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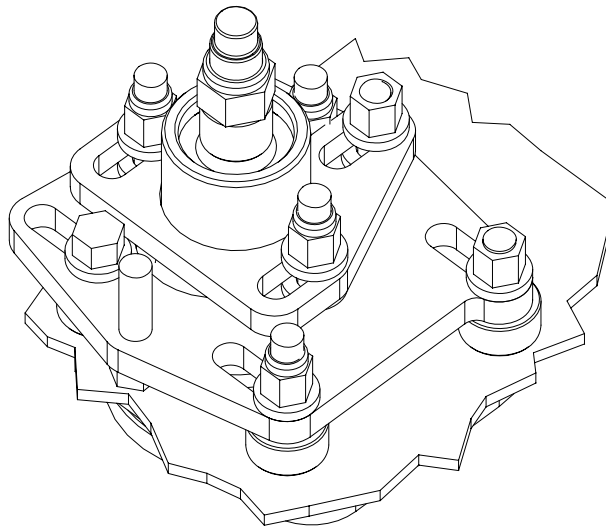


21730 Hanover Ave Lakeville, MN 55044

## INSTALLATION INSTRUCTIONS

1994-PRESENT MUSTANG CASTER/CAMBER PLATES

**READ ALL OF THE INSTRUCTIONS BEFORE YOU BEGIN THIS PROJECT**



### ***DISCLAIMER/WARRANTY***

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## **READ ALL OF THE INSTRUCTIONS BEFORE YOU BEGIN THIS PROJECT**

1. Jack up the front of the vehicle and place jack stands securely on the frame of the car.
2. Remove front wheels.
3. Place a floor jack under the control arm and jack up until slightly loaded.
4. Remove the strut shaft top mounting nut.
5. Remove the three nuts that hold the factory upper strut mounting plate in place and remove it from the car.
6. Carefully lower the jack to bring the strut shaft down through the strut tower center hole, but do not completely un load the jack: the spring may become dislodged and fly out, causing injury and/ or damage to the vehicle.
7. Remove all washers, collars, bushings, etc, from the strut shaft.
8. Collapse the strut shaft down into the strut body far enough to remove the factory bottom plate, and dust boot.
9. Remove the factory dust boot and discard. Leave the factory bumpstop on the strut shaft.
10. Check illustration #2 to identify the driver's side and passenger's side bottom plates.
11. For coil over applications, we recommend drilling a fourth hole for the most rigid installation possible. Place the appropriate bottom plate upside down on top of the strut tower, with the bolts protruding downward through the slots. This serves as a template for locating the hole for the fourth bolt
12. Sliding the plate as far outboard as the factory alignment slots will allow, insert an appropriately sized punch or marking pen through the nut of the bottom plate and mark the hole's center location onto the top of the strut tower. Next, slide the plate as far inboard as possible and again mark the holes center location onto the top of the strut tower.
13. Remove the bottom plate. Mark a point exactly between the two marks you've just made. This middle mark is where you will drill for the fourth bolt.
14. Center-punch, drill a pilot hole, then drill a 10mm(.394") hole through the strut tower top. Deburr the hole.
15. Install the bottom plate beneath the strut tower with the bolts protruding upwards through the factory mounting slots. (See illustration #1) Make sure the bottom plate bolts move freely in the adjusting slots of the strut tower. If not, file the slots until they do.

