

### **Tools Required:**

- 3/8", ½" drive ratchet or impact wrench
- Sockets 18mm, 21mm deep, 24mm, 25mm, 27mm
- Hydraulic jack and stands or service lift
- Pry-bar
- Torque Wrench

### Disassembly:

### NOTE: If you have already disassembled the control arm or rear axle, skip ahead to STEP 7

- Remove the lower rear seat cushion to gain
  access to the upper control arm mounting bolt. Located directly above the drivers and passengers'
  side footwells there is a push release that detaches the seat cushion. Once each release is popped,
  the lower seat cushion can be removed.
- 2. Using a **24mm** socket, remove the large bolt on the driveshaft tunnel. **IMAGE 1**
- 3. Lift the vehicle until there is sufficient work space under the car. Support with jack stands.
- 4. Using a **21mm** deep socket, remove the upper control arm bolt at the axle. **IMAGE 2**
- 5. Knock the bolt out, separating the control arm from the axle.



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**NOTE**: it may be necessary to support the front of the axle to remove tension from the control arm bolt.

 Using an 18mm socket and long extension, remove the (2) remaining upper control arm mount bolts and remove the upper control arm mount and control arm out as an assembly. IMAGE 3

### **Assembly:**

- 7. Using a **25mm** wrench or socket for the bolt head and a **27mm** socket for the nut, remove the front control arm bolt as shown in **IMAGE 4**
- Adjust the control arm until the bolt holes line up with the ones on the stock arm.
   Ensure equal thread engagement on both portions of the adjuster and rod end.
- Mount the BMR upper control arm into the factory mount or the BMR UCM002 mount and re-assemble with the provided new bolt. Tighten to 200 ft lbs
- 10. Re-install the assembly into the car and insert the rear upper mounting bolts. Tighten to 85 ft lbs





- 11. Connect the rear of the BMR control arm to the upper control arm bushing on the rear end. It may require the axle to be rotated to allow the bolt to slide through. Tighten bolt to 129 ft lbs
- 12. Lower vehicle and insert the large bolt into the upper mount inside the car. Tighten this bolt to **240 ft lbs**
- 13. Re-install lower seat cushion.

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\*When using any of the 3 available positions on a BMR-CAB005, we always recommend using the TOP hole on our BMR UCM001 or UCM002 upper control arm mounts if you have installed them\*

The 3 mounting positions for the <u>upper control arm MOUNT</u> are <u>NOT designed to use for pinion angle</u> <u>adjustment</u>. The positions available modify the instant centers, and are designed to be used to achieve maximized performance results. Testing and adjusting *may be required*. If you are simply replacing the mount to have a stronger mount that has tighter tolerance and does not 'clunk' like the factory mount, always use the upper most position.

### **Upper most position:**

This position is similar to stock geometry. Use this position if you meet one or more of the following criteria:

- -have a non-adjustable UCA,
- -are lowered more than 1"
- -use lower control arm relocation brackets
- -have a 9" rear end housing

### **Middle Position:**

This position is designed and should be used for:

- -stock height cars that have a manual transmission and NO lower arm relocation brackets
- -lowered cars with NON-FACTORY automatic transmissions (4R70, TH400, PG, etc)
- \*must use adjustable Upper Control Arm

### **Lowest Position:**

This position is designed and should be used for:

- -stock height automatic transmission cars that do not use lower control arm relocation brackets
- -racecar applications with NON-FACTORY automatic transmissions
- \*must use adjustable Upper Control Arm

That is a rough suggestion, it is up to YOU to test and see what position works best.

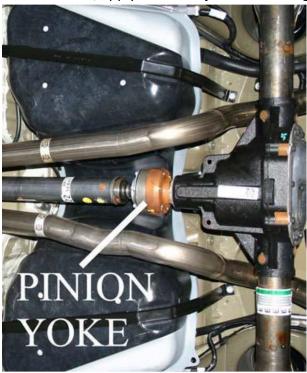
These suggestions are based on years of testing. There is no specific position requirement, and results may vary.

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Make sure the rear end is loaded by either setting the car on the ground or letting the car rest on jack stands positioned under the rear axle. In both cases, the car needs to be as level as possible and the suspension loaded.

- Place an angle finder on the rear portion of the two-piece driveshaft and record the angle. Now place the angle finder on the pinion yoke and record the angle.
- Subtracting one angle from the other results in your pinion angle (Example: -2 rear end angle subtracted from 0 driveshaft angle = -2 degrees)
- Adjust the control arm to achieve the desired angle.
- As a starting point, most cars respond well to the following initial settings: Automatics: 1-2 degrees negative, Manuals: 2-3 degrees negative
- Once pinion angle has been set, apply Loctite to jam nuts and tighten.



To properly set the <u>pinion angle</u> when <u>using adjustable control ARMS</u> PLEASE VISIT AND WATCH OUR VIDEO ON YOUTUBE NAMED "BMR Suspension S197 Mustang Driveline Angle"

https://www.youtube.com/watch?v=9TbwRZqEtxQ



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