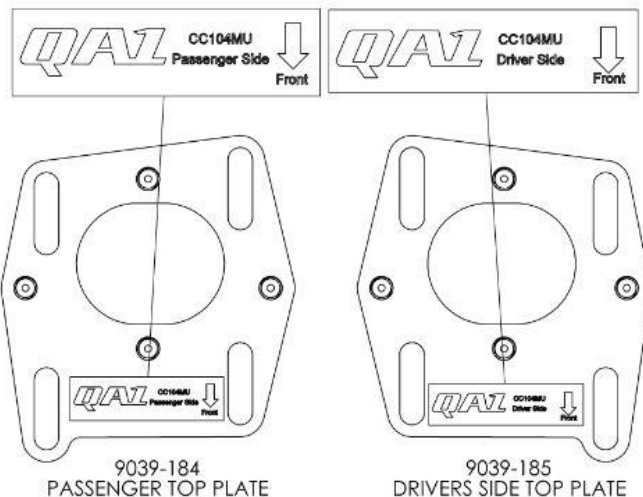


Figure 6

19. Refer to **Figure 6** to identify the driver's side and passenger's side top plates.

20. Place the appropriate top plate over the studs of the bottom plate. Install the washers and nyloc nuts on the two long studs. The standard nut goes onto the short stud.

21. Install 3/8" washer and nyloc nuts over the 4 top plate studs.

22. The orientation of the bearing housing assembly can be changed from "positive" to "negative" (See **Figure 7**). The majority of the cars will have the bearing plate in the "positive" orientation. Depending on the ride height (stock or lowered), the "positive orientation of the bearing housing assembly will allow camber settings varying from positive to over one degree negative. To change the orientation of the bearing housing assembly's between positive and negative, you can swap the bearing housing assembly to the opposite sides of the car.

23. Install the appropriate bearing housing assembly on top of the washers, followed by three more washers and 3/8" nylon locking nuts.

24. The strut shaft is installed through the spherical bearing with three of the 16mm I.D. spacers. Different strut manufacturers each have their unique length for the top threaded portion of the strut shaft. The user must determine the proper combination of spacers to put above and below the bearing for the struts being used. Spacers will be installed both above and below the bearing. Position the strut shaft just low enough that it will not hit the underside of the hood.

You can double check the clearance by carefully closing the hood with clay, putty, etc... The thickness will indicate how much hood clearance there is. Caster and camber settings change the strut shaft's position relative to the hood. Double check final clearance with the car on the ground, final alignment completed, and while turning lock to lock. Clearance on the 1994-2004 Mustangs is extremely tight.

Note: When using a coil-over conversion kit, you will delete one of the spacers to allow room for the upper spring perch. You must be careful to ensure the upper spring perch will not touch the strut tower or the bottom plate during any combination of steering movement or suspension travel.

25. Reinstall the strut shaft top mounting nuts.

26. Tighten all the caster/camber plate adjusting nuts to 40 lb.-ft.

27. Pull the bump stop down slightly until after the alignment is completed. Then push it up until it contacts the bottom of the bearing plate.

28. Reinstall wheels and carefully lower the vehicle to the ground.

29. Remember to torque the lug nuts per Ford's specs.

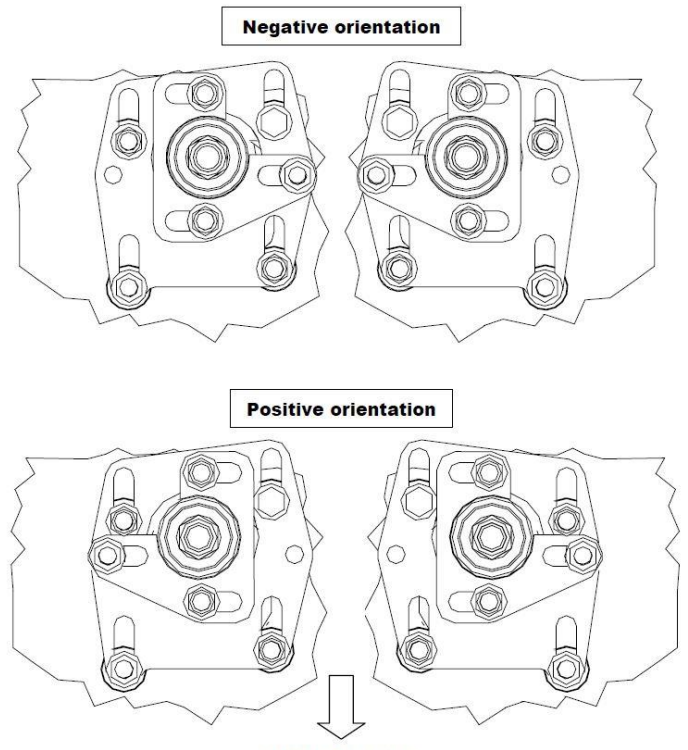


Figure 7

30. Have your car professionally aligned.
31. During the alignment, torque the caster/camber plate adjusting nuts to:

Three camber nuts: 40 lb. ft.

Four caster nuts: 40 lb. ft.

Note: Because camber and caster can be adjusted independently, you can adjust one, lock it down, and then adjust the other. Always double-check all camber and caster measurements after any adjustment of even one parameter.

The camber adjustment slots when used in conjunction with the factory camber adjustment slots, allow the widest range of camber adjustment possible.

If you are adjusting towards the extreme limits of camber and/ or caster, be sure to double check the clearance between the strut shaft and the edge of the large center hole of the strut tower. Check not only with the wheels pointed straight ahead, but also while turning the steering wheel lock to lock. In some instances, Ford's production tolerances on the positioning of that center hole can cause interference when camber or caster is adjusted towards the limit of travel.

REMEMBER THAT ANY TIME YOU MAKE ANY CHANGE IN CAMBER, CASTER OR RIDE HEIGHT, YOU MUST RE-ADJUST THE TOE SETTING.

To further upgrade your suspension, use other QA1 suspension products such as coil-overs, shocks, struts, springs, K-members, torque arms, panhard rods, sub-frame connectors, strut tower braces, rod ends, sway bars, tubular control arms, spherical bearings, carbon fiber driveshafts and more. For more information, please visit www.QA1.net.

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- Quick Tips
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