16. Pull the strut shaft up out of the strut body and carefully jack up the control arm until the strut shaft is back in position, protruding through the large center hole.
17. Install a 8mm thick washer over each bolt of the bottom plate. These washers will rest directly on top of the car's strut tower. (See illustration #1)
18. Check illustration #2 to identify the driver's side and passenger's side top plates.
19. Place the appropriate top plate over the bottom plate's bolts. Install the washers and nuts on the two long bolts. The standard nut goes onto the short bolt.
20. With the three nuts still loose, slip another 8mm thick washer between the strut tower top and the main plate. Insert the 10mm x 30mm bolt down through the flat washer, the main plate, the thick washer, the strut tower top, and thread it into the bottom plate's nut.
21. Place a 10mm washer over 3 of the top plate bolts.
22. The orientation of the bearing housing assy can be changed from "positive" to "negative." See illustration #3. The majority of the cars will have the bearing plate in the "positive" orientation. Depending on ride height (stock or lowered), the "positive" orientation of the bearing housing assy will allow camber settings varying from positive to over one degree negative.
23. Using illustration #3 as a guide, determine whether to install the bearing housing assy's in the "positive" or "negative" position. To change the orientation of the bearing housing assy's between positive and negative, you swap the bearing housing assy to the opposite sides of the car.
24. Install the appropriate bearing housing assy on top of the washers, followed by three more washers and the 10mm nylon locking nuts.
25. The strut shaft is installed through the spherical bearing with three of the 16mm ID spacers. The various strut manufacturers each have their unique length for the top threaded portion of the strut shaft. You must determine the proper combination of spacers to put above and below the bearing for your struts. You will probably have spacers both above and below the bearing. You want to position the strut shaft just low enough that it will not hit the underside of the hood.

Suggestion: Before dismantling anything on your car, 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 you install the strut with the spacers.

You can double check the clearance by carefully closing the hood with play dough, 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 and newer Mustang is extremely tight.

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

26. Reinstall the strut shaft top mounting nuts.
27. Temporarily tighten all the caster/camber plate adjusting nuts.
28. Pull the bumpstop down slightly until after the alignment is completed. Then push it up until it contacts the bottom of the bearing plate.
29. Reinstall wheels and carefully lower the vehicle to the ground.
30. Remember to torque the lug nuts to Ford's specs.
31. Have your car professionally aligned.
32. When the alignment is complete, torque the caster/camber plate adjusting nuts:

Three camber nuts	40 ft/lbs
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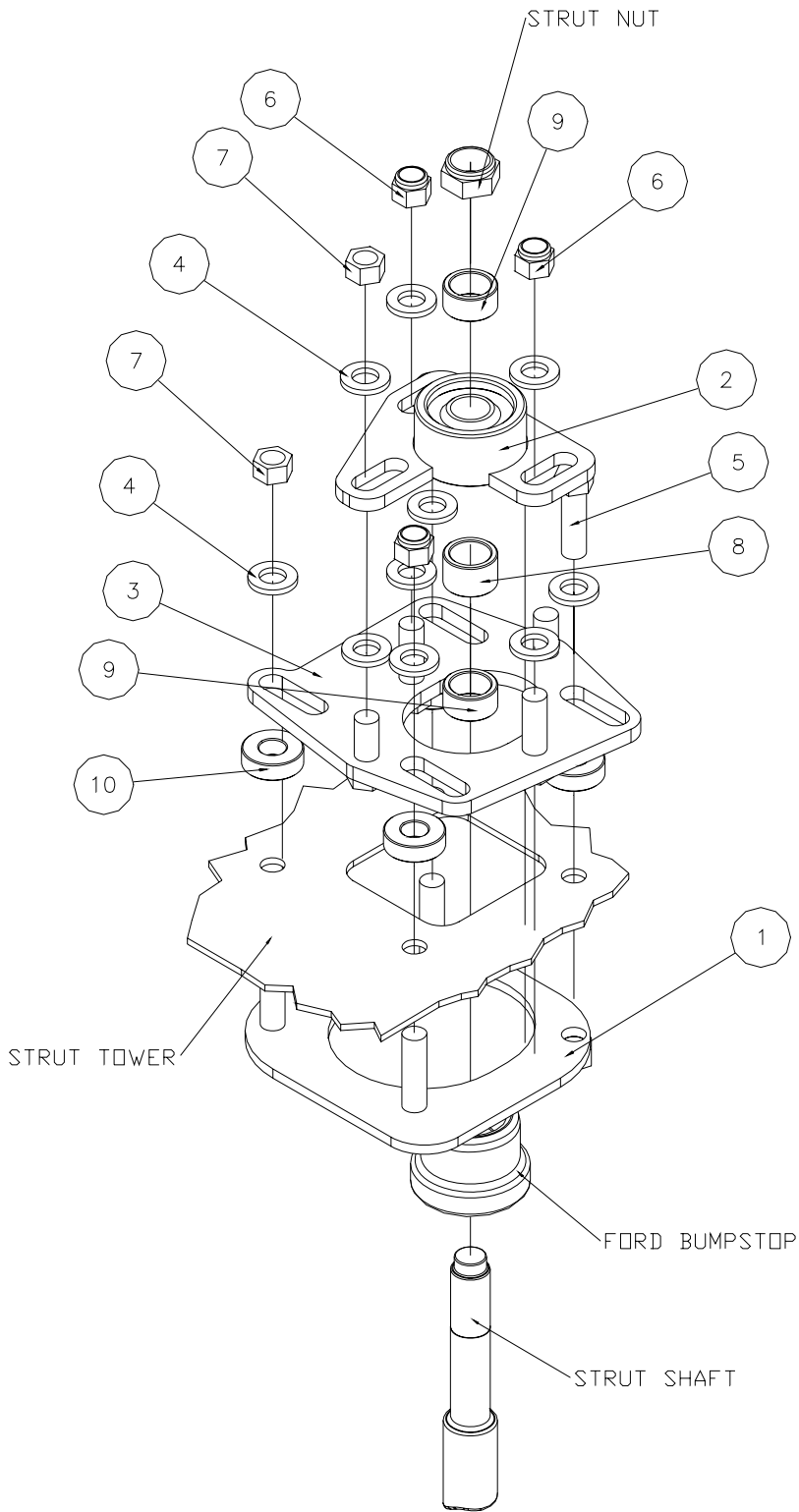
Three caster nuts, 1 bolt	40 ft/lbs
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*Note:* Because camber and caster can be adjusted independently, you can adjust one, lock it down, and then adjust the other. Always double-check all camber and caster measurements after any adjustment of even one parameter.

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

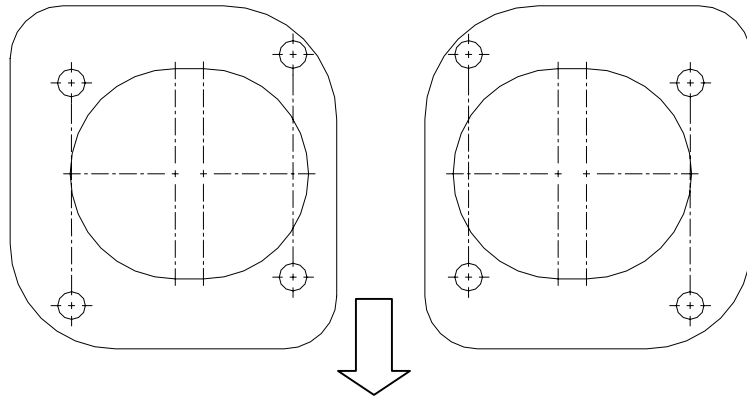
If you are adjusting towards the extreme limits of camber and/ or caster, be sure to double check the clearance between the strut shaft and the edge of the large center hole of the strut tower. Check not only with the wheels pointed straight ahead, but also while turning the steering wheel lock to lock. 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 readjust the toe setting***



Parts list		
Item	Part Name	Qty
1	WELDMENT, BOTTOM PLATE	1
2	BEARING HOUSING ASSY	1
3	WELDMENT, TOP PLATE	1
4	WASHER, 10MM	10
5	BOLT, HEX HEAD M10X30	1
6	NUT, 10MM LOCKING	4
7	NUT, HEX M10	2
8	SPACER, 16MM LONG	1
9	SPACER, 16MM SHORT	2
10	WASHER, SPECIAL 8MM THICK	4

