



CHE PERFORMANCE PRODUCTS INSTALLATION INSTRUCTIONS

REAR UPPER CONTROL ARM

CHE2K: Tubular Upper: 2005-2010 Mustang

CHE2L: Street/Strip Adjustable Upper: 2005-2010 Mustang

CHE2M: Competition Adjustable Upper: 2005-2010 Mustang

CHE2R: Street/Strip Adjustable Upper: 2011-Current Mustang

APPLICATIONS:

Body Style: All

Engine: All

WARNING!!: If you lack the necessary skill, tools, or equipment to safely complete this installation, have the component installed by a mechanic with the proper equipment and expertise.

Thoroughly read and understand these installation instructions before beginning the installation. If there is any doubt regarding the procedure, please contact CHE Performance prior to attempting installation

Package Contents:

- 1ea. Rear Upper Control Arm
- 1ea. Assembly Lube Vial (Poly Bushing Only)
- 1ea. Applicator Brush (Poly Bushing Only)

Please note that Double Adjustable Upper Control Arms have been set to factory length. If it is desired to adjust pinion angle, please follow the instruction sheet included with the double adjustable control arm after installation of the upper control arm has been completed.

The photos show installation of a fixed length upper control arm in a 2005 Mustang. Adjustable uppers and 2011-Current uppers will vary slightly in appearance from photos.

Step 1. Raise the Vehicle

With the front wheels properly blocked; raise the rear end of the vehicle as high as safely possible. Place jack stands on a solid area under the frame of the car, not the rear end.

Step 2. Support Rear Axle

To aid in aligning the control arm mounting holes, place a floor jack near the front pinion side of the differential. The floor jack should only be raised enough to apply light pressure to the axle.

Step 3. Remove Rear Seat Cushion

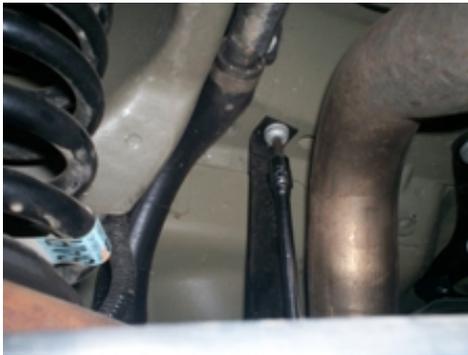
To gain access to the Upper Control Arm mount forward bolt, it is necessary to remove the rear lower seat cushion. Push in on the plastic tabs located on the lower side of the cushion and raise the cushion up and out of the vehicle.

Step 4. Remove Mount Front Bolt



From the inside of the vehicle, remove the Upper Control Arm Mount front bolt using an 18mm wrench or socket. Save the bolt for re-use.

Step 5. Remove Fuel Tank Straps



On 2005-2010 Mustang Only (gas tank removal is not needed on 2011-Current):

To Remove the upper control arm it is necessary to lower, **but not fully remove** the gas tank. Ensuring that the gas tank is properly supported, remove the 2 bolts (one on each side) retaining the fuel tank straps using a T-50 torx bit.

Exercise extreme caution to ensure that the gas tank is properly supported prior to removing tank straps!!

Step 6. Remove Rear Mount Bolts



Remove the 2 bolts retaining the Upper Control Arm Mount to the body of the vehicle. Save the bolts for re-use.

Step 7. Remove Control Arm Bolt



Remove the Control Arm Bolt from the Axle Housing and remove the Control Arm and Mount from the vehicle. Save the flag-bolt and nut for re-use.

Step 8. Remove Control Arm From Mount



Remove the stock control arm from the mount. Save the bolt and nut for re-use.

Step 9. Lubricate Bushing Face



Using the provided assembly lube and brush, coat the bushing faces and the face of the control arm mount where the bushings make contact.

Step 10. Install Control Arm In Mount



Using the factory nut and bolt, install the new CHE control arm onto the Upper Control Arm Mount, making sure that the pinion snubber is in the proper position. Torque the bolt to 175N-m (129lb-ft).

Step 11. Install Control Arm Assembly



Install the Upper Control Arm assembly in the vehicle. Install the 2 rear Control Arm Mount bolts. Torque the bolts to 115N-m (85lb-ft).

Step 12. Install Axle Housing Bolt



Install the factory flag-bolt and nut on the rear (axle housing side) of the upper control arm. If the rear axle has shifted during installation, it may be necessary to use a floor jack under the pinion side of the differential to align the bolt holes.

Important: If the factory axle side rubber bushing is being used, do not fully tighten the rear control arm bolt at this time. In order to prevent binding the bolt must be torqued with the vehicle at ride height.

Step 13. Install Mount Front Bolt



From inside the vehicle, install the factory Upper Control Arm Mount front bolt using an 18mm socket. Torque the bolt to 175N-m (129lb-ft). Install the rear lower seat cushion at this time.

Step 14. Install Gas Tank Straps

On 2005-2010 Models: Using the factory bolts, install the gas tank straps making sure that the tank is in proper position and that all hoses and lines are clear of obstruction.

Step 15. Torque Rear Control Arm Bolt.

Properly Support the vehicle on the rear axle so that it is at ride height. Torque the rear (axle housing side) control arm bolt to 175N-m (129lb-ft).

Step 16. Inspect Installation

Fully inspect the installation ensuring that the suspension is free to travel and that all fasteners have been properly installed.

Step 17. Lower vehicle

If pinion angle is to be adjusted (Adjustable Upper Control Arms Only), follow the instructions included with the Adjustable Upper.

If installation has been properly completed, lower the vehicle and perform a road test.

Questions, Comments, Suggestions?

If you have any questions, comments, or suggestions regarding these instructions or product, please do not hesitate to contact us immediately. Thank you, and enjoy your new CHE Performance Product.

Technical Support/Contact Information

e-mail: support@cheperformance.com

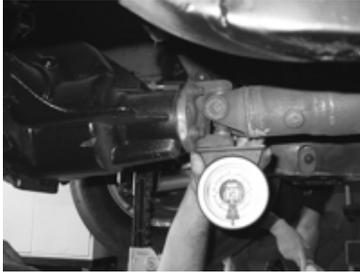
Website: www.cheperformance.com

Setting Pinion Angle (Adjustable Upper Control Arm Only)

A. Raise and Support Vehicle

In order to properly set the pinion angle, the vehicle must be at ride height with the weight of the vehicle supported on the wheels/axle. Automotive ramps under the front wheels and jack stands under the rear axle are recommended. The vehicle should also be as level as possible.

B. Measure Pinion Angle



The pinion angle is the difference in angle between the pinion gear in the axle housing and the driveshaft.

The pinion angle is determined by subtracting the angle of the pinion from horizontal from the angle of the driveshaft from horizontal.

Although there are a number of dedicated devices available for checking pinion angle, a simple angle finder available at most hardware stores will perform this task sufficiently.



The pinion gear angle can be measured from any surface that is either exactly parallel or exactly perpendicular to the pinion, such as the pinion flange or a bearing cap.

The driveshaft angle is simply measured directly from the driveshaft.

Subtract the 2 angles to arrive at the pinion angle.

C. Adjust Pinion Angle

A pinion angle of 2-3 degrees down (with the pinion pointed downward) is recommended. For V8 cars with the 2-piece driveshaft, the measurements should be made from the rear section of the driveshaft.

If it is necessary to adjust the pinion angle, first loosen the 2 jam nuts on the upper control arm. Note that the jam nut with the identification marks is a left hand thread.

Adjust the length of the upper control arm by turning the double adjuster in the proper direction until the desired pinion angle is achieved. Shorten the control arm to move the pinion angle downward, lengthen the control arm to move the pinion angle upward.

After final adjustment has been made, tighten the 2 jam nuts on the upper control arm.

On rod end mounted upper control arms, it is important that the rod end is in proper alignment with the spacers or suspension damage may occur.

D. Lower Vehicle

If installation and pinion angle adjustment has been properly completed, lower the vehicle and perform a road test.

Questions, Comments, Suggestions?

If you have any questions, comments, or suggestions regarding these instructions or product, please do not hesitate to contact us immediately. Thank you, and enjoy your new CHE Performance Product.