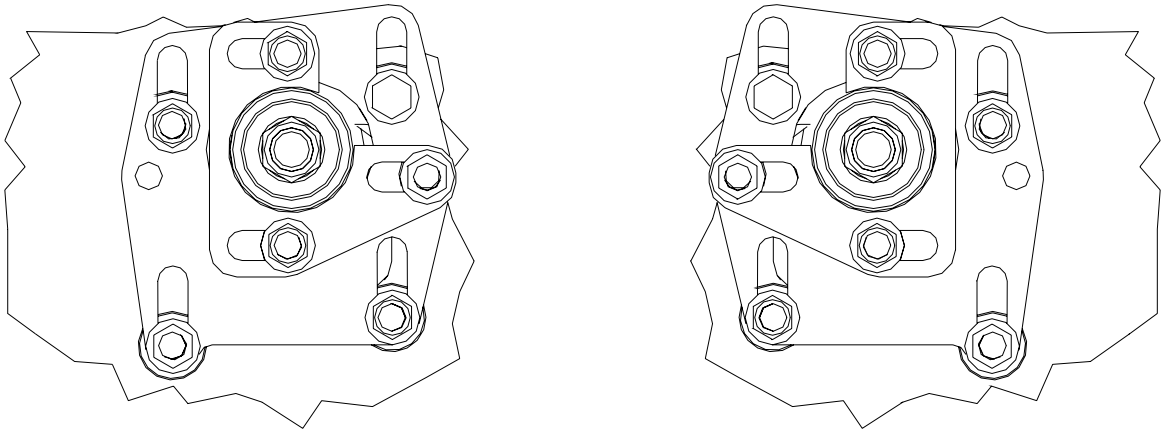
Illustration 1



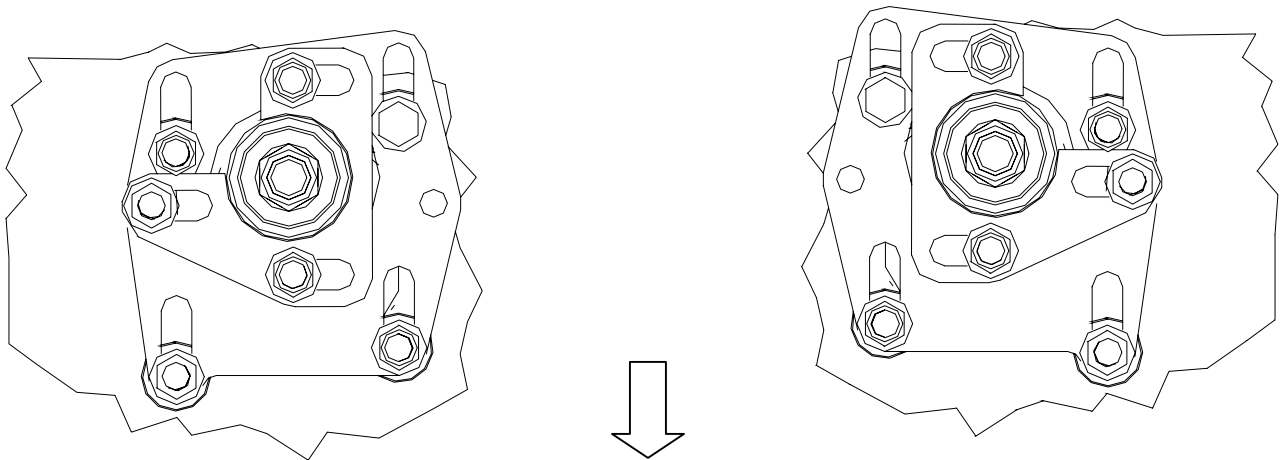
Front of vehicle

Illustration 2

Positive orientation



Negative orientation



Front of vehicle

Illustration